



Center for Medicare & Medicaid Innovation

Request for Information (RFI) on Pediatric Alternative Payment (Integrated Care for Kids) Model Concepts Summary of Comments



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Individual Comments

Bailey, Jennifer

Comments about improving child health and reducing costs

An issue for many providers is continuity of care. A large barrier to establishing a true medical home is the overuse of the hospital Emergency Departments and private, non-profit urgent care centers. As a FQHC, we have open sick slots for our patients daily that are reserved for same day call-ins. However, we have a tremendous rate of patients utilizing EDs and urgent care centers when not appropriate. Parents view these centers as alternatives to a primary care office although going there may not be appropriate. Since there is no fee or regulation of the use of the ED, it is difficult for us to keep these families out of the ED. This is problematic on several levels.

1. ED providers are being bogged down with non-emergent complaints that may hinder a center's ability to give care to those whom it is more appropriate
2. Emergency department care costs significantly more than a visit with your PCP
3. PCPs are missing opportunities to address other issues that affect health other than an acute issue

I advise that a system needs to be in place that would deter ED use when not appropriate. As an office, we do our best to educate parents on the appropriate use of the ED and when to instead come to us as an alternative. We only close three days a year and are open on all weekends for patient care. I understand that convenience also influences a parent's choice to go to the ED, so an expansion of hours has been offered. A partnership with the Medicaid providers, EDs, and PCPs is needed to help curb this problem that is very costly for CMS. As an aside, I would never want a child that needed emergent care to not feel confident and comfortable going to the ED. However, I see far too often that children are being seen for simple colds, constipation, ect.

Thanks!

Contos, Harris

To Whom It May Concern:

We are pleased to submit a response to the Pediatric Alternative Payment Model RFI, attached.

Sincerely yours,

Harris Contos, DMD, MBA



Contos_Harris.pdf

Response to RFI on Pediatric Alternative Payment Model Concepts

by

The Medical Management of Caries Working Group

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- I. About us.
- II. What is “the medical management of caries” (MMC)?
- III. How does MMC relate to health reform?
- IV. Illustrative examples and case presentations.
- V. Summary.

I. About us.

We are pleased to have the opportunity to submit this response for consideration as part of the alternative payment model concepts in pediatric care. We are an informal group of oral health professionals consisting of academic researchers in oral microbiology; practicing pediatric and general dentists; a former Public Health Service practitioner and program manager; and (an insufferable) policy analyst, i.e. a “wonk.” The diverse composition of our group allows for rich, open, wide-ranging discussion and exchange of viewpoints, experiences, and ideas on the spectrum of dental care issues in this country. Among our common denominators:

- We believe we are fairly well conversant in the “better, smarter, healthier” thrust of health reform, and its corollaries of “value over volume,” “population health management,” “comprehensive, integrated, preventive care,” “accountable care,” and “risk-sharing/shared savings” payment arrangements.
- We also believe that these precepts largely do not extend to dental care as it is provided in this country, which is not to say that they are inapplicable or that dental care is somehow unique in medicine and exempt from them, but rather to say that the existing organization, financing, management, delivery, and underlying assumptions and attitudes shaping dentistry in this country, centered as they are upon the private, solo, “drill and fill” fee-for-service, cottage industry model, are obtuse and wholly inadequate to address the requisites of health reform. These deficiencies are especially manifest in population groups having difficulty in gaining access to dental care.
- As the ultimate extension of the above, we are especially concerned with the significant and utterly unnecessary risk of submitting pediatric patients to sedation and general anesthesia for

the restoration or extraction of primary teeth, not to mention the waste of public health care dollars, from this doctrinaire practice, when a vastly simpler, risk-free, effective, fractionally costly, and better- outcome approach is available. (See “FDA review results in new warnings about using general anesthetics and sedation drugs in young children and pregnant women” at <https://www.fda.gov/Drugs/DrugSafety/ucm532356.htm>.)

- We also believe, through many years of collective direct experience with tens of thousands of patients, and as illustrated with cases supplied here, that a fundamental rethinking in the treatment of tooth decay to one of “the medical management of caries” (formal term for “tooth decay”) is warranted and imminent, a proverbial “paradigm shift.” The technical intricacies of administering local anesthesia, waiting for it to take effect, and then of removing effected tooth structure— so-called “surgical dentistry”— only to restore it again through various intricate and costly procedures, often prone to future failure, is slated to be dislocated by the medical management of decay which has the advantages of preserving tooth structure; effectively controlling the decay process; yielding considerable savings in treatment time, skill requirements, training time, equipment, utilities, and other costs; and leading to better patient experience and outcomes.

II. What is “the medical management of caries” (MMC)?

The medical management of caries extends back to 1908 and is based upon the long-known antibacterial properties of the silver (Ag^{++}) and fluoride (F) ions, which contrary to conventional removal and restoration of tooth structure, act to arrest and seal off the decay process, harden the tooth structure against further decay, and establish a preventive antibacterial microenvironment in, on, and around the tooth surface. This is accomplished by applying a micro-drop of silver diamine fluoride (SDF) solution to the cavity and to high-risk tooth surfaces where indicated, frequently complemented with the placement of fluoride-infused glass ionomer cement (GIC) used as a restorative material (known as the SMART technique) and sealant on pits and fissures susceptible to decay. The method is safe, effective, painless, and can easily be performed even by readily trained non-dental personnel. All this is in contrast to the usual process of administering local anesthesia (sometimes sedation) to the patient to allow for the mechanical removal of tooth structure to halt decay, followed by placement of amalgam or composite material to restore structure in the simpler cases, or stainless steel crowns in more involved situations. (For more information, see the extensive resources available at www.MMClibrary.org, in particular:

http://www.mmclibrary.com/uploads/Back_to_the_Future_-_The_Medical_Management_of_Caries_Introduction_-_Steven_Duffin.pdf and http://www.mmclibrary.com/uploads/Back_to_the_Future_-_The_Medical_Management_of_Caries_Introduction_-_Steven_Duffin.pdf.)

III. How does MMC relate to health reform?

We reference the “triple aim” of health reform, “better, smarter, healthier” care. We also present an alternative payment model and an alternative, integrated organizational model.

Better care.

At the therapeutic level, MMC is treatment of the disease of tooth decay far more aligned with its bacteriologic etiology than the conventional approach of mechanical removal of effected tooth

structure and resulting in compromised tooth structure in the permanent dentition. As such, it is far more effective in controlling the disease at the particular tooth (direct action on decay-causing bacteria; strengthening of tooth structure), as well as providing a reservoir of antibacterial agents (silver and fluoride ions) in the oral cavity for preventive effect.

At the patient experience level, MMC removes the fear of needles and drills possessed not only by children but adults as well. Application is painless, takes only minutes whether for one tooth or several in one sitting, and leaves the pediatric patient with a cooperative, if not overall pleasant, experience.

Smarter care.

Regarding costs. Direct treatment costs of using SDF are a fraction of conventional “drill and fill” treatment. A bottle of SDF costs approximately \$140.00, contains about 250 drops (an estimated \$0.50-\$0.80 per drop), and one drop can treat up to five teeth, in contrast to an average cost for one simple conventional restoration of \$150.00 (some other approximate costs: stainless steel crown, \$250; pulpotomy, \$165; oral sedation, \$250; IV sedation, \$750; general anesthesia, \$2000-\$3000). The productivity gain from the savings in treatment time is on the order of magnitudes (10 minutes or less with SDF v. 30-45 minutes or more for conventional local anesthesia and restoration), augmented by lower or no use of supplies (e.g., carpules of anesthetic, needles, disposables) and equipment (e.g., handheld instruments, autoclave, handling of “sharps”). Additionally, the lower, easily taught skills requirements and training time for application of SDF by non-dentist personnel gives further boost to productivity. Succinctly, MMC is vastly more efficient than conventional dentistry.

Regarding access. It is axiomatic that lower costs allow for increased access to care; the public insurer can extend coverage. It needs also to be emphasized that the simplicity of the SDF technique means it is not restricted to the dentist’s office, it can be provided by non-dentist personnel at the pediatrician’s office, in school-based clinics, and other even more non-traditional venues, such as church halls and other locales where social service providers, child development, and child welfare programs may operate. In brief, geographic and logistical obstacles to care are greatly reduced. It also needs to be stressed that the painless, “no needles and drills” nature of SDF greatly lowers the fear factor of children in receiving dental care, transforming a potential “dental phobe” into a child with a lifelong healthy attitude toward his or her dental health and future dental care.

Healthier care.

MMC allows for better outcomes over conventional dental methods by replacing costly, inferior treatment, prone to failure and increased future expense, with simple arrest and control of the decay process in line with the microbiological etiology of the disease. Rather than the number and complexity of restorative procedures done (particularly the resort to general anesthesia for restoration or extraction), its measures are absence of active decay, and subsequent avoidance of toothaches and extractions, very straightforward and simple measures of population health management. Conventional measures such as DMFT scores (decayed, missing, filled teeth) are irrelevant.

Alternative payment model.

The effectiveness, simplicity, versatility, and abundant efficiencies of MMC make it highly suitable as the basis for a “shared savings” alternative payment model in pediatric dental care. The monetary savings (apart from issues of appropriateness of care and longitudinal quality) are the difference between reimbursement for conventional “drill and fill” procedures versus application of SDF. A reasonable estimate is \$200 for conventional treatment as opposed to \$20 for SDF application. The numbers are striking and obvious. Consistent with the health reform goal of moving away from traditional fee-for-service payment, considerable savings, better quality of care, and improved outcomes for the pediatric dental population can be realized through a properly designed payment arrangement with the financial incentive for dentists to share in overall savings by adopting MMC. The more potential “drill and fill” procedures avoided, the greater the savings for the public insurer, the more the reward for the MMC practitioner. (The numbers— not to mention infinitely greater catastrophe— are even more dramatic if the avoidance of unnecessary sedation or general anesthesia is figured in, see actual cases Section IV.)

This type of “value-based care” also provides a basis for dental care to enter into the mainstream of health reform, which is seeing new organizational, financing, and management models emerge to be in line with the demands of overall “accountable” goals of health reform. For several reasons, dental care has largely been absent from these developments, in no small part due to its adherence to restrictive and outdated practice models, reliance on fee-for-service, rudimentary measures of quality and outcome, poor integration with medicine, and an overall lack of experience in working under prepaid reimbursement mechanisms. This despite “oral health being integral to overall health” as stated in the report of the Surgeon General on oral health in 2000. This state of affairs explains much of why medicine and evolving health care systems such as ACOs are disinclined to incorporate dental care as part of their comprehensive service offerings when they themselves are finding their way in the new competitive health care environment and can afford to give scant attention to those unfamiliar with this changed and changing landscape.

As presented above, however, MMC is consistent with the aims of health reform and the evolving health care environment. As such, an organized MMC dental group operating an alternative payment arrangement could be seen to offer competitive advantage to the ACO or health system which includes dental care in its offerings, meaning that care becomes truly comprehensive and integrated, another goal of health reform.

IV. Illustrative examples and case presentations.

Example 1. The highly variable, “Wild West” situation that exists in dental care, and the stark contrast that exists between SDF treatment and the hold that conventional dentistry has, can be seen in this e-mail from a dental health listserv:

Subject: [Pitt Listserv] more about SMART and SDF

From:

Date: 4/5/2017 8:21AM

To:

we have been trying to introduce these techniques in our county clinic with good success using Dr. Horst's presentation to train the dentists one at a time. However what I feared might happen recently did.

we did SDF/SMART on an 8 year old to restore the primary molars. unfortunately we had to extract T and we sent the child to a pediatric dentist for a space maintainer (we can't make those). when the child came back to us a few months later he had multiple pulpotomies and stainless steel crowns done with 4 visits of oral sedation and a huge bill. the pediatric dentist was asked why he did all that work when the referral was only for a space maintainer and his response that it was unethical for him and against the standards of care of the AAPD not to treat the child comprehensively.

while I agree that we cannot tell any other dentist how to practice, does anyone know if there is more official endorsement of the SMART technique by dental organizations? do you think any average group of dentists would find the technique "unethical"?

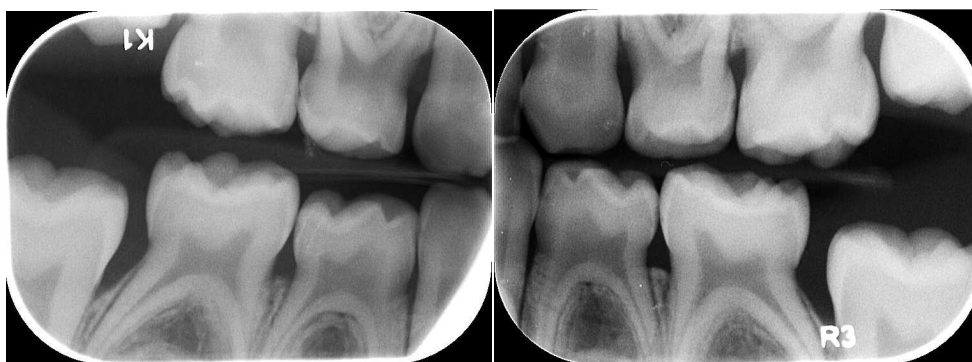
Sent from the Univ of Pittsburgh List (not affiliated with any organization)

.....

The sender is from a government agency, which presumably was presented with a bill in the neighborhood of \$6000-\$8000. Treatment with SDF to arrest the decay, with follow-up treatment if necessary, in all likelihood would have run to one-tenth that amount, all the while avoiding unnecessary treatment and the risks of sedation to a child.

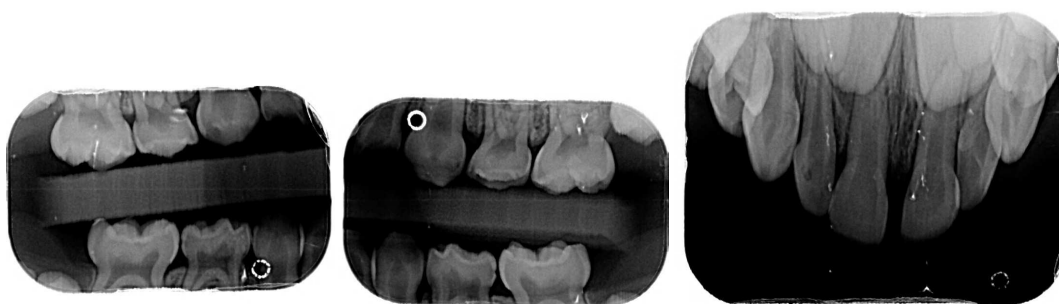
Example 2. Actual cases presented to one member of our group. The first instance shows proposed gross overtreatment in the treatment plan on fundamentally sound teeth easily treated with SDF.

Case 1:



6-year-old patient presents with her parents for a second opinion. Previous dentist recommended class 2 (DO) composite fillings on all first primary molars (#B,I,L,S) with oral sedation. Parents felt this was aggressive and did not want sedation. She was treated same day as her 2nd opinion consult with SDF for \$100, vs. the surgical/sedation treatment which would have cost \$1352.

Case 2:



4-year-old patient presents with her parents for a second opinion. Previous dentist recommended fillings on #D,I,L,S,T under IV sedation. Mother felt that was very aggressive and was not comfortable with the idea of IV sedation. She was treated same day as her second opinion consult with SDF for \$125, vs. the surgical/IV sedation treatment which would have cost \$1647.

Case 3:



22-month-old patient presents with both parents for a second opinion. Previous dentist recommended IV or GA and pulpotomies and veneered crowns on #D,E,F,G. Parents are both physicians and do not want IV or GA and not interested in cosmetic crowns at this point. He was treated with SDF on the same day as his second opinion consult for \$100, vs. the surgical treatment which would have cost them \$2730 for IV (\$1,000++ more for GA in a hospital). This child is underweight (failure to thrive FTT), in office IV sedation would be very risky on a child of this age and weight.

Example 3. As mentioned earlier, the unwarranted use of general anesthesia for restoration or extraction of primary teeth is of great concern, for its risks to children, for its unjustifiable costs. Control of this situation is difficult given the prevailing dogma in pediatric dentistry which lends credence and validity to this course of treatment. To address this, we suggest that CMS develop a policy and regulations greatly restricting this practice. As a thought, CMS could enter into a shared savings arrangement with individual dentists or a dental group trained in MMC to assess prescriptions for sedation or general anesthesia for Medicaid/CHIP patients for suitability. Children not deemed suitable (presumably that will be most) will be offered the option of treatment by the reviewing dentists/group under MMC protocols. Reimbursement would be on a capitated basis negotiated for the anticipated length of treatment for individual patients. The portion of the shared savings due the dentists/group would be paid at specified intervals of the child's treatment with evidence of the arrest of disease. As seen in the cases presented above, the potential for system-wide dollar savings is considerable, while patient experience and outcomes are vastly improved as well. (A template shared savings proposal is available separately from one of our members for consideration.)

V. Summary.

Dental care lies largely outside the organizational, financial, delivery, and managerial developments taking place under health reform. It is difficult to conceptualize how a model of treatment fundamentally based on the mechanical removal of effected tooth structure, then its restoration with various materials ("drill and fill" dentistry), aligns with the reform goals of "better, smarter, healthier" care. The medical management of caries (cavities) does present such an alignment. The technique is simple, effective, inexpensive, readily teachable, and easily adaptable to different care delivery venues. It provides a very straightforward and relevant outcome measures– arrested decay, avoided toothaches, avoided extractions. Public insurance programs heretofore tied to the inefficiencies and intractabilities of

conventional dentistry stand to gain considerably in financial savings and in seeing “better, smarter, healthier” care apply to dentistry by adopting policies and regulations encouraging a shift from “drill and fill” to medical management of the disease of tooth decay.

Contos, Harris

Hello- Could you tell me if you require a particular format in replying to the RFI, or can we use a fairly custom layout, e.g., introduction, narrative, references, etc.? Thank you. -Harris Contos, DMD, MBA

Cox, Beryl

To whom it may concern:

My senior paper at SUNYIT was on pediatrics home model. It is my opinion that it is a great model. The most difficult section of medical home is MD / OD putting community workers as equals of health care. Doctors want to be the leader, where Medical Home Model totally requires a co-op approach to medicine. Medical Home Model is not socialist medicine, it is Cooperative medicine for the betterment of each child, each practice, each school and each parent. Medical Home Model is a win-win for all parties, with better health and cost savings.

Delgado, Denise

To whom it may concern,

As a parent, whose son is a special needs adult, (Down Syndrome, 29-years old), from past experiences, it would be "extremely" helpful if pediatric care facilities would inform parents, with special needs children, whether, or not, they specialize in treating, and, more importantly, handling special needs children.

Economically, this would save time and money for both parents and facilities in that parents would not have to find another facility to correctly treat their children; and, facilities would not double-dip for services not rendered correctly.

Emotionally, parents, but more importantly, the children would not be subjected to archaic, out-dated services from providers and facilities that traumatize the children and the parents because their pediatric educational background did not include treatment-and handling of special needs patients or, they are not interested in- or do not possess the patience required in caring for children with special needs.

Thank you.

Dickson, Heather

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Gross-Panico, Michelle

CMS:

Below is my input as a provider of oral health care for pediatric populations in Arizona.

I have found the below concepts critical to addressing the comprehensive oral health needs of children and youth.

Opportunities and impediments to extending and enhancing integrated service model concepts like accountable care organizations (ACOs) to the pediatric population;

Opportunity: Dental home assignments made by state Medicaid health plans assign members to providers for care. Requiring state Medicaid health plans to provide members with information on an assigned dental provider is beneficial because 1.) it increases awareness by members that they have a dental benefit, 2.) removes the barrier to care of having to find a dentist that will accept Medicaid plans, 3.) allows health plans to share personal health information with providers so providers can outreach to members to schedule them for their dental visits, and 4.) provides the health plan with the ability to gather data and produce provider scorecards that determine the percentage of members being seen by providers

Opportunity: With the foundation of dental home assignments and provider scorecards, financial incentives for dental providers can be implemented. Example: When a dental provider accomplishes providing services to 70% of the Medicaid members that are assigned to them as a dental home within the measurement year, they received a bonus check or incentive payment.

Impediment: Several Medicaid health plans credential and contract with only dentists. They do not credential and contract other dental providers such as public health, collaborative practice, or independent dental hygienists or dental therapists. These mid-level providers will increase access to and utilization of services. If they are credentialed and contracted for direct reimbursement as permitted by the state statutes, dental practice act, and Medicaid policy manuals the services they provide could be documented or counted. The success of using other dental provider types is highly dependent upon Medicaid health plans recognizing them as a provider type then credentialing and contracting with them to provide reimbursement for their services.

Opportunity: Integration of public health, collaborative practice, or independent dental hygienists or dental therapists into medical practice settings to work side-by-side with pediatricians, physicians, nurse practitioners, and physician assistants in federally qualified health centers, community health centers, long term care facilities, private medical clinics, and hospitals. Integration of medical-dental care in this manner increases access to care for pediatric populations, increases health literacy, and provides an additional entry point into the oral health care system.

Flexibilities and supports states and providers may need in order to offer such models of care to a state's pediatric population;

Opportunity: Utilize licensed mid-level dental providers to increase access to and utilization of dental services. This requires state Medicaid programs to credential and contract mid-level dental providers such as collaborative practice/public health/independent dental hygienists and dental therapists

Impediment: Reimburse dental providers for examinations that are completed with the use of

technology such as teledentistry. Some patients are unable to access a dentist, but have access to a mid-level dental provider such as a collaborative practice/public health/independent dental hygienists or dental therapist. When this mid-level provider has asynchronous or synchronous communication with the dentist, the dentist reviews the images and assessments gathered by the mid-level provider to make a diagnosis and treatment plan. This examination by the dentists should be reimbursable regardless of whether the patient was seen by the dentist in person or via asynchronous or synchronous teledentistry.

Impediment: The CDT procedure codes are limiting and require expansion to support pediatric care models. For example, the CDT procedure codes for dental images and radiographs require both capturing and reading the image. The new service delivery models are set up to have a mid-level dental provider that can receive direct reimbursement for services take or capture the image or radiograph in the field and have the dentist read the image at a later time. Similar to the medical model of care, the development of additional CDT procedure codes for separately capturing an image and separately reading the images would support the newer dental delivery models.

Kauchick, John

Public comment

Pediatrics is slow to adapt evidence based practice. An example: many pediatric patients have adult risk factors, yet practitioners ignore this. When you suggest SCD's for an obese older child, etc.

Meilahn, Jill

I am a pediatric physiatrist. I work with the most expensive pediatric patients - healthy children with disabilities. Children with cerebral palsy and spina bifida are the most common examples. They live similar length of life to people without these conditions but have significantly more medical expenses. The children receive birth-3 services followed by early childhood services and special education services in school. They require DME in the form of wheelchairs, walkers, special beds and braces for legs and arms. The majority of them are on Medicaid and waiver programs.

Pediatric physiatrists are well suited to provide a medical home for these children.

B-3, Early Childhood services and social services should seek out specialty providers which would improve the child's care and potentially save money by early correct diagnosis, treatment and appropriate DME selection. However, these agencies are not required to consult with physicians, much less specialists. Perhaps some level of education for these agencies regarding physician specialties helpful to them, as well as a registry by which physicians could be located would be helpful. Currently this is a "word of mouth" accidental happening. I have been in my current location for 10 years and finally have a nice working relationship with many of the local B-3, Early Childhood, Social Services and waiver directors. However, I still meet people that are surprised to know I am available and how helpful I can be to them. In this age of computer information connecting services should be easier.

Additionally, DME requirements should be based on pediatric needs rather than following adult requirements. For example, leg braces are expected to fit for a year, a wheelchair for 7 years, which is not realistic (think of a 9 year old and a 16 year old, not anywhere near the same size!). DME providers can deliver inappropriate or poorly fitted equipment with impunity. Parents and caregivers have no recourse if it takes a year to deliver a wheelchair, if the parts are incorrect or if it fits poorly. There would be less waste if things were done correctly and DME vendors were held accountable for their products.

I would be willing to answer questions or provide more information if needed. Feel free to contact me

Sincerely,

Dr. Jill Meilahn

Ortiz, Jadiyi

I really appreciate the set up for our youth's care.

The concern is our population especially the foreign born population continues home remedies and spent extra money out of pocket and the solution usually is on their PCP guidelines and their medical insurance pay for they care but the believe is that the government funded insurance is not covering the best care, while explaining to them that there is no differences I took them by surprise, the vaccines come from the same companies the hospitals and specialist most of the time is the same or better !!! because the physician most of the time not looking for what kind of coverage except at the time of referrals and even the heart is going more for the under-served kids for a better outcome.

I would like some kind of population education to encourage the use of their coverage the the Child Health Plus or other kind of government funding plan is even better, parents with private insurance some times not looking for medical advice trying to avoid co-payments and medication co-payment as well.

Owens, Mary

- Allow the states to charge a copay to emergency rooms and minor emergency clinics, when PCP offices open. Reward those PCP's that have open access scheduling, after hours and Saturday hours.
- More education for the patients in regards to making appointments, seeking care, etc.
- Talking with providers more often about issues, and not punishing them for things they cannot control.
- Adding other types of providers for reimbursement, ex. Dieticians, psychologists, occupational therapists, the PCP's often have limited access to these providers, so if they can be in their offices, it would be better and easier for the patient.

Just a few things, but these items frustrate the providers.

Mary Owens

Pappas, Lisa

Increase drug awareness education and testing at earlier ages. From an economic standpoint if we want to get a head we should invest in educating youth about opiates, addiction, and alcoholism. The youth of America need to learn how deadly these drugs are. They need food. Often druggy parents will sell food stamps for drugs. We need to increase education about healthy eating, portion control, and feed children at school offering breakfast and maybe (to go) dinner in some areas. I'd rather see my money going to feeding kids than paying for drugs. Make food stamps/cards with a picture so no one else can use them but the card holder.

Many Children suffer from asthma, reactive airway, and other respiratory related illness. Often symptoms surrounding conditions are overlooked or not managed efficiently by parents and some medical providers. If we learn from states like North Carolina where they have invested in respiratory therapists to work hand in hand with school nurses and educate students and parents I believe we would have better outcomes especially in states with poor air quality, high indigent, or American American population because the prevalence is higher in some of these groups!

In states with high RSV issues. RSV clinics for babies offering nose suctioning (not deep suctioning) may help decrease admission rates of infants caused by dehydration. If a baby can eat a baby is more likely to stay hydrated and out of the hospital.

Paying for outpatient care! Securing a pediatrician for every pediatric patient may help reduce costs.

Home births, poorly staffed birthing centers, midwives without the proper training and or equipment and poor prenatal care can lead to neonatal issues due to increased risk. Improving education surrounding the risks of home delivery or the importance in the ability to perform a crash c-section should be better addressed. Just one baby not resuscitated correctly can cost Medicare/Medicaid thousands in testing and for handicap care. In my career working in the NICU I saw more and more semi brain dead home birth babies. It's super frustrating and I don't think Medicare or Medicaid should condone this in any way shape or form.

Multiple births caused by all of the fertility drugs and procedures cost a lot of money in neonatal care due to prematurity, miscarriage cost, etc. This should be better monitored.

Slade, Ian

Hello,

The key to decreasing cost for pediatric care is investing in preventative care and better communication via mobile platforms. There are plenty of opportunities for parents to intervene before getting into the curative phase of care. Also, providing telemedicine support will help keep kids at home or at school.

We need to invest in these strategies to not only decrease cost, but also improve the quality of life for the kids.

Please let me know if you want more details on the mobile technology that can facilitate this.

Please let me know if you have any workshops that i can attend to help you guys out.

Thanks,
Ian

Organization Comments

Academy of Nutrition and Dietetics

Dear Acting Administrator Verma:

The Academy of Nutrition and Dietetics (the “Academy”) is pleased to provide input to encourage CMS to proceed with the creation and testing of an innovative payment and service delivery model intended to enhance the quality of care and reduce avoidable expenditures in high risk pediatric populations enrolled in Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP).

Representing more than 100,000 registered dietitian nutritionists (RDNs),¹ nutrition dietetic technicians, registered (NDTRs), and advanced-degree nutritionists, the Academy is the largest association of food and nutrition professionals in the United States and is committed to improving the nation’s health through food and nutrition across the lifecycle. RDNs independently provide professional services such as medical nutrition therapy (MNT) under Medicare Part B. RDNs may provide MNT for “high-need, high risk” children via the Early Periodic Screening, Diagnosis and Treatment program when nutrition intervention is determined to be medically necessary per state guidelines, and may also provide MNT for other pediatric populations in states that have added benefits for nutrition counseling.

The Academy strongly supports CMS development of an Integrated Pediatric Health Care and Health-Related Social Service Delivery Model using Alternative Payment Models (APMs) to improve care and outcomes, and decrease avoidable costs in pediatric populations described in the RFI as “high-need, high-risk beneficiaries” covered by Medicaid and CHIP. The Academy appreciates the opportunity to highlight critical gaps in care for the purpose of informing delivery and payment model design, and to provide responses to specific questions proposed in this RFI.



Academy of
Nutrition and Dietetics

April 7, 2017

Seema Verma
Acting Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services Attn:
Request for Information (RFI)
Pediatric Alternative Payment Model Concepts

Re: CMS Request for Information (RFI) on Alternative Payment Model Concepts

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Gaps in Care

A CMS Innovation Model that utilizes multiple and thoughtfully constructed APMs has the potential to facilitate improvements in care that are patient and family-centered, and enable the best practices of team-based care underscored in numerous clinical practice guidelines. APMs, coupled with CMS waivers that afford greater flexibility in the types of care and services that can be provided in both health care settings and in the community, may help remove some barriers to care associated with benefit design and payment related policies. Nutrition is an example of an area where there are significant gaps in care

¹ The Academy has approved the optional use of the credential “registered dietitian nutritionist (RDN)” by “registered dietitians (RDs)” to more accurately convey who they are and what they do as the nation’s food and nutrition experts. The RD and RDN credentials have identical meanings and legal trademark definitions.

in the pediatric Medicare, Medicaid, and CHIP populations, including “high-need, high-risk” beneficiaries. MNT is an integral part of treatment in achieving functional, cognitive, physical growth, and developmental goals that may prevent more invasive, expensive, and avoidable treatment, comorbid conditions and associated costs. Medicaid’s benefit package **does not require** coverage for nutrition services. Access to nutrition care may be possible through the Early Periodic Screening, Diagnosis, and Treatment Program, but is dependent on several factors, including state definitions of medically necessary services. The following are some examples of “high-need, high-risk” populations for which there is a wide variation in the nutrition care.

Individuals with Intellectual and Developmental Disabilities and Special Health Care Needs (CYSHCN)

are examples of “high-need, high risk” populations with a wide range of conditions including chronic diseases, health-related problems related to prematurity, and congenital defects that require frequent follow up and medical care. “An estimated 11.2 million children, or 15% of all children in the U.S. have special health care needs. Medicaid, CHIP and other public health insurance programs cover nearly half (44%) of children with special health care needs. Public insurance, including Medicaid, is the sole source of coverage for 36% of these children.”²

It is the position of the Academy of Nutrition and Dietetics that nutrition services should be provided to children and youth with intellectual and developmental disabilities (IDD) and special health care needs throughout life in a matter that is interdisciplinary, family centered, community based, and culturally competent.³ Children with autism spectrum disorder, cerebral palsy, cystic fibrosis, chromosomal disorders such as Down syndrome, neurological disorders, genetic or inherited metabolic disorders, orofacial cleft, Prader-Willi syndrome, and spina bifida are examples of high risk populations who have significant nutritional risk factors. Some examples include “growth alterations (e.g., failure to thrive, obesity, or growth retardation), metabolic disorders, poor feeding skills, drug-nutrient interactions and sometimes partial or total dependence on enteral or parental nutrition.”⁴ “Nearly seven in ten children with special health care needs have difficulty with bodily functions, such as breathing, swallowing, or chronic pain.”⁵ Therapeutic feeding teams comprised of occupational therapists, speech therapists, and RDNs play a critical role in developmental pediatrics. RDNs work with children with global developmental delay who have conditions including, but not limited to, dysphagia, delayed feeding, failure to thrive, hypotonicity, and conditions that require the use of feeding tubes. They also play an important role in training other interdisciplinary team members, patients, and caregivers in food selection and preparation as part of the intervention plan.

The prevalence of obesity in CYSHCN is almost twice that of the general population.⁶ Nearly three-quarters of children with special health care needs live in low or middle income families, below 400% of the federal poverty level,⁷ highlighting the need to screen for and address food insecurity in this population. Individuals with intellectual and developmental disabilities and children with special health care needs require lifelong planning for services and care. Early intervention programs authorized by Part C of the Individuals with Disabilities Education Act enable care from birth through age three and

² <http://kff.org/medicaid/issue-brief/medicaid-and-children-with-special-health-care-needs/> accessed April 3, 2017.

³ “Position of the Academy of Nutrition and Dietetics: Nutrition Services for Individuals with Intellectual and Developmental Disabilities and Special Health Care Needs,” *Journal of the Academy of Nutrition and Dietetics*, 2015; 115:593-608

⁴ *ibid*

⁵ <http://kff.org/medicaid/issue-brief/medicaid-and-children-with-special-health-care-needs/> accessed April 3, 2017

⁶ Rimmer JH, Yamaki, K, Lowry BM, Wang E, Vogel LC. Obesity and obesity-related secondary conditions in adolescents with intellectual/developmental disabilities. *J Intellectual Disabilities Res*. 2010; 54(9): 787-794.

⁷ <http://kff.org/medicaid/issue-brief/medicaid-and-children-with-special-health-care-needs/> accessed April 4, 2017

may include nutrition services. There is a significant and real risk of an absence of nutrition care once children enter Medicaid/CHIP, and the medical need still exists. Furthermore, as people with IDD and CYSHN age and become dually eligible for Medicaid and Medicare, “the combination of cognitive and physical disabilities will significantly increase their medical expenditures; therefore, identifying new strategies emphasizing prevention and early treatment of comorbidities can help maximize future cost benefits.”⁸ An integrated pediatric delivery model design should insure that all CYSHN are referred for and have access to specialized nutrition care based on routine nutrition screening.

Preterm and low-birthweight infants are also examples of “high-need, high-risk” populations at increased risk of immediate life-threatening health problems including respiratory distress, jaundice, anemia, and infection, as well as long-term complications and developmental delays. Long-term complications can include learning and behavioral problems, cerebral palsy, lung problems, and vision and hearing loss.^{9 10} As a result of these risks, preterm birth and low birth weight are leading causes of infant death and childhood disability. Preterm birth and low birth weight exact a heavy societal toll with the annual economic burden related to preterm birth estimated to exceed \$26 billion, including costs for medical care and early intervention as well as lost productivity due to disabling conditions.”¹¹ There is a great need for better coordination of services for premature and low birthweight infants who may spend two to three months in the neonatal intensive care unit before being discharged to the home with multiple medical issues and an increased need for nutritional care.

Children with overweight and obesity, with and without comorbid conditions, including, but not limited to, insulin resistance, type 2 diabetes, hypertension, hyperlipidemia, orthopedic conditions such as Slipped Capital Femoral Epiphysis (SCFE) and Blount’s disease, depression, disordered eating, non-alcoholic fatty liver disease, (NAFLD) and obstructive sleep apnea are examples of “high-need, high risk” populations where early identification, team-based care, and improved coordination of care could have an impact on the trajectory of outcomes, quality of life, and the long term total cost of care. Currently, childhood obesity is estimated to cost the health care system approximately \$14 billion in direct medical costs.¹² “Secondary prevention and tertiary prevention/treatment should emphasize sustained family-based, developmentally appropriate approaches that include nutrition education, dietary counseling, parenting skills, behavioral strategies, and physical activity promotion. For youth with obesity and concomitant serious comorbidities, structured dietary approaches and pharmacologic agents should be considered, and weight loss surgery can be considered for adolescents with severe obesity.”¹³ The EPSDT benefit covers all medically necessary services which *can* include coverage for obesity-related services.¹⁴ Coverage for obesity-related services as part of EPSDT is not required. The US Preventive Services Task Force recommends that clinicians screen children age 6 years and older for obesity and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status.¹⁵ The Affordable Care Act included provisions that promote preventive

⁸ Rimmer JH, Yamaki, K, Lowry BM, Wang E, Vogel LC. Obesity and obesity-related secondary conditions in adolescents with intellectual/developmental disabilities. *J Intellectual Disabilities Res.* 2010; 54(9): 787-794.

⁹ March of Dimes. [Premature babies](#). Accessed April 3, 2017

¹⁰ March of Dimes. [Low birth weight](#). Accessed April 3, 2017

¹¹ Behrman R, Stith Butler A, eds. *Preterm Birth: Causes, Consequences, and Prevention*. Washington, DC: National Academies Press; 2007

¹² <http://www.healthycommunitieshealthyfuture.org/learn-the-facts/economic-costs-of-obesity/> accessed April 3, 2017

¹³ “Position of the Academy of Nutrition and Dietetics: Interventions for the Prevention and Treatment of Pediatric Overweight and Obesity.” *J Acad Nutr and Dietetics.* 2013;113:1375-1394.

¹⁴ <https://www.medicaid.gov/medicaid/quality-of-care/improvement-initiatives/reducing-obesity/index.html> accessed April 3, 2017.

¹⁵ <https://www.medicaid.gov/medicaid/quality-of-care/improvement-initiatives/reducing-obesity/index.html>

care including obesity-related services and coverage. The obesity screening and counseling provided in the primary care setting are an important step to reducing rates of obesity in the pediatric population, yet the service may not meet the needs of populations already with obesity and obesity-associated comorbidities, as many practices may not have access to or be utilizing the most qualified and/or cost-effective providers for “intensive, behavioral interventions”.

Children living in households experiencing food insecurity are at risk for cognitive, emotional, behavioral, and other health conditions.^{16 17} A substantial and rapidly growing body of research has demonstrated associations between children’s health, development and well-being and measures of food security and food sufficiency. There is a higher prevalence of food insecurity among families with children. Food sufficiency, a condition closely related to food security, has been assessed in several Federal surveys before the development of the food security measures, and the measure was used in much of the earlier research on outcomes of inadequate food access. Findings from several studies on child health and development outcomes associated with food insecurity and food insufficiency found the following conditions to be more likely for children in food-insecure or food-insufficient households than for children in otherwise similar food-secure households:¹⁸

- Poorer health of children, as reported by parents
- Higher hospitalization rates of young children
- Iron deficiency anemia in young children
- Lower physical function in children ages 3-8
- Poorer psychosocial function and psychosocial development in school age children
- Higher rates of depressive disorder and suicidal symptoms in adolescents
- More anxiety and depression in school-age children
- Higher numbers of chronic health conditions in children

In addition to a high prevalence of food insecurity in households with children, there is an underutilization of health-related social services that may, in part, help address the need.¹⁹ There are opportunities to improve health outcomes by increasing health care provider awareness and understanding of the impact of food insecurity and poverty on child health and the effectiveness of federal supplemental nutrition programs such as Women Infants and Children (WIC), on health outcomes. Although RDNs play an important role in coordinating access to health-related social services, the fee-for-service payment model has been a significant barrier to the ability of RDNs to perform such roles in the primary care setting. All healthcare providers could play a pivotal role in health related social services by referring appropriate children and families to programs such as WIC, that are under-utilized by eligible populations. Data from a 2013 United States Department of Agriculture report indicates that although 84.4% of eligible infants participated in WIC in 2012, only 49.8% of children ages one to four participate in WIC.²⁰ Screening for and actively working to address food insecurity is one example of an

¹⁶ Council on Community Pediatrics, Committee on Nutrition, “Promoting Food Security for All Children, Pediatrics. 2015: 136:5; e1431-e1438.

¹⁷ Shankar P, Chung, R, Frank D, “Association of Food Insecurity with Children’s Behavioral, Emotional and Academic Outcomes: A Systematic Review.” J Dev Behav Pediatr. 2017: 38:153-150.

¹⁸ Cook J, Frank D, Berkowitz C, Black M, Casey P, Cutts D, Meyers A, Zaldivar N, Skalicky A, Levenson S, Heeren T, and Nord M. Food Insecurity Is Associated with Adverse Health Outcomes among Human Infants and Toddlers. Journal of Nutrition. 2004; 134:1432-38.

¹⁹ Shankar P, Chung, R, Frank D, “Association of Food Insecurity with Children’s Behavioral, Emotional and Academy Outcomes: A Systematic Review.” J Dev Behav Pediatr. 2017: 38:153-150.

²⁰ <https://www.fns.usda.gov/national-and-state-level-estimates-special-supplemental-nutrition-program-women-infants-and-childr-2> accessed April 3, 2017

opportunity to improve health and outcomes through a model that integrates health care and health-related social services.

These examples of populations of “high-need, high-risk” infants, children and adolescents highlight the diversity of conditions for which nutrition and care provided by RDNs is a critical component of treatment, but may not be provided. An integrated model could have a significant impact on patient access to family centered care through tertiary care settings, clinics, homes, schools, and community-based organizations.

Lastly, Medicare and Medicaid policies present barriers to patient access to nutrition care. Virtually all prevalent chronic illnesses have a nutrition component, yet there remain huge gaps in the way our health care system addresses the important role of nutrition in preventing and treating such diseases — particularly in the Medicare program. Under current law, Medicare only covers outpatient medical nutrition therapy services provided by RDNs for beneficiaries with diabetes, chronic renal insufficiency/non-end-stage renal disease (non-dialysis) or post kidney transplant.²¹ Medicare policy is important beyond its impact on Medicare itself, because states that expand benefits to include nutrition care and private insurers are likely to adopt Medicare’s baseline policies as their own. Thus, the Medicare MNT coverage determination has a significant impact on the ability of pediatricians to prevent or manage acute and chronic disease in “high-need, high-risk” pediatric populations.

Response to Questions in RFI

RFI Section I: Integrated Pediatric Health Care and Health-Related Social Services Delivery Model

Question #3: What policies or standards should CMS consider adopting to ensure that children, youth and their families, and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

CMS could create a separate track of a pediatric integrated services delivery model that aims to address the unique issue for rural and underserved communities. CMS policies should remove barriers and enable and incentivize the use of telehealth to improve access to care and monitoring by appropriate pediatric specialists, and pay for non-face-to-face interventions with appropriate health-related social services in other parts of a state. Policies regarding telehealth services under the current Medicare program are antiquated and do not adequately address the needs of Medicare patients, providers, and the Medicare program itself. The emergence and rapid growth of telehealth and mobile technologies designed to improve the health of individuals, enhance patient engagement, and lower costs should be recognized in new delivery and payment models as they offer new opportunities to increase access to care in urban, suburban, and rural areas. Time spent by all qualified health care professionals (both physician and non-physician providers) using such technologies for assessment, treatment, evaluation and monitoring functions needs to be recognized in future payment models. Beneficiaries should be

²¹ Center for Medicare and Medicaid Services National Coverage Determinations Manual Chapter 1, Part 3 (Sections 170 – 190.34) Medical Nutrition Therapy (Rev. 181, 03-27-15)). https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/ncd103c1_part3.pdf accessed April 7, 2017

able to receive health care services amenable to telehealth technology in their homes, taking advantage of the wide range of emerging e-health technology. In order for an integrated service delivery model focused on improving care for “high-need, high risk” beneficiaries in rural areas to achieve its goals, the model would also need to recognize and engage non-rural providers who are appropriate specialists, allied health professionals, as well as Centers of Excellence (COE) teams and specialty clinics (e.g., gastroenterology, neurology, pediatric obesity specialists, and feeding clinics). CMS and state Medicaid agencies should engage pediatric specialists and COEs in APMs that also hold specialist provider teams accountable for outcomes.

Question #6: What are some of the obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

One of the challenges that health care providers face when integrating services is parent and caregiver ability to implement treatment plans. Providing care for “high-risk, high need” children is stressful for families. Providing parents and caregivers with accessible resources and training to improve coping and problem-solving skills that would better enable families to implement treatment plans are examples of health-related social services that would benefit children and families. CMS could consider testing and payment for this type of intervention with families as one strategy to help improve outcomes and decrease avoidable costs as part of an integrated delivery model.

Variable provider access to, and interoperability of, Electronic Health Records remains a significant barrier to ensuring accurate and current patient records and to maintaining critical communication among providers. Complete patient records are not only essential for preventing adverse events and errors, but also for teams to function in order to provide good care. All providers involved in a patient’s care must be able to document a patient’s condition and communicate with all of the providers involved in team-based care, regardless of the physical location, association of the provider, or proprietary system. It is important to note that allied health professionals were not eligible for EHR incentive programs, which has had an impact on the adoption of EHRs. There are additional barriers for allied health professionals such as RDNs who may not be employed by the practices where their patients receive most of their care, or where organizations do not understand the role of nutrition care in treatment plans.

Variable or lack of payment for services such as nutrition care in the most patient and family-centric settings increases the risk for readmissions into the hospital system in high risk pediatric populations. RDNs provide nutrition care and intervention as members of interdisciplinary teams in the inpatient and outpatient setting and within community-based organizations. A patient and family-centered integrated delivery model that utilizes APMs has the ability to address some gaps in care related to provisions for place of service and covered benefits.

RFI Section III: Integrated Pediatric Service Model Payment and Incentive Arrangements

Question #1: What payment models, such as shared savings arrangements, should CMS consider?

CMS and state Medicaid agencies should consider the use of multiple APMs in order to create the right kind of financial incentives for all health care providers and health-related social

service providers to improve care and outcomes. In order to accommodate the range of conditions and specialty care needs in “high-need, high-risk populations,” CMS should consider risk-adjusted prospective population based payments for pediatric primary care as well as bundled payments with eligibility for shared savings for team-based specialty care and Centers of Excellence. Fee for service payments with links to quality/outcomes should also be considered if needed to engage important specialists. Furthermore, there needs to be an additional mechanism and financial incentive for all provider types involved in the care to collaborate and coordinate care. The burden of accountability should not fall solely on primary care. Both primary care and specialty providers need to view themselves and their teams as accountable providers for an integrated services delivery model that uses APMs to achieve improvements in care and outcomes in the “high-need, high-risk” pediatric populations covered by Medicaid and CHIP. Payment for coordination of care is essential to an innovation model’s ability to improve care and decrease avoidable spending. Coordination of care payments should be commensurate with the expertise and time required to coordinate care in “high-need, high risk” pediatric population, and to enable other providers (e.g. RDN, OT, PT) to perform the role and be paid for the care provided.

An integrated delivery model for high risk pediatric populations presents an opportunity for CMS to simultaneously address important medical risks for preterm and low-birthweight babies through a more holistic and integrated approach. Poor weight gain during pregnancy, previous low-birthweight pregnancy, and chronic health conditions such as diabetes, hypertension, and obesity are examples of medical risk factors for low-birthweight.²² Low birthweight is associated with developing diabetes, heart disease, high blood pressure, and metabolic syndrome, and obesity later in life.²³ In a meta-analysis published in 2014, dietary interventions during pregnancy were associated with increased birth weight and length and a reduced incidence of low birthweight. “The provision of nutrition education as well as food or fortified food products to pregnant women, particularly those who are underweight, at nutritional risk, or come from a low-income country, is likely to increase the size of the infant at birth with important health and financial ramifications.”²⁴ Integrating nutrition care into a pediatric integrated delivery model that also includes pregnant women could be an effective strategy for reducing the medical risks for preterm and low-birthweight, the leading causes of childhood death and disability. A pediatric model that integrates health care and health related social services should aim to increase participation rates of pregnant women in the WIC program as one strategy to address food insecurity and the risk of low-birthweight. In 2013, 68.4% of eligible pregnant women participated in the program.²⁵

#5 In addition to Medicaid’s mandatory benefits (including supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?

The Academy strongly recommends that CMS Integrate nutrition services into Pediatric Care Delivery Models and APMs. CMS should factor the cost of delivery of nutrition care into health care payments. “Medicaid’s benefit package for children covers traditional medical services like

²² <http://www.marchofdimes.org/baby/low-birthweight.aspx> accessed April 4, 2017

²³ <http://www.marchofdimes.org/baby/low-birthweight.aspx> accessed April 4, 2017

²⁴ Gresham E, Byles J, Bisquera A, and Hure, A. “Effects of dietary interventions on neonatal and infant outcomes: a systematic review and meta-analysis.” *Am J Clin Nutr* 2014;100:1298–321.

²⁵ <https://www.fns.usda.gov/national-and-state-level-estimates-special-supplemental-nutrition-program-women-infants-and-childr-2> accessed April 3, 2017

doctor visits, hospitalizations, x-rays, lab tests, and prescription drugs. It also includes behavioral health, dental, hearing, and vision care as well as physical, occupational, and speech therapy and medical equipment and supplies.”²⁶ It does not include nutrition care. There is no mandated benefit for nutrition counseling under Medicaid.²⁷ Chronic diseases such as heart disease, diabetes, cancer, and others are the leading causes of death and disability in the United States, and the largest cost drivers for Medicare and Medicaid.²⁸ The prevalence of obesity in CYSHCN is almost twice that of the general population, and there has been a notable increase in hypertension, diabetes mellitus, and obesity in adolescents identified as CYSHCN.²⁹ Poor nutrition is one of the four modifiable health risk behaviors that lead to chronic disease development and severity.³⁰ Providing nutrition care for “high-need, high-risk” populations should be viewed as a strategy for improving the health of two generations.

Thank you for your consideration of the information the Academy has provided to inform CMS’s decision to proceed with developing an innovation model in pediatric care. The Academy looks forward to continued opportunities to work with CMS to design a health care delivery and payment system that improves the health of vulnerable populations and meets the needs of all stakeholders. Please do not hesitate to contact. We look forward to future opportunities to provide input on a draft model and APM proposals.



Jeanne Blankenship, MS, RDN
Vice President, Policy & Advocacy
Academy of Nutrition and Dietetics



Marsha Schofield, MS, RD, LD, FAND
Senior Director
Academy of Nutrition and Dietetics

²⁶ <http://kff.org/medicaid/issue-brief/medicaid-and-children-with-special-health-care-needs/> accessed April 4, 2017

²⁷ <https://www.medicaid.gov/medicaid/benefits/epsdt/index.html> accessed April 4, 2017

²⁸ <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical.html> accessed April 7, 2017

²⁹ Rimmer JH, Yamaki K, Lowry BM, Wang E, Vogel LC. Obesity and obesity-related secondary conditions in adolescents with intellectual/developmental disabilities. J Intellectual Disabilities Res. 2010; 54(9): 787-794.

³⁰ <https://www.cdc.gov/chronicdisease/overview/> accessed April 7, 2017

Advantage Dental

These comments are in response to your Request for Information (RFI) on Pediatric Alternative Payment Model Concepts. The comments specifically relate to Section III: Integrated Pediatric Service Model Payment and Incentive Arrangements, Questions 1 and 2. The information provided is a summary of the Population-centered Risk- and Evidence-based Dental Interprofessional Care Team (PREDICT) quality improvement project conducted by Advantage Dental Services, LLC and University of Washington, Northwest Center to Reduce Health Disparities, Seattle, WA. Additional information about the model and the potential for cost savings can be obtained by contacting Gary W. Allen





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RFI

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Fri 3/24/2017 12:14 PM

To: CMS HealthyChildrenandYouth 

RFI Submissions

You replied on 3/24/2017 12:43 PM.

These comments are in response to your Request for Information (RFI) on Pediatric Alternative Payment Model Concepts. The comments specifically relate to Section III: Integrated Pediatric Service Model Payment and Incentive Arrangements, Questions 1 and 2. The information provided is a summary of the Population-centered Risk- and Evidence-based Dental Interprofessional Care Team (PREDICT) quality improvement project conducted by Advantage Dental Services, LLC and University of Washington, Northwest Center to Reduce Health Disparities, Seattle, WA. Additional information about the model and the potential for cost savings can be obtained by contacting

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Question 1: What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generative savings and/or improving outcomes for children and youth receiving services from integrated health-related systems?

Tooth decay (dental caries) is the most common chronic health problem of children. Children and youth suffering from tooth decay represent a population that is unnecessarily expensive to Medicaid and CHIP programs and provide an opportunity for substantial cost savings. Dental Caries is a disease with significant public health implications afflicting low SES children, with marked socioeconomic, racial and rural disparities in disease prevalence and treatment. Approximately 45% of children 3 to 5 years old and fewer than 10% of children younger than 2 years old received dental services in 2008 in the United States (Griffin SO, et al. Medical Expenditure Panel Survey, United States, 2003–2009). Many young children with untreated caries have their first dental visit in the Emergency Department (ED). Newspapers, magazines and on-line publications have documented deaths of children from untreated oral infections. Surgical in-hospital treatment of caries is becoming more common and costly and the disease recurs at a high rate. Hospital stays for severe dental disease can run several days and can cost between \$10,000 - \$25,000 (State of Little Teeth, American Academy of Pediatric Dentistry Jul 2013). Preventable dental conditions were the primary reason for 830,590 ER visits by Americans in 2009 – a 16% increase from 2006 (PEW. A costly dental destination: hospital care means states pay dearly. Washington DC: PEW Center on the States; 2012.). Although all Medicaid-enrolled children are entitled to care under EPSDT, dental care utilization is low. Rates for age 1 visits recommended by the American Academy of Pediatrics and the American Academy of Pediatric Dentistry are less than 10%. Dental caries is largely preventable by early oral health assessment, identification of individual risk factors, parental counseling and education, and referral for curative care when indicated. The progressive nature of dental disease can quickly diminish the general health and quality of life for affected infants, toddlers, and children. The American Academy of Pediatric Dentistry cites studies that show early childhood caries can result in:

- Life-threatening infection;
- Significant pain;
- Chewing difficulty (due mostly to pain) leading to malnutrition and gastrointestinal disorders that can result in a failure to thrive or delayed or insufficient growth; and
- Poor speech articulation; poor sleep habits; low self-esteem, social ostracism and poor school performance that leads to a diminished overall quality of life.

Failure to identify and prevent dental disease has consequential and costly long-term adverse effects.

Estimates of the cost of treating dental care in the United States are more than \$40 billion per year and the Medicaid program alone pays between \$100 million and \$400 million each year to treat ECC in children (State of Little Teeth, American Academy of Pediatric Dentistry Jul 2013).

Question 2: How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

The majority of states operate Medicaid dental programs that are fee-for-service. These programs largely fail to reduce disparities in access to care or oral health because they do not prioritize those who are most in need and because they incentivize the production of services only for

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Where there are managed care systems, they largely employ the same failed model with capitated payments and incentivize less care, in part because the capitated payments are based on previous expenditures rather than the actual cost of care. Both approaches are limited by a focus on individual payments and practices rather than global budgeting and no meaningful attempt at community based care. CMS has stated that within five years all state Medicaid dental programs will be managed care with global budgets.

The state of Oregon has been a national leader in implementing global budgeting, pay-for-performance incentive models and integration of physical health, behavioral health and oral health through Coordinated Care Organizations (CCOs). The integrated CCO model has demonstrated significant cost savings since it was established by the Oregon legislature in 2012 and is a model that is easily transferrable to other states. The Center for Healthcare Strategies analysis of cost saving by CCOs estimates \$1.3 billion in savings since 2013 with projected savings of \$10.5 billion by 2022 ([Lloyd, J](#) and [Matulis R](#). Reviewing Medicaid ACO Progress in Leading-Edge States, Center for Healthcare Strategies, Feb 2017)

The Oregon CCO model encourages collaboration between CCOs and DCOs by adding financial incentives to a number of metrics, including dental measures. A percentage of the funding is withheld and placed in an incentive pool. The CCOs performance on certain metrics determines what they can earn back. Incentive for performance on the dental metrics is passed on to dental care organization (DCOs). In addition to improving performance on dental measures, CCO performance on other measures can also benefit indirectly from enhanced dental care (e.g., lower emergency room utilization through improved access to preventive dental services). Oregon's integrated global budget and incentive model recognizes oral health as an important component of total health care and provides incentives and motivation for stakeholders to emerge from the historical silos of care.

Advantage Dental is a DCO contracted to provide services with all sixteen Oregon CCOs and has taken the global budget and incentive pay for performance model a step further in organizing and delivering dental services in its clinics and among its contracted providers.

Advantage Dental has successfully implemented a global budget capitation payment model with expanded pay-for-performance and evidence- and risk-based quality of care benchmarks to providers for continuing quality improvement. Routine monitoring and feedback is given to providers so they can self-assess and adjust quality metric performance towards meeting benchmarks. The incentives accrue to all of the team members, including paraprofessionals and lay staff members. This payment and incentive model of care has contributed to individual providers and the Advantage DCO's ability to meet or surpass CCO performance metric targets.

In the Oregon global budget model as implemented by Advantage Dental, dentists are encouraged to participate because they are paid fairly on a capitated rate. A percentage of the capitation is withheld and providers receive this back at the end of the calendar year if certain performance metrics are met. In addition, their appointment schedules are filled with needed curative care, rather than with unnecessary screening and preventive care. Dentists are not burdened with having to assess the dental needs of their assigned Medicaid population. Children are referred to dentists based on individual screening assessments done in the community. With nearly 90 percent of US children enrolled in schools, school-based dental services have potential to reach at-risk pediatric populations. Recognizing that the ultimate benefit to oral health depends on timely dental treatment, Advantage Dental focuses on evidence- and risk-based dental care delivered at school and other community settings by an interprofessional team with payment incentives to meet service goals. The community and school-based screenings,

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encouragement to their participation.

Implementation of the PREDICT model has been enthusiastically received by employees and dentists. A recent survey conducted by Joana Cunha-Cruz and colleagues at the University of Washington Northwest Center to Reduce Oral Health Disparities, found a high level of organizational readiness for adoption of change to a global budget and pay for performance dental delivery model.

Advocate Children's Hospital

Good Afternoon,

On behalf of Mike Farrell, President, Advocate Children's Hospital, please see the attached comments in response to the the Request for Information (RFI) Pediatric Alternative Payment Model.

Thanks for your consideration.



Advocate Children's
Hospital.pdf



advocatechildrenshospital.com

March 28, 2017

Administrator Seema Verma
Centers for Medicare & Medicaid Services
US Department of Health and Human Services

Submitted via:

Re: Request for Information (RFI) on Pediatric Alternative Payment Model Concepts

Dear Administrator Verma:

On behalf of Advocate Children's Hospital, we appreciate the opportunity to provide comment on the Pediatric Alternative Payment Model concepts. We commend the Centers for Medicare and Medicaid Services (CMS) Innovation Center for seeking input from providers on models that will improve the health of children and youth covered by Medicaid and the Children's Health Insurance Program (CHIP).

As part of Advocate Health Care (Advocate), Advocate Children's Hospital is the largest network provider of pediatric services in Illinois and is one of the 10 largest children's hospitals in the nation. We maintain two primary Advocate Children's campuses, located in the Chicago suburbs, with additional pediatric services accessible at Advocate's 11 other hospitals throughout Illinois. Advocate Children's two campuses have the second and third largest neonatal intensive care units (NICUs) in Illinois, offering the highest level of care to the most at-risk premature and critically ill newborns. In 2015, Advocate Children's served the community through approximately 16,000 inpatient admissions, 117,000 emergency department visits, 255,000 outpatient visits, and nearly 10,000 surgical cases, which included nearly 500 open heart surgeries. Advocate Children's also provided care to 235 high-risk infants that were transported from community hospitals in the greater Chicagoland area to Advocate Children's.

Children with medical complexity are high utilizers of health care - they comprise up to 6 percent of the U.S. population of children on Medicaid but consume approximately 40 percent of Medicaid resources,¹ with the largest portion of this cost spent on inpatient care.² Coordinated care programs for this patient population can

¹ <https://www.childrenshospitals.org/issues-and-advocacy/children-with-medical-complexity/fact-sheets/defining-children-with-medical-complexities>

² M. Wietcha, Evolving Medicaid to better serve children with medically complex conditions. [Internet]. Bethesda: Health Affairs Blog; Dec 8 2014 [cited 2015 Apr 21]. Available from: <http://healthaffairs.org/blog/2014/12/08/evolving-medicare-to-better-serve-children-with-medically-complex-conditions>.

reduce inpatient stays and significantly reduce costs.³ The barrier to full implementation of such programs is that a comprehensive, inter-professional collaborative team is needed. Such teams may include the patient and family, physician, advanced practice nurses, and a multitude of specialty providers including dietitians, speech language pathologists, occupational and physical therapists, social workers, case managers, subspecialty physicians, and palliative care teams. These patient and family-centered teams also must collaborate with local, regional, and state agencies for such services as durable medical equipment, early childhood services, state waiver programs, and Women Infants and Children (WIC) services.

Under my leadership, Advocate Children's created a Coordinated Care for Children with Medical Complexity Program, which has provided primary and specialty care to over 65 medically fragile and technology dependent patients since April 2015. As a direct result of this program, pediatric patients and their families have avoided 258 visits to the emergency department and 53 inpatient hospitalizations, and have experienced an improvement in their family quality of life (as measured by the PedsQL(TM) 4.0 Family Impact Module). In the first year alone, the estimated savings from the program totaled 1.2 million dollars based on avoidance of emergency department visits and inpatient hospitalizations.

While this proven approach reduced costs and improved outcomes, it also often requires developing creative approaches to coordination and the delivery of care. The sustainability of children's health care programs is in jeopardy when there is a lack of reimbursement for services provided in a non-traditional manner.

One such example of an approach used to connect the myriad of providers that serve children with medical complexity is the use of telehealth, or electronic methods to deliver health care and care coordination in real time or via asynchronous interactions. This technology achieves increased access and improved efficiency for children with medical complexity through real time visits, remote patient monitoring, connecting with the medical home and with multiple specialists. Such programs are not only equivalent to in-person visits, but in some instances they are superior⁴, demonstrating improved medical decision making⁵, parent confidence⁶, cost savings⁷ and reduction in overall health care costs (20,24).

There are multitudes of potential benefits associated with broadly expanding telehealth services to pediatric patients, including:

- **Improved access to quality home services with qualified pediatric providers.** In instances where in-person care is required, telehealth could help provide training, supervision, and resources to the in-home provider. Such a resource would improve both competence and confidence of providers in the home.
- **Partnerships with professionals.** Connections between physicians, therapists, counselors, etc. would allow for the provision of information, education and training, and support. This would empower families to provide care that is more direct when in-home providers are not available.

³ Gordon JB, Colby HH, Bartelt T, Jablonski D, Krauthoefer ML, Havens P. A tertiary care–primary care partnership model for medically complex and fragile children and youth with special health care needs. Arch Pediatr Adolesc Med. 2007; 161(10):937–44.

⁴ Chen, DS, Callahan CW, Hatch-Pigott VB, et al. Internet-Based Home Monitoring and Education of Children With Asthma Is Comparable to Ideal Office Based Care; Results of a 1 year Asthma In-Home Monitoring Trial. Pediatrics 119(3):569-578, 2007.

⁵ Nelson B, Collier RJ, Saenz AA, et al. How Avoidable are Hospitalizations for Children With Medical Complexity? Understanding Parent Perspectives. Acad Pediatr 16(6) 579-586, 2016.

⁶ Casavant DW, McManus ML, Parsons SK et al. Trial of telemedicine for patients on home ventilator support: feasibility, confidence in clinical management and use in medical decision making. J Telemedicine Telecare 20(4): 441-449, 2014

⁷ Katalinic O, Young A, Doolan D. Case study: The Interact home telehealth project. J Telemed Telecare 19(7):418-424, 2013.

- **Pediatric -specific training competencies.** Telehealth could help provide a window into the home for the provider in order to better assess the patient needs as well as facilitate a pediatric certification process or waiver agency oversight.
- **Discharge and planning bridge.** Telehealth connections could help to ease transitions from inpatient settings to long term care facilities or homes, potentially reducing inpatient and long-term care facility stays, as well as hospital readmissions.

As outlined above, telehealth is a critical and ideal solution for children with medical complexity; however, significant barriers continue to exist, which has limited telehealth development and expansion.

- **Connectivity:** Patients with special health care needs require priority access to basic services, such as water and electricity. Similarly, as electronic communication becomes more prevalent, continued efforts are needed to establish and maintain sufficient broadband connections in the home. Nationwide broadband efforts are underway, but they must go hand in hand with processes for establishing priorities in maintaining and restoring service in the event of outages.
- **Funding of training programs:** As described above, effective training processes could be established to help train and support more pediatric specific providers in the home setting. Certification processes and funding are necessary to support these programs.
- **Regulatory requirements.** Although reimbursement for telehealth services has improved, it continues to vary widely by state. Moreover, many insurers have restrictive rules for telehealth payment, including a limitation on the type of health care professional that can furnish telehealth services. Despite the effectiveness of counselors, therapists, and other non-physician professionals, payment is generally limited to care furnished by a physician or advanced practice nurse. Geographic restrictions also pose a significant barrier to telehealth, in addition to lack of recognition of the home or school as a covered site of care.

Care teams for children with medical complexity can meet the needs of patients through electronic means. To continue to provide the highest quality of care to our patients, however, health care providers, including Advocate Children's Hospital, require infrastructure support, reimbursement parity, and the waiver of regulatory requirements that hinder telehealth adoption.

Again, we thank you for the opportunity to provide these comments. Please know Advocate Children's stands ready to be a resource to CMS as you work to expand pediatric programs within Medicaid and CHIP. We are committed to working with policymakers at all levels of government to promote to advance innovation in health care delivery for children to ensure quality and improve outcomes. Do not hesitate to contact me or should you have any questions or if we can be of assistance.

Regards,



Mike Farrell
President
Advocate Children's Hospital

AFL Enterprises

Dear Centers for Medicare and Medicaid Services,

Thank you for the opportunity to provide the attached information in response to the Request for Information (RFI) seeking input on approaches to improve pediatric care.

Feel free to contact me should you require additional information or clarification on any of this information.

Thank you.



AFL Enterprises.pdf

March 27, 2017

Centers for Medicare and Medicaid Services

Re: Request for Information to Improve Pediatric Care

Dear Centers for Medicare and Medicaid Services,

I am pleased to provide the information below in response to the Request for Information (RFI) seeking input on approaches to improve pediatric care.

For the past 5 years, AFL Enterprises, LLC has worked with federally qualified health centers to integrate oral health with primary care practice. Using a quality improvement approach, and developing metrics to support improvement efforts, we have seen dramatic increases in the number of children receiving preventive oral health services, and are beginning to see improvements in patient outcomes.

The following information is provided based on experience using the Institute for Healthcare Improvement Breakthrough Series methodology in federally qualified health centers to improve oral health outcomes.

SECTION IV: PEDIATRIC MEASURES

AFL Enterprises has worked with local, state, and national stakeholders to develop a set of child oral health quality measures that can be used to assess the quality of dental services provided in health center dental programs. <http://www.nnoha.org/resources/dental-dashboard-information/>

Questions:

- 1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.*

Response: As part of the NNOHA Dashboard Collaborative we track seven different provider level metrics from 26 Health Centers across the United States. Oral health measures what would be appropriate for beneficiaries aged 0-21 include:

- Caries at recall (outcome measure)
- Caries risk assessment at dental visits or well child visits
- Reduction in caries risk status (outcome)
- Sealants 6-9 year olds, and 10-14 year olds
- Treatment plan completion
- Self-management goal setting
- Fluoride varnish application in medical and dental
- % of pediatric medical patients who have had a dental appointment within the last year

The evidence behind assessing risk and providing sealants shows both near-term and overall health and well-being, as well as short and long-term cost reductions.

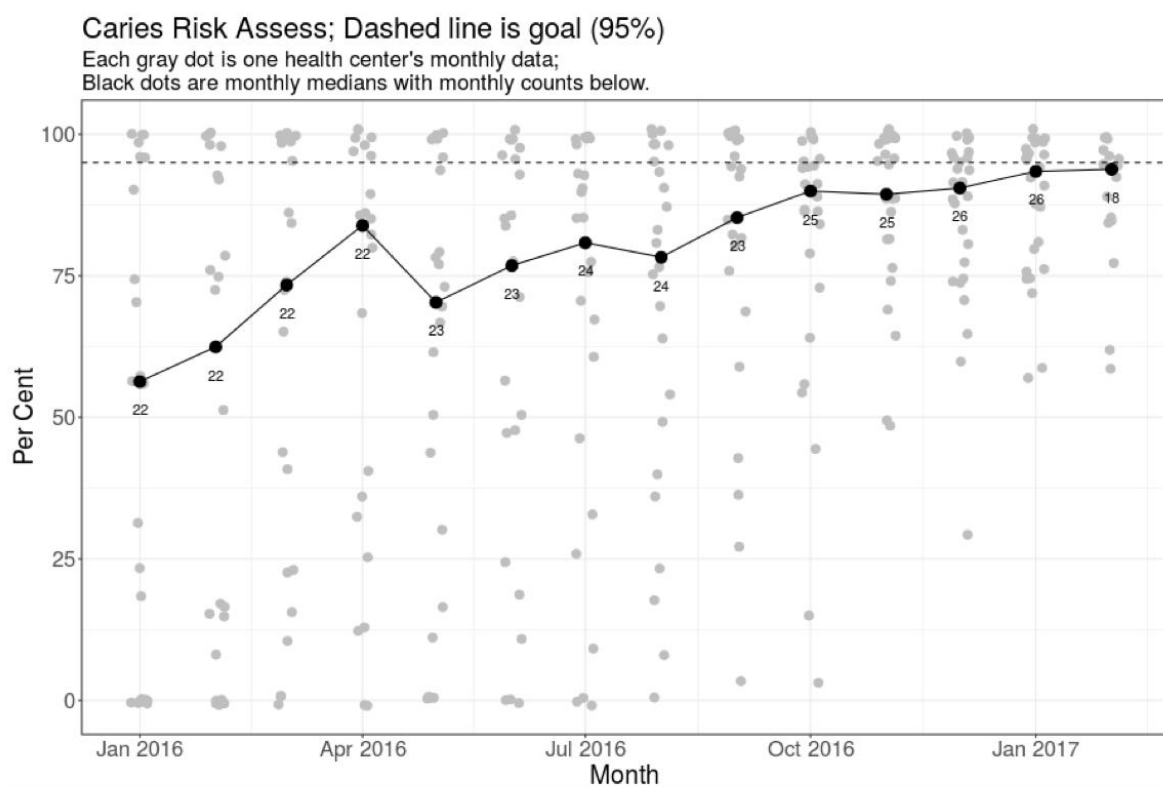
The American Academy of Pediatric Dentistry (AAPD) recommend the use of a caries management protocol for infants, children and adolescents. The AAPD guidelines state that “caries-risk assessment tools and protocols can assist in providing evidence for and justifying periodicity of services, modification of third-party involvement in the delivery of dental services, and quality of care with outcomes assessment to address limited resources and work-force issues.”¹

2. *Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.*

Response: These measures are currently being collected at the practice-level at federally qualified health centers. The data elements are either CDT codes, I-CD10 codes, or smart codes developed by the health centers to collect this data in their electronic health records. Because these are measures used for quality improvement, the focus is on improvement at each individual health center. Work is ongoing to refine the measures for consistent definition and interpretation. The graphs below show

¹ American Academy of Pediatric Dentistry (Rev. 2014). *Guidelines for Caries Risk Assessment and Management for Infants, Children and Adolescents*. Reference Manual (V. 37, N 6). Retrieved March 24, 2017, from: http://www.aapd.org/media/policies_guidelines/g_cariesriskassessment.pdf

examples of the performance of 26 health centers participating in the Dashboard



Collaborative.

Figure 1: Median data for Caries Risk Assessment from the NNOHA Dashboard Collaborative

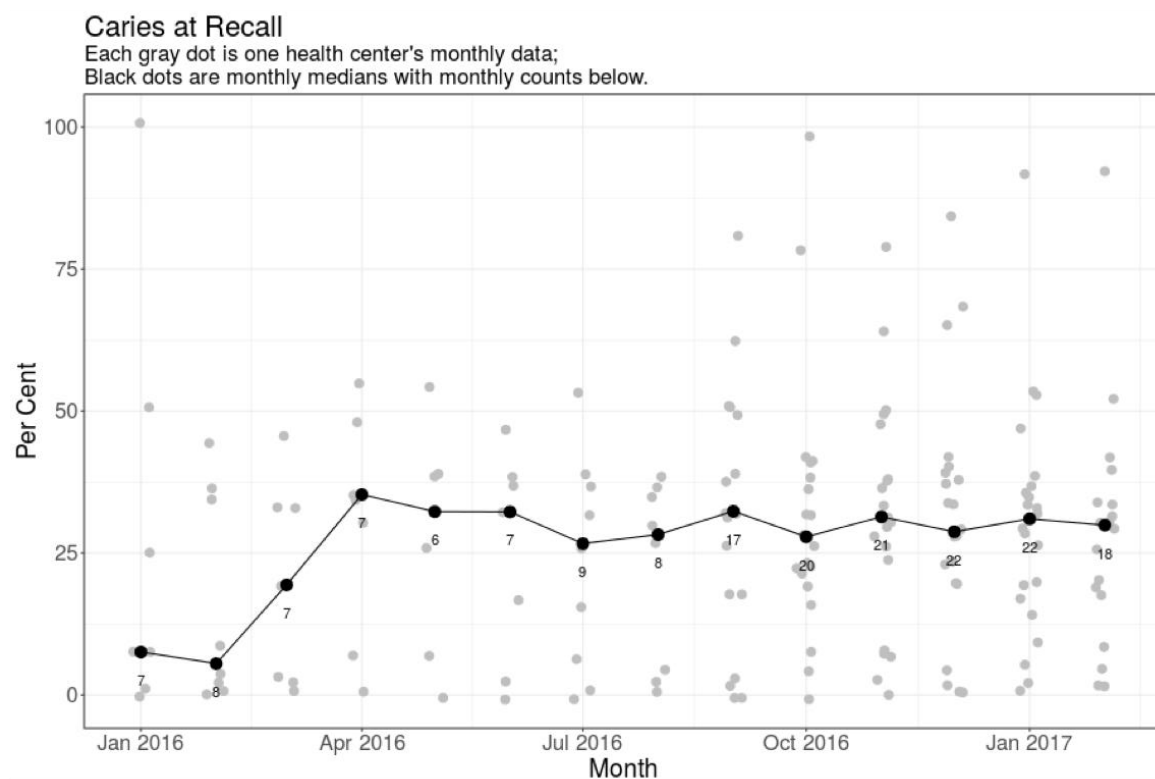


Figure 2: Median data for Caries at Recall from the NNOHA Dashboard Collaborative

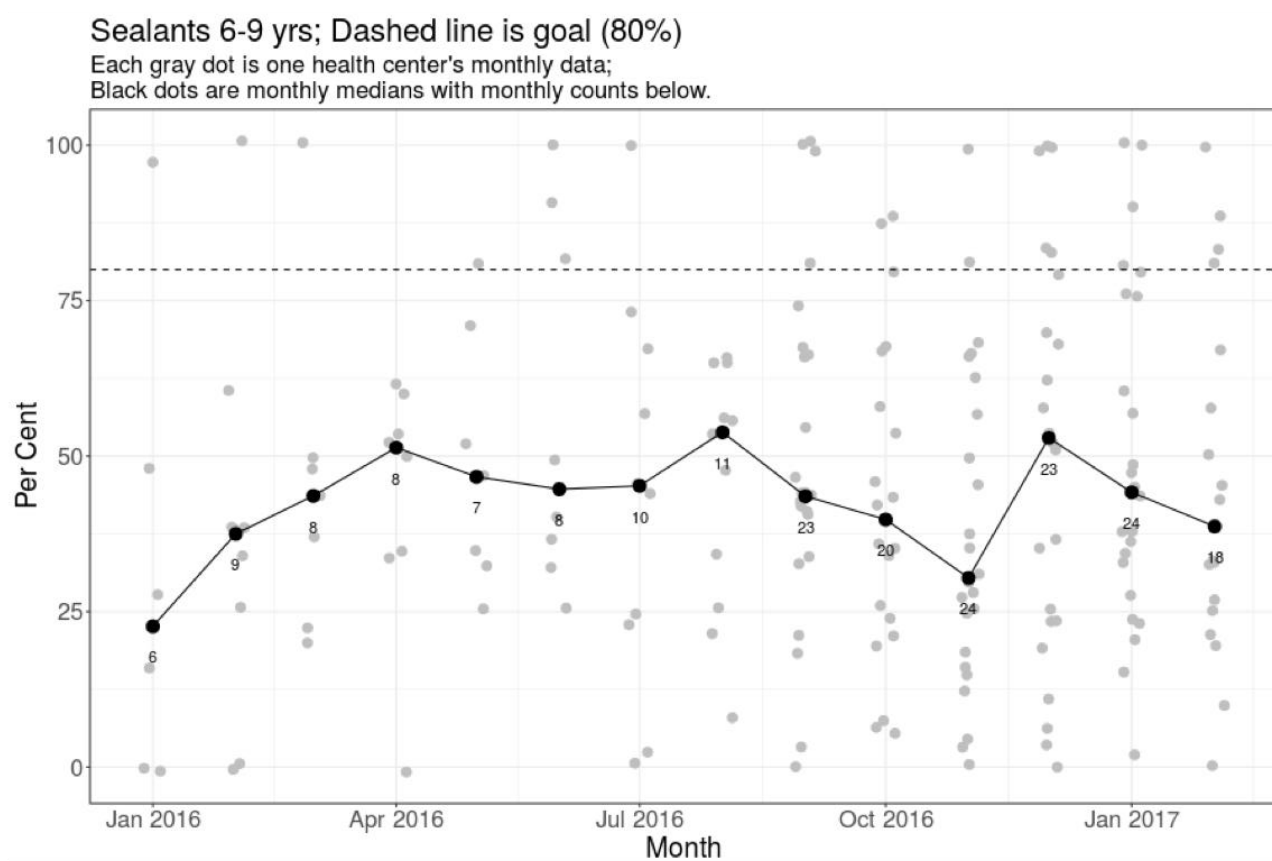


Figure 3: Median data for Sealants 6-9 from the NNOHA Dashboard Collaborative

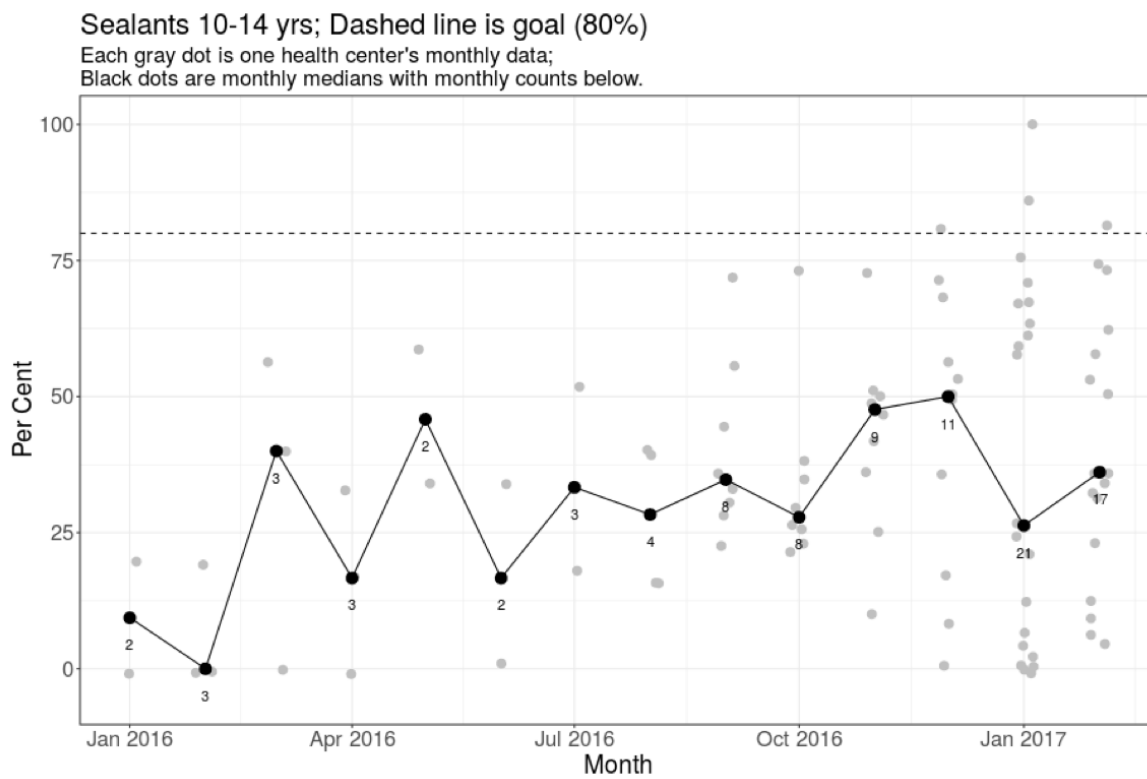


Figure 4: Median data for Sealants 10-14 from the NNOHA Dashboard Collaborative

SECTION V: OTHER COMMENTS

1. *What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?*

Critical success factors in working with health centers to improve oral health quality include:

- The opportunity to participate in a Breakthrough Series Collaborative with their peers
- An engaged, well-informed faculty
- Clear, consistent measures that can be obtained through the electronic dental records.

Barriers/Challenges include:

- Collecting and reporting QI data from existing Electronic Dental Records (EDRs) and clinic management systems;
- Inconsistent adoption and application of evidence-based clinical practices for prevention and chronic disease management;
- Health centers need extensive technical assistance support in setting up the measure collection system, often, the dentist is tasked with programming the queries; and
- Few QI resources flow to dental
- Some sites lack Administrative support to fully participate.

2. *As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.*

It is important to consider the oral health needs of children in an integrated system.

Breakthrough Series Collaboratives have demonstrated that it is possible to improve oral health outcomes for children by bringing together medical and dental teams to develop local solutions, measure results, and share promising practices.

It is also important to note that while we have made great progress in developing practice-level metrics, there is still work to be done to refine and solidify the measures for national distribution.

Feel free to contact me should you require additional information or clarification on any of this information.

Sincerely,



Colleen Lampron

Colleen Lampron, MPH
Quality Improvement Learning Collaborative Director

Akron Children's Hospital

Dear Dr. Billioux,

Akron Children's Hospital appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models. Please see the attached document.

Best,



Akron Children's
Hospital.pdf

**Centers for Medicare and Medicaid
Innovation: Request for Information on
Pediatric Alternative Payment Model Concepts**

*Comments Submitted By: Akron Children's
Hospital*

March 2017

March 27, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

Akron Children's Hospital appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models. We focus our comments on several key aspects of the request we believe are important to the evolution of care systems for our pediatric population in Northeast Ohio; particularly those integrating health care with shared accountability and savings.

Our comments focus on systems-centered, child- and family-focused solutions for care. From healthy children in need of preventive care for optimal physical and mental development to those with complex conditions, all children would benefit from a medical home providing a child and family-centric perspective driving the design of future systems of care.

Overall, we believe a system of care for children must:

- Be child-and-family driven and supported by an infrastructure aligned around the child's development with metrics designed specifically for kids.
- Integrate physical and mental health to address the complete health needs of children
- Be delivered via a home and community-based integrated network of care must be sensitive to the social determinants impacting a family's ability to support their children's health care needs.

The following is our response to the request for information and recommendation regarding the specific payment model and network attributes for integrating pediatric health care and health-related social services with shared accountability and savings.

Alternative Payment Models

- Develop a payment mechanism (e.g., PMPM care management fee) for a centralized care coordination function and funding for emergency social services for high need populations.
- With experience, move to capitation for an actuarial sufficiently sized population that:
 - Includes payment for physical and mental health care
 - Incorporates social services into the medical cost
 - Includes a socio-economic risk adjustment factor
 - Calculates the return on investment over the long-term (10+ years)

Integrated Networks must:

- Be able to meet the needs across a geographic region.

- Provide comprehensive pediatric specialty care.
- Be able to integrate high risk children in other sectors.
- Have large scale EMR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.
- Have a centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.

We look forward to working with you to explore promising innovations for the health of America's children as well as needed public policy changes to facilitate their spread. If you have any questions on our comments, please contact Robert McGregor at RMcGregor@chmca.org.

Sincerely,

Robert S. McGregor, MD
Chief Medical Officer
Akron Children's Hospital
One Perkins Square, Akron, OH 44308
Phone: 330-543-5295
Fax: 330-543-3854
www.akronchildrens.org

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Currently, effective models are needed particularly for the integration of mental health and behavioral health services. 'Child health' encapsulates physical and mental health, yet today's system does not adequately facilitate the integration for the well-being of the child.

Q3: What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

A3: For rural populations, CMS should consider incentives, like enhanced match rates or other flexibility options, for state Medicaid programs to adopt as well as:

- Payment or incentives for telemedicine infrastructure
- Payment parity for services provided through telemedicine

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

As a pediatric hospital, we integrate as partners with schools and integrate informally with social service agencies. The operation of an integrated model is important to consider given the multiple social and behavioral services across multiple clinical providers.

Experience to date signifies integrated operations:

- Require large scale EMR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.
- Have developed centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.

Q1: To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)? a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

A1:

- School nursing/ school health services are the most common mechanism of partnership with education.
- Regarding partnerships with state and local government; a formal partnership exists with the county departments of public health in the areas we serve.

- Partnerships with community organizations; informal partnerships dominate the community sector.

Akron Children's Hospital has one of the most extensive and impressive school based nursing programs in the nation. This was developed as an important community service and expands the opportunity to address expanding population health initiatives like asthma care and preventive medicine beyond hospital walls.

Schools today are challenged to accommodate a more diverse student population. Health issues which once prevented some children from attending a traditional school are proactively addressed by our school health program to ensure all students, from pre-school to high school, can succeed.

In 2004, Akron Children's merged with a private company, Schoolhouse Network, and contracted with districts to provide school nurses, health management plans; education for students, parents and school employees; and other health services. The hospital currently serves 30 school districts throughout a 7 county region. The hospital also provides flu vaccines on the schools' campuses and social and emotional learning programs.

There is a direct relationship between student health and academic success. Students who are present in class have an increased chance of academic success as compared to students who are chronically absent, missing instructional seat time. School nursing services impact on student attendance is measured by the outcome of each student health clinic visit. Each clinic visit is measured by ability to meet the health needs of a student and return to class for learning. Through standardization of operations and evidence based clinical practice guidelines, the percentage of overall students returning to class has steadily increased. From January – November 2016, 443,226 students were cared for in school clinics while maintaining a 93% back to class percentage.

In this ongoing 2016-2017 academic year, we employ 230 nursing staff and have provided care for over 83,000 students in 182 school buildings. Over 400,000 students are cared for annually in school clinics by school nursing staff.

Schools contracting with our services have access to a Registered Nurse (RN) available at all hours school is in session. The RN can respond to any building for a serious medical issue. Additionally, districts have the opportunity to add programming provided by the hospital, including wellness and disease prevention programs for staff and students.

Akron Children's School Health Services supports the academic success of children through health promotion, education and child advocacy. School Health serves as a liaison among school staff, family, community and healthcare providers. Akron Children's pediatric registered nurses work closely with school staffs to ensure a comprehensive school health program is in place.

Akron Children's School Health Services provides immediate access to pediatric healthcare professionals at Akron Children's Hospital and our 27 pediatric practices. One of the primary roles of school health

services is around care coordination. Communication is streamlined between the school nurse and physicians via our electronic health record.

Akron Children's Hospital School Health Services is fully insured and focuses on:

- Providing cost-effective school nursing services.
- Improving student attendance.
- Addressing first aid, emergency services and acute healthcare needs.
- Administering medications and necessary procedures.
- Meeting the healthcare needs of students with chronic conditions.
- Implementing disease prevention and wellness programs to increase the overall health of the school.
- Referring students who need help to the appropriate specialists.
- Creating a safe learning environment for students.
- Enhancing overall school health through community outreach.

Care coordination between hospitals and schools fosters the development of health plans for chronic diseases. Our services provide a bridge between health and academics, and working directly with the medical providers and the schools ensures the child's health plan is being carried out at school. Managing the health of students with chronic diseases like asthma, the leading cause of school absenteeism, and diabetes allows students to have more time in the classroom and results in fewer hospital visits. Personalized care plans improve quality of life for students. Partnerships strengthen the health care-education continuum, reducing injury and increases overall illness prevention while allowing for convenient care.

Akron Children's Hospital School Health Services also provides the opportunity to address population health initiatives like asthma and preventive care. We collaborate with the school and nurses to ensure the most up-to-date Asthma Treatment Plan is available for daily asthma care and exacerbations, when needed. We are implementing asthma screening tools to identify and treat asthma patients as early as possible. Additionally, we are exploring the feasibility of school based clinics which would provide annual well-child visits and immunizations for students.

We suggest creating a system promoting sharing of electronic health information in a secure and compliant manner that would incorporate incentives to enhance population initiatives through shared incentives.

Q2: Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

A2: We operate 27 primary care pediatric practices in the community and currently partner with multiple community agencies to provide mental health services within the primary care setting.

Q5: Where is there the most potential for improved outcomes and/or savings associated with future

streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

A5: Priority should be placed on partnerships enabling work across geographies. Potential exists for increased utilization of telemedicine, telepsychology and other efforts that build virtual capacities connecting pediatric specialty care with allied health and community providers in rural settings and health care centers.

Q6: What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

A6: Obstacles include:

- Differing measures, despite aligned goals
- Mismatch in cultures typical to health care and social sectors
- Having to demonstrate ROI over a shorter time period.

Additional obstacles not specific to integration with social service providers further complicate the evolution of service and payment models for population health include:

- An appreciation for the unique aspects of the pediatric and maternal population within broader populations
- Payment for social determinants of health
- Unclear patient attribution year over year
- Cultural transformation for large systems of care
- Sustainable funding with decreasing rates once savings are recognized

Q8: What role do models of care such as ACOs play in the pediatric environment? A) Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both? B) How are pediatric ACOs the same or different from adult-focused ACOs? C) What opportunities do pediatric ACOs have for integration with community and health services systems? D) Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

A8: Pediatric ACOs are relatively new players in terms of managing the health care of populations. Few pediatric ACOs currently negotiate with states directly for payment.¹ The pediatric ACO develops the care model specific to its defined population. Care models regularly include care coordination within and across care delivery sites and patient and family-centered medical homes. Many ACOs distribute some sort of incentive pay (savings) to providers based on the achievement of cost and quality goals. MCOs maintain the needed claims and related infrastructure for services such as claims processing and utilization review. Pediatric ACOs tend to provide case and care management.² Presently, health plan bears the risk while the ACO provides the care delivery model.

In comparing pediatric ACOs to adult-focused ACOs:

- Pediatric ACOs generally have smaller populations, and will need additional participation to create efficiencies for initial cost savings

- Pediatric ACOs require longer term contracts for outcomes measurement. Thus, short term measures related to or proxies for longer term outcomes are needed for shorter contract windows
- Pediatric ACOs find savings via efficiencies and coordinated care vs. efficiencies found through competition as in the adult markets
- Pediatric ACOs must be able to prospectively versus retrospectively attribute their patients to the ACO, to best serve and identify interventions and target populations.

Q9: What other models of care besides ACOs and MCOs could be useful to implement to improve quality and reduce the cost of care for the pediatric population?

A9: There is a critical need for integration of behavioral and physical health in care delivery. The specialized pediatric mental health workforce is inadequate to meet the need. We are currently in the process of expanding our mental health services to every Akron Children's Hospital pediatric practice (27 sites), including by collaborating with local behavioral health agencies.

Recommendations for effective integration include:

- Effective use of technology that allows for virtual care encounters, thus avoiding more costly "face-to-face encounters"
- Centralization or coordination of care management across multiple service sectors, thus avoiding the scenario of the child having multiple care coordinators
- Cultural transformation will need to occur across all sites. Moving from a fee-for-service mindset to an integrated care with family driven goals requires changes across all levels of the organization and particularly with leadership in setting the direction.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

In our experience contracting with payors for shared savings and pay for performance payment models, we have found the need for the following:

- Accurate patient attribution
- Establishment of credible risk adjustment and outlier protection particularly for children with complex conditions
- The ability to calculate the return on investment over the long-term (10+ years) to account for lifespan benefits of pediatric health and wellness interventions

Q1: What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

A1: Medicaid and CHIP beneficiary populations/participants offering the greatest opportunity for generating savings and/or improving outcomes from integrated health care and health-related social services systems include:

- Children with complex medical conditions as their medical issues are often intertwined with social complexity.
- Children at social risk. This includes those experiencing poverty and exposure to childhood adverse events as well as immigrant and minority children.
- Children from conception to 25 years old; highlighting the importance of starting preventive services during pregnancy to prevent later morbidities.

Q2: How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs? a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models. b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures? c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients. d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

A2: In our experience, payment models and incentive arrangements should take into account the following:

- The population must be large enough to drive ample savings to encourage provider participation and reward optimal outcomes.
- CMS must consider payment models that encourage support of the primary care physician to keep even the most complex children closer to home and enable more cost efficient care.
- State health homes provide an option for specialized populations. State health homes often include mental health and care coordination functions. In addition, the Comprehensive Primary Care Plus (CPC+) program piloted with adults from the Innovation Center may build upon this as a payment option for specialized pediatric populations.

As a recipient of a Health Care Innovation Award, we focused on improving the quality of care for medically complex patients, while reducing cost. Our cohort was defined by tube-fed children with a neurological diagnosis. Our medically complex population represents a significantly high cost due to the fragility of their medical conditions. For children with complex medical conditions, payment models should serve to foster dynamic care teams (the team includes the family) to readily share information among primary care, specialists and community providers. A care coordinator/manager/team may serve as a central point for information sharing. Through this Award, we learned alternative payment structures need to be simple and stable.

SECTION IV: PEDIATRIC MEASURES

Q1: What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

A1: The selection of the performance measures can serve not only to assess, but also to drive improvement by motivating systems and individuals to improve the health and well-being of the population. Thus, it is critical for the measure to align with the goals of the pediatric alternative payment models (APM) (APM defined as a payment model other than traditional fee-for-service) and how value is defined.

The “system” of measurement must adequately incentivize/ reward the providers of care, and must account for the motivations of children and their families’, providers, payers, and others key aspects or components of any measurement system used by an APM, including data and reporting infrastructures. Presently, data and reporting infrastructures needed for meaningful measurement are not sufficiently in place. These reporting infrastructures also need to be bidirectional and give information back to providers so that they can take action, and not just take it from them.

Q2: Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

A2: Measures should seek to appropriately share accountability to foster motivation and ability to address key elements of overall health. We place great value on patient experience and recognize the majority of health outcomes are determined outside of the doctor’s office. Accounting for social determinants of health is critical. Children, and their health outcomes, are both sensitive and vulnerable to factors outside of the traditional health system’s control.

SUMMARY

In summary, the Akron Children’s Hospital appreciates the opportunity to respond to this request for information on pediatric alternative payment models. We continue to work to support the evolution of care systems for the children in the communities we serve.

In addition to our comments in this RFI, we might suggest a framework to consider for a community integrated health system. Neal Halfon presented the 3.0 Transformation Network, in a 2014 Health Affairs article. This framework focuses on socioeconomic and developmental correlations to health over the lifespan and may serve as well as a guide for work in this field moving forward.

US Health System Transformation

Health system characteristic	Era 1.0: sick care system	Era 2.0: coordinated health care system	Era 3.0: community-integrated health system
Objective	Acute care and infectious disease	Patient-centered care; coordinating episodes of	Population and community health outcomes; optimizing

Health system characteristic	Era 1.0: sick care system	Era 2.0: coordinated health care system	Era 3.0: community-integrated health system
		care across levels of care and managing chronic conditions	the health of populations over the life span and across generations
Organization of services	Independent health care providers; hospital, clinics, primary care providers, and specialists operate separately	Systems of health care, such as accountable care organizations and medical homes; teams of health care providers accept collective responsibility for quality outcomes and overall cost of care	Community-integrated health system; integrated health care networks partner with public health and community organizations to both reduce community health risk factors and provide coordinated illness care
Care process	Little coordination between inpatient and outpatient medical care; dominated by an acute care treatment model	Coordinated care to better manage medical risk at each level (primary, secondary, and tertiary) of the health care delivery system	Integrated health, psychosocial services, and wellness care designed to optimize and maintain health and well-being across the life course
Payment methodology	Fee-for-service; rewards volume of services	Value-based payments; health care providers rewarded for better patient outcomes, better patient experience of care, and lower total cost of care	Recognize value with long-term time horizons and capture multisector financial impacts outside of health care cost; sustainable financing alternatives such as population based global budgets; single budget for a broad scope of health care services, combined with incentives
Health information technology	Separate paper medical records exist but are not connected	Electronic health care information exchanges connect various provider networks	Health and medical information follows the person; there is connectivity between the health and human service systems; and actors have access to real-time data on quality, costs, and outcomes for individuals and populations
Quality of care	Large variations in quality and low transparency	Consistent quality; using standard quality outcomes and improvement processes through collaborative learning	High and continuously improving quality through a learning health system
Population health improvement	Not addressed	Focused on health of patients/clients only	Focused on health outcomes for geographically defined population, including upstream socioeconomic and

Health system characteristic	Era 1.0: sick care system	Era 2.0: coordinated health care system	Era 3.0: community-integrated health system
			developmental correlates of health

¹ http://jamanetwork.com/data/Journals/PEDS/934898/POI150080supp1_prod.pdf

² Survey data from Children's Hospital Association Accountable Care Organizations Study, 2014

Akron Children's Considine Research Institute

Dear CMS,

Please see the attached response to the RFI Pediatric Healthcare and Service Delivery models. Also attached is the Pathways Community HUB Manual as a supporting document.

- Response From CHAP HUB and Akron Children's Research Center 3-18.docx

- CommHubManual15_508c.pdf

In addition to the documents sent in response to the RFI we would like to include the following two attachments that are relevant.

- Michigan HUB Report to Congress.docx

- Pathways CCC in LBW Prevention.pdf

Thank you



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CMS Request for Information Response Pediatric Healthcare and Service Delivery Models

RFI Response Agencies – The Pathways Community HUB Developers and National Network

Including – The CHAP HUB, The Pathways Community HUB Certification Program at the Rockville Institute, The Pathways Community HUB Institute, Rebecca Considine Research Institute Akron Children’s Hospital

The original formatting of the request is provided comments are integrated within utilizing an initial summary statement and the our answers labeled “**Response**” after each question.

AGENCY: Centers for Medicare & Medicaid Services (CMS), HHS

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is seeking input on a draft pediatric care model concept, including:

- Integrated Pediatric Health Care and Health-Related Social Service Delivery Model (general)
- Operation of Integrated Service Model
- Integrated Pediatric Service Model Payment and Incentive Arrangements
- Pediatric measures
- Other comments

DATES: *Comment Date:* To be assured consideration, comments must be received by March 28,

2017 **ADDRESSES:** Comments should be submitted electronically to:

FOR FURTHER INFORMATION CONTACT: with “RFI” in the subject line.

BACKGROUND

Section 1115A of the Social Security Act, as enacted by section 3021 of the Affordable Care Act authorizes the Center for Medicare and Medicaid Innovation (Innovation Center) to test innovative payment and service delivery models to reduce program expenditures while preserving or enhancing the quality of care for Medicare, Medicaid, and Children’s Health Insurance Program (CHIP) beneficiaries.

CMS is exploring the development of a new pediatric health care payment and service delivery model. We are issuing this Request for Information (RFI) to obtain input on the design of a draft model concept focused on improving the health of children and youth covered by Medicaid and CHIP through state-driven integration of health care and health-related social services with shared accountability and cost savings. The aim of this model is to facilitate strategies for timely and appropriate delivery of family-centered, community-based, linguistically and culturally appropriate, cost-effective, and integrated services to all children and youth covered by Medicaid and CHIP with an emphasis on those with or at-risk for developmental, social, emotional, or behavioral health challenges, intellectual or physical developmental delays or disabilities, and/or those with complex and/or chronic health conditions (also known as “high- need, high-risk beneficiaries”).

An individual’s health needs extend beyond preventive and therapeutic health care services to include

access to health-related social supports, and this is especially true during childhood when factors such as sound nutrition, safe living environments, responsive adult caregivers, and nurturing social relationships are critical for healthy growth and development. As a result, inadequate or inconsistent access to these factors can have near and long-term physical and psychological impacts whose effects extend throughout the life course as children become adults. Children and youth covered by Medicaid and CHIP may be exposed to such unfavorable social conditions and adverse childhood experiences, which could go unrecognized or unaddressed as a result of limited support for providers to address them alone. A number of federally-funded programs play a role in addressing threats to children's health, including Medicaid and CHIP, Healthy Start, Head Start, Child Welfare, the Indian Health Service (IHS) and more. However, many vulnerable children are not able to access the optimal combination of these programs and services. Pediatric beneficiaries can often receive the wrong care at the wrong time because of late presentation of neglected illnesses or challenges, often including under- or untreated behavioral and mental health issues.

CMS continues to work with state Medicaid programs and providers to focus on paying for value instead of volume in the Medicaid and CHIP programs. Lessons are emerging from state and tribal programs and use Medicaid Health Homes, accountable care organizations, community health teams, care management programs, and other services and models which promote shared accountability, patient centeredness, and service integration. To date, these and other innovations have focused primarily on the adult Medicaid population. In order to meet the diverse needs of pediatric beneficiaries and address the specific challenges to (and cost-saving potential of) accessing needed health and health-related social services, CMS is considering a pediatric alternative payment model. We wish to explore models that encourage pediatric Medicaid and CHIP providers to collaborate with health-related social service providers (e.g., early childhood development programs, child welfare services, crisis intervention programs, behavioral health providers, and home and community based service providers) at the state, tribal and local levels, and share accountability for outcomes for children and youth covered by Medicaid, and CHIP. Such an integrated service delivery model could present several benefits:

1. Comprehensive, universal screening of pediatric Medicaid and CHIP beneficiaries (in addition to services currently covered in Early Periodic Screening, Diagnosis and Treatment (EPSDT)) across model participants' clinical and partnering health-related social service sites could increase identification of health care needs (such as behavioral health) and community-based and other health-related social services supports among children, youth, and their families (such as respite care) at an earlier stage than what is currently commonly experienced;
2. Alignment around eligibility and enrollment requirements among Medicaid, CHIP, IHS. and health-related social service providers could reduce service interruptions and churn (or briefly losing and re-gaining eligibility), resulting in administrative cost savings;
3. Children and youth would stand to receive streamlined, coordinated care across health care and health-related social services providers with families at the center of decision-making, potentially resulting in improvement in health and wellness and reduced total cost of care and service delivery; and,
4. Health care and health-related social service partners would be encouraged to develop the infrastructure needed to support sharing in accountability and cost savings;

We recognize that a number of state Medicaid programs have unique accountable care organization (ACO) models, most of which focus on the adult Medicaid population. CMS seeks input on the impediments to extending and enhancing ACOs or similar integrated service model concepts to the pediatric population in states and tribes. Additionally, we are interested in the flexibilities (e.g.

streamlining and coordination of existing Medicaid and CHIP state plan and waiver authorities) and supports (e.g. infrastructure, training, data analytics models, etc.) states, tribes and providers may need to offer such a model to all or some subset(s) of a state's and tribe's pediatric population. In addition, CMS seeks comment on models for states and providers to coordinate Medicaid and CHIP authorities and waivers with other health-related social services for children and youth, including models supported by the provision of incentive payments and sharing in cost savings.

CMS seeks broad input from beneficiaries, consumers, and consumer organizations (including family members and youth); pediatric providers, including Indian health care providers, and behavioral health specialists and providers; pediatric dentists and other oral care providers for children and youth; child advocacy groups; elected officials, including Governors and legislators; tribal councils, state offices including Medicaid, departments of health, public health, and health-related social services agencies and providers; purchasers, health plans and managed care organizations; home and community-based service providers; Health IT and Health Information Exchange (HIE) vendors and associations; school administrators and local educational organization leaders; and other private and public stakeholders. Commenters are encouraged to provide the name of their organization and a contact person, mailing address, email address, and phone number. However, this information is not required as a condition of CMS' full consideration of the comments.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

CMS is interested in learning about pediatric alternative payment models (APM) (APM defined here as a payment model other than traditional fee-for-service) that emphasize both quality and multi-disciplinary service delivery, with consideration of the unique needs of children and youth covered by Medicaid and CHIP and the potential impacts on their health and well-being. In the model concept being explored, CMS proposes that pediatric health care systems and providers work with their states and tribes to take on accountability for the health and wellness of children and youth, with the families at the center of care planning, potentially sharing that accountability with health-related social service provider partners.

Response

Executive Summary of question response.

- Utilizing the strategic lens of comprehensively identifying and reducing risk, presents a great opportunity for the health and human service system to improve outcomes and reduce cost.
- The reply to this request for information will be framed in the context of a well-developed and nationally certified model, the Pathways Community HUB. The HUB Model is a nonproprietary, Nationally Certified approach to reach out to those at greatest risk, and comprehensively assess and address risk in a pay for performance methodology.
- The HUB model is almost state wide in Ohio and going statewide in Washington state, with 11 other states in development. Michigan has a strong initial group of HUBs that were supported by CMMI and were reported in the Healthy Communities grant NEJM article ([N Engl J Med. 2016 Jan 7;374\(1\):8-11](#)) to be part of the evidence foundation to that initiative. Multiple other beginning peer reviewed publications and reports have been published and AMCHP recognition of the model as a promising best practice has been achieved.

- The HUB model has current data, sustainability features and a strong connection tied between health, social and behavioral health risk identification and reduction.
- The HUB model supports community based and culturally appropriate service through the critical involvement of communities and Community Health Workers as part of the care coordination team.
- The model has existing and extensively utilized measures of confirmed risk identification and reduction. These published measures within the “Pathways” used span health, social and behavioral health risk factors. The current CMS measures that focus on medical care can be tracked and are well within the context of the current Pathway measures. Current research and data collection approaches can allow greater evaluation of the measures. Data tracking also supports evaluation as to how specific Pathway measures are interrelated to each other and how groupings of measures lead to increased impact of specific health and social outcomes.
- The published Pathway measures are tied to Medicaid Managed Care contracts especially in Ohio and spanning most of the state. Departments of health, foundations and other funders are participating in the same developing payment model tied to achieved outcomes of confirmed risk reduction. The State of Washington and Michigan are pursuing similar payment approaches.
- The Pathways have been used extensively with children spanning measures that include and extend far beyond EPSDT. They have also been used in expectant mothers and adults.
- The national network of HUBs and the related policy, funding, certification, and community advocacy agencies are all interested in greater research and further development of the HUB model. There are no costs to use the model. Achieving national certification to meet all standards of the model is critical to achieve the outcomes.

In this response risk is described and utilized in the following context:

- All health and social service agencies have as their basis for impact the engagement of at risk populations and the reduction or mitigation of one or more identified risk factors. Risk factors span the domains of physical, social, behavioral, educational, employment and economic health.
- Risk exists at an individual (smoking, obesity, education, access to health care etc.) and population level (schools, neighborhood safety, racism etc.). The HUB model focuses on identifying and addressing individually identified risk factors. It is actively serving to inform population health initiatives by tracking which risk factors can and which ones cannot be quickly addressed.
- Risk factors can involve current factors (chronic illness) as well as future or upstream factors (healthy infant living in a home of smokers, lead paint or insufficient food).
- Recent data is confirming that a more comprehensive approach to risk identification and reduction is needed. Providing well child screening without addressing homelessness, parenting or assuring access to nutrition for example may not result in a positive outcome for a child. When risk reduction is approached in a holistic manner, health, social and behavioral health related factors can be identified and addressed with much greater yield in positive outcomes.
- When a risk factor is identified (lack of medical care, homelessness, lack of access to medications) and then successfully addressed through care coordination the result of addressing the risk (confirmed medical home, safe housing established, has medications) is considered to be a critical trackable work item in an effective system of care. This work item is placed within the Pathway measurement tool described in the following sections. These Pathways are built to fit within the

context of current CMS, HEDIS and other related measures. The Pathway measures extend well beyond to include access to food, housing, health education, parenting education, behavioral health intervention etc.

- If the identification and reduction of risk are encompassing of the work that is needed to improve health then care coordination and direct services provide the categories or work domains currently available within our health and social system of care.
 - Care Coordination – Involves individuals reaching out within communities and or working within institutional settings. Through questionnaires and other data resources they identify/screen for, risk factors and then help make sure the individual at risk connects to the evidence based interventions that address the risk factors. Other related terms for care coordination can include case management, outreach, care management and others.
 - Intervention Service – This category spans all the interventions that treat or address the risk factor – The medical home visit, the physical housing, food, employment training, physical therapy etc.
- The HUB model provides a model to contractually link diverse agencies within a community to work as a team to reach out to the homes, homeless shelters and service structures within a community. Those at greatest risk are enrolled and their risk factors are assessed spanning health, social and behavioral health domains. As the care coordination team works to confirm each identified risk factor is addressed. These risk reductions are captured within the specific Pathway which ties payment to quality and outcome.
- CMS partnering with existing not for profit, evidence focused and nationally standardized ventures may foster any resulting combined model to grow and improve within National Certification domains that have thus far proven to be of significant help to improving hospital quality and care, professional development and quality standards and many other similar standards driven enterprises.
- Measurement of effective risk reduction using the HUB model and the measured Pathways is now available at the individual, agency, community and state level. Payers spanning health and social service are helping to expand the model. There is significant need for greater research, refinement of the National Standards and expansion of the improved outcomes and cost savings. The focus on increasing the bandwidth of evidence is making progress with several recent peer reviewed publications and many more in development. Partnerships with state and federal agencies focused on improving health would be of great help at this phase of development.

Question

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

Response

There is great interest in the network and supporting policy, funding and community connected institutions within the national Pathways Community HUB Network to be part of further development of the HUB model to address areas identified by CMS that are currently lacking or in

need of improvement. The HUB model has been steadily improving its effectiveness and national standards in providing an outcome focused pay for performance approach that spans the domains of health, social and behavioral health.

- Pediatric populations with higher health, social, and behavioral health needs have specific advantages within the HUB model to assure attention to all risk factors and to assure appropriate compensation which is tied to each risk factor identified and addressed. For example a special needs child with issues related to access to medical care, housing, food security, developmental delays specialty appointments etc. would have one or more Pathways with payment attached to each of these risk factors (the risk must be confirmed to be addressed to get paid). A child with only a few issues has only one or two identified issues has few Pathways and consequently less payment attached. In comparison our current system of care that incentivizes providers at all levels to enroll and serve clients who are less at risk as they take less time and expense. The more risk factors the more Pathways and payment incentivizing providers to reach out and serve those at greatest risk.
- Research, cultural competency, Information technology, evidence based educational approaches, and American business accountability and production expertise represent some of the domains of technical expertise that are hard wired within the HUB model.
- CMS reforming and or collaborating with the HUB model could build on existing evidence based structure with many decades of experience and research and a broad multistate initiative with established and highly diversified funding streams.

Currently engaged and interested national partners include the Pathways Community HUB Certification Program at the Rockville Institute, Westat, The Georgia Health Policy Center, Communities Joined in Action, Akron Children's Hospital, The Ohio American Academy of Pediatrics and multiple Medicaid managed care and public health focused funders, and the currently developing Pathways Community HUB Institute.

Question

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to "ramp up")? Additionally, what program integrity strategies were employed where these partnerships exist?

Response

The model of Pathways focuses on identifying all risk factors spanning health, behavioral health and social determinants. The model serves and is actively deployed serving populations of all ages. There is significant concentrations of service to expectant mothers, infants, young children and adults with chronic disease. There is currently developments to have greater focus on teens and young adults.

The Pathways Community HUB model provides the National Standards and structure for the contracting between community agencies, community needs identification, centralized processes, systems, training, supervision and pay for performance tracking of those being served, tying payment to outcomes. The model focuses on care coordination, assuring that individuals with identified risk factors connect to the interventions confirmed to address them

At the center of the model is the Community HUB. The HUB serves as the air traffic control agent coordinating all the other community agencies across a defined region/community of care. The HUB does not have its own employed care coordinators. It does serve as the central coordinating structure for all of the separate community agencies that do hire and deploy community care coordinators. The HUB is then empowered to coordinate a diverse network of agencies, each with specific areas of expertise spanning, FQHCs, primary care pediatric practices, behavioral health, addictions, social services and others each of which to be part of the HUB must have trained and supervised care coordinators that reach out to those at greatest risk, complete checklists to assess risk factors then work with their supervisors and team members to complete the Pathways (reduce risk) and improve outcomes. .

Within the Pathways HUB model community care coordinators identify individuals at greatest risk and provide a comprehensive assessment of all health, social and behavioral risk factors. Care coordinators deployed using the Pathways model can include community health workers (CHWs), nurses, social workers and other professionals. They work with their supervisor and team to ensure that each identified risk factor for their client is addressed with evidence based or best practice intervention. The specific tool developed for each risk factor is the Pathway.

The Pathways are nationally standardized as the risk reduction performance and quality measure within the model. Pathways are developed and specific to each risk factor. The Pathways have the ability to conform to existing CMS, NCQA and other national measures. These measures most commonly fit within the domain of confirming identified risk has been addressed. For example the focus on assuring immunizations and well child care within EPSDT fit well with the Medical Home, Medical Referral (for visits after the medical home is established) and Immunization focused Pathways. The nationally standard Pathways extend to risk factors and mitigation of risk within behavioral health, social determinant, education and adult employment domains.

Each Pathway has a specific billing code being utilized by payers spanning Medicaid Managed Care, Departments of Health, Grants, Mill Levies, United Way and many others. There is a Pathway for each major individually addressable risk factor currently identified. The completed Pathway represents that an identified risk factor (housing, food, access to medical care etc.) has been addressed. In this model and payment approach the payment is tied to a completed Pathway. Comprehensive risk reduction is achieved. Higher level outcomes that relate to the multiple risk factors addressed can then be measured including infant mortality, EPSDT, school performance etc. In adult populations that same strategy and measurement process is in place with larger outcomes achieved in chronic disease management, reduced hospitalization, employment etc.

In a comprehensive approach to identifying and reducing risk some factors such as housing are demonstrating a greater weight or impact. As above and in answers below the manner in which less obvious risk factor such as quality childcare interact with the other identified risk factors is an area needing not only substantial recognition but significant further research and study.

Peer reviewed publication documented outcomes include a 60% reduction in low birth weight for expectant mothers and a more than five dollar savings for each dollar invested in the programming. The CMMI supported and now Nationally Certified HUBs in Michigan demonstrated reduced utilization and cost savings. Tens of thousands of Pathways spanning health, behavioral health, and social determinants of health have been confirmed to be completed across a growing national network of HUBs. Many of these Pathways produced are for children including developmental referral, immunizations, medical home, parenting education. Pathways for housing, food, clothing, domestic

issues parenting education and others have been and are being produced for children with payments attached as described in more detail below. Further research is in progress and more is needed.

Community HUBs have been deployed serving all ages of children with the largest volume of experience and service in the infant and toddler age groups.

Using current IT and related open market technical resources HUBs can be ramped up quickly. Multiple IT platforms are available to choose from several separate vendors. There are many new training sites for CHWs and supervisors.

Three new large regional multi agency HUB networks have been ramped up over the last 6 months in Ohio including Summit County (Akron/Canton), Mahoning Valley (Youngstown) and Columbus Ohio (United Way). Payment contracts with Managed Care Organizations(MCOS) and others are being formalized. They are already producing risk reduction reporting and have generated data documenting a reduced rate of low birth weight for the individuals and communities they serve. EPSDT related risk reduction measures are being collected. Three more HUBs will start this year bringing Ohio to 9 or more HUBs and approaching a statewide approach. Washington State is in a near statewide initiative implementing new HUBs and working towards all National HUB Certification Standards.

Question

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

Response

Possibly the most important policy or standard that CMS could consider adopting is to require rural and urban communities to deploy evidence based or evidence focused care coordination models. The HUB model and other similar serve to assure children connect to all available interventions to address their identified risk factors. Without using these evidence focused approaches to care coordination methods that are not accountable to established National Standards will be deployed. Care coordination is found in every health and social service system funding stream. Transforming care coordination to evidence based approaches that are effective, rigorous, outcome driven and held accountable to National Standards can be transformative to our overall system of care

HUBs currently span both inner city and highly rural geographic locations. The objective in both geographies is to find those most at risk, comprehensively identify their risk factors and connect the individual to all available regional interventions that will be assured to address the identified risks.

Overcoming the barriers of transportation within rural communities to confirm connection of the child and or family member to service is one of the primary challenges. The cost per risk factor addressed documented in many of the standardized Pathways (i.e. child with no medical home is confirmed to connect to a medical home) must often be higher in rural communities. Interestingly in both urban and rural communities HUBs have been able to identify and fully utilize services and or generate additional services. The real numbers provided in measuring the number of Pathways (risk reductions) that are not successful in being addressed provide accurate data that can support

the development of regional services to address population needs.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

CMS is exploring how the establishment of partnerships between child- and youth-focused health care and health-related social services providers might be structured and operate to integrate services.

Additionally, CMS understands that varying eligibility criteria and program requirements can be challenging for children, youth, families and providers to manage, resulting in both service gaps and implementation challenges, such as different case managers or navigators for each program. We are interested in innovative approaches to integrate child and youth services within these partnerships by lowering barriers to identifying, enrolling, and maintaining coverage.

Question

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?
- a. Please comment particularly on service integration with programs such as [Head Start](#); child welfare programs; Children's Mental Health Initiative programs; [Healthy Transitions](#) grantees; [Safe Schools/Healthy Students](#); foster care programs; the [Maternal, Infant, and Early Childhood Home Visiting Program](#); [Individuals with Disabilities Education Act, Part C programs](#); [Healthy Start](#) projects; and other state, tribal, and federal programs.

Response

These programs when delivered in a community or region without coordination can reach the individual served with duplication. In working with many communities across the U.S. we have identified maternal and child health as one of the most duplicative of all service areas for community based care coordination. It is not uncommon for a family to have five or more care coordinators. On several occasions we have identified as many as 15 care coordinators serving a particular family. In most regions without a HUB these services are not in collaboration or coordination representing significant service duplication and burden on the families served. Many of the maternal and child health care coordination strategies do not use the most evidence based care coordination approaches available. Most often care coordination service structure is invented at the state and or local level and is not tied to evidence based standards. As outlined above each of these programs has their own set of risk factors that they identify and address. These risk factors do not usually encompass a comprehensive assessment of risk. There is not financial accountability and related measures to identify and confirm if a risk factor that has been identified is confirmed to be addressed. In addition to an evidence focused, culturally connected approach the HUB model ties risk reduction outcomes to payment. There are other evidence based models of care coordination to choose from that also have published confirmation of better outcomes at less cost.

The HUB model in Ohio has embraced and included Maternal, Infant, and Early Childhood Home Visiting Programs as well as Medicaid Managed Care related outreach programs under one set of risk reduction metrics and evidence based tools using Pathways as the risk reduction measurement.

In accomplishing this providers of these services must meet all the requirements of the specific program they are funded through as well as meet all standards of the Pathways Community HUB model. For example, in Richland County when a client is enrolled into Help Me Grow they must complete all documentation related to Help Me Grow and any additional documentation related to demonstrating risk reduction using the HUB model. To prevent duplication of service, each client enrolled is registered with the HUB and assured there is not duplication across Help Me Grow, The Ohio Infant Mortality Reduction Initiative, United Way or any of three supporting Medicaid Managed Care programs.

In the communities this has been implemented in the HUB referral management approach is preventing significant service duplication. Further integration and progress is needed as none of the HUBs have all the outreach programs integrated.

It has taken time and some local political challenges to begin to network agencies within a Pathways Community HUB. Agencies providing these services currently benefit from the duplication. Toledo was the first HUB to pilot the use of startup financial incentives for the community care coordination agencies willing to work within the HUB network to improve quality, track outcomes and reduce duplication and expense. This has now been replicated as part of the state expansion models especially in Ohio and Washington state. A combination of financial incentives as well as growing state and federal requirements for the coordination and collaboration are needed to make next steps forward.

Questions

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?
 - a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?
 - b. What potential exists for increased partnership for provision of home and community-based services?

Response

The HUB model represents financially contracted network of agencies that reach out to those at greatest risk, comprehensively assessing and addressing their risk. This involves confirming connections to care (using standard Pathway Measures) across all ages, health, social, behavioral health, employment and education domains of service.

At the center of this community network is the HUB. The HUB serves as the air traffic control agent coordinating all the other community agencies across a defined region/community of care. The HUB does not have it's own employed care coordinators. It does serve as the central coordinating structure for all of the separate community agencies that do hire and deploy community care coordinators. The HUB is then empowered to coordinate a diverse network of agencies, each with specific areas of expertise spanning, FQHCs, primary care pediatric practices, behavioral health, addictions, social services and others each of which to be part of the HUB must have trained and supervised care coordinators that reach out to those at greatest risk, complete checklists to assess risk factors then work with their supervisors and team members to complete the Pathways (reduce

risk) and improve outcomes. .

The HUB functions include, serving as an entry point for the funding from multiple sources, providing the allocation of referrals, tracking quality including effectiveness of risk reduction and providing support to the network related to training, supervision, information technology etc. Extending from the HUB are the community based agencies that provide the outreach to the homes and communities most at risk. These “Care Coordination Agencies (CCA)” hire, and support the care coordinators who may be Community Health Workers Nurses, Social Workers etc. The care coordinator is then the boots on the ground that reach those at risk, provide a comprehensive assessment of risk and with their Supervisor and other team members assure using Pathways that each risk factor is addressed. PowerPoint with graphics attached.

There are specific requirements in the National Standards for the HUBs and the CCA to meet. That said a broad range of community based agencies can be a CCA. Now strengthening within HUBs more medical providers and hospital are becoming CCAs. For example Third Street Family Health Center in Mansfield has 6 Community Health Workers. Third Street is one of several local agencies within the HUB. As at risk expectant mothers and children are identified within Third Street’s medical services then they check in with the HUB to assure no service duplication with other care coordination agency and the client is assigned a care coordinator from 3rd Street who reaches out to the client’s home and begins a multi visit care coordination approach of assessing and addressing risk. As the risk factors are addressed the progress is tracked by the HUB and 3rd Street receives reimbursement for risk factors that are assured to be addressed through the Pathway documentation. The risk factors span health, behavioral health and social services.

Since the HUB related payment is tied to the care coordination work done to connect individuals to care Third Street provides appropriately separate services and invoicing related to the work their doctors and other staff do to provide the service interventions such as medical visits and therapies.

Clients can be referred into HUB services by care coordinators like those at Third Street finding their own clients and enrolling them in the HUB. The HUB network may also receive referrals from 211, or another social service or medical provider that does not have their own care coordinators. Akron Children’s Pediatric Practice in Mansfield Ohio for example often reaches out to HUB personnel with children they are concerned about related to a high level of medical, social and or behavioral health risk.

The work components of the HUB in the community integrate and network all health and social service providers by dividing the work as follows

- The Community HUB provides the center of the network to track the regional data, the referrals, the risk reduction measures (Pathways), quality and to provide support to the CCAs.
- The CCAs send out the care coordinators to assess and address risk. When integrated with the HUB they move from being duplicated silos to a team of agencies working together and focused on community needs and risk factors that are tracked and aggregated by the HUB. They have access to multiple funding streams to assure the potential to serve all at risk individuals spanning all conditions.
- The Direct Service providers – These agencies are not necessarily contracted with the HUB unless they happen to have their own care coordinators such as in the Third Street example above. The best HUBs have strong connections to a wide range of direct service providers including providers of health care services, behavioral health, pharmacy assistance, social service providers (housing, food, clothing), developmental screening and intervention providers for children and education and employment for older children and adults. These encompass the best practice and evidence based interventions that are required within the HUB model to occur in order to complete each Pathway and assure the risk factor has been addressed. The strength of these relationships is growing as HUBs

become better established. The Toledo HUB for example has strong relationship with three competing hospital systems and has financial contracts with more than 20 community based CCAs.

Consistent with the question, partnerships that integrate and collaborate medical as well as social service and behavioral health service are critical to improve outcomes. HIPAA compliance, contracts payment etc. all represent significant barriers. They can all be overcome within standardized and nationally certified models of community care coordination.

Question

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

Response

There are several independent IT providers that provide software solutions to serve the Pathways Community HUB model. In all cases the IT systems track the clients, their risk factor assessments, and the confirmed interventions to address each risk factor identified (the Pathways). IT, CHW training and other supportive resources are separate market based components that are not connected to the Rockville Institute HUB Certification except in their efforts to develop the tools in support of the National Standards.

These systems are most often independent of established electronic medical records though interfacing and direct messaging capabilities are in progress. One of the most broadly used systems is Care Coordination Systems Mobile Pathways Connect. This system does the above as well as has regional and aggregated reporting capabilities. It has met comparable "High Tech" requirements and is used within Medicaid Managed Care supported initiatives in Ohio with similar usage in Washington state and Michigan.

CCS works with individual programs. It also has the option for statewide and or regional contracting. The pricing and support has been affordable for all communities interested and the pricing has been adjusted for communities that have more limited resources. The CCS system is working within the environment of the information exchange especially in Toledo. There are several other HUB IT supporting platform options with various features to consider.

Question

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

Response

Though medical programs have been a concern related to service duplication we have seen more care coordination related duplication that must be addressed by many orders of magnitude. Care coordination efforts duplicated represent significant unnecessary expense. When a community care coordinator (case manager), assigns an individual to their caseload this represents about \$1500-3000 per person served and this calculation is without the higher level administrative fees that are extracted before the dollars reach the community agency.

In the HUB model the various strengths of the participating care coordination agencies are considered. For example one of them may be a mental health center, housing provider, or a primary care provider. When the client enters the HUB referral process based on an established set of fair policies they are assigned in part based on any special needs or considerations. If an individual needing care coordination had a history of schizophrenia it may be determined that the mental health center care coordinator would be best. No matter what age, condition or other risk factors there are to address all the clients fit within the identification and reduction of risk methodology and payment structure of the Pathways Community HUB model.

At the level of the HUB multiple funders of care coordination can contract to then support and engage multiple network partners. The funding then can be allocated and in the most advanced HUBs braided to support a methodology that allows each at risk member of the community achieve a source of funding for their care coordination. In Richland Co Ohio there are more than 10 potential funding streams from which one of them is assigned to an identified at risk person. One of the Richland funders (United Way) key purposes is to provide funding for individuals for whom no other funding stream is able to be identified.

The coordination of this risk reduction work and the funding is critical to occur at a community/regional level. This is one of the requirements of the HUB National Standards. The HUB administration being within the community served and knowing personally various agency directors etc. helps the whole enterprise work through systemic and community specific barriers and risk factor reduction based gaps in services.

The reporting from the HUB as a whole provides specific numerical information regarding the risk factors identified that are most quickly and easily addressed and those that are either not able to be addressed or take an excessive amount of time. The HUB Director and staff knowing the local community service structure can then work with local agency leadership and other local power brokers to assure the barriers and other factors are address so that the identified risk factors can be addressed more easily.

Here is a live example from rural Knox County Ohio. It was identified that the Pathways capturing enrollment into prenatal care was demonstrating a two month time period from client risk assessment and determination of need for prenatal care to confirmed first prenatal visit. The local director identified with further research that local prenatal providers required confirmation of Medicaid or other insurance before they could be seen. The local Medicaid office required sign off by a physician before the Medicaid card would be provided. Care coordinators had been sending the clients to another county to get physician sign off to get the Medicaid approval. One call to the local Health Department and they stated their physician would sign off on the pregnancy test. The Pathway completion timing was remeasured and went from 2 months to less than 2 weeks (client risk identification to confirmed prenatal appointment).

This type of work flow analysis using the risk reduction confirming Pathways as the work item to be completed is used systemically and with great organization within American Business. The HUB model has significantly benefited in design by notable and national business leaders with knowledge

and expertise in work flow accountability and related financial incentives.

Question

5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

Response

Overview

Using the lens of comprehensive risk reduction to improve outcomes and reduce cost provides strategic assistance in streamlining programs and their requirements to improve outcomes and reduce cost. Identifying and addressing risk in this context brings every current health and social service program serving individuals at risk into the same strategic structure of delivering meaningful work and work products to be measured. Each health and human service program premise for funding and support currently relates to their specific work to identify and address particular health, social behavioral, educational or employment related risk factors.

Each domain of risk identification and reduction at the national level is fragmented and uncoordinated resulting in ineffectiveness in identifying and addressing risk for children and adults who are most at risk and have complex health, social and behavioral health risk factors. The state and federal system could make substantial steps of progress by requiring at the community level a collaboration and coordination of the care coordination and direct service related interventions through nationally standardized and evidence based models like the HUB model.

Capitalize and Collaborate with Existing Experienced and Published Evidence Based Models.

Critical to evidence based models like the HUB model are decades of experience, trials and failures, scientific and best practice publications that work together to produce a high level of specificity and design with multiple critical components to make them work. Some of these requirements directly relate to the need for flexibility in deployment to allow many different types of agencies and individuals participate in the work depending on existing community resources. Then specifically the training, supervision and reporting structure that must be in place to make it work.

On the surface care coordination is just reaching people and connecting them to resources. In the developing evidence base models such as the HUB the following example helps bring the complexity into view. In going out to a specifically identified home in an urban housing complex or rural house trailer you will find multiple child, adult and elder family members. These individuals each have the highest potential for morbidity, mortality, current and future poverty. Each individual may have a spectrum of health social and behavioral health risk factors and each of these individuals and their risk factors are interrelated and interdependent. Each individual and the whole family represents critical and accountable risk identification and reduction work that needs to be accomplished to achieve better outcomes.

Effective care coordination is almost as complex and just as critical as the standards in place for pediatric heart surgery. Public and private funders should seek out the most evidence based and effective national models and to partner and support them to further develop this expertise. The expertise for these models and their standards will be very difficult to start from scratch far away from

the communities and individuals served. Not for profit certification institutions are also better protected from public funding changes, are more able to connect and receive information and guidance from the national network. The HUB model and others can be very responsive to priorities and recommendations presented within a collaboration with federal and state policy and funding leaders.

The Most Fundamental Change Needed – What Is The Meaningful Work Product of a system focused on risk reduction, improved health and reduced cost.

Our nation has the greatest expense and the lowest ranking of basic health outcomes in the developed world. Fundamental to being able to change these high level metrics is the inability of policy makers and purchasers to see the specific work products connected to comprehensive risk reduction and hold the system of care accountable for producing them.

The most critical determinants of an enterprise success in doing work to reach a desired outcome are the specific measurable work products a system produces. These defined then the system can then be held accountable to do the work. Current clinical measures of achieved risk reduction have been developed and exemplified in the work CMS has done to support measure development. As described below these measures are deployed in systems within an accountability approach that is different than what is recommended here. The current measures do fit well within the context of confirmed reductions of medical risk factors and could be a strong part of a risk reduction approach exemplified by the Pathways Community HUB model. Overall our system of care is not driven by nor accountable to deliver work products that reduce risk for our most at risk populations.

Driving the overall system of care to reduce risk, focusing on individuals and populations most at risk, is the strategic framework the HUB model. This same context fits with many other observed scientifically validated methods by which outcomes are improved and cost reduced. The HUB model can be utilized as a recommended or required community network strategy. The HUB can also serve as an example of risk reduction focus and the accountability needed by the system as a whole.

As programs within health, social service, behavioral health and related funding provide information to funders in efforts to expand or maintain budgets the primary data presented does not currently relate to the number of individuals who have been specifically identified at risk, their specific risk factors and numerical reports as to how many of their risk factors have been confirmed to be addressed. The work accomplished reports to decision makers relate to public need, volumes of service, caseloads, process measures and emotional appeals all to fund and further support a system that overall is not demonstrating effectiveness.

The medical care component of the system has made some progress with measuring performance. The lack of accountability in for reducing risk is the most apparent in the programs serving social determinants such as housing, food, clothing, adult education and employment. It cannot be over emphasized that these social risk factors represent the greatest number and weight(level of impact) necessary to address to improve physical, social, educational and economic health. These social risk factors must be integrated and part of a whole person approach in combination with medical and behavioral health care related measures of medication, and primary care visit compliance etc.

The individual's and family served see their own risk factors of housing, food, lack of medical care, medication access etc. all within the context of the whole person and family. Our system of care currently approaches these risk factors in a fragmented, competitive and partial approach.

There is an opportunity to strategically transform our system of care and achieve the best results at the lowest cost.

Our health and social service system is funded in significant part by American Business. American

business is among the most efficient producers of work products that span manufacturing, technical support marketing and many other tangible and less tangible measures of work completed. It is within the strategies of American business that the US health and human service system can look to see how specific work products of systems are defined and how the administration of that system then holds the workforce accountable for producing them in the most cost effective and highest quality manner.

This highly accountable approach can be accomplished while at the same time realizing the critical components of cultural competency, community engagement, motivational interviewing and related critical catalysts that improve risk reduction. For example Community HUBs have as part of the intervention workforce, community health workers who are from and part of the culture and community they serve. It is readily apparent in the risk reduction data evaluated by HUBs that when an individual has a CHW helping them with education and support to encourage breast feeding, reduction in smoking and smoke exposure to infants, compliance with primary care visits etc, these CHWs are able to document these risk reductions and better compliance in a manner that far exceeds other less culturally competent providers of community care coordination. These documented risk reductions result in confirmed completed Pathways to which payment and sustainability is tied.

The more accountable for risk reduction results our Ohio networks have become the more CHWs have been hired trained and supported within communities at greatest risk.

Impact in achieving positive outcomes and the related cost reduction is grounded in our ability to accountably and effectively identify and address comprehensive risk.

5% of the population represents at least 50% of the cost. The basic intervention steps within evidence focused community care coordination include the following,

1. **Find** - Risk screening and regional identification strategies imbedded across the community including on the ground outreach, 211, social service agencies, medical providers etc that identify those at greatest risk and refer to the HUB for intensive care coordination service.
2. **Treat** - The next step is to clearly define each individual's health, social and behavioral health risk factors through a comprehensive risk questionnaire. Data from insurance providers as well as public data now becoming available from educational centers, property and public service records can also be helpful to more fully define the risk factors.
3. **Measure** - Assure that each risk factor identified in a comprehensive set spanning health, behavioral health and social determinants is addressed with an evidence based and or best practice intervention.

To comprehensively assess and efficiently address risk it requires a realignment of currently siloed based community service structures. The focus expertise and potential role of varying community service organizations is different within each community. To gain the greatest strength from current resources an approach is needed that sets basic standards, measures quality guidelines and networking structure in place while at the same time allowing flexibility in how each community builds their specific Pathways Community HUB.

There are extensive available resources in the direct service component of reducing risk (Drs visits, food, housing etc) It is within the care coordination component, which is part of every health and social service funding stream, that the greatest opportunity for improvement exists (see "Exec Summary" for more information on direct service vs care coordination). As care coordination is critical to identify the risk factors and assist individuals in overcoming barriers to receive them this part of the system must be improved for comprehensive risk reduction progress. For example in communities who are assessing the need to start a new HUB we not uncommonly identify individuals and families that have as many as 15 community care coordinators. One of them is there to address the asthma

medications, one for access to medical care, one is for domestic issues etc. As none of them uses a comprehensive approach to identify and address risk they may not identify the eviction notice the family has just received nor have the expertise to help them find housing.

Our system of care must be fully integrated to identify all of these risk factors and assure they are all addressed if we are to achieve different and better results.

Specific Further Description of the HUB model.

The HUB model provides the basic standards for community based care coordinators (CHWs, nurses and social workers) to reach out to those most at risk, provide a comprehensive assessment of their risk factors, and to implement Pathways that each confirm that an identified risk factor has been addressed.

Care coordinators deployed using the Pathways model can include community health workers (CHWs), nurses, social workers and other professionals. The comprehensive assessment of risk spans health, behavioral health and social determinants and is modified by age and other factors.

Based on the identified risk factors the care coordinator works with a team that includes medical, social service and other relevant expertise to develop a plan of care to address all risk factors identified. Each risk factor is assigned a Pathway which serves as the risk reduction measurement tool and billing focused work product to assure that the comprehensive identification of risk results in each risk factor being addressed as best as possible.

The Pathways are nationally standardized and published as the risk reduction performance and quality measure within the model. The Pathways have the ability to conform to existing CMS, NCQA and other national measures. The majority of these measures fit within the same context of identified and reduced risk that also fit within the domain of confirming identified risk has been addressed. For example the focus on assuring immunizations and well child care within EPSDT fit well with the Medical Home, Medical Referral (for visits after the medical home is established) and Immunization focused Pathways. The nationally standard Pathways and their measurement within the HUB model then extend into identified risk factors and mitigation of risk within behavioral health, social determinant, education and adult employment domains. Risk reduction reports demonstrating the effectiveness of the HUB system in identifying and addressing risk are now available. These reports can include the average time and average cost per risk factor reduced and now include data from all 6 and soon to be 9 regional HUBs. The data is useful in not only seeing what risk factors were addressed but also those risk factors in aggregate and across the state that are least likely to be successfully addressed and take extensive time to complete (i.e. housing and smoking cessation). This data is proving very valuable to policy and decision makers who are providing specific resources targeted at risk factors that are most difficult to address.

Each Pathway has a specific billing code being utilized by multiple payers spanning Medicaid Managed Care, Departments of Health, Grants, Mill Levies, United Way and many others. There is a Pathway for each major individually addressable risk factor reduction currently identified. The completed Pathway represents that an identified risk factor (housing, food, access to medical care etc.) has been addressed. Payment is tied to a completed Pathway. Comprehensive risk reduction is achieved. Higher level outcomes that relate to the multiple risk factors addressed can then be measured including infant mortality, EPSDT, school performance etc. In adult populations that same strategy and measurement process is in place with larger outcomes achieved in chronic disease management, reduced hospitalization, employment etc.

Comprehensively assessing and addressing risk contains the specific work items that are required to achieve physical, behavioral and economic health. All current evidence focused measures within health, behavioral health and social service fit well within this lens of risk reduction and related

outcomes. The problem is the programs and initiatives deployed are fragmented and do not lend themselves to the most effective ways to drive the work products of risk reduction. The data they produce and related outcomes and measures of cost savings are also fragmented, inconsistent and difficult for any decision or policy maker to make sense out of.

For example HEDIS measures capture very clearly many key medical focused risk factor reductions (trimester of entry into prenatal care, well child visits etc). HEDIS does not include the factors that represent the largest number and burden of risk social determinants and is lacking in behavioral determinants. An individual with excellent compliance to HEDIS would still be very likely to have a poor outcome if they had multiple other social determinant risk factors.

HEDIS uses percentage based accountability. Qualification to receive a financial reward is based on the percentage of individuals that had their risk factor reduced. For example if 75% or more of children achieve screening for lead poisoning. American business almost never uses percentage based accountability ("80% of our cars run well"). If a medical provider group has to make sure that 80% of the children are screened for lead poisoning then the fastest and least expensive way to accomplish this is to reach out to the least at risk children. The 5-10% at greatest risk will have issues of housing, food, transportation and cultural barriers that will be much harder to work through. Percentages that can serve to create even more avoidance of high risk populations. The measures defined by HEDIS, CMS and many others can be integrated into risk reduction approaches effectively within the HUB model using individual work product completion strategies (completed Pathways) as the business driver.

Higher level incentives can be tied to bundles or groupings of risk factors related to well child care, normal birth weight baby, or reduced Hemoglobin A1c. Payments and measures of quality can tie directly to a defined work product that represents at it's basis comprehensive reduction in risk which has the highest degree of evidence basis for improving health.

The HUB model has embraced and received significant guidance from American Business leaders to develop the work products (confirmed reductions in risk – Pathways) and to hold care coordinators, agencies and now growing regional networks of agencies (HUBs) accountable to reducing the risk. The risk reduction can be presented with measures of,

- Effectiveness - was the risk factor was addressed or not.
- Time - how long did it take to confirm the risk factor was addressed.
- Cost per risk factor addressed – Current HUB Managed care and related funders pay based on risk factor reduced (completed Pathway). There is a national pricing approach connected to RVUs.
- Health Impact - What are the larger outcomes such as asthma control or low birth weight, EPSDT success as well as impacts to future school performance and employment all of which are directly related to a comprehensive approach to risk reduction.

In summary, comprehensive risk reduction, improved outcomes and reduced cost can be achieved through, requiring and supporting evidence based approaches to engage communities in effective pay for performance approaches to comprehensively identify and address risk.

Question

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

Response

The current system of care and payment structure does not require a comprehensive approach to identifying and reducing risk. It does not require collaboration among siloed service agencies. There is no basic tracking especially for care coordination and social service programming for evaluators, policy makers and purchasers of the service to even see what risk factors various programs are identifying and how many risk factors they are successfully addressing.

The key work items that could be measured and provided to policy and decision makers from agencies involved in identifying risk could involve the answers to the following questions.

- What risk factors do you identify and care coordinate (help overcome barriers and connect the individual to the intervention)?
 - Of those identified with a risk factor how many can you confirm received an evidence based or best practice intervention to address it?
 - What is the cost per addressed risk factor?
- What risk factors do you provide the intervention for (the medical care, the physical housing etc.).
 - How many people receive the intervention?
 - What is the cost per intervention?

Evidence based models like the HUB model require specific strategy and financial incentives to ramp up the intervention. In bringing in a HUB the duplication of service is identified and mitigated. Providers of care coordination must document if they are successful or not. Agencies must go from silos to effective teams that reach out and engage those at greatest risk.

The HUB in Toledo Ohio (Lucas County) innovated approaches to provide new agencies with a financial incentive for signing on to become a care coordination agency within the HUB. The payment models now available connect to each risk factor identified and addressed. These payments have finally reached a place in development that is sufficient to sustain and grow the HUBs providing the work. As more agencies contract and become part of the HUB network the attractiveness of having access to the additional funding, the supportive networking and being part of a recognized community team improving outcomes goes up. Toledo is not contracted with more than 20 community agencies that extend from large health departments to smaller community based social service structures.

Requirements by funders for National Certification of HUBs is critical. This protects the HUB network from competitors that may say they are doing all the extra evidence supported work of training, supervising, monitoring quality and following HIPAA guidelines but have no accountable structure to confirm it. All current nationally certified HUBs are growing and demonstrating outcomes. Almost just as many decided to take some of what represents a HUB and make the rest up on their own. All of these as far as we know have spent grant and other dollars but not been sustainable or successful in producing the outcomes.

The Pathways Community HUBs focusing on the care coordination part of the risk reduction can provide this information today including the cost per risk factor reduced. This is inherent in the Medicaid Managed Care and other contracting that fund the HUBs based on each specific Pathway completed.

Question

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

Response

Medicaid Managed Care clinical leaders have been very central as part of the national team to build the HUB model and to inform and support the National Standards. Departments of Health, State Medicaid, social service and behavioral health service as well as social service focused expertise has all been part of the process. As Medicaid Managed Care is the primary funder of HUBs in Ohio they continue to provide feedback and guidance to improve the model.

Barriers – There are over 60 different defined risk factors and the related Pathway focused reduction of the risk factor involved in invoicing MCOS. The invoicing process started out being very burdensome and challenging for MCOS. Several developments have made this more streamlined. There is now established a set of Relative Value Units that apply to each of the Pathways completed. This mirrors the national process for medical services and expands the framework to include social determinants such as food, clothing, housing and specific packages of evidence focused education all within the context of risk reduction as documented by completed Pathways.

The approach to RVUs from the care coordination service component and provides an RVU value for example of 9 for the confirmed establishment of housing for an at risk enrolled individual identified to be without housing. Confirmed Medical Home for someone without one is 5 and confirmed lead screening for a child is 1 RVU. This established RVU system across all the Pathways is then used as the contracting tool for MCOS and others and converts to a single payment amount per RVU. In addition to RVU system development the technology is advancing making billing for risk reduction (Pathway Production) simpler and easier to accomplish.

Question

8. What role do models of care such as ACOs play in the pediatric environment?
- Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?
 - How are pediatric ACOs the same or different from adult-focused ACOs?
 - What opportunities do pediatric ACOs have for integration with community and health services systems?
 - Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

Response

Item (a) – Pediatric ACOs have supported comprehensive community based care coordination and accountable risk reduction models like the HUB in some locations. The majority of the current funding that achieves improved care coordination and better service delivery models has occurred through MCOS and Health Department funding.

Shared savings with ½ of the savings for example coming back to communities and community HUBs to address other population level risk such as behavioral health infrastructure, housing, educational facilities etc. has been discussed with identified willingness by MCOS to consider this approach.

Item (b) The HUB model has been labeled as a TACO (Totally Accountable Care Organization) in some circles as it assures a comprehensive approach to each individual and family. To completely address risk for a child there must also be identification and reduction of risk for the family. For example if a child has uncontrolled asthma and all the medical components are in place yet the mother is severely depressed, has dropped out of her education and work commitments and is getting near to homelessness these risk factors directly connected to the mother and child must be assessed and addressed for the individuals and this family to achieve health. Interestingly when this is done well addressing the child's and associated family members risk and especially when it includes evidence base parenting education and other factors the child may not only be in the ER less, they a much better chance to do well in school and attain future employment. This may seem overwhelming. It is currently being done within the context of Managed Care funding, early childhood and Department of Health funding, social service funding support and other related resources.

Item (c) – Pediatric ACOs could expand contracting with local Community HUBs and serve in a similar manner as MCOS. Unless ACOs fully engage the community, community members and community service organizations to fully coordinate and assure a comprehensive assessment and the related confirmed mitigation of risk their impact to those at risk will be limited.

Item (d) – Our state MCOS have not embraced the expansion of ACOs as they serve as an additional expense and administrative layer between the MCOS and the client served.

Question

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

Response

The primary domain needing the most improvement is care coordination. At risk individuals have multiple and varied risk factors. Assuring good medical care is important yet only confirms a small percentage of the risk factors needing addressed to achieve health. MCOs and ACOs provide care coordination. When they partner care coordination with a community HUB this brings care coordination into an evidence based model structure with multiple nationally required Standards that assure greater accountability and comprehensiveness of risk identification and reduction. HUBs are capable of partnering with multiple payers extending beyond MCOs and ACOs also including, social service, public health, foundations and business. This allows accountable approaches to further enhance social determinant, educational and behavioral health risk reduction efforts though tying Pathway payments related to those issues to other relevant funders. House Bill 332 in Ohio further expands the relevance of HUBs in Ohio by starting to request MCOs and Departments of Health to collaborate with HUBs.

The following are a few of the central strengths of deploying HUBs in Communities as part of a national approach to providing outcome and reduced cost focused care.

- **Pay for Performance** – Per the national Standards 50% of all dollars going into a Community HUB must be tied to confirmed intermediate and final outcomes. This is the highest in all of health and social services. The closest level of direct accountability we have identified is 3% in

MCOS. Most of this HUB financial accountability is tied to completed Pathways. Each Pathway when completed confirms that an identified health, social or behavioral health risk factor has been addressed as described above. MCOS have been the leader with this type of HUB support and now have payments tied not only to confirmation of the client receiving a medical home, specialty follow up medication reconciliation but also social factors such as housing, food, adult education. Risk factors specifically focused on children span confirmation of immunizations being up to date, developmental screening and confirmed connection to referral services as well as all other EPSDT related requirements. The contracts have specific national RVU billing codes extending to as many as 60 different risk factors within pediatrics, adults and prenatal populations. The RVUs and the codes are not yet recognized by CMS. With guidance and improvements, they could be.

- **Connection to the Community and Community Members** – Through the utilization of a local HUB to coordinate the enterprise the local HUB Director can utilize regional risk reduction reporting to identify the risk factors that cannot be easily addressed. They can engage local leadership, churches, government and local foundations to help specifically focus on the areas of greatest community need. They can represent their community needs to state leadership using live data demonstrating success or lack of success in addressing the risk factors of their most at risk populations. The utilization of Community Health Workers (CHWs) who are from and part of the most at risk communities served brings jobs, education, resource and supported wisdom directly to the communities that need the economic activity the most. The CHWs are directly supported and supervised by a team of health and social service professionals who learn from the CHW and gain a much better understanding of the population served. We have seen many of the almost 2000 CHWs we have helped to train in Ohio go on to other levels of professional growth including social work, nursing, physical therapy, administration and many more. The strength of the relationship the well selected and supported CHW has with the client is part of the scientifically proven impact they have to change and improve behaviors and reduce risk related to substances, nutrition, parenting, compliance with medical care, educational advancement and employment. We can measure the effectiveness of CHWs with specific risk reduction efficiency numbers. Related scientific publications have been published and are in progress. The attached AHRQ HUB Manual provides many of these references.
- Evidence based model – We ask that you consider affirmation, support and collaboration to allow care coordination models develop and improve within not for profit enterprises and separate from state and federal government. If federal, state and local programming simply utilize parts and components from evidence based models and do not hold full program fidelity they will not get the same results. In addition to the HUB the Nurse Family Partnership has developed a high degree of evidence, specificity in programming and proven results in both outcomes and cost savings. Like the HUB model the Nurse Family Partnership provides a strategy with a comprehensive approach to identifying social as well as medical risk and assuring competent coordination of those risk factors and their intervention. The HUB model is differentiated by it's CHW can community connection components, pay for performance and the engagement of a whole network of various care coordination providers to do the work. When evidence based models with confirmation of improving results and saving dollars are available why does the majority of
- public dollars fund care coordination that does not have that same confirmation?

The not for profit domain for certifications and accreditations is an institutional space proven to make progress when developed in collaboration and with requirements from state and federal

government. JACHO, Board Certification for Physicians, NCQA Certification for Managed Care and many others provide current examples. JACHO starts with a history of hospitals where your chances of survival went down substantially if you went into one versus staying home with the same level of illness.

In the large majority of our HHS care coordination is not within existing evidence based models. It is duplicative, and not accountable to specifically identify and assure risk factors are addressed. The risk factors that are addressed are most often isolated and not comprehensive to the individual's needs.

As state and local decision makers examine care coordination it may appear that the program and work is simple and easy to develop their own certification and set of standards. The premise people at risk have health and social service needs and simply need to be referred for service does not hold up when you get out to the at risk community and homes that are served. When a HUB connected CHW goes into the most at risk homes the number and complexity of risk factors can be overwhelming. The family and individuals they seek to serve when appropriately risk focused have the highest chance of morbidity and mortality in their community. The individuals are on multiple medications, they have legal and domestic issues, there are eviction notices, loss of employment, and substantial behavioral health issues. We frequently have individuals with confirmation of more than 20 and as high as 30 specific and significant health social and behavioral health risk factors.

In order to assure all of these risk factors are identified and addressed it requires specific training, supervision, tracking and support for the whole team. Timelines and quality assurance monitoring to assure the appropriate prioritization and intensity of work effort to assure quality and efficient care are critical. Good care coordination may not be quite as complex as heart surgery. When serving the most at risk families and when done well it is close.

The HUB model is part of a growing national network of care coordination practice under standardized measures and with highly varied populations. There is a growing network of research and policy development related to the HUB model. The access of network, to the on the ground community efforts, and related shared scientific and best practice information can grow develop and improve the model. This development could be especially accelerated through strategic partnerships with CMS and states mirroring similar initiatives like "Partnership for Patients" and the related efforts around improving organ transplant rates.

One of the greatest opportunities state and federal agencies have to improve outcomes and reduce cost is to require identified models of evidence focused care coordination. This deploys work proven to improve outcomes and reduce cost. Why would dollars be spent on reinvented or with partial fidelity to the best care?

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

CMS recognizes that accessing the optimal combination of child and youth services to meet each child's unique needs presents a significant challenge for vulnerable children and youth in need of services, as well as for their families. In the draft model concept, we seek to improve coordination and alignment across programs and systems by supporting the establishment of robust health care and health-related social service provider partnerships to improve health, wellness, and total cost of care with the potential for sharing in cost savings for successful performance. We are interested in input on innovative financial arrangements that combine or coordinate funding in an effort to integrate and streamline care for high- need and vulnerable children and adhere to current Medicaid

and CHIP program integrity requirements. Since the Innovation Center seeks to test models that, when successful, can be scaled and spread, we seek comments on how current Medicaid and CHIP authorities and programs might be used to support reproducible state-based models to improve care for children and youth.

Question

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?
- a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?

Response

Using risk identification and reduction as the lens described in the initial summary, risk in the pediatric population is most effectively viewed examining both current and future (upstream) risk. For example a child may have severe asthma with recurrent admissions which presents an opportunity to examine multiple current risk factors. Two newborns that are perfectly healthy rolling down the hall of the hospital to go home may have dramatically different future outcomes based on the risk factors the go home to including tobacco smoke exposure, parenting skills, nutrition and many others. To be effective in the short and long term current and preventive risk identification and reduction must be effective.

Assuring preventive focused risk reduction offers the largest impact and greatest cost savings. Identifying and addressing preventive risk factors can focus on teens, expectant mothers and fathers as well as parents of children. It should be emphasized that the individuals and families to which the service goes out to will have a variety of specific risk factors. There is no one or two that will make a huge impact. The risk factors are interdependent and directly connect to one another. For example we have informally identified that getting a mother of small children day care connects to her ability to comply with medical home visits as well as adult education and employment. In the same way specific families can be identified through geocoded hot spotting, neighborhood canvassing, emergency room utilization and many other methodologies.

When the appropriately at risk individual and family is identified a comprehensive evaluation of their current and future risk can be assessed and addressed through evidence focused care coordination. In this type of enterprise a care coordinator may work with an infant who has not yet appeared in the ER, has no chronic disease and would not show up on any insurance or other medically focused evaluation of risk. If the infant has a family history of asthma and is living in a smoke filled home for example this risk factor if addressed now and in combination with an evidence focused comprehensive approach has evidence that the risk reduction accomplished could keep the infant from ever showing up in the ER. Infants and children within identified at risk homes have substantially greater potential for better outcomes if preventive risk is identified and addressed as early as possible. Most extremely obese individuals demonstrate indicators of obesity on the pediatric growth curve before six months of age. Another critical factor and example is parenting. Providing evidence based parenting (several models available) to expectant or current parents can have a dramatic impact on future outcomes for the child and future adult. Triple P a

globally implemented evidence based model from the University of Queensland has demonstrated significantly better future school performance and a significant reduction in the diagnosis of ADHD if parents and related family receive the evidence based parenting education needed. This is supported by multiple other studies demonstrating that parents that are not knowledgeable and able to focus attention and emotion on what is good about their child and mainly focus on unwanted behavior result in very poor school performance.

Since school performance ties to employment and employment ties to economic status and economic status is the most highly weighted risk factor for chronic disease outcomes this is a very high potential future risk factor to address.

Answering the above question more specifically if an evidence based approach can be used to identify those infants and children that are at greatest current or future risk and all of their risk factors can be addressed the greatest success and cost savings will be achieved the earlier in life the risk is addressed.

Within Akron Children's Hospital there is another very high potential population of children that could benefit from focus. Within every specialty area such as pulmonary, endocrine, palliative care, rheumatology, nephrology and others there is an identified population of children that are very high need high cost and not successful in disease management. In all of these areas and in interviewing all of the related specialists these are by far most commonly children that go home to families with unstable housing, lack of food, uninformed parenting and multiple other health social and behavioral health issues. Evidence based care coordination specifically targeted and applied to both the children and their supportive family members can improve compliance with medical care, help remove home based toxins, reduce stress related to basic survival resources and substantially improve outcomes. A recent discussion with one of the rheumatologists was about an 8 year old child who's rheumatoid arthritis is very well controlled when she takes her medication. On discharge to home after several weeks in the hospital she is right back in the ER a few weeks later in tremendous pain due to medication compliance and family risk. The prolonged pain control and treatment starts all over again. This story is told with asthma and many other chronic childhood conditions.

Question

- b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

Response

Risk identification and reduction both current and future would be the best driver of focus. Finding those at risk as young as possible will yield the greatest impact of outcomes and cost. Starting education and support before the child is born is best. Breastfeeding, parenting, toxin avoidance (smoking outside) and many other evidence based education interventions should be provided as early as possible. Addressing all the other risk factors as part of a comprehensive set as early as possible is critical. Finally, children with uncontrolled chronic disease including behavioral health issues can substantially benefit from high intensity evidence based care coordination service.

Question

2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?
- a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

Response

Using a risk reduction lens in viewing performance and related incentives for risk reduction the clinical provider domain represents a portion of the critical risk factors, with social determinants and others related as the majority. .

The Pathways Community HUB model was initially founded based on experience with Alaska's Community Health Aide Program. Alaska has been very successful in reducing infant mortality and achieving compliance with immunizations and other preventive services through community based care coordination using CHWs. In Alaska the medical provider is directly tied to CHWs who are out in the community. In addressing this area related to the connection to physicians the following reality is believed to be important. The physician (and this author is a pediatrician) has a significant potential impact on the medically focused risk factors. These risk factors are critical to address to achieve better outcomes. Most of the risk factors for the patients that the physician cares for are social and behavioral health related. Especially in the area of social determinants the average physician practice has very little expertise in identifying social determinant risk factors and assuring they are addressed. It is not a cost effective use of a clinical provider's time yet those providers serving high risk populations often spend significant amounts of time working on social risk factors as they may not have access to effective community based care coordination.

As per the data and evaluation metrics achieved through various medical home initiatives the improvements when achieved are very dependent on the location, population focus etc. of the medical office and how adept they are in identifying and addressing social as well as health related risk.

The HUB model supports an approach that allows medical offices to be as much an active participant in the comprehensive care coordination as they want. They can have their own CHWs and fully coordinate the care coordinator with the physician. If they are not located near the at risk community and want their at risk patients to benefit from intensive comprehensive care coordination they can refer to and collaborate with CHWs from other community based agencies.

In the best models no matter what agency deploys the CHW for a specific at risk patient the medical home physician receives a dashboard related to comprehensive identified risk and the progress towards addressing the risk factors.

It is important for practitioners who do the extra work and take the time to collaborate with care coordinators to receive some form of incentive. As the intensive care coordination work is done most often not by the physician and quite often not best done by the physician's own staff the funding in this area must be able to be made available to the qualified agencies and staff that are actually care coordinating the comprehensive identification and reduction of risk.

The current HUB payment models implemented across Ohio and starting in Washington State and Michigan support this type of approach. The care coordination is paid for tied to risk reduction (Pathways) as described above. If the CHWs (nurses, social workers and other health professionals can be used) come from the medical office they will receive the care coordination payments from the HUB for the work. If the client is in a medical home that does not have this evidence based care coordination service yet has a highly at risk patient the work and the payment can go to another collaborating community agency.

Payment should be tied to specific confirmations that a risk factor was addressed within a comprehensive approach. It should be connected to evidence based Certified programming. In care coordination whoever actually does the work in the doctors office or the community should receive the payment (also see Section II, Question #9.).

Question

- b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

Response

In the current health and social service funding arena there is greater payment potential for serving those at least risk. This is true not only for medical professions that can see more patients per hour the less problems they have but is also true in social services as highly complex caseloads take more time and time is money. In the HUB model the national standards require service to those at greatest risk. Upon completing the initial assessment of risk if only a couple risk factors are identified then those are the only work items that will be able to be billed for. The financial incentive in the HUB model is to find individuals with many risk factors and to work through addressing the risk factors as fast as possible. In the best models this incentive not only is extended to the care coordination agency deploying the CHWs it is extended as an additional incentive payment to the CHWs themselves. This is similar to RVU payment incentive systems for primary care Pediatricians.

The CHWs receive frequent quality and risk reduction efficiency reporting with financial incentives tied to how many risk factors were identified and addressed. Every Pathway is confirmed by a nurse or social worker and careful monitoring is in place to assure fidelity. Approaches are needed to significantly increase the amount of income programs are serving when the individual served is of very high health, social and behavioral health risk. Without this additional support programs do not have and will not take the time to serve them. We have done time studies that demonstrate a highly at risk client can take up to 30 times more time than one at very low risk. The HUB research has provided basic comprehensive risk scoring approaches that include health, social and behavioral health components. This risk scoring needs greater study and the weighted cofactors need more advanced peer reviewed research and publication. Accurate scoring of risk could yield payment strategies for both providers and care coordination initiatives. This research as well as research related to the interaction and interdependence of health, social and behavioral health risk factors represents a great area of research opportunity.

At this time we can provide specific data as to how many and what risk factors an individual has. We have weighted (provided coefficients) based on the best information we have related to time, effort and difficulty in addressing the risk factor. We can report for individuals and populations the

number of risk factors addressed, not addressed, the median time and the cost for each successful reduction (Pathway complete). These metrics of risk reduction are the center of our incentive program for CHWs which recently demonstrated a 47% increase in Pathway production based on adjustment of incentives and reporting. A detailed description of the program is available.

The same type of incentive based confirmed risk reduction approach is easily transferable to any other direct service or care coordination provider in the health and human service system using the same model.

Question

- c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

Response

As per the discussion earlier regarding private business approaches – If the work product required to improve outcomes is to identify and address comprehensive risk then consider payment structures that support tying the dollars directly to a risk factor that has been addressed within a comprehensive approach to risk reduction. Unlike health and human services American business does not use percentage based measures to tie payments to achieve accountable work products.

Smaller providers of health care or social services can be significantly and unfairly reimbursed by percentage based accountability to risk reduction measures. If they have a small population to serve who is very at risk and yet they are held to the same 70-80% standard as a large provider with a great mix of less at risk patients then despite the additional time effort etc. the provider of those at greatest risk will not receive the incentive. We see this exact dynamic as part the Pediatric care network with a large variety of mix with Medicaid and insured patients. Even within the Medicaid population the range of potential health, social and behavioral health risk can be dramatic. Changing the incentive and accountability strategy for health and social service to a specific work deliverable risk reduction product with accountability for each one can be part of transforming and improving the overall business model.

Would they pay a company for producing tires that 70% of the time are not flat. An American Business who purchased tires that were 70% flat would send back each flat one and only pay for each on that worked. This concept is critical. In American business the cost they charge for their successful items has built within it the cost of the work items that are sent back or don't work. For example there are many work products in American Business that have frequent failures and cannot be paid for. The payment and cost for these failures is built within the ones that are successful.

In the same way the HUB Housing Pathway can only be invoiced if a homeless individual is confirmed to achieve housing. The RVUs for the Housing Pathway are the highest of all risk factors (9). This translates depending on the contract to \$700-\$900 in payment. Finding housing for the homeless takes many hours of work, trial and failure. The hours and the failures are built within the successfully delivered product driving the system to achieve it. Since public housing on the average takes years to achieve (in Richland Co Ohio) care coordinators must intensively look for and identify housing opportunities for the clients they serve. As the HUB itself receives part of the payment they also have a significant incentive to identify public and private housing providers that can provide

housing. In the most recent regional risk reduction report the average time it takes to complete the Housing Pathway is 2 months. This is still not acceptable especially for expectant mothers that may deliver before getting housing. It is an improvement. The county average to attain public housing without care coordination is around 2 years.

Using Toyota manufacturing as an example the leadership of Toyota know the time, cost, administration etc for the whole car as well as for the production of each part. Our health and human systems approach in the U.S. is not only not effectively comprehensive in its approach to risk reduction. The leadership and decision makers do not know clearly the risk factors that are being addressed, the time cost or related expense for their production. The system and it's payments do not provide information on the fundamental work products achieved for the individuals served.

Medical risk factor reduction clearly has better cost measures and risk reduction payment structure than social services. Thankfully MCOS and others are extending cost per risk reduction payment strategy to social and behavioral health risk factor reduction within the model contracts described. **Building a comprehensive American Business model approach to payment tied to the reduction of risk could give decision makers critical data on where to put resources and how to adjust pricing to achieve the best outcomes at the lowest cost.**

Question

- d. Are different payment models appropriate for different potential health care and health- related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

Response

Risk identification and reduction offers the single most outcome and cost reduction focus as an overriding principle of measured performance improvement and payment. The time, effort resources and success rate that providers have in assuring specific risk factors are addressed is critical. The level of evidence basis and quality of each intervention to address a risk factor should also be considered. For example if the risk factor is lack of knowledge regarding diabetes management. Payment for delivering the education to address this risk factor should require or consider in the payment the quality of education confirmed to be delivered. Did the educator point them to a web page and walk away or did they work through an interactive evidence based education package with pre and post education questions confirming though educational achievement and observation that the education was successful?

Just starting to use comprehensive risk reduction with the integration of evidence based measures and assessment tools, can inform pricing and structure.

Question

3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?
- a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service

providers.

Response

Looking from the view of the highly at risk child, their homelessness, lack of medical care for their asthma, poor nutrition, lack of effective evidence based parenting etc. are all part of one whole person. Our nation has the interventions, resources and professional service structures to address all of those issues and provide a much better potential positive health, educational and economic outcome for the child. The services for each of these issues are fragmented in separate silos of application, transportation, and related service requirements. Very few of these areas of needed risk reduction represent funded service structures that are financially accountable for identifying and addressing the child's risk.

The critical services are funded based most often on demonstrating the national need and volume measures of information and referral that do not have within them confirmations that the child's risk has been addressed. Most of the risk areas the child and the other children within the community where they live have service capacity decisions made at levels of evaluation and information far away from their community. State and federal leaders are deciding which risk factors are most important and providing and focusing resources based on incomplete data and not specific to this child's community and their needs.

A risk identification and reduction approach is needed that provides informative data from individuals and populations related to the most common and hardest to address risk factors. Accountability and related financially contracted networking needs to be established to make sure that all the agencies and services needed to treat this whole child are working together to get the job done. The HUB model is only touching the tip of the mountain of potential for our fragmented and unaccountable system to fully integrate and work together to effectively identify and address risk.

To break current systems structures spanning health, social and behavioral health services out of their defensive silos and into effective community team work it will take both official requirements as well as financial incentives that recognize the training, cost, time and resources needed to effectively address risk within an accountable and effective community network of intervention.

This does not represent a need for more dollars within the system. The lens of evaluation to determine which agencies are addressing which risk factors and at what rate of success and timing yields significant opportunity for improvements in efficiency, duplication of service reduction and improvements in outcomes each of which represents significantly reduced cost.

Question

- b. What factors are essential to the success of this alignment?

Response

#1. Overall Risk Reduction Focus,

#2. -Requirement for evidence based care coordination of service across community networks.

#3.-Careful analysis of risk reduction work products and the payments/incentives needed to achieve them within a comprehensive approach to improving physical, behavioral and economic health.

Question

- c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

Response

There are now reports available in all 6 (soon to be 9) regional HUBs in Ohio demonstrating production metrics for each risk factor and risk reduction effort (Pathway) within health, social and behavioral health domains. The report demonstrates in aggregate form the success or lack of success of care coordinators in completing the Pathway (risk reduction). The median time it takes to complete each Pathway and the cost are reportable.

The reporting data from the comprehensive risk assessment checklist used by the CHWs, nurses and social workers that serve as care coordinators within the HUB. This provides a numeric value of exactly what risk factors are being identified across the regional HUB population being served. The report shows how many of those risk factors were addressed (completed Pathways) and how many were not addressed (Finished Incomplete). It also shows how many Pathways are in progress to be addressed. The median time that it takes to address an identified risk factor is provided (i.e. housing 2 months). We can provide average payment amounts per completed Pathway for the cost of each risk reduction.

This report is very similar to American business production reports based on the work products they produce spanning a huge variety of material, tech support, marketing and other services. It is the beginning of what could be termed an outcome production report. This most recent report for our region is embarrassing as the items related to confirming smoking cessation and achievements in addressing housing are not favorable. That said specific training, support and community initiatives have now been launched to better inform and support service providers as well as care coordinators in improving these numbers. This analysis drove the community intervention and is available in all the other HUBs in Ohio with aggregate results available for the state.

Risk reduction reporting extends to the CHWs themselves as they receive reporting on their number of at risk clients assessed for risk and their effectiveness in addressing risk. The invoices that are sent to MCOS the State Health Department and our local United Way for example all demonstrate the risk factors identified and confirmed to be addressed with the associated cost per Pathway (risk reduction). Examples of these items as part of data sharing are also available. Data regarding risk reduction is essentially the same or very similar across quality improvement, research, invoicing and personal performance of care coordinators. The dollars tie to the outcomes achieved.

In some advanced HUBs provider offices can access the dashboard of health, social and behavioral health risks currently being care coordinated by the CHW and their team. The provider also receives information as to how to reach the care coordinators. In settings where the care coordinators (usually CHWs) reach out directly from clinics the providers can include CHWs in visits and have more intense collaboration and coordination of care and care planning with care coordination team.

Question

4. How could states and tribes and providers coordinate incentive payments, state and federal grant

funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

Response

The Pathways Community HUB model has built within it a braided funding approach that has been recently supported and codified by state level payers.

In most HUB payment models the source of funding for an at risk client enrolled is tied between client and funder. A CHW may have 30 clients with up to 10 different payment sources each tied to a specific client. The Payment then ties to the comprehensive risk assessment and then to each Pathway that is completed assuring that an identified risk factor is addressed. For example if a new client is found and the assessment identifies they need, housing, primary care and immunizations to be up to date. The HUB related payment would not tie to the direct service for any of those components (providing the medical care, physical house or immunizations). The funding would tie to the Pathways that document that the care coordinator has connected them and assures they have established safe housing (housing Pathway), that they showed up for the medical home first visit (Medical Home Pathway) and that they are now up to date on their immunizations (Immunization Referral Pathway). These three Pathways and the assessment would appear on the invoice to the payer responsible for the client. The Community HUB who submits the invoice and provides the services outlined above keeps a small percentage of the dollars and the rest of the dollars go to the care coordination agency that hires and deploys the community care coordinator that is working with the patient.

In the most advance braided funding model when a new at risk client is identified and the assessment is completed the funding can be tied directly from the funder to the billing code of the relevant Pathway being completed. In this strategy Medicaid can pay for the medical risk factor focused Pathways (Medical Home, Immunization, Developmental Screening etc.). Social service agencies can pay for their associated Pathways (Housing, Food, job training etc). In this model the invoice to a payer would demonstrate the risk reduction Pathways for a specific client only within their domain of service focus.

In either current HUB payment model Integrated Payment strategies are in place now representing MCO, Health Department, Foundation, United Way, Community Mill Levy, Private Business, Church Donations and many other funding streams. The intensive audits related to both financing and HIPPA have been successfully passed by many different programs and on many different levels of service.

CMS can expand the outcome improvements, cost savings and integrated service and pay for performance model of Pathways through strategic collaboration.

Support the implementation of Community HUBs across all communities in the U.S. Partner within not for profit domains supporting HUBs with the expansive need for more research related. Help expand the body of knowledge and the production of outcomes associated with comprehensive and accountable risk reduction. Help to highlight that these transformative approaches not only improve physical health they work together to improve educational and future employment success for children and adults.

The HUB network of national highly integrated and supportive agencies includes Communities Joined in Action, Medicaid Managed Care (especially United Health Care, Caresource and Centene), Westat, The Rockville Institute, The Georgia Health Policy Center, Akron Children's Considine Research Institute, The IHI's 100 Million Lives Initiative, The Ohio Academy of Pediatrics, The

Pathways Community HUB Institute and all of the current HUBs that represent 100s of thousands of clients currently being served. With the strategy of your choosing we could launch a national learning collaborative engaging HUBs and policy and provider groups across the US building on current success and dramatically expanding the effectiveness of this early nationally standardized approach.

Question

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?
 - a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

Response

Please see Section III item 3(a) above.

Question

- b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?

Response

In order to comprehensively assess and address risk and achieve the best outcomes at the least cost all risk factors must be identified and addressed as best as possible. This means that the best models would coordinate all health, social and behavioral health care coordination at the community level to assure they all work together to pay for, track and support the comprehensive identification and reduction of risk. EPSDT represents an important bundle of medical services. EPSDT by itself even if fully implemented would leave behind many other interdependent and critical social, behavioral health and related unaddressed risk factors.

Interestingly because of the opportunity to achieve outcome improvement and cost savings United Health Care, CareSource and Centene (Buckeye in Ohio) are all moving towards a comprehensive risk reduction payment approach. They are paying for the care coordination related to housing, food security, parenting education etc. This is proving that it can be done! The best national strategy would be to braid the funding available so that Pathways (risk reductions) related to housing are paid for by social service entities and medical care related Pathways are paid for by Medical related funding structures. Braided funding using individual Pathways as the payment work product with the associated Pathway billing code is being piloted at the CHAP HUB in Richland County.

Question

- c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

Response

We obviously emphasize a comprehensive approach. There has been identified specific bundles within the comprehensive approach that seem to be another layer of important focus to achieve better specific outcomes within areas such as asthma control, obesity prevention, parenting and others. This can be provided in greater detail. It is an area needing greater research.

The challenge of the Health Home model is that their primary responsibility and effectiveness to date has been related to addressing medically focused risk factors. These offices most often are not located within communities most at risk. Their current staff and expertise may not reflect the culture or cultural competence of the community served. There are notable exceptions and it is critical to work towards goals of the Medical Home model serving as a competent and effective resource for care coordination. In collaboration and close communication with each child and adults primary care physician a network of currently available resources can be formed that capitalizes on the strengths professional skills and cultural competence of other agencies within the community that may not be within the walls of a clinic or hospital. Effective care coordination requires trained and supervised care coordinators. It is best when it involves direct home visiting that establishes an ongoing relationship with the client and family. The specific collection of risk data and how those risk factors become the accountable work products of Pathways are critical. Regional integration of multiple community based agencies including doctors offices, churches, health departments, social service agencies, mental health and others each of whom can support and deploy care coordinators with their own agency specific strengths and abilities. Each agency accountable for non duplication and careful supervision and tracking within a risk reduction model.

In the more that 50 communities our team has worked with the majority of the time the best agencies to hire and deploy the risk reduction focused care coordinators are social and behavioral health focused entities directly within and or near the communities served. Agencies who currently or who are willing to hire, train and support individuals who have cultural and communication skills most often directly from the at risk community served. This list of engaged entities should always include physician practices. The work that the care coordination team does to address health, social and behavioral health risk is required by the National Standards to be tied to the primary care provider. The provider can participate and has authority over the plan of care especially in the areas of addressing medical risk factors. This participation varies and is most often currently minimal. In Alaska where care coordination is hard wired in the system the providers work arm and arm with the care coordinators.

Over time maybe physician practices may move to be physically and culturally (within their staffing) connected to communities. Now they are far away. In our own community in Richland Co. it is 4 hours round trip by bus to the private practice locations from the most at risk part of town. If you are traveling with your children and 15 min. late you may be sent home. Care coordination can effectively be deployed with training and support to involve all available agencies and individual resources playing a substantial role in overcoming the barriers between risk and risk reduction.

Question

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

Response

The National Certification Standards for HUBs require each HUB to calculate its return on investment (cost savings) to the community it serves.

Our most recent publication in the Journal of Maternal and Child Health demonstrated a 500% return on investment for a cohort of patients based on a propensity score matched control group (reference available in appendix of attached HUB manual). The intervention group received a comprehensive approach to risk reduction using the principles of the Community HUB Pathways model. We calculated the cost to provide the care coordination to the intervention group. There was a 60% reduction in low birth weight LBW in the enrolled group. It was determined that for every 12 patients who received the intervention (within an at risk population) one LBW would be prevented. The first year and long term cost of LBW related to both medical expense as well as special education and related future services have been well evaluated and published in peer reviewed journals. The comparison of the cost to serve twelve, prevent one and the published cost of LBW filled in the equation. This is not the only cost in this effort to compare. Because the CHWs also provided parenting information proven to improve school performance, helped parents receive adult education and employment and a host of other health and social service risk factors there are other domains of improved and future physical, behavioral and economic health that could be measured in a cost savings approach. HUB models in Michigan, New Mexico, Oregon and other states have documented cost savings in a variety of manners. Using Hospital historic data reductions in ER use and hospital admissions have been measured with substantially reduced cost. Reduced cost and utilization was measured in the three Michigan HUBs under CMMI looking at a public payer based risk matched control group.

There are many ways to measure short and long term costs. Interestingly the medical cost savings is helpful. As we figure out how to best document the economic cost related to improving the child and adults performance in school, future employment and related reduced potential for chronic disease related to reduced poverty these numbers should be much more substantial. Comprehensive risk reduction especially for a child not only improves health outcomes, the reduced family stress, improved parenting (through evidence based parenting education), stable housing, healthier nutrition and many other related features work together to improve future school and employment success.

This is another area that the national team including HUBs would hope to achieve, to be part of researching and evaluating in collaboration with CMS these cost savings evaluations. Experts related to “Big Data” including CORE in Washington State are also part of the team and actively engaged in this work.

SECTION IV: PEDIATRIC MEASURES

CMS has worked with stakeholders to develop a core set of child health care quality measures that can be used to assess the quality of health care provided to children enrolled in Medicaid and CHIP.

States and tribes can use the child core set of measures to monitor and improve the quality of health care provided to Medicaid and CHIP enrollees; however, CMS notes that state and tribal reporting on the core set is voluntary. CMS is interested in learning from and, where appropriate, building upon its work on pediatric quality measures indicative of health outcomes. In particular, we are interested in short-to-medium term measures associated with both short- and long-term cost reductions and improved quality to both Medicaid and other public sector programs as healthy children become healthy adults. In addition, CMS is interested in learning how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health.

Question

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

Response

Most of the measures currently developed fit well within the risk identification and reduction model of the HUB model. The specifics of the measures can be fully integrated as needed. Our payment experience would recommend not to use percentage based accountability for achieving the risk reductions focused upon within those measures (see the later part of Section II, #5 above regarding percentage based accountability). Payment can be tied to each individual that is confirmed to have that risk factor addressed.

In a comprehensive approach to addressing Pediatric risks multiple additional social, behavioral health and medical risk factor identification components need to be added. As measure development is complicated at times it may be reassuring that many of these are very simple and have been utilized successfully for almost 20 years with related publications and evaluation. On the risk assessment checklists example questions might read – Do you have housing? Do you have regular access to food? Have you received parenting training in Triple P? There are many others.

Total risk by domain can be measured using risk scoring strategies that can provide objective information in the domains of health, behavioral health, and social determinants.

The HUB model is a continuous quality improvement approach with LEAN business methodology. Additional measures and related Pathways are yet to be developed and implemented.

Question

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

Response

Most of these measures are currently collected. They can all easily be added to the data collection structure and Pathways can be modified or developed to address the specific risk factor in focus. The success of achieving related interventions to address the identified risk factor can be reported with the time, success rate etc reported as above. Every data collection event (filling out the risk factor checklist on the initial and return home visits by care coordinators) is reviewed by at least one supervisor and sometimes other members of the team. Audits by payers including MCOs has continued to improve the data integrity and completeness. Pay for performance within the model was studied and published (reference in attached HUB Manual) demonstrating that pay for performance at all levels improves the accuracy and effectiveness of the data.

The Published listing of Pathways by AHRQ includes Pathways with many subcategories for data

collection. The Medical Referral Pathway for example has sub categories to capture well child care, specialty care etc. The Social Service Pathway has numeric sub-designations that capture food, clothing, legal assistance etc. Specific requirements for data collection can be put within the Pathway. Data collection items such as emergency and urgent care use may not be in the Pathways but are placed within the checklist as reportable items.

SECTION V: OTHER COMMENTS

Question

1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

Response

Please see Section III 3(a) above.

Question

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

Response

It is very much appreciated that CMS has so carefully constructed and asked these critical questions. This is the first we have seen something like this so well developed and so (at least to us) critical to getting information to improve health.

Most of the references noted in this document can be found under references in the AHRQ Pathways Community HUB Manual, attached to the email sent.

We realize it is difficult to arrange in person meetings to further discuss and work through the answers provided.

Central members of our team without expectation for financial travel support etc. would enjoy the opportunity to expand this discussion and mutual understanding.

With appreciation,

Mark Redding MD FAAP

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SPECIAL NOTE TO RESPONDENTS: Whenever possible, respondents are asked to draw their responses from objective, empirical, and actionable evidence and to cite this evidence within their responses.

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Pathways Community HUB Manual

**A Guide to Identify and Address Risk Factors,
Reduce Costs, and Improve Outcomes**



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care • www.ahrq.gov

Pathways Community HUB Manual

A Guide to Identify and Address Risk Factors, Reduce Costs, and Improve Outcomes

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The information in the *Pathways Community HUB Manual* is intended to assist service providers and community organizations in creating a HUB to coordinate delivery of health care and social services. The content was developed by the Pathways Community HUB Certification Program. This manual is intended as a reference and not as a substitute for professional judgment. The findings and conclusions are those of the authors, who are responsible for its content, and do not necessarily represent the views of AHRQ. No statement in this manual should be construed as an official position of AHRQ or the U.S. Department of Health and Human Services. In addition, AHRQ or U.S. Department of Health and Human Services endorsement of any derivative products may not be stated or implied. None of the investigators has any affiliations or financial involvement that conflicts with the material presented in this manual.

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Introduction and Purpose

The Pathways Community HUB Manual is designed as a guide to help those interested in improving care coordination to individuals at highest risk for poor health outcomes. The Pathways Community HUB (HUB) model is a strategy to identify and address risk factors at the level of the individual, but can also impact population health through data collected. As individuals are identified, they receive a comprehensive risk assessment and each risk factor is translated into a Pathway. Pathways are tracked to completion, and this comprehensive approach and heightened level of accountability leads to improved outcomes and reduced costs.¹

The most important functions of the Pathways Community HUB are to:

- Centrally track the progress of individual clients (to avoid duplication of services and identify and address barriers and problems on a real-time basis);
- Monitor the performance of individual workers (to support appropriate incentive payments);
- Improve the health of underserved and vulnerable populations; and
- Evaluate overall organizational performance (to support appropriate payments, promote ongoing quality improvement, and help in securing additional funding).

Community-based care coordination has a critical role in ensuring that individuals at risk connect to the evidence-based interventions and services that will improve their outcomes. The current siloes and fragmented approaches to care coordination that exist in communities often result in duplication of services, ineffective interventions, and uncoordinated care.

The HUB provides centralized processes, systems, and resources to allow accountable tracking of those being served, and a method to tie payments to outcomes. This guide describes the model, infrastructure needed, and implementation strategies through a step-by-step approach.

Three overarching principles make up the foundation of the HUB model:

1. **Find:** Identify individuals at greatest risk and provide a comprehensive assessment of all health, social, and behavioral health risk factors.
2. **Treat:** Ensure that each identified risk factor is assigned to a specific Pathway that will ensure the risk factor is addressed with an evidence-based or best practice intervention (e.g., prenatal care, specialty care, parenting education, housing, food, clothing).
3. **Measure:** Completion of each Pathway confirms that the risk factor has been successfully addressed. Measurement also includes other outcomes that involve multiple risk factors (e.g., improvement in chronic disease, reduction in emergency department [ED] visits and hospitalizations, adult education, employment).

The intended audience includes all those involved in coordinating care for individuals at risk for poor health outcomes. Key stakeholders include but are not limited to:

- Federal, State, and local government agencies.
- Community-based organizations using community health workers (CHWs) or community care coordinators.
- Safety net clinics.

- Health plans.
- Accountable care organizations.
- Social service agencies.
- Local public health departments.
- Private practitioners.
- Hospitals.
- Public health departments.
- Charitable organizations.
- Private practitioners and businesses.
- Individuals served and the communities that serve them.

Current Difficulty in Identifying and Addressing Risk Factors

The United States spends significantly more money per capita on health care services than any other nation in the world.² The reality is that the United States lags behind most other developed countries in terms of key outcome measures, including infant mortality, health equity,³ and patient perceptions of safety, efficiency, and effectiveness. The primary sources of these adverse health and social outcomes are risk factors.^{4,5} If risk factors are the source of poor outcomes and related expense, why isn't the focus of our health and social services system the coordinated and comprehensive identification and reduction of risk?

The purpose of the HUB is to identify and address risk factors—primarily at the individual level but also at the community-population level. Finding the specific individuals within communities who are most likely to have a poor health outcome, addressing their specific needs, and accountably measuring their results will influence the overall health of the larger community. The first community that piloted the HUB model showed a countywide reduction in low birth weight by targeting the women most likely to have a poor birth outcome.

Published and ongoing research shows that community care coordinators can successfully find and engage the right individuals, complete a comprehensive risk assessment, and then partner with them to overcome barriers to successful outcomes.¹ This work can be done with accountability, cultural competence, and a pay-for-performance approach that results in reduced risk, better outcomes, and reduced cost.^{1,6,7}

The HUB model requires that we look at risk from a new perspective. Some of the questions we need to ask include:

1. Who is most at risk in our community?
2. What risk factors tie to the adverse health and social outcomes we need to address?
3. How can we comprehensively assess risk for each individual served?
4. In addition to identifying, tracking, and improving individual risk factors, how can we look at population health?
5. How can we measure the economic benefit?

Evidence Related to Risk Factors

Care coordination is currently part of many health and social service funding streams, but it is usually not evidence based. Evidence-based approaches are at the foundation of our modern health care system, but the same rigor has not been applied to care coordination. There is great potential to improve outcomes by using key strategies of comprehensive risk assessment, identification and tracking of risk factors, and payment tied to reduction of risk.⁸

Five percent of the population represents more than half of the total health care cost.⁹ We need to find and engage vulnerable individuals with proven strategies to improve health equity and outcomes. Cultural competence is an essential factor in the workforce deployed to achieve this goal.

Risk factors related to health care represent less than 15 percent of the risk factor burden. If we were able to identify the most at-risk individuals and confirm that they received the best health care possible, it is estimated that we would only see a 10 to 15 percent improvement in their health outcomes.⁴ Social determinants of health represent the largest percentage of the drivers behind many poor health outcomes.^{4,10} Therefore, it is important to conduct a comprehensive risk assessment to identify and quantify all the risk burden an individual faces. In addition, accountability and pay-for-performance strategies can be used to confirm that all identified risk factors are addressed and resolved.¹

Fragmented approaches to care coordination are usually not effective. Care coordination is already part of many local, State, and Federal health and social service funding streams, but it is delivered in a silo-based structure. Multiple care coordinators can be assigned to one person based on the specific needs that care coordinator is addressing. For example, one care coordinator might work with a client to address effective use of her asthma medication puffer, while another might address infant safety, and still another might address food issues or domestic violence. Across the spectrum of health, social, and behavioral health services, a comprehensive approach centered on individuals and their risk factors is needed to achieve better health, social, and economic outcomes.¹¹

Some risk factors are considered to be “upstream” and some are “downstream.” When dealing with downstream risk, the damage has been done, and the care coordinator is working to minimize further damage. For example, an adult with a long history of smoking and severe chronic obstructive pulmonary disease might experience multiple hospital admissions. Upstream risk factors are those that can have an intervention before damage is done. In this case, a healthy newborn baby with no medical issues may leave the hospital to go home to a house full of smokers. Intervention at this point has substantial potential to affect health and related health care expenses many years later.

Lack of insurance and access to health care is a critical component of risk. Medicaid expansion under the Affordable Care Act has significantly increased the number of individuals who now have insurance.¹² Unfortunately, some of the most vulnerable individuals at highest risk do not sign up. Care coordination is an important component to address this risk factor as part of a comprehensive approach to risk reduction.

Barriers for people who are insured. Health insurance is critical, but barriers still exist for many individuals with insurance. Some of those barriers include inability to navigate the complex physical and mental health care systems, high copayments and deductibles, lack of information on how to use their insurance, and other issues such as lack of transportation, inadequate housing, and difficulty meeting other basic needs.¹³

Disparate level of risk for racial and ethnic minority groups. Racial and ethnic minority populations face additional barriers leading to poorer health outcomes. African-American women have substantially higher rates of low birth weight (LBW) babies,¹⁴ while Hispanics have disproportionate rates of diabetes.¹⁵ Unequal access to care is one factor leading to poor hypertension control among Hispanic populations.¹⁶ Risk factors involved in accessing care can include language and cultural differences, mistrust of the health care system, financial constraints, and racism encountered within the health and social systems of care.

Risk factors for those living in rural areas. Individuals living in rural areas represent 20 percent of the population, yet only 9 percent of practicing physicians work in these areas.¹⁷ Therefore, rural residents must often travel long distances for care and can experience long waits at clinics. Many do not receive needed care in a timely manner.¹⁸ Basic social supports and services (e.g., medical and social service providers, cell phone service, transportation) may not be as readily available in rural areas.

Risk factors for other groups. Other high-risk populations have specific needs that must be addressed. Some groups to consider include adolescents, those with behavioral health conditions, individuals leaving prison, and individuals with high medical debt. For example, care coordination using Pathways has been used in Muskegon, Michigan, to reduce rates of recidivism for ex-offenders.

Not identifying, assessing, and addressing risk factors for individuals in a timely manner has two major consequences. First and foremost, the consequence is human suffering. Second, costs are significantly higher because delays in risk factor intervention and prevention result in expensive and catastrophic health and social outcomes such as frequent ED visits, repeat hospitalizations, and failure to finish school.

The Broken Business Model of Care Coordination

The process of identifying at-risk individuals and connecting them to the health and social services they need is often referred to as care coordination. Care coordination is a broad term that is often thought of as a process that occurs within the health care system. The HUB model specifically addresses community care coordination, which can be defined as the coordination of services beyond the “walls” of the health care system. A community care coordinator (CCC) in the HUB model is trained to meet individuals in their homes or in a community setting to address all their identified issues. These needs may include help with housing, transportation, employment, and education in addition to accessing health care services.

Care coordination occurs within many different and most often isolated domains of the health, behavioral health, and social service system. The current business model for delivering care coordination services remains inadequate. For example, it is most common for care coordination services to focus on “activities” that may or may not produce positive outcomes. And while more than one organization may provide care coordination services within a given geographic area, generally little or no collaboration occurs across these programs. Individuals fall through the cracks and efforts are duplicated. A high-risk pregnant woman may have multiple care coordinators who do not interact with each other and another high-risk person may have no care coordinator.

Three fundamental business model problems exist with the current approach to care coordination—lack of meaningful work products, duplication of effort, and failure to focus on those most at risk. The fragmentation and duplication of services and poor outcomes resulting from poor care coordination increase health care costs.

The care coordination services purchased often have no confirmed benefit to the individual served.

Most care coordination services are purchased through local, State, and Federal government funding streams. These contracts typically purchase “work products” that do not confirm a comprehensive approach to the effective identification of and intervention with an individual’s risk factors. Payments are based on process measures, such as number of individuals on a case list, visits or phone calls made, or notes charted.

Duplication of care coordination is a burden to the budget and the individual served. Members of the Pathways Community Care Coordination Learning Network (CCCLN) have reported situations where clients have had 10 or more care coordinators at one time. It is quite common for an at-risk individual to have four or five care coordinators. In most communities, these services are not coordinated and result in significant duplication. Care coordination can cost up to \$2,000 or more per year per client served.

At-risk individuals have reported that it is challenging to have multiple people and agencies in their homes collecting personal information and sometimes offering conflicting information. There may be times when it is appropriate and necessary to have more than one care coordinator in a home, but the reasons should be clearly documented. Communitywide standards for care coordination can help identify and eliminate unnecessary duplication of services, leading to improved costs and outcomes.

There is no requirement or incentive to focus on high-risk individuals and to ensure that each risk factor is addressed. It takes less time, expense, and cultural competency skills to serve lower risk populations. Contracts that do not require services to those at greatest risk encourage agencies to “cherry pick” by serving low-risk individuals and avoiding those with the greatest need.

For example, in current funding models, a care coordination program may be working to confirm that 80 percent of children in a defined population have received lead testing. Most children (85 percent) may be relatively easy to reach. However, the remaining 15 percent of children and families may have language barriers, lack telephones, or mistrust care coordinators who are not from their neighborhood. If a care coordination program serves higher risk individuals, then they will have to work harder, provide more hours of service, and ultimately make less money serving them under current contracting strategies.

Fixing these problems requires a fundamental change in the way care coordination contracts are written. Payments need to be scaled to recognize the number of risk factors an individual has and the time, resources, cultural competence, and skills needed to effectively serve those at greatest risk. We need to build a system of care with incentives to seek out and effectively serve those at greater risk instead of our current system with unintentional financial incentives to avoid them.

American business has developed many service, product delivery, and tracking structures that support accountability, quality, and confirmed results. Airports, package delivery firms, technology companies, and other business models hold tremendous examples. Business leaders have brought their insights and innovations to the development of the Pathways Community HUB model.

The business concept of “value stream analysis” works to identify and select the best value alternatives for designs, materials processes, and systems to achieve more effective products/results. This concept was originally applied to manufacturing and led to a transformative improvement.¹⁹

In a parallel manner, can the health and social service system identify each component needed to achieve a positive health or social outcome? Can we then identify financial and programmatic strategies that focus interventions on the populations most likely to benefit from them effectively and efficiently? Can we comprehensively identify and address each risk factor in a business model approach?

American business and manufacturing score at the top for efficiency and effectiveness within international rankings. In contrast, American health and social service systems and related expenses rank near the bottom. Business system models combined with a community-connected, culturally competent approach represent a substantial opportunity for significant improvement.

According to the latest National Standards from the Pathways Community HUB Certification Program (PCHCP), HUBs must demonstrate both cultural competence and a business model approach that ensures a comprehensive assessment and documentation of intervention for all risk factors identified. Fifty percent or more of the HUB's funding must be tied to specific health and social service outcomes produced. This accountability of tying dollars to specific results has been demonstrated to produce better outcomes, improved documentation, and increased efficiency.^{1,6}

A Way To Solve the Problem: Pathways Community HUB

Building a Pathways Community HUB will bring together an accountable team of community-based agencies that deploy CCCs to reach out to those at greatest risk, assess their risk factors, and ensure that they connect to care. As individual risks are reduced, population-level health improves and overall costs are reduced.

The codevelopers of the HUB model spent several years in Alaska working with community health workers (CHWs). Alaska has a large network of certified CHWs located within high-risk communities. Alaska has progressed from reporting some of the worst infant mortality statistics in the United States in the 1960s to some of the best today. The CHW experience in Alaska and its regional supporting network were key building blocks in the development of the HUB model.²⁰

The Pathways model was the precursor to the Pathways Community HUB model. Pathways were developed by the Community Health Access Project (CHAP) in the late 1990s, about the same time that CHW programs were being established in Ohio. CHAP created Pathways as a response to funders asking how the work that CHWs did could connect to improved outcomes.

CHAP designed and began using Pathways for all their enrolled clients in 2000 and started to see noticeable changes in outcomes, specifically around LBW. Pathways were simply a tool used to identify, track, and measure each risk factor through to a measurable outcome. Pathways were triggered by the comprehensive risk assessment completed by the CHW when a client was enrolled. CHAP worked with funders to change all contracts to outcome-based payment and developed strategies for payments related to successful Pathway completion.



The success of implementing Pathways within a single agency, CHAP, led to the realization that the model would be more successful if it could be used by all the agencies within the community working with high-risk populations. CHAP worked with key stakeholders in Richland County, Ohio, including local government agencies, community-based organizations, health care providers, community leaders, and others, to develop the first HUB approach.

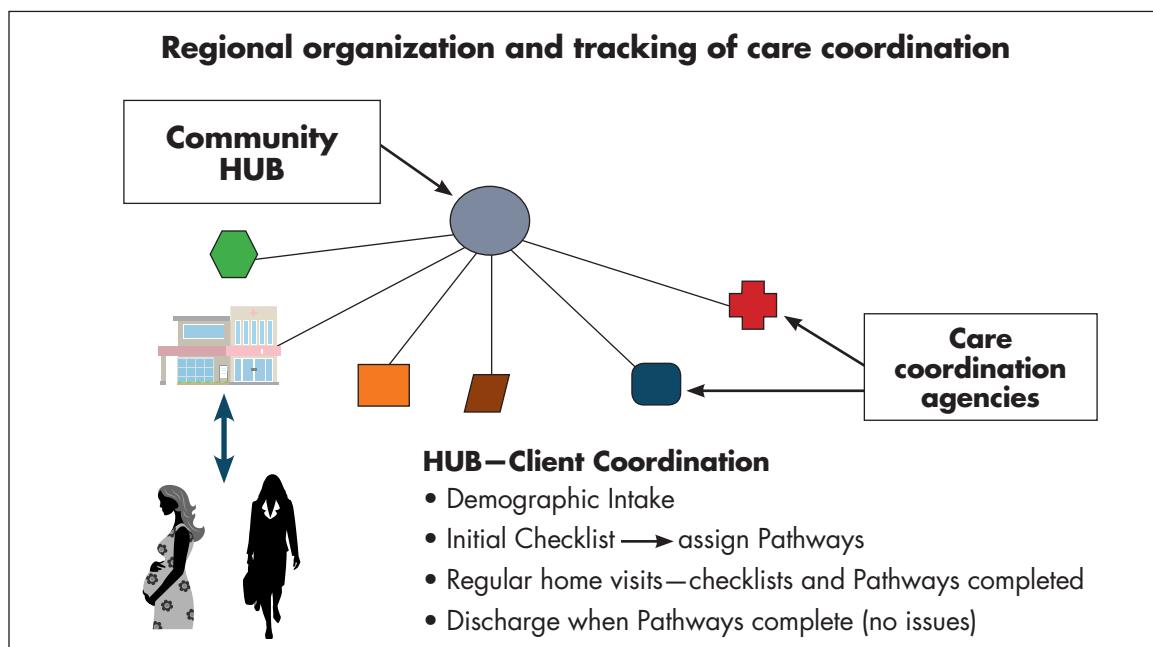
The CHAP Pathways Community HUB grew out of this first attempt to bring all care coordination agencies together within the county. The HUB is the network that brings together care coordination agencies and provides the infrastructure that is missing in most communities. The Pathways are the specific tools the HUB uses to track an individual's identified risk factors through to a measurable outcome.

HUB initiatives then developing in Toledo and Cincinnati, Ohio; Albuquerque and Rio Arriba, New Mexico; Oregon; Michigan; and other locations have substantially informed and shaped the model. Today, the HUB model represents a national learning and quality improvement network organized by the Agency for Healthcare Research and Quality and supported through a broad base of funding streams. Certification and related collaborative efforts among national health improvement initiatives provide an opportunity for continued improvement, development, and spread.

The Hub At Work - Part 1

See the HUB Community Template in the Appendix for an illustration of how the HUB works. Following is an example of the HUB in action.

Leah is 17 and pregnant. She is staying at a friend's house for a few days because her parents threw her out of the house for getting pregnant. Her friend has heard of a CHW named Kim who helped her cousin when she was pregnant last year. Her cousin has Kim's number, and they place a call.



Kim works for one of the local care coordination agencies (CCAs), Community Vision, that is part of the HUB network. There are a total of eight CCAs connected to the HUB that work with at-risk pregnant women.

Kim meets the requirements to serve as a CCC in her HUB as she has been trained and certified as a CHW. Kim is from the same community where Leah lives. The following day, Kim meets with Leah at her friend's house. Immediately, Kim explains the program and obtains an appropriate release of information that protects Leah's personal health information. Kim then checks in with the HUB to make sure that there is not another CCC from one of the other agencies within the HUB network already working with Leah. Using tablet-based technology, Kim determines that Leah is not yet enrolled in the HUB and she is eligible for HUB community care coordination.

In a manner that is consistent across the HUB network, Kim goes through a checklist with Leah to evaluate her medical, behavioral health, and social risk factors. As Kim works through the checklist with Leah and comprehensively identifies risk factors, she begins to discuss options for housing, food, clothing, medical care, and other supportive services. Kim begins to encourage her to client to reenroll in school. Through conversation, Kim learns that Leah has always wanted to be a nurse and had been making good grades in school before she got pregnant. After completing the initial checklist and learning about the risk factors most important to Leah, Kim sends the risk factor information to her supervisor.

Kim collaboratively works with both her supervisor and Leah to develop a care plan that addresses all the identified risk factors. From Kim's checklist, it is documented that Leah does not have housing, adequate food, or health insurance; has not started prenatal care; and recently dropped out of school. In addition, the two checklist questions related to depression were positive. Kim completed a full depression screen that indicates Leah is at risk for depression. Each of these risk factors is identified and tracked using Pathways in Leah's plan of care.

Within a couple days, Kim finds Leah temporary housing. The establishment of stable housing completes the Housing Pathway, and that outcome will take months of work. Kim links Leah to the local WIC program for food and helps her enroll in the Medicaid program for insurance. Kim's nurse supervisor calls the local obstetric office and sets an appointment for Leah early the following week. As each risk factor is addressed, the corresponding Pathway is completed.

Over a period of 18 months, Kim continues to work with Leah through regular home visits. During the pregnancy she usually sees her twice a month. When the situation is more stable, she sees her every 2 months. At each home visit a new checklist is completed and the number of risk factors identified and related Pathways needed goes down. Leah's overall risk status improves as Kim tracks her progress over time.

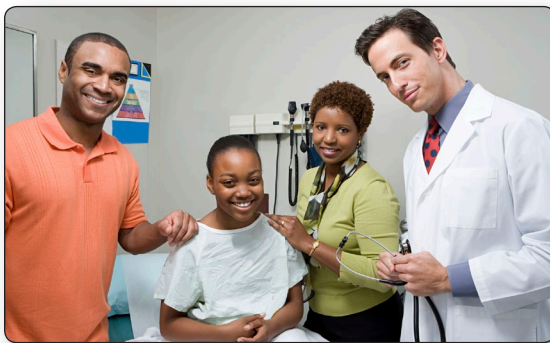
Leah attends almost all her prenatal visits. With help from Kim, she receives an initial evaluation, diagnosis, and support from the behavioral health center. Three months after enrollment, Kim helps Leah reengage with her family. Kim supports Leah in reenrolling in school and helps her look for child care. During Leah's pregnancy, Kim makes it a priority for Leah to receive education supporting breastfeeding, safe sleep, evidence-based parenting, and many other critical items.

Leah has a healthy, normal weight baby girl. Kim visits her at the hospital and works with the nursing staff to make sure everything is set up for going home, including a car seat and a pediatric appointment for the baby. Kim even helps Leah get an outfit for the baby pictures. Kim follows up with Leah to make

sure she gets back to her obstetrician and completes the Postpartum Pathway involving the selection of an acceptable method of family planning.

In the following months, Leah completes her GED and enrolls in community college. Leah's risk evaluation is monitored and revisited by Kim's supervisor on a regular basis. Leah's risk assessment is much lower now than when she was first identified and enrolled in the HUB. Leah has been stable over the past 6 months, and Kim lets her know that she will not be visiting as often but is available if needed.

Understanding and addressing Leah's comprehensive risk factors through Pathways and the supportive culturally connected relationship Kim has with Leah are the keys to improved outcomes and reduced costs. The personal connection, combined with confirmed evidence-based interventions, helps Leah stabilize her most basic needs, change her behaviors, and begin to make progress toward goals that can lead to economic stability and better health for her and her family.



The Hub At Work - Part 2

As a CCC, Kim does not provide direct services. Kim's role is to engage Leah and identify the factors that place her at risk for poor health outcomes. As a CCC, Kim's role is to find and connect Leah to the evidence-based or evidence-informed interventions and services that address each identified risk factor. Kim works with an interdisciplinary team of experts and resources.

Although Kim is a CHW, a CCC can be any trained professional working through a CCA that works with individuals in the community setting. The HUB then works as the center of the network to organize and coordinate all the CCAs that deploy CCCs serving in the same role as Kim.

Payment from the local Community HUB is scaled and based on risk. The information that Kim gathers is reported to her CCA, Community Visions, and to the community HUB. Reports are run to determine risk status and to evaluate the speed and effectiveness of addressing each risk factor. Barriers to addressing specific risk factors are recorded and evaluated individually and in combination with other CCCs to identify barriers and inadequacies in the community service structure, both at the individual and community-population level.

In addition to outcome reporting, the completed Pathways are tied to the billing report. Community Visions reports their data in an ongoing manner to the HUB, which submits an invoice for payment either biweekly or monthly. The payer in this case may be a Medicaid managed care plan, a State-funded maternal and child health initiative, a local foundation, or any number of other funders. The HUB works to diversify funding so that at-risk pediatric, pregnant, and adult clients who are identified have a funding source to support outcome-focused community care coordination.

The HUB is responsible for ensuring that the entire CCA network adheres to the Pathways Community HUB Certification Standards (available at <https://pchcp.rockvilleinstitute.org/certified-hubs/>). These national standards help ensure quality and fidelity to the evidence-based HUB model of care coordination, as well as improved outcomes, reduced costs, and increased equity.

Pediatric, pregnant, and adult clients are each served in a similar manner from identification, engagement, assessment of risk, and resolution of risk factors tied to Pathways. The Pathways are standardized and when supported through Medicaid managed care have been tied to specific billing codes acceptable to the Centers for Medicare & Medicaid Services (CMS). Pathways have been implemented in a large variety of geographic and cultural settings, and many different care coordination funding streams.

This story is not as dramatic as many told across the CCCLN. Families with small children have been found in the winter living in the back of deserted factories. Clients have been found under bridges, in tents, and on the streets. The work of the CCC begins with establishing a supportive relationship, identifying basic social supports, and helping individuals address health and behavioral health needs. As the relationship grows, clients are supported to go back to school or to find work leading to real health and economic stability. This basic approach of addressing survival-based priorities first is well established based on Maslow's hierarchy of human needs.



Even in the ancient story of the Good Samaritan, there is a comprehensive approach. The Samaritan does not just bandage wounds, e-script an antibiotic, and bill for an office visit. He bandages the individual's wounds, provides transportation, finds him a place to stay, ensures that he has food, and then checks back in to make sure he is getting back on his feet. Unless our health and social service system begins to focus on those in greatest need and recognize a comprehensive approach to risk factors, the revolving door at the ED, intensive care unit, and unemployment center will continue, and so will the expense.

The HUB model recognizes the significant importance of trusting relationships. The individuals capable of serving as effective CCCs are most often found within the communities at greatest risk targeted to be served. When CHAP began the initial work in Mansfield, Ohio, they found their CHWs at the local churches within the neighborhoods with the greatest poverty, highest LBW rates, and worse infant mortality measures. The women identified were already serving their community through local church initiatives. They were known and trusted by the community.

Knowledge and experience of the developers of the model from the Alaska Community Health Aide Program led to the development of specific community college accredited training for CHWs. The combination of specific training, practicum experience, and supervision by an engaged clinical provider was found to be a critical factor to success.

Nurses and social workers in some communities have a history of serving at-risk neighborhoods and can also serve very effectively in this role. Communities starting a new initiative should work to find individuals who are known, trusted, and already connected to the most at-risk communities and grow the program based on their foundation of experience and leadership. It was the wisdom and insight of the CHWs that led to the basic principles and priorities of comprehensive assessment and a focus on social determinants in addition to health care needs. The latest national recommendations for care coordination now support their wise recommendations.¹¹

A HUB, its network of CCAs, and their employed CCCs are an accountable community-based system of care coordination. A HUB lends itself to managing multiple and diverse payer sources and ensuring accountability for risk reduction and outcome improvement across its network.

Summary of the Pathways Community HUB Model

The HUB model is summarized by the following three steps:

1. Find.
2. Treat.
3. Measure.

1. Find

Find and engage those at greatest risk. Comprehensively identify each of their risk factors.

2. Treat

Each risk factor identified is assigned a specific Pathway. Pathways addressing health, behavioral health, and social service interventions are tracked simultaneously to ensure evidence-based and best practice interventions are received addressing each risk factor.

3. Measure

As risk factors are addressed, the Pathways are completed and a reduction in risk is recorded. Nationally standardized Pathways are required.

Measures related to addressing many risk factors, such as reductions in emergency department visits, reduced hospitalization rates, and improvements in hemoglobin A1c are tracked separately from Pathways. They represent potential outcome improvements that are a result of multiple health, social, and behavioral health risk factors and the completion of multiple Pathways. Pathways that cannot be completed with the desired outcomes reached are recorded as “finished incomplete.”

The HUB model of care coordination provides the tools, outcome reporting, and payment strategies to help improve quality and outcomes while reducing costs. Through communication, collaboration, and built-in incentives, the HUB increases the efficiency and effectiveness of care coordination services.

Elements of a HUB

Infrastructure

The HUB links together CCAs in a community or region. Although most communities already have agencies that provide care coordination services, they are delivered in a fragmented approach. It is not uncommon for a family to have three to five care coordinators in their home. This is not a fault of the agencies, but rather the narrow programmatic funding for services at the local, State, and Federal level.

There can only be one Pathways Community HUB in a defined service area. To prevent duplication and fragmentation of services, a HUB is needed as the central registry to track community care coordination. The HUB is often described as “air traffic control” because it is constantly tracking and monitoring service delivery and outcomes. The HUB must also be based in the region it serves because it must have a thorough understanding of capacity, both of the CCAs and the direct service providers.

The HUB is a neutral entity and operates in a transparent and accountable manner. This means that the HUB does not refer clients to any CCC that it may employ. The HUB's role is to coordinate a network of CCAs. CCCs employed by those agencies reach out to clients and ensure that they connect to needed services: health, behavioral health, social, educational, and environmental.

Governance

The HUB is committed to improving the health of the community and is ultimately responsible to the community. The HUB is required to have a community advisory board made up of members who reflect the community and region the HUB serves. Engaged local leaders and community members are essential to the creation of a successful HUB.

Quality Improvement

The HUB is responsible for monitoring and improving the quality of care coordination services provided to those at risk as measured through clearly defined reduction of risk evaluated and quantified by the completion of Pathways. Specific reporting of process, outcomes, and payment is required as discussed below. The HUB must have a clearly defined quality improvement (QI) plan that defines how services are evaluated at multiple levels, including the CCC, CCA, and HUB. There should be an identified individual on the HUB staff specifically responsible for QI.

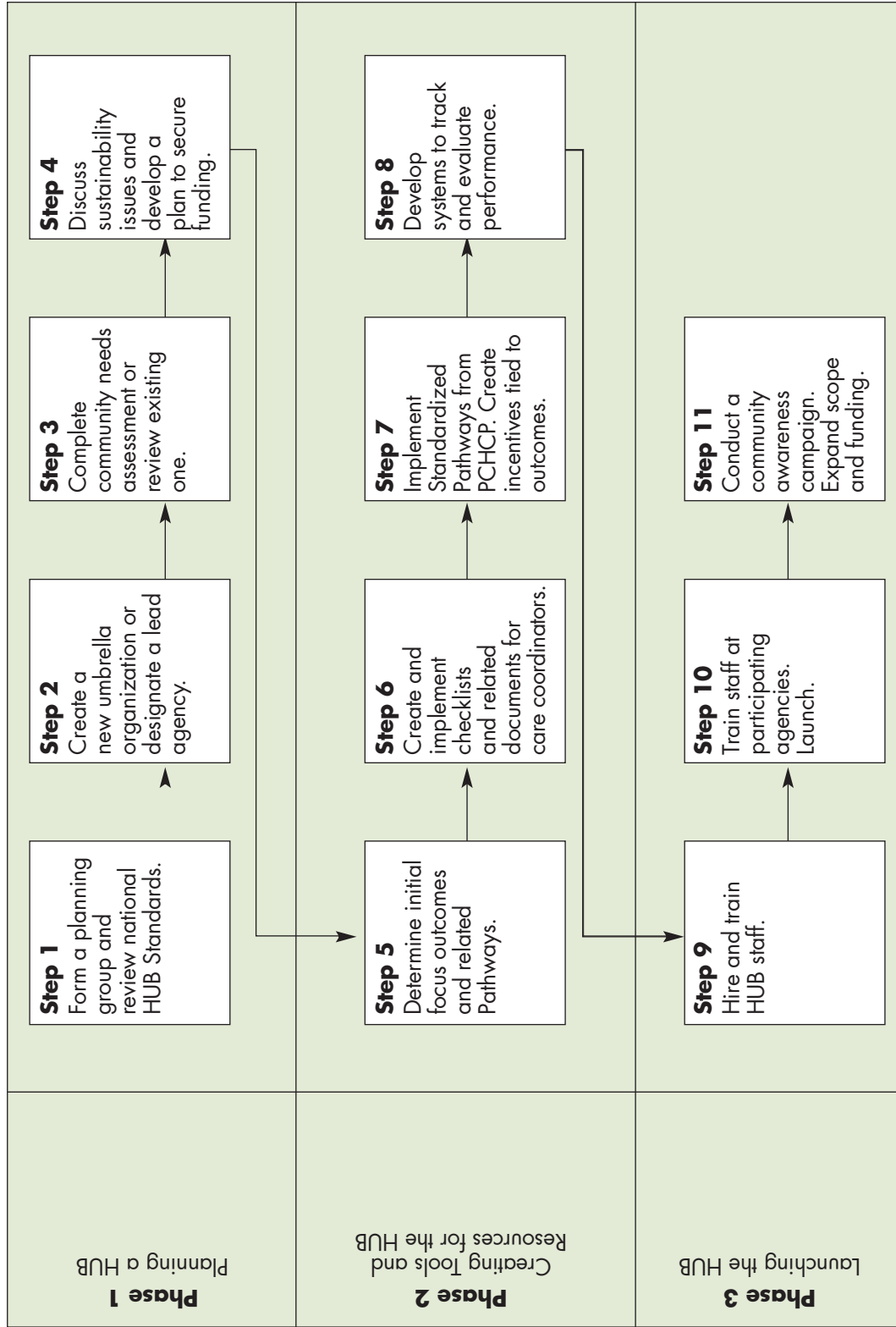
The HUB needs to have a description of how QI projects are selected, managed and monitored. The schedule of QI reviews needs to be defined along with a plan that clearly addresses QI opportunities through additional training or changes in policy. Key areas that should be addressed in the QI plan include:

- Referrals.
- Engagement.
- Duplication of services.
- Home visiting.
- Supervision.

Sustainability

The HUB aligns payments with measured Pathway outcomes in its contracts with payers and CCA members. The 20 standardized Pathways link billing codes to Pathway completion (see examples on PCHCP Web site at <https://pchcp.rockvilleinstitute.org/certification-tools/>). Payment for outcomes is a critical component of the Pathways Community HUB model and promotes accountability, quality, equity, health improvement, and value. To help ensure comprehensive and sustainable care coordination services, the HUB must have diverse and multiple revenue sources. It is a prerequisite for certification that the HUB have contracts with more than one payer. The Pathways Community HUB must conduct a cost-benefit analysis to determine the financial impact of HUB services and if service efficiencies, cost savings, and health improvements are achieved.

Figure 1: The Phases and Steps of Building a Pathways Community HUB



A Step-by-Step Guide to Building a Pathways Community HUB

The remainder of this guide provides a three-phase, step-by-step process for building a Pathways Community HUB. This process is intended to be a general guide rather than an exact roadmap, as local circumstances should dictate the actual steps undertaken and the correct sequencing of those steps. Reviewing the national standards and obtaining technical support from the Pathways Community HUB Certification Program (PCHCP) and other public and private support agencies is critical.

Phase 1: Planning a HUB

Phase 1 involves the steps necessary to plan a Pathways Community HUB. These include identifying and bringing key stakeholders from the community together. This team works together to focus on priority needs and target populations. The issue of sustainability needs to be addressed in this beginning phase as well.

Step 1: Form a Planning Group

Step 1 involves bringing together key community stakeholders who show an interest in improving the delivery of health and social services to at-risk populations. It is imperative to include representatives from the targeted populations and the care coordinators who work with them. Once the planning group decides to commit to the Pathways Community HUB concept of collaboration, they will begin to determine what individual will be considered the “Community Change Agent” or leader of the local HUB initiative.



The planning group should also specifically examine the Pathways Community HUB Standards for Certification. These standards will help them focus on key infrastructure, training, policies, and procedures needed to reach certification. Following the evidence-based components of the model defined in the certification standards is critical to achieving quality, outcomes, and cost savings.

Key questions to consider in Phase 1, Step 1:

- Which organizations should be involved in the effort, and how can we get those not involved to come to the table? Candidates should include organizations already involved in community care coordination (e.g., health and social service agencies, payers [health, social, and behavioral health], policymakers and politicians, local charities, and other community-based organizations), along with private businesses. The net should be cast wide when considering potential partners, particularly with respect to private companies that may have an interest in helping. It is desirable to have organizations involved with this process as early as possible (see HUB template in Appendix).
- What organizations within the group are willing and able to contribute to the effort?

Step 2: Create a New Umbrella Organization or Designate a Lead Agency

Depending on the outcome of the initial discussions, a decision should be made as to whether there is a need to designate an existing agency as the lead for the effort or to create a new, formal umbrella organization. In many cases, an existing organization with experience in building networks and tracking data can be designated to serve as the lead agency or convener. If such an organization does not exist or an agreement cannot be reached on a lead agency, the creation of a new entity likely makes sense.

In either case, appropriate governance structures should be set up, typically through an advisory group made up of diverse community stakeholders. This organization will be responsible for providing the common infrastructure and other resources needed by community stakeholders to more effectively serve at-risk populations.

According to the standards, the HUB agency must serve as a neutral point of registration and QI monitoring. The HUB cannot hire or deploy its own care coordinators. The HUB's role in tracking activities and results, producing quality outcomes, distributing referrals, and supporting the network's training and technology needs cannot show favoritism or be conflicted by referring clients to itself.

Key Points in Developing a HUB

- The HUB must be a neutral entity in the community and cannot employ its own care coordinators.
- There is only one Pathways Community HUB in a community or region.
- The HUB must be an independent legal entity or an affiliated component of a legal entity.
- The HUB must be based in the community or region it serves.
- There must be a Community Advisory Board made up of members reflecting the community or region the HUB serves.

Learning Network Examples

- In Toledo, Ohio, an existing nonprofit hospital network (CareNet) took on the role of the designated lead agency developing the Northwest Ohio Pathways HUB.
- In Saginaw, Michigan, the Saginaw County Community Health Improvement Plan (CHIP) Steering Team assumed responsibility for determining which organizations would fill the prescribed roles in the Pathways model.
 - Saginaw represented one of three HUBs launched by the Michigan Public Health Institute within a CMS innovation grant.
 - The Saginaw CHIP Steering Committee has broad local leadership representing health and public health initiatives, payers, and policymakers.
 - The Saginaw Community Mental Health Authority was chosen as the lead agency, resulting in the launch of Saginaw Pathways to Better Health. They had grant management and Medicaid funding experience. Extensive experience with behavioral health and multiagency network management were also identified as key strengths.

- The HUB for Pathways to a Healthy Bernalillo County is housed at the University of New Mexico Health Sciences Center, but the program itself is community designed and community driven.
 - More than 80 percent of the county funds transferred to the HUB by the University of New Mexico Hospital are redirected back to the community through a competitive application process and professional services agreements with 14 partner organizations.
 - The HUB monitors the performance of the partner organizations and receives monthly invoices from each, which are paid largely based on deliverables (completed Pathways).
 - The HUB also oversees the Web-based database, prepares quarterly reports, provides ongoing training for the Community Health Navigators, coordinates standing monthly meetings, and provides feedback on performance by each partner through periodic site visits.
 - The HUB consults on a quarterly basis with its Pathways Community Advisory Group composed exclusively of community members.

Step 3: Complete Community Needs Assessment

Determine Priority Health and Social Service Needs

In this step, HUB members examine local and regional data to determine the most critical health and social service issues the HUB will address. Representatives of community-based programs, providers, and agencies should meet with at-risk individuals who are members of the target population to better understand the issues and barriers they face.

Learning Network Examples

- The Pathways to Better Health of the Lakeshore is a Community HUB outgrowth of the Muskegon Community Health Project (MCHP) that has used the Pathways model for many years. The Pathways model was initially used by the Michigan Prisoner Re-entry Initiative, a statewide program designed to help newly released prisoners access services needed to facilitate successful reentry into the community. MCHP convened a small group of individuals—including former prisoners and representatives from hospitals, the county health department, and other agencies that address medical issues for low-income populations—to clarify the barriers to serving newly released prisoners. The key outcomes that they determined to be critical included establishing a medical home and establishing basic social supports, including housing and food. MCHP was able to reduce the number of prisoners who quickly reentered prison by helping them achieve success in gaining health, social, and employment-based stability.
- In Saginaw, Michigan, the Saginaw Pathways to Better Health initiative used a national model called Mobilizing for Action through Planning and Partnerships (MAPP). MAPP is a communitywide strategic planning tool for improving community health. This tool was selected because of its comprehensive approach to assessment, its national credibility, and its commitment to collaboration with a community-driven approach. In 2011, MAPP incorporated and replaced the formerly separate activity of two local hospitals, both of which had their own community needs assessment process. This represents a very collaborative endeavor and the single process for the assessment of the health of Saginaw County residents. MAPP includes the County Department of Public Health in addition to the hospital systems.

- The Michigan Ingham Pathways to Better Health Initiative evaluated community data and received funding through a Michigan Policy Health Institute CMS Innovation grant to serve Medicare- and Medicaid-eligible adults with multiple chronic conditions. Further target population focus is occurring through the CMS State Innovation Model (SIM) initiative that will guide the target populations for services. Obesity, infant mortality, and chronic conditions are current focus areas of the SIM initiative.
- The Northeast Oregon Network (NEON) staff and Community Leadership Team reviewed community health assessments to determine the areas of greatest health disparities. They identified high prevalence rates of diabetes and cardiac disease in excess of State and national averages, indicating a health disparity. In addition, community assessment data indicated that more than half of the population was living at 200 percent of the Federal Poverty Level or less. A further growth trajectory for these conditions was anticipated due to an aging population.

Choose Target Areas or Populations for Intervention

A community needs assessment, which includes local data specific to medical, behavioral health, social, environmental, and educational factors, should guide the HUB in its efforts to improve health and reduce inequities. Hospitals, health departments, and other community partners should work together to assess community health needs and resources, and create a shared plan for addressing those needs. One or two community “champions” need to be identified to drive this process forward to move from a review of the needs assessment to a strategy building session. Once a community needs assessment has been completed or reviewed (if conducted no more than 3 years prior), the planning group needs to review the findings and determine which at-risk populations will be targeted for community care coordination services.

Most Pathways Community HUBs start out serving a targeted portion of the at-risk population. The development of the HUB infrastructure allows additional at-risk populations to be added at a later time when the HUB has more experience with the model.

Key Points in Identifying the Target Population

- Baseline data exist for the targeted population.
- Payers have expressed interest in this population and would consider paying for Pathway outcomes.
- Existing CCAs in the community or region have the capacity to serve this population.
- The HUB and CCAs have staff who can provide culturally and linguistically proficient services to the targeted population.

HUBs need to carefully choose specific target areas or populations for intervention.

Learning Network Examples

- The CHAP initiative partnered with more than 70 local agencies, including Jobs and Family Services, Help Me Grow, MedCentral Hospital, Richland County Foundation, New Hope, Richland County Children Services, local outreach agencies, Richland Public Health, and many others.

- These agencies prioritized all the issues identified through review of community needs assessment data and agreed to focus initially on reducing the incidence of LBW. They all worked together in early 2004 to form the first Pathways Community HUB. CHAP used a process known as “geocoding” to identify the highest risk areas for LBW infants. Some census tracts were found to have LBW rates as high as 24 percent.¹⁴
- The Health Care Access Now (HCAN) initiative in Cincinnati brought together a group of stakeholders, including health and social service providers. This team assessed the current level and capacity of care coordination and outreach services offered to high-risk populations. They then designed a more strategic approach to assisting specific subpopulations in receiving appropriate care. They jointly decided to target their first project to at-risk pregnant women.

Step 4: Discuss Sustainability Issues and Develop a Plan To Secure Funding

Funding and sustainability considerations should begin with Step 1 by inviting potential payers to be part of the key stakeholders planning group. Once the needs of the target area or population are understood, the planning group needs to carefully consider how to secure funding to start and maintain the Pathways Community HUB. Often, multiple sources of funding may be available, including:

- Local foundations.
- Local, State, and Federal agencies.
- Third-party payers, such as Medicaid managed care organizations (through contracts with the HUB for services provided).
- Grant funding to finance the initial planning or startup of the venture.

Learning Network Examples

- HCAN in Cincinnati secured multiple funding streams to initiate the Pathway Programs currently offered, including the Cincinnati Health Department, UC Health, Robert Wood Johnson Foundation in partnership with the Health Collaborative, United Way of Greater Cincinnati, Interact for Health, and Deaconess Association Foundation. The Health Foundation of Greater Cincinnati provided initial grant support for the formation of HCAN.
- NEON in Oregon identified startup funding in Federal and foundation grants.
 - A Centers for Disease Control Small Community Transformation grant was used to create and implement a CHW training program, create a Community Leadership Team, develop detailed HUB policies and procedures, and educate about the model to build momentum.
 - Implementation funding has been provided by the Health Resources and Services Administration (HRSA) Office of Federal Rural Health Policy through a Network Development Grant.
 - The Meyer Memorial Trust has also provided additional funding for outcome payments for completed Pathways.
- United Way of Franklin County is exploring the startup of a new HUB initiative in Columbus, Ohio. United Way programs have been supportive in many communities to provide both startup

and sustainable funding. For the CHAP program in Ohio, United Way funding has been a critical source of support for at-risk clients who do not qualify for any other available funding source. With a proven track record of supporting multiple agencies across a community network, United Way organizations should be considered as a potential partner and leader of HUB development.

- Rural and Urban Access to Health (RUAH) in Indianapolis, Indiana, applied for funding from HRSA's Healthy Communities Access Program, receiving a 4-year grant in 2001. St. Vincent also formed a partnership with Indiana Health Centers, ADVANTAGE Health Solutions, Inc., Health and Hospital Corporation of Marion County, and the Butler University College of Pharmacy and Health Sciences. This partnership provided additional funding and in-kind assistance to RUAH.
- Michigan, with leadership, research, and support from the Michigan Public Health Institute has been working to support sustainability and growth strategies for their three HUBs in Ingham, Muskegon, and Saginaw. They have received substantial support through the Center for Medicaid Innovation. Their initial very positive results in cost savings for enrolled members have supported continuation funding for all three initiatives. They are working on contracting strategies with Medicaid Managed Care.
- CHAP began with the support of several organizations, including the Richland County Foundation, the Osteopathic Heritage Foundation, Richland County Jobs and Family Services (Temporary Assistance to Needy Families dollars), and an American Academy of Pediatrics Community Access to Child Health grant. These funds helped support the development of services to at-risk individuals in rural and urban areas, along with the development of the Pathways approach (see Step 5 for more details on this program).

Long-term success requires finding an ongoing, stable source of funding, as initial grants usually cover only the startup phase to build infrastructure. In some cases, these funds may come from service contracts between the Pathways Community HUB and payers (e.g., Medicaid managed care programs) or other organizations that fund services for at-risk individuals. Securing contract provisions that provide such funding requires the ability to demonstrate reduced cost of care and improved outcomes.

Community HUBs in Hamilton, Lucas, and Richland Counties in Ohio have successfully secured sustainable funding through Medicaid managed care organizations. Ohio's Department of Medicaid, Department of Health, Commission on Minority Health, and Voices for Ohio's Children have all worked together and individually to help develop, sustain, and support the work of HUBs. This work in Ohio continues to receive bipartisan support and has seen significant progress over the years.

Not-for-profit hospitals can be good sources of ongoing funding. They are required to allocate money to community health improvement initiatives and must report such activity to the Internal Revenue Service each year. To meet their "community benefit" obligations, hospitals can provide both cash donations and in-kind support to such activities.

Another interesting option worthy of consideration is the use of a local property tax levy to support HUB operations. In Albuquerque, New Mexico, the county has approved a tax to fund the Pathways to a Healthy Bernalillo County through the University of New Mexico Hospital. This levy, similar to taxes that fund the local health department and children's services, provides a long-term source of funding that needs to be renewed only every 8 years. Local governments in many communities have the authority to initiate such taxes.

A final option to be considered is to urge governors, State legislatures, and other government officials to allocate funds to support HUB infrastructure development and ongoing operations. Oregon, for example, passed legislation providing \$250,000 over 2 years to an organization known as HealthMatters of Central Oregon to support the development of a Pathways program.

While many promising options for securing sustainable funding exist, long-term success requires confirmed results. Following the national HUB certification standards has been found to be critical in obtaining results. Multiple initiatives have used a portion of the model and have not fully embraced the requirements for risk focus, cultural competence, pay for performance, and accountability to demonstrate return on investment. Without following the certification requirements, many of these initiatives have not been able to demonstrate results and have not been sustainable.

Fidelity to the Model in Attracting Funds

Certification and demonstration of the correct deployment of the model can help convince policymakers and funders of the critical nature and effectiveness of the community care coordination work. Stakeholders should educate potential investors about the ability of a Pathways Community HUB to eliminate duplication of services, reduce risk, improve quality, and decrease the cost of care.

To achieve sustainability, policymakers and funders must receive education about the HUB model and tools, and be empowered to demand that dollars begin to equate with the strategic identification and reduction of risk factors. HUB certification must at the same time continue to use QI approaches to respond to the realities of communities in serving those at greatest risk and the funders supporting them. The process must be both supportive and accountable. Technical support, participation in research, and use of certification to open doors to greater recognition and resources for developing Community HUBs are critical. This represents a great opportunity in health care system reform to achieve better outcomes with less cost.

Phase 2: Creating Tools and Resources for the HUB

Once the HUB has established a planning group, identified targeted areas or populations for the intervention, and secured initial funding, the next phase is to select and design the required infrastructure (e.g., tools, resources) to support community-based stakeholders serving the targeted at-risk populations. The overall goal is to remove duplication of services and to identify and address risks.

Step 5: Determine Initial Focus Outcomes and Related Pathways

In 2001, the Institute of Medicine charged health care organizations, clinicians, purchasers, and other stakeholders with “aligning the incentives inherent in payment and accountability processes with the goal of quality improvement.”¹⁵ In response to this report, a movement developed to change the system of accountability within the care coordination component of health care and social services. Approaches included identifying key work products that represent a positive benefit for clients, tying financial incentives to completion of those work products, and developing “action steps” that help facilitate success.

The Pathways Community HUB model, if used properly, can shift the focus of health and social service systems away from activities to outcomes. The model represents a beginning effort to demonstrate that effective care coordination can serve a critical role by comprehensively identifying and reducing risk.

“Pathways” serve as a tracking tool specific to each identified risk factor. The Pathway then tracks and documents each critical step, ending with ensuring the risk factor has been addressed. The Pathway is complete when a final outcome is achieved.

Some of the outcomes completed within a Pathway are intermediate (e.g., confirmed appointment with first medical home visit, successful delivery of evidence-based education packages to prevent obesity) and some outcomes are final (e.g., a homeless person is confirmed to have established safe housing, an at-risk pregnancy results in confirmed delivery of a normal birth weight baby).



In addition, Pathways provide the individual billable work product to tie financial incentives to outcomes. These incentives are built to encourage and support CCCs in serving those at greatest risk, helping them to overcome barriers and receive the interventions needed to improve outcomes and reduce costs. In other words, Pathways serve as the documentation and reporting system that captures each of the guiding principles outlined earlier—i.e., finding those at risk, treating them with evidence-based interventions, and measuring the results of these efforts.

Pathways are part of ensuring a comprehensive approach to identifying and addressing risk factors:

- A Pregnancy Pathway seeks to ensure adequate prenatal care in order to improve birth outcomes, such as reducing the incidence of LBW infants and infant mortality.
- A Family Planning Pathway seeks to reduce the number of women with unintended pregnancies.
- The Housing Pathway ensures the establishment of suitable housing.
- Some of the Pathways break out specific subcategories that allow programs to document and report greater detail as they address specific risk factors. The Social Service Referral Pathway has a coding approach that supports definition and tracking of referrals for specific needs. The Education Pathway supports the delivery and documentation of any number of evidence-informed “packages” of education. Programs delivering packages of health, social, and behavioral health education can demonstrate the confirmed delivery of each education package with a pre- and post-test to evaluate the client’s understanding. Culturally connected CCCs with positive client relationships can be trained and supported to serve in a highly effective educational role promoting changes in behavior for their clients and families.
 - The Internet is now a common source of information, including for at-risk individuals and families. Much of the information is not evidence informed and can even represent a danger. Using the Education Pathway, HUB networks can define the specific evidence-informed package of information addressing nutrition, diabetes management, employment readiness, and a host of other issues. This can provide a higher quality standard for the delivery of education by CCCs.

- An example with particular potential and impact is parenting focused on expectant mothers and families with children. The delivery of evidence-based parenting information and education works as an upstream preventive intervention impacting future educational, economic, and health-related outcomes.
 - Evidence-based parenting education has been shown through research to result in parents having more positive interactions and reinforcements with their children, combined with a less emotional approach to discipline. Increased positive interactions by parents has been connected to future school performance, decreased behavior problems, reduced use of children's services, and reduced youth services involvement.^{21, 22, 23}
 - Success in education is the single greatest factor tied to employment and future economic success. Economic success is the single most powerful indicator of future health and health care.^{10,24}
 - Positive parenting is tied to future educational and economic success. Parenting is an upstream risk factor with the ability to convert to a protective factor and is an important example when looking for ways to improve future economic and disease-burdened outcomes.
- In the CHAP neighborhoods served in Richland County, Ohio, it has been demonstrated that up to 50 percent of the boys in identified census tracts will serve time in prison.
 - Local leaders at the Mental Health Center (Catalyst) funded by the Richland County Foundation and in partnership with the HUB have recently launched a new initiative focused on this outcome.
 - Positive Parenting Program (Triple P) education with a strong evidence base is being launched by training local CCCs and providing them with Internet-based educational tools and videos that they will provide to families within the targeted census tracts.
 - The parenting-focused Educational Pathway is being provided as part of a comprehensive risk evaluation and reduction approach to address housing, food, health care access, and other issues.
- A Medication Assessment Pathway is a way for a CCC to take a snapshot of how individuals are really using their medication in their homes. The CCC completes a comprehensive Medication Assessment Chart for all prescription, over-the-counter, herbal, and alternative medicine used by the client. The CCC is trained to record all the information in the client's own words. This Pathway is complete when the identified primary care health professional receives this in-home review of medications. If this review indicates clients are not taking their medications as recommended, the Medication Management Pathway can be used to educate them and ensure that they begin taking the medication as directed by their physician.
- A Medical Home Pathway monitors individuals who do not have ongoing primary care and confirms that they have connected to a patient-centered medical home. It is one thing to establish a medical home, but it takes ongoing education and support to work with individuals who have never had a regular place of care. Multiple Pathways can be used to support the proper use of the medical home once it is established.

The simplicity and targeted focus of each Pathway is a critical element in working with individuals and in the full system of care. Based on the recommendations of the CCCLN, standardized Pathways were developed; each one focused on a specific risk factor or risk area to be addressed. Each Pathway is documented and recorded separately. Risk factors that cannot be addressed despite significant effort by the CCC and their supervisor are labeled as “Finished Incomplete.” These Pathways receive additional focus and evaluation across the HUB network.

In the development of research and billing approaches for Pathways, it is also critical to have a consistent unit of recognized service. The national HUB certification standards require that the Pathways programs use be standardized and drawn from the nationally approved set. This standardization is critical for the overall evaluation and billing methodology within the HUB model. Pathways represent both the billable unit and the measurable outcome.

Alternative Models to Pathways

Pathways are not the only model that can be used to track and create accountability for performance. For example, the Bridges to Excellence program (online at http://www.hci3.org/programs-efforts/bridges-to-excellence/recognition_programs) pays incentives to physicians caring for patients with diabetes and other chronic diseases based on performance with respect to the provision of specific, evidence-based processes, as compared to benchmarks. Ongoing tracking, incentive payments, and feedback help to promote continuous improvement.

When funders, such as Medicaid managed care organizations or health departments, are trying to develop contracts and payment approaches with communities, it becomes very difficult to develop and implement pay-for-performance contracting strategies when every community in the State is using a completely different set of Pathways. Research becomes more meaningful if all programs across the State are using the same basic Pathways, because now it is possible to demonstrate the significance of obtaining stable housing, food, clothing, a medical home, and employment for at-risk individuals and families. This information can be documented and demonstrates how many individuals are having difficulty and significant time delays in achieving the risk reduction outcomes demonstrated in each Pathway.

According to the national standards, it is acceptable for programs to add information that is collected and some additional components to the common national Pathway structure. Whenever possible (as discussed under checklists), if additional questions and data are needed, the checklists are usually the best and most flexible location to place these requirements when building a HUB system. The nationally standardized set of Pathways is available at <https://pchcp.rockvilleinstitute.org/certification-tools/>.

The First Pathway Step - “Initiation Step”

The “initiation step” identifies the specific risk factor that the Pathway seeks to address. Individual HUBs may add information to this step to help ensure that the focus remains on a narrowly defined at-risk group or targeted region. The initiation step not only defines the risk factor identified but also ties back to financial contracts that will state exactly which Pathways/risk factors can be paid for through the contract. The contract will define exactly which age groups or specific risk-related groups meet eligibility for payment.

Examples of Pathway initiation steps:

- Medical Home - Client needs a medical home (ongoing source of medical care).
- Housing - Client and/or family is in need of affordable and suitable housing.
- Medical Referral - Client needs a health care appointment.
- Pregnancy - A woman is confirmed to be pregnant.
- Smoking Cessation - Client states that he/she is a cigarette or tobacco user.

Examples of additional HUB information that has been included for the Pregnancy Pathway:

- “Any woman living within the targeted census tracts and confirmed to be pregnant with a pregnancy test”
- “Any woman confirmed to be pregnant with a pregnancy test that meets the criteria of high risk as outlined in the contract”

There are many strategies used across HUBs to define high risk based on geocoding and risk factor scoring approaches.

Action Steps - Actions Documenting Evidence-Based and Best Practice Interventions That Address the Risk Factor

Action steps represent the middle steps of the Pathway. They document the specific evidence-based and best practice interventions for addressing the identified risk factor. Action steps must meet any and all requirements documented in the completion step.

The action steps have been developed in a way that tries to encompass the needed variation of specific interventions found within community HUB service regions, such as those based in urban or rural areas. Some Pathways have one or two action steps required to reach the completion step, while others have multiple action steps, as noted above. Tracking the steps within a Pathway is a critical part of the process to understand how to be more successful in reaching the outcome. Analysis of CCCs who are higher producers of completed Pathways will help to outline the process to train other CCCs to be more successful. It is similar to the careful, methodical QI processes in a number of other fields.

In some cases, the outcome is reached even though not all of the action steps are completed. For example, an expectant mother may be found and enrolled at 36 weeks gestation, and then delivers her infant after receiving only one prenatal visit. If the birth of a viable normal birth weight infant is the only requirement for completion within the completion step, then the Pathway can be documented as completed even though the action steps were not completed. In Pregnancy Pathway measurements, billable events occur within the action steps, making this type of situation less rewarding financially and encouraging earlier intervention and completion of all action steps when possible.



Action steps are documented within the Pathway in logical order. They need not be completed in consecutive steps (i.e., one after the other), as the order can be changed to best fit the needs of an individual client. Sometimes the first action step is a necessary prerequisite to other steps being completed, thus representing a “rate-limiting” step that could delay completion. For example, a Pathway focused on childhood immunizations might list educating the family about the importance of immunizations as the first action step. This step is critical since getting parents on board is a necessary prerequisite to moving forward with the other steps. Addressing the issues that cause these steps to be rate limiting can often improve the production process.

Significant evidence is available to support the critical nature of behavior change as part of improving health and social outcomes. Pathways that document provision of specific education work to promote behavior change. CCCs also use motivational interviewing strategies to promote readiness for change. The strength of positive and trusting relationships between the CCC and client has been identified as a necessary ingredient to informing and supporting clients as they work through behavior changes (e.g., stopping smoking during pregnancy, completing adult education classes, finding employment).

Private business production methodologies not only look at production steps but also look at micro-steps in the specific and sometimes highly detailed barriers that may slow down or significantly inhibit the production process. In the same way, during Pathway completion, it is very valuable for CCCs to be able to document specific challenges they encounter in trying to work through the action steps of the Pathway. Simple issues, such as an impolite receptionist at the front desk of a health care provider's office, may be a much greater obstruction to care than is realized or documented. Failure to reach the completion step can be analyzed on the individual client level, but also on the population level to monitor for systemic issues.

The “Completion Step”

In the completion step, the outcome is clearly defined, easy to understand, based on accepted criteria, and measurable. The Pathway is not documented as “Complete” unless this step has been achieved, and thus the risk factor successfully addressed. Examples of completion steps include the following:

- Medical Home - Confirmation that the first appointment for the medical home was kept.
- Housing - Confirmation that the individual has moved into an affordable and suitable housing unit for a minimum of 2 months.
- Immunization Referral - Confirmation that the client's immunization record has been reviewed and is up to date.

The completion step must provide objective measurement of a positive outcome in order to be marked complete. The outcome must be an occurrence that has a substantial basis for positive impact to the individual served and includes the following subtypes:

- **Intermediate Outcome** - Confirmation that the individual has received an evidence-based or best practice intervention that is known to improve or to have a positive impact on the client served. A diabetic client, for example, is not confirmed to immediately be in better diabetic control when she is confirmed to have received her first medical home visit. The likelihood of having a better outcome, however, has a basis for improving. The same is true if it is confirmed

that at-risk individuals receive evidence-based nutritional or parenting education, immunizations, behavioral health services, and other services. These events are substantially different than current processes and activities that are the focus of care coordination contracts now. Process-based events, such as confirmation that a client is on a caseload, assessment or paperwork was completed, or a phone call was made, do not have an evidence basis for improving outcomes.

- **Final Outcome** - This category of Pathway completion occurs when the identified risk factor has been addressed and a final outcome is confirmed. Examples of strong positive outcomes are stable housing has been established, a normal birth weight infant has been born, a secure source of food has been established, and employment has been verified. It is possible that the individual may develop the same risk factors again, for example, with the second pregnancy or becoming homeless, and Pathways would need to be reinitiated.

Most payments that are tied to HUB-related care coordination services focus on the completion step of Pathways. Most research, evaluation, and demonstration of positive outcomes will come from the appropriate documentation of the completion steps. Research evaluating Pathways completion looked at a pay-for-performance approach compared with tracking Pathways without payments attached. It has been demonstrated that pay for performance improves both the documentation and speed of Pathways completion and risk reduction.⁶

It is also critical to document and separately designate Pathways that cannot be completed.

1. **Complete** - This category represents a Pathway that the CCC, and if needed, his or her supervisor, has confirmed to be completed. The requirements of the national standards and any additional requirements of the HUB or their funder must be confirmed. Specifically, it represents that the risk factor that was identified within the initial or ongoing assessment has been addressed with evidence-based or best practice intervention.
2. **Finished Incomplete** - A risk factor was identified and a Pathway was attempted to be completed with due diligence. Action steps and related activities occurred working toward addressing this risk factor. Yet, for reasons that must be documented, the risk factor could not be addressed. Pathways may be finished incomplete when a client suddenly moves away and cannot be located. It sometimes occurs when the risk factor identified has no available services for intervention. Examples include:
 - An individual may need behavioral health services and no services are available within the next 12 to 18 months.
 - An individual may need stable housing and may be ineligible or unable to secure housing within 1 to 2 years despite significant attempts by the CCC.

It is important to consider all possible options before documenting a Pathway as finished incomplete. Finished incomplete Pathways for an individual can serve as a very important data point for population-level evaluations across caseloads, agencies, HUBs, and States. The inability of a CCC, agency, or HUB to address specific risk factors documented in aggregate reports can show funders and policymakers where gaps exist and needs are greatest that may require changes in policies or distribution of resources.

Specific policies and procedures are required to provide guidance to CCCs and their agencies to qualify a Pathway as “complete” or “finished incomplete.” Some Pathways do require extended time. When reports are generated related to specific CCCs or CCAs, they may unintentionally encourage them to close Pathways not completed in order to remove them from the report.

The procedures established should discourage premature closure of Pathways. They can represent an important risk factor for the client still needing them to be addressed. Similar reporting based on how long a Pathway has been open or the time it takes to complete can also provide critical information.

The Pathway completion step remains one of the most critical risk reduction indicators and should be emphasized in an initial and ongoing manner within HUB initiatives.

The Role of the Pathways Community HUB Certification Program

PCHCP serves as the national center for assessing community HUB compliance with established standards for implementing the HUB model. As part of the CCCLN established by AHRQ, PCHCP is founded on QI principles and focused on learning from communities and individuals using the model.

The establishment of a national approach for the certification of Community HUBs was funded by the Kresge Foundation in 2012. The Community Health Access Project, Communities Joined in Action, The Rockville Institute, and The Georgia Health Policy Center have served as the coalition of national organizations to lead this development.

Through support from Kresge, initial pilot sites in Toledo, Ohio; Albuquerque, New Mexico; and Saginaw, Michigan, were taken through a first approach to HUB certification. Based on lessons learned and guidance from a diverse group of national stakeholders, the approach has been further developed and improved.

Certification is now an established approach and work is in progress with regional HUB initiatives in more than 15 communities across the United States. Research, which has been fostered and published within the network, serves as a steadily improving source for refining the national HUB standards at PCHCP.

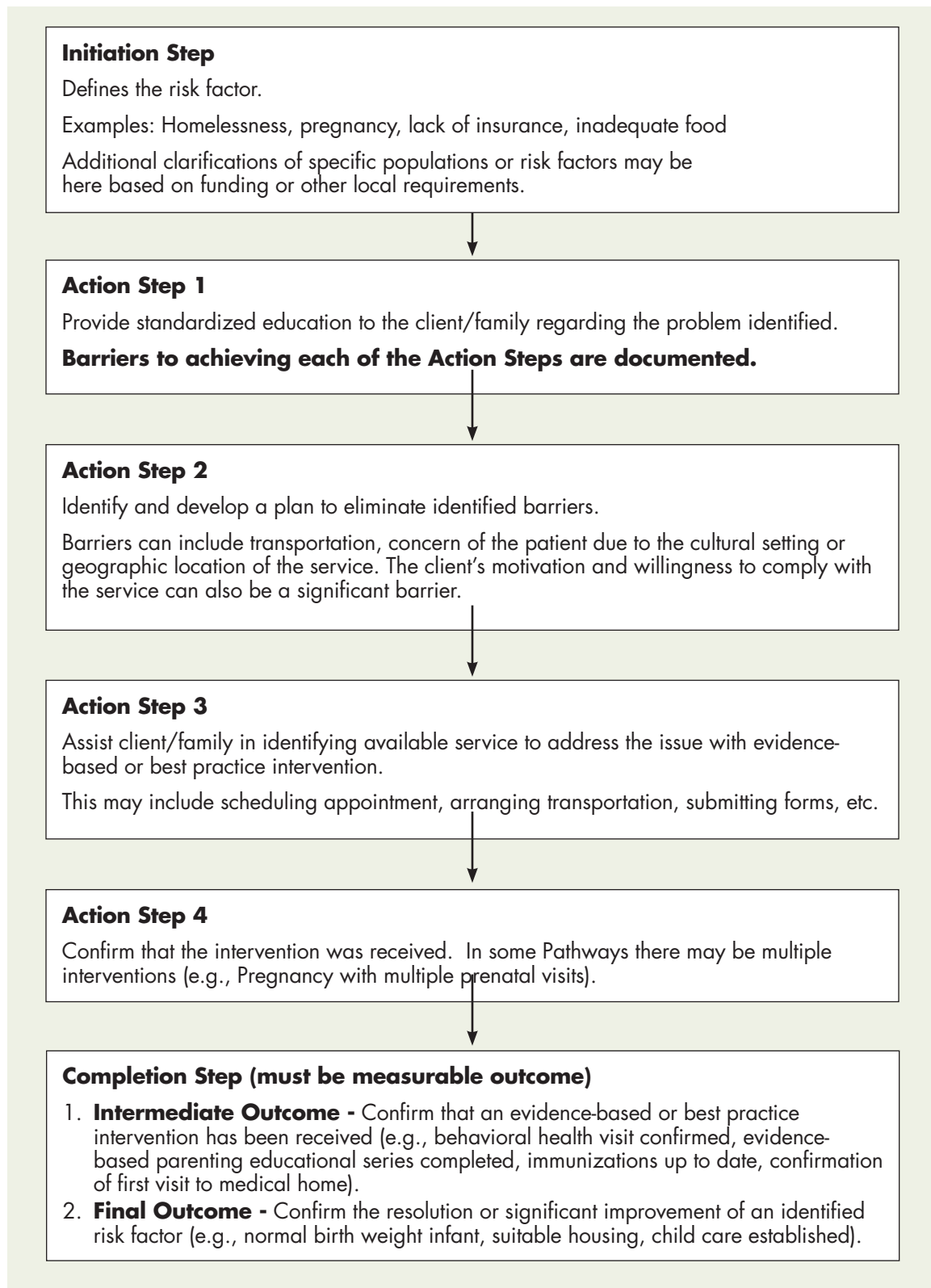
Development of improvements to existing Pathways are occurring now and are expected to continue to occur. The changes and improvements are not as frequent as they were early in the model’s first development more than 12 years ago. Continued research and national sharing of best practices is encouraged and has been a great benefit to the growth and development of the model.

The HUBs currently following the national standards and accountably participating in certification are demonstrating positive outcomes, reduced costs, and growth of their HUB initiatives (See Primary Resources for Current Evidence in the Appendix).

Putting It All Together: Pathway Examples

The chart on the next page provides a common structure on an entire Pathway—including the initiation step, action steps, and completion step. Examples of specific Pathways can be found on the PCHCP Web site at <https://pchcp.rockvilleinstitute.org/certification-tools/>.

Figure 2. Pathways Common Structure



Step 6: Create Supporting Tools and Documents for Care Coordinators

This section discusses additional required documentation tools to implement the Pathways Community HUB model. Tools are presented in the order that they might be used for a newly enrolled client. Unlike the nationally standardized Pathways, the forms in this section have flexibility to adapt to local data collection needs.

Consent Form/Notice of Privacy Practices/Release-of-Information Forms

These forms confirm that the client is comfortable having his or her information turned in to the central Pathways Community HUB. In addition, they lay out the program's privacy policies (which need to conform to the Health Insurance Portability and Accountability Act, or HIPAA, requirements), give permission for the collection of additional information, and explain the client's rights and responsibilities, including complaint and grievance procedures.

These forms can be used by anyone who is working with at-risk individuals in need of comprehensive care coordination services available through the Community HUB. Optimal HUB enrollment is achieved when there are many avenues for identification and referral of at-risk clients. The local librarian, schoolteacher, minister, or nurse at the specialty clinic could be taught how to assist an at-risk individual or family to become connected and enrolled. Several of the current HUB communities have partnered with their local 211 programs, who can also help identify and refer individuals to the HUB.

The process to accomplish privacy protection within a HUB is essential. It works to confirm that HIPAA requirements are followed, while also ensuring that there are no significant barriers between at-risk individuals and the interventions they need to address risk. The CCC, who is known and trusted in the community, is a key partner in this first step and can achieve this needed balance.

When communities are considering building a HUB, HIPAA issues are often one of the first questions brought up as a barrier. How can you have a communitywide network and maintain HIPAA? HIPAA requirements need to support the concept of team-based care and not be used as an impediment. Technology solutions, as well as paperwork approaches, can ensure information is shared in a need-to-know manner. Security approaches based on passwords and firewalls can allow CCAs within the HUB to access information for their clients while not being permitted to access information for other clients. Based on the individual's permission, the HUB can have access to all the CCA client information related to serving the client's needs.

CCCs must have training and expertise to provide the necessary education to clients and to assist them in completing the HIPAA-related forms. CCCs cannot gather any personal health information for the HUB without obtaining permission from clients to serve them within a HUB network of agencies. It is important to always ensure that privacy is protected and that HIPAA is not used as a barrier to serving at-risk clients.

Intake/Enrollment Form

Unlike the nationally standardized Pathways, intake and enrollment forms can vary between different HUBs. Within a HUB, there needs to be standardization across all data collection tools. This includes information captured at enrollment, including basic demographic data, referral information, agency enrolling the client, and date the information is submitted to the Pathways Community HUB.

The HUB uses demographic information for multiple tracking, mapping, and outcome reporting purposes. Some of the enrollment information, including the address, may be part of the risk factor analysis (risk scoring) approach of the HUB. One important function of the HUB is to use basic demographic information to identify potential duplication of service. (See sample initial enrollment form in the Appendix.)

Assessment Via Checklist

This step focuses on the identification of health, social, and behavioral health risk factors. The CCC works with the client to fill out a checklist that includes “trigger questions”—i.e., questions for which a “yes” answer indicates a specific risk factor and a Pathway should be assigned. For example, “Do you need a medical home?” “Do you need help paying for utilities?” “Do you need to find safe housing?”

The checklist is critical for gathering information, since many clients will not always volunteer to share concerns about domestic violence, mental health issues, or loss of health insurance coverage unless specifically asked. Like the enrollment form, the national HUB standards promote flexibility in the development and implementation of checklists to meet the needs of the targeted population and community.

Checklists have the following common subcategories:

- Initial - This checklist is completed when the client is enrolled. The initial checklist most often collects more data to establish a client’s baseline risk assessment. Because of all the data collection involved, the completion of this checklist may involve more than one visit.
- Followup - This checklist is completed every time a CCC has a face-to-face visit with a client. It is designed to track progress on the previously identified risk factors and to discover any new risk factors that may have developed since the last visit. For example, the client has established a medical home and achieved stable housing, representing completion of both the Medical Home and Housing Pathways. However, on a followup visit, the CCC discovers through the checklist questions that the client has recently experienced domestic violence, and additional Pathways need to be initiated.
- Client - Checklists might be broken out in different categories based on the clients served by the HUB. These client types might include adult male, adult female, pediatric, and pregnant.

In addition, based on the national HUB Standards, the checklists should be linguistically and culturally appropriate and tie effectively to the nationally standardized Pathways through assessment of all relevant health, social, and behavioral health risk factors.

The checklists or enrollment forms should be a first consideration if new data items need to be captured. Adding data requirements into Pathways should be the last resort. Pathways are best when they have the greatest simplicity. All HUBs must meet the required data collection elements of the standardized Pathways.

Keeping the Pathways intact and the checklists short should be a central goal in developing the HUB. Complicated data requirements will decrease data collection accuracy, increase time spent by the CCC, and create barriers to Pathway completion. The HUB’s strength of simplicity is directly tied to its efficiency and effectiveness.

Plan of Care Using Pathways

The primary purpose of the plan of care is to ensure that all the risk factors a client has are identified and addressed. Specific risk factors identified within the checklist should, in the large majority of cases, tie directly to nationally standardized Pathways.

The CCC shares the plan of care with his or her supervisor either electronically or on paper. If the CCC is a registered nurse or a licensed social worker, then he or she is not required to have supervision. If the CCC is a CHW, then a supervisor is required under the HUB model standards. The supervisor may also add Pathways based on the checklist responses or change the priority of Pathways in the care plan.



The national certification standards require specific policies and procedures to document the expected timelines and accountable communication process between the CCC and the supervisor as they develop and implement the plan of care. For CHWs, all of their initial and followup checklists, along with their updated plan of care, must be reviewed and signed off by the supervisor in a timely manner.

CCCs are visiting the homes of the individuals at greatest health and social risk to collect health, social, and behavioral health information. When CCCs are CHWs, they have significant training to work in clients' homes. Their training prepares them to work as part of an interdisciplinary team.

The team could include the advanced training and experience of a clinical provider, registered nurse, or licensed social worker who can help support, prioritize, and appropriately manage the host of risk factors presented. The importance of careful supervision is represented in research and within some of the most advanced and effective CHW models in the world, including the Alaska Community Health Aide Program.²⁰

When the supervisor and CCC have signed off on a specific Pathway completion, an invoice can be submitted electronically (or on paper) to the appropriate funder. Community-based care coordination programs using traditional care coordination approaches often report extensive and challenging invoicing procedures that take significant time and expense. Setting up the HUB's Pathway completion and related invoicing reports to be as automated and time efficient as possible is an important component in achieving a sustainable and efficient HUB.

As Pathways are completed and risk factors are addressed, the number of risk factors for the client goes down across the areas of health, behavioral health, and social services. Risk scoring and other methodologies to demonstrate the reduction of risk related to HUB-focused care coordination are now being piloted. The reduction of risk over time can track along with the reduction of stress. As risk factors represent the primary source for adverse health, social, and economic outcomes as well as their related costs, tracking the reduction of risk factors is the central data collection and reporting function of the HUB model.

The HIPAA-compliant communication of risk factors identified and Pathways action plan should be communicated with the medical and behavioral health home clinical providers whenever possible. Partnership and collaboration in the development and prioritization of the community care

coordination plan of care can be very beneficial. Alaska represents one of the most advanced CHW care coordination models and has built within it a strong partnership and communication between CHWs and clinical providers.

HUBs should work effectively to support the development and completion of a risk reduction plan of care for individuals and for the community they serve. HUBs can join together across States and at the national level through PCHCP to accomplish similar analysis and risk reduction improvements for individuals and populations.

Bringing in Outside Experts To Facilitate HUB Development

Most current Community HUBs received significant technical support from expert public and private agencies to help them achieve community engagement, design the specific features and requirements of the HUB, develop and implement training, select technology solutions, and develop contracting and invoicing strategies for sustainability.

The Pathways Community HUB Certification Program has information and resources available now and currently under development at <https://pchcp.rockvilleinstitute.org/>.

Step 7: Develop Sustainable Funding Strategies for HUBs

The pay-for-performance component of the HUB model is critical to achieving the best outcomes at less cost. The HUB certification standards require that a minimum of 50 percent of the overall payment to the HUB initiative be tied to outcomes. Most of the health, social service, and behavioral health funding streams currently do not have pay-for-performance requirements.

HUBs can use pay for performance as a leading marketing component of the HUB to engage funders and policymakers in their support. It is also designed to be effective in sustaining the HUB through appropriate pricing strategies and incentive structures that have demonstrated success.

A critical difference in the incentive structure for HUBs is the focus on at-risk populations and their risk factors. In typical direct service and care coordination contracts, the provider of the direct service or the CCA will earn more income and achieve greater financial stability by serving clients at least risk. High-risk clients have many risk factors that also affect their ability to comply with appointments. No shows and difficulties keeping scheduled visits is a key source of financial loss for direct service and care coordination agencies.

High-risk clients will take significantly more time as they will usually have more issues to address. For example, a client with two small children who has met the poverty guidelines (<200% of Federal Poverty Level) and is eligible for care coordination could fit one of two profiles:

1. She has a safe home, a car, a job, and health insurance. The children's father is involved and providing some income and support. She is not depressed.
2. She lives in unsafe housing with large holes in the bathroom floor. She does not have medical care or insurance. She has no transportation and no supportive family members. She scores high on the depression screen.

Direct service providers and care coordinators report informally and through related research that the second client can take 200 to 300 percent more time, especially for CCCs who must address social as well as health risk factors. Since 5 percent of the population represents 50 percent of the cost, the greatest concentration of our health disparity incentives must focus rewards and effectively support care coordinators in serving those at greatest risk.

In the HUB model, client 1 might not even reach a risk factor score high enough to qualify for comprehensive care coordination. On the first visit, the CCC may provide information on available resources. When the risk identification information is presented to the HUB, many of the current funders of HUBs would have threshold levels of risk that would place this client in a “call if you need us status.” The client might also appreciate this as frequent home visits take time and may not be beneficial in this situation.

In the HUB model, client 2 is at significant risk and represents an appropriate referral to the HUB, both for programmatic and financial reasons. Because of her health and social risk factors, the CCA deploying the CCC will make significantly more money than they would for client 1. The additional dollars are needed for the additional time the CCC will spend with this client.

As client 2 is eventually connected to safe housing, insurance, medical care, food, education, and employment, her risk factors are addressed and her total risk score goes down. The plan of care also goes from 10 to 15 Pathways initially to no more than 2 or 3. At this point in the client’s service, which may take 9 to 36 months, the dollars that the CCA earns serving this client have gone way down and the client is no longer in need of intensive connections to services to stabilize her situation.

Following careful quality guidelines established by the local HUB, the CCC (with approval from her supervisor) can discharge the client from active service. She will remain on a “call if you need us” status. The CCC may check in periodically to make sure things are going well.

Developing contracts for HUB services should take advantage of national examples and lessons learned so far. The Pathways themselves are the primary billing unit for service. Coding strategies have been developed and implemented within Medicaid managed care contracts and other funding streams. (See Pathways list at <https://pchcp.rockvilleinstitute.org/certification-tools/>.) In addition, multiple “relative value unit” (RVU) approaches are being piloted, with a national approach to RVUs in development. United Healthcare, Buckeye Community Health Plan, CareSource, and Paramount have all substantially contributed to this development.

A few Pathways support payments for steps within the Pathway. The Pregnancy Pathway, for example, places the birth of a viable normal birth weight baby as the highest paying step. There are also smaller payments for each confirmed prenatal visit as part of working toward completion. Even with substantial intervention, some birth outcomes will not achieve the goal of normal birth weight. If the infant is born with LBW, the program still receives a significant portion of the payment based on achieving the intermediate steps of prenatal visits.

Extending incentives to CCCs for completing Pathways and serving those at greatest risk has been piloted. Individual CHWs, social workers, nurses, and clinical providers serving at-risk populations within CCAs can have a portion of their compensation tied to the achievement of outcomes and intermediate action steps. This approach has demonstrated positive results and would benefit from further testing.

How Do CCAs Serving in the HUB Network Receive Funding?

In most current examples, the HUB contracts directly with care coordination funders, including government agencies, Medicaid managed care organizations, grant makers, United Way, and other entities. The HUB then subcontracts with collaborating CCAs who hire and deploy CCCs to serve the at-risk population.

The following are examples of some of the current general strategies that have been used successfully within the HUB model:

- When building a new HUB and beginning new contracts with existing CCAs, a kick start financial strategy is encouraged. This was first piloted in Toledo, Ohio (Northwest Ohio Pathways HUB) to provide a startup payment allocation to CCAs willing to participate.
 - Building an accountable network with existing CCAs and changing programs from process to outcomes is not an easy philosophical or programmatic switch. CCAs need time and resources to implement additional training, hire new staff, and use new data collection tools and invoicing strategies.
 - A startup funding allocation to CCAs can help significantly in gaining more buy-in, participation, and good will among agencies. This has been in the range of \$20,000 to \$25,000 in some initiatives and can have a broad range based on the location and scale of the HUB.
 - Startup grant dollars or some similar allocation is needed to fund and support the HUB. Most of the funding streams currently sustaining HUBs use a pay for outcomes approach. This type of startup funding allocation is not readily available. Additional flexible funding should be identified for this function. Grant resources, State funding allocations, and private business donations have been used for this purpose. The Ohio Commission on Minority Health is an exciting new example of this approach to help Certified Community HUBs get started in Ohio through funding approved by the Ohio Legislature.
- Payment can be assigned to each of the nationally certified Pathways or to all the Pathways that are relevant to the population served by the HUB. A completed Pregnancy Pathway, for example, may reach a value of up to \$800 to \$1,600 or more, including all steps. A Social Service Pathway for establishing a secure source of food or child care may have a value of \$40 or less.
 - The payment and scale of sustainable payment varies significantly based on the level of risk of the population served. The sustainable payment level also depends on other parallel payments for the other Pathways and related components of the contract.
 - The number of Pathways and related payments can be estimated for the average at-risk client. This can be used to calculate sustainable pricing models. Some Pathways take a significant amount of time and related expense and others are less time intensive. Technical assistance is recommended in developing final payment schedules.
 - Unpublished research has been completed to evaluate the number of hours taken for a CCC to complete a specific Pathway. The cost to complete each Pathway was calculated using a total unit rate cost of the CCC per hour. The unit rate takes into account the payment for the

- CCC as well as time spent by the administrative staff, supervisor, and information technology staff, as well as all other related overhead costs of the program. Payment per individual served with community care coordination using Pathways was not found to be higher in cost than traditional and less accountable care coordination strategies.
- Additional research and collaboration among HUBs and their payers nationally is needed to develop more consistent and effective Pathway-based payment structures. Payment for Pathways has been in place for more than 15 years within Ohio programs, and almost 10 years in New Mexico. This has provided experience and strategy for more current HUB implementations.
 - The HUB model supports some portion of the overall payment being tied to process-based measures such as the completion of the initial checklist and enrollment information.
 - Clients at greatest risk can be very challenging to track and locate following their initial enrollment into the program.
 - After enrollment paperwork is completed and a plan of care is developed, if the client moves and cannot be found, the CCA can still receive some payment for the work completed.
 - Especially for new implementation, some of the payment must be tied to process-based measures to support the cash flow needed to sustain CCA operations.
 - CCAs with experience finding those at risk and being paid for the reduction of their risk factors using Pathways can support themselves and grow with this type of approach. It does take time, and some traditional payment approaches are important as part of the mix, especially in getting the system started.

Learning Network Examples

- Pathways make the strategy of “braided funding” possible. One at-risk individual may be eligible and receiving care coordination through several health and social service agencies. In the current system, without a HUB, the duplication of service is not easy to identify. The HUB allows collaboration among funders to eliminate service duplication and work toward an efficient approach to comprehensive risk factor identification, Pathway initiation, and completion.
 - In a braided funding approach, the funding is tied to the completion of Pathways and can be allocated based on the specific type of Pathway completed.
 - The Housing Pathway can be assigned to the social service funding stream.
 - The Medical Home, Medical Referral, and Medication Assessment Pathways can be assigned to the Medicaid managed care funding stream and the Behavioral Health Pathway to a behavioral health funding stream.
 - One CCC works with the client and systematically works through the risk factors, recording progress with the HUB. The HUB, using the billing codes associated with each Pathway, assigns the reimbursement to the appropriate funding stream.
 - Pathways completion is the driver in this system. As this approach eliminates the need for multiple care coordinators, the pricing and overall cost of care can be reduced. Braided funding has not been fully implemented in any of the current HUBs. The infrastructure, tools, and principles to benefit from this strategy are in place and there is work toward further testing and evaluation.⁷

- There are many current examples of excellent accounting management of a broad array of care coordination funding streams within HUBs, including:
 - Medicaid managed care plans,
 - United Way,
 - Housing providers,
 - Health departments,
 - Behavioral health organizations, and
 - Private business.

In these examples, each client and all his or her associated Pathways are assigned to a specific funder. One CCC may have a variety of clients with different funding streams but are each served with the structure and model of the Pathways Community HUB. The HUB ensures that clients enrolled do not have multiple CCCs and that each funder receives reports on risk factors being identified and addressed with Pathways. Infrastructure to support this level of accounting expertise is required by the national HUB standards.

How Does the HUB Get Paid?

The HUB is recommended to serve as a thin (relatively inexpensive) component to the overall cost of care coordination for the network of agencies providing the service. In most current funding strategies, the HUB receives a percentage of the overall payment going to CCAs. As noted above, the HUB administration is usually no more than two or three positions, depending on the size and scope of operations.

Some HUBs provide additional supportive services to the CCAs, such as supervision of CCCs, billing, and payroll functions. All these additional supportive functions can add to the administrative expense of the HUB. It is critical to keep the percentage of funding going to the HUB as efficient as possible.

Policymakers and payers may see the HUB as an additional expensive administrative layer in a system of care that already has many administrative layers and related expenses. The function of the HUB is to identify and eliminate duplication of services, confirm payments for outcomes, and achieve documented cost savings across the network of CCAs. It is critical to convince potential supporters of these benefits.

In evaluating a new HUB, the percentage cost of the HUB will directly relate to the overall size of the network and total annual budget of the care coordination funding coming through the HUB. If two highly skilled HUB directors are hired, and their benefits, office space, technology, and additional consulting and support structures are put in place, this could easily reach a cost of \$250,000 or more. If they will be operating a HUB network that has an annual starting budget of \$500,000, their percentage of the initiative's costs will be high. If they are operating a \$4 million to \$5 million dollar HUB network, their percentage of the cost will be lower.

A goal percentage rate for the HUB administration may be estimated at 10 percent. This may require a stepwise approach and would almost always involve a higher percentage when the HUB gets started.

The national standards require a HUB to demonstrate that 50 percent of dollars connect to outcome-focused payments. The standards also require that each HUB have a credible strategy for demonstrating both positive outcomes and cost savings (return on investment). When these requirements are met, it becomes much easier for a HUB to justify its expense in a Nation with a system of care that is the most expensive and least effective in the developed world in producing positive outcomes.

Impact to Date

Linking payment to outcomes within the payment strategy for CHWs continues to be controversial. This was piloted in early 2001 to 2007 at CHAP and demonstrated an almost 300 percent increase in the number of pregnant women effectively identified and served within several months of initiating the program. As the local Community HUB, CHAP is now working with the agencies that deploy CHWs to develop similar incentive approaches. CHAP's incentive system produced a number of other benefits for both individual CHWs and the organization as a whole, as outlined below:

- The most productive CHWs have realized substantial yearly income increases (\$3,000 to \$4,000 a year).
- CHAP was able to use data routinely collected from the incentive system as an objective tool to measure employee performance during times of financial difficulty when layoffs became unavoidable.
- Research has demonstrated Pathways that are provided when incentive structures are in place are completed faster (more efficiently) and that the documentation (data collection) is more accurate.⁶

Incentives should be considered part of developing a positive, supportive, and helpful work environment for CHWs. They are in the homes of those at greatest risk. They need supervisory, emotional, and financial support to be effective. CHWs can find themselves employed and compensated in a manner that places them near poverty as they then try to serve clients in poverty. If there is any consideration of an incentive program, especially for CHWs, these other factors should be addressed first.

The Importance of Partial Payments

As with American corporations, the Pathways model recognizes that not all outcomes will be positive. When developing contracts and employee incentives, HUBs should build in adequate payments for those Pathways that do not reach completion. Creating staged payments with some level of compensation for the achievement of partial success—for example, getting a pregnant woman into prenatal care, even if she ultimately delivers an LBW baby—makes sense. Failure to do this will make it almost impossible for community-based care coordination programs to take on at-risk patients.

At the same time, it is critical that contracts and grants secured by the HUB—and corresponding incentive systems for individuals—not focus the financial reward to agencies or individuals solely based on the percentage of clients served. As noted earlier, setting such a threshold—such as screening 80 percent of the population for lead exposure—creates strong incentives for organizations and individuals not to serve those at greatest risk—such as the 5 to 15 percent of the at-risk population that does not have a phone, lives in unsafe or difficult-to-access housing, or faces other barriers that make reaching them difficult.

Quality Improvement Resources

Quality assurance materials and resources will be available on the Rockville Institute PCHCP site: <https://pchcp.rockvilleinstitute.org/resources/>.

Step 8: Develop Systems To Track and Evaluate Performance

As stated in the introduction, the most important functions of the HUB are to:

- Centrally track the progress of individual clients (to avoid duplication of services and identify and address barriers and problems on a real-time basis);
- Monitor the performance of individual workers (to support appropriate incentive payments);
- Improve the health of underserved and vulnerable populations; and
- Evaluate overall organizational performance (to support appropriate payments, promote ongoing quality improvement, and help in securing additional funding).

Rather than serving as a central repository for the full client chart, Pathways Community HUBs typically set up an electronic system that captures a relatively limited set of client numbers and identifiers; the typical HUB uses this system to perform the following functions:

- **Register “new” clients** through a centralized database to minimize duplications: As described above.
- **Monitor progress of individual clients; identify and address barriers:** The database should also provide up-to-date information to the various individuals and agencies involved, information on how clients are progressing with respect to the initial identification of risk factors, and progress using Pathways to reduce them. Some communities have used paper-based processes that allow individuals to enter information on a form, while others are moving toward electronic (Web-based) systems that allow real-time tracking.

The availability and practicality of electronic systems in some areas may be limited. Problems include:

- Lack of access to high-speed Internet services,
- Outdated electrical wiring in older buildings, and
- Other problems inherent in underserved communities where care coordination for at-risk individuals takes place.

Tablet technology implemented by several programs (and several separate vendors) has been an additional solution for documentation. Tablets also support CCCs in delivering specific training and educational interventions to at-risk clients.

- **Evaluate performance of individual workers:** The system should allow tracking of the performance of individual CHWs, social workers, nurses, clinical providers, and others involved in caring for at-risk clients. This information can feed into the incentive payment system described earlier.

- **Evaluate and report on organizational performance to stimulate quality improvement:** The HUB system should measure and report on the performance of collaborating organizations producing positive outcomes (e.g., completed Pathways) with a given level of resources. Reports should be accessible to the local HUB, related regional directors, and CCAs.
 - The system should be designed to allow quality analysis of all delayed and unfinished Pathways to identify any common barriers to boosting “production” of desired outcomes—i.e., interventions, agencies, or action steps that require additional attention.
 - The system should allow evaluation of each step of the process to determine where production is being slowed or is below standards. The focus should be on finding needed process improvements, not on punishing individuals or agencies. To that end, the Pathways Community HUB works with partner agencies to develop standard production reports that compare outcome production across all involved agencies. Reports show how many Pathways are pending or completed by each staff member of each agency, thus allowing the identification of the most productive or successful individuals and organizations. This information assists not only in determining appropriate incentive payments, but also in facilitating the spread of best practices and in identifying any delays or barriers that need to be addressed by an individual, an agency, or the community at large.
- **Monitor community health status:** The information gathered by the Pathways Community HUB can be very useful in helping to identify and track risk factors and related needs at the individual level and aggregated at the community level. Working together with the health department, health care providers, hospitals, and others in the community, the HUB can provide valuable information on what is and is not working in the community. As a network with many sources of wisdom, the HUB can serve to convene and help develop the best community response to addressing necessary improvements.

Phase 3: Launching the HUB

The third and final phase of the process is to roll out the operations of the Pathways Community HUB. This step includes hiring dedicated staff for the HUB and ensuring appropriate training of staff and CCCs at participating agencies.

It is recommended that throughout the process of developing the local HUB, there be an understanding and focus on the national Pathways Community HUB certification standards. The standards, in addition to other materials and certification-focused technical support, are available through PCHCP.

CCCs must meet the national standards for basic training and supervision. The staff and CCCs must know how to apply the Pathways and tools. There must be effective agreements and contracts between the HUB and participating CCAs. All parties must work together to achieve community awareness and engagement of community service providers and related collaborators.

Step 9: Hire HUB Staff

The appropriate timing for hiring HUB staff will vary by community. In some situations, staff will be hired earlier to help facilitate and support many of the activities described in previous steps. In other situations, the staff of collaborating agencies will handle these activities, allowing staffing of the HUB to be delayed until later in the process. Partnerships with universities have enabled some HUBs to hire graduate students in social work or public health to serve as interns.

Learning Network Examples

- Toledo, Northwest Ohio Pathways HUB - Largest in the learning network with multiple grants, Medicaid managed care, and related programs supporting 10 positions within the HUB.
- Muskegon Community Health Project - One HUB director, one HUB manager, and two clinical supervisors.
- Oregon, NEON - One full-time equivalent (FTE) Hub Coordinator, .5 FTE operations staff, and .5 FTE executive director.

Step 10: Train and Organize CCCs and Staff at Participating Agencies

Significant training of relevant agencies and individuals to use the model is required to ensure proper implementation and data collection. The training process for the Pathways model is outlined below:

- **Develop a HUB implementation team:** Most HUBs use technical support to form a team of trainers and support personnel to provide the appropriate education and technical assistance to get started. This can occur in a train-the-trainer approach with the outside technical support team empowering the HUB leadership or other local resources to serve in this role moving forward.
- **Identify a team leader at each CCA:** The implementation team should meet with the team leader at each CCA to review current work processes. The work and documentation required for the HUB model should be brought into the work structure in the most efficient and effective manner possible.
- **Support CCAs in identifying their CCCs:** Using CCCs who are currently providing care coordination services within the community can help implementation. It also helps HUB implementation by supporting and strengthening current care coordination structures instead of representing a duplicative and competitive new community structure.
 - CCCs can be nurses, social workers, CHWs, or others as long as they can provide community care coordination within the community setting.
 - CHWs supervised by clinical providers, registered nurses, or licensed social workers can provide one of the most efficient and effective ongoing deployment strategies.



It may take time and the development of local expertise to apply and grow this approach. CCCs working at the CCA will most often have existing paperwork and database requirements as part of their current work at their agency. The new work they are beginning with the HUB will require new paperwork or database data collection requirements. These requirements are in addition to current responsibilities and must be effectively integrated into the workflow.

The national standards recommend that CCAs use CCCs for their HUB initiative who devote a large portion of their work time to the HUB service. If their position is only proposed to have a small percentage of time devoted to the HUB, they can be pulled in other directions with other responsibilities, reducing their effectiveness. HUBs that have ensured that their CCAs have “HUB dedicated” CCCs realized more effective Pathway production and better outcomes.

Learning Network Examples

- Rio Arriba Pathways in Española, New Mexico, advertised in the community for the positions. They looked for individuals with a background of serving others in positions that require trust. They have a number of cosmetologists on staff, as people frequently trust and confide in their hairdressers. They also looked for people who speak Spanish and are from the population to be served.
- Pathways to a Healthy Bernalillo County in Albuquerque uses CHWs (Navigators) hired and employed by the partner community-based organizations. The HUB provides each organization with a job description template from which to recruit their Navigators. In many cases, the organizations had internal candidates who met most or all of the desired characteristics. The HUB provides program orientation and ongoing coaching of the Navigators, if needed. Most of the CHWs who have left the program took better paying positions elsewhere, often qualifying for these positions through their experience with the Pathways Program. Many of the Navigators continually strengthen their leadership qualities and are always willing to mentor the newer Navigators as they develop their own leadership abilities.
- Muskegon Community Health Project in Michigan uses CHWs recruited through traditional recruitment methods. They also seek CHWs through faith-based and local nonprofit agencies, law enforcement, neighborhood associations, and local government. Recruitment is often through word of mouth, with an emphasis on hiring CHWs from the community so that neighbors are serving neighbors.

Training Requirements

- The CCA agency leadership, including the financial representatives, need to be trained on the Pathways model and its basic requirements. The potential benefit to the individuals served as well as the potential improvement in quality and sustainability of the CCA can be additional areas of focus.
- The CCCs need to receive more extensive training consistent with the national Pathways Community HUB standards. Previous training and experience is taken into consideration with these requirements.
 - If the CCC is a registered nurse or social worker, the training requirements can be significantly less.

- New employees, without previous training and experience in the role of being a CCC, will need more extensive training.
- National standards promote a training experience that can include approximately 100 contact hours of classroom training and additional hours in on-the-job practicum experience.
 - CHW curriculum requirements include understanding of the basic health, social, and behavioral health issues that CCCs will be engaged in helping to address with their clients.
 - Chart documentation, HIPAA compliance, motivational interviewing, and many other curriculum requirements are also required through the national standards.
 - For existing CHWs, previous training or certification within their State can be recognized as an important component of their required training experience.
 - The national standards for HUBs do not count as certification for CHWs. They do outline the minimum documented curriculum requirements required for a CCC (including CHWs) to serve in a certified HUB.
- Examples of existing State CHW training requirements that may substantially address most of the CHW curriculum requirements include the following:
 - The Ohio Board of Nursing has a curriculum for CHWs. Legislation in Ohio designated CHW as a profession. The approved curriculum is available at <http://codes.ohio.gov/oac/4723-26-13>.
 - The Minnesota Department of Human Services discusses CHW requirements at http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=dhs16_140357.

HUB Operations

HUBs need to organize, deploy a communication and regular meeting plan, and implement a quality assurance strategy to operate the network.

- The HUB must have an initial and ongoing approach for communicating with the CCAs and their staff. Setting up a regular meeting schedule for communication with the HUB team leaders at each agency is an important part of this approach.
- Quality assurance by the HUB and within each CCA is part of PCHCP's national certification requirements. Quality assurance should be a central focus of every aspect of the HUB operation, which includes not only the services provided but also the fiscal, human resources, and other operational components.
- The networking of the CCCs themselves between and among the CCAs involved in the HUB is a critical aspect of improving the overall operation. In Albuquerque, New Mexico, all the CCCs from each of the 14 agencies involved get together on a monthly basis to discuss local challenges, best practices, training needs, and any other important topics that can improve their overall

operation. It is within these sessions that strategies are shared across agencies to engage at-risk clients, identify their risk factors, and ensure their connection to interventions. These meetings of the CCCs have also been very informative to local, State, and national leaders who have been invited to attend them. Other HUBs in other communities have begun to adopt this practice.

Learning more about how existing HUBs communicate within their network, reward and affirm progress, provide specific reports and quality assurance focused information, is an important objective for any new HUB that is developing.

Step 11: Conduct a Community Awareness Campaign

Community HUBs are required by the national standards to have a Guidance Council representative of the community and community service structure. The individuals and their represented agencies on the Guidance Council play a substantial role in providing community awareness of the HUB and its development. The participation of the HUB leadership in other health, social service, and behavioral health meetings and activities within the community is also critical in achieving community awareness.

Community members play a critical role in identifying and referring at-risk individuals to the program. Teachers, school nurses, ministers, coaches, and others may be in the best position to know when an individual needs help. (Within the HUB model, these individuals are known as “finders.”) Successful programs, therefore, will conduct a formal community awareness campaign to make sure that all important referral sources know about the program, identify who might benefit from it, and understand how to refer at-risk individuals.

The HUB leadership is responsible for developing effective relationships and communication structure with local service providers so that frequently identified barriers to receiving services can be addressed at the individual and population level. The HUB leadership should work closely with other local service providers and their CCAs to provide periodic summary reports and communications to community policymakers and funders as part of the process. This communication can help achieve growth and expand the positive impact. Events highlighting the success of local CCAs, their CCCs, and the direct service providers who provide the interventions can be an important form of improving community engagement.

Accurate and effective communication, as well as the ability to develop strong personal relationships, is a critical skill CCCs need to work with their clients. It is also critical for supervisors and administrators across the HUB network. Individuals within the HUB network who are accountable for getting the work done, as well as developing positive relationships, are critical to the initiative’s ability to serve those at risk and to achieve better outcomes at less cost.

Conclusion

Our Nation, with the most resources and the worst outcomes in the developed world, has a great opportunity for improvement. The source of disparity and cost are risk factors, most of which can be addressed. A new focus on effectively and efficiently identifying and addressing risk factors that span health, behavioral health, and social services is demonstrating improvement in outcomes and cost.

It is a substantial challenge to change silo-based services to effective care networks. Moving from process-based payments that incentivize service to low-risk clients to outcome-focused payments that incentivize service to those in greatest need is essential. This national learning network developed by AHRQ is very early in development. Your participation and innovation are needed.

Those at greatest risk can be reached and have their risk factors addressed, and they, their children, and their families can achieve better health, social, and economic outcomes.

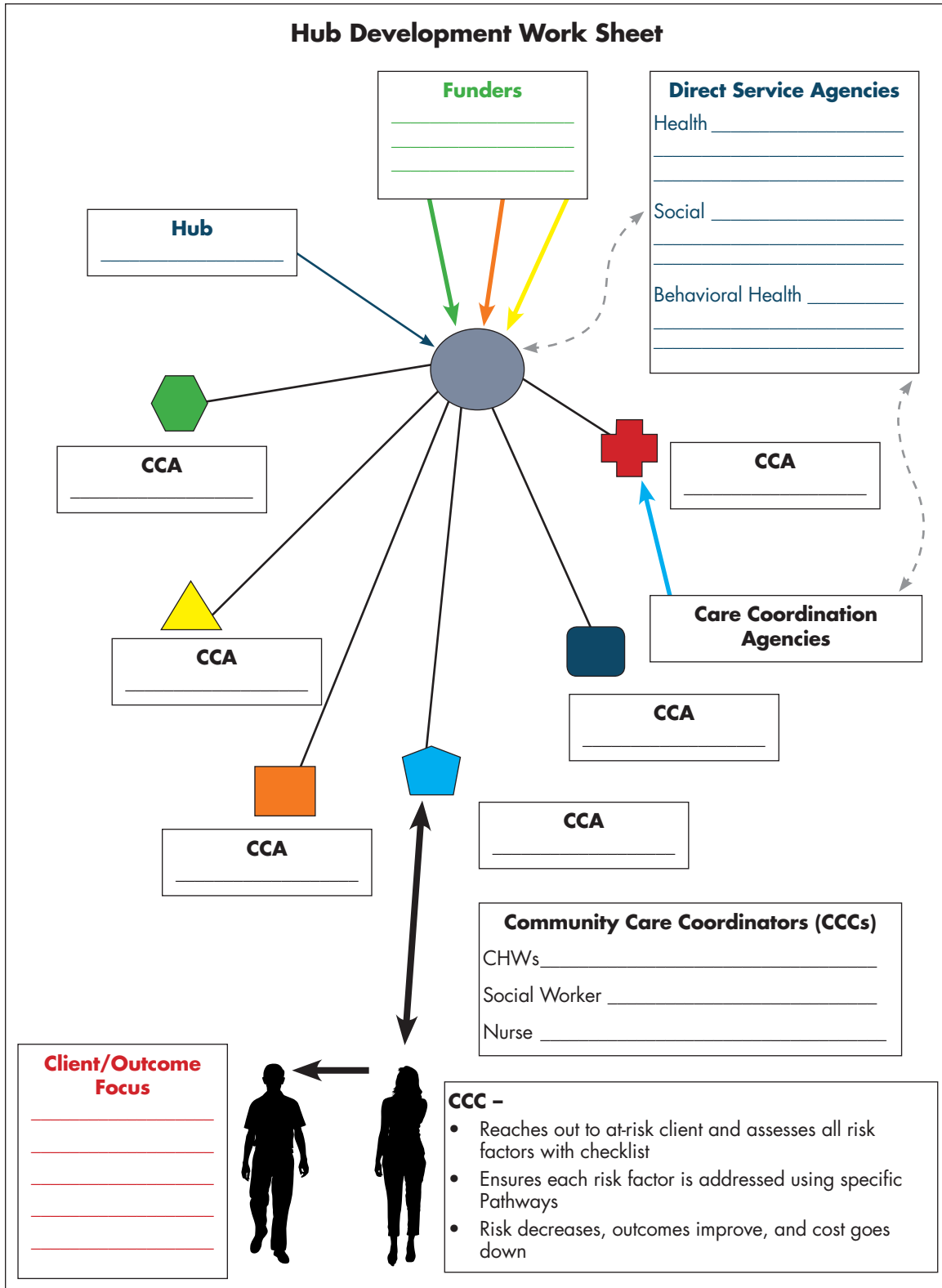
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Appendix

Community HUB Template



Community Care Coordination Learning Network

HUB Initiative	Location	Contact	IT Strategy	Outcome Focus	Certification Status
Community Health Access Project - CHAP	Mansfield, Ohio	Michelle Moritz, Sarah Redding, Bob Harnach	Web-based tablet platform	Maternal and child health; now expanding to serve all ages	In progress
Northwest Ohio Pathways HUB	Toledo, Ohio	Jan Ruma, Carly Miller Hospital Council of Northwest Ohio	Web-based tablet technology	Original focus on maternal and child health; now focusing on all age groups	Provisional certification awarded October 2014; final certification pending
Health Care Access Now (HCAN)	Cincinnati, Ohio	Judith Warren	Web-based tablet technology	Serving all age groups	In progress
Muskegon Community Health Project	Muskegon, Michigan	Judy Kell, Peter Sartorius Muskegon Community Health Project/ Mercy Health Partners	Web-based tablet technology	All age groups	In progress
Rio Arriba Pathways	Española, New Mexico	Lauren Reichelt	Combination of paper and electronic system	Pregnancy	In progress

HUB Initiative	Location	Contact	IT Strategy	Outcome Focus	Certification Status
Pathways to a Healthy Bernalillo County	Albuquerque, New Mexico	Daryl T. Smith Office of Community Health Worker Initiatives University of New Mexico Health	Web-based custom-designed system	Low- to very low-income adults with multiple complex needs	Provisional certification awarded October 2014; final certification pending
St. Vincent Health	Indianapolis, Indiana	Sherry Gray St. Vincent Health			
Northeast Oregon Network (NEON)		Lisa Landendorf, Executive Director Eric Griffith, Hub Coordinator North East Oregon Network		Adults with chronic disease	In progress
Saginaw Pathways to Better Health	Saginaw, Michigan, and adjacent counties	Sandra Lindsey, Project Director Barb Glassheim, Project Manager Vurlia Wheeler, HUB Manager Saginaw County Community Mental Health Authority	Web-based tablet technology	Adults with chronic disease Maternal and child health	Provisional certification awarded October 2014; final certification pending

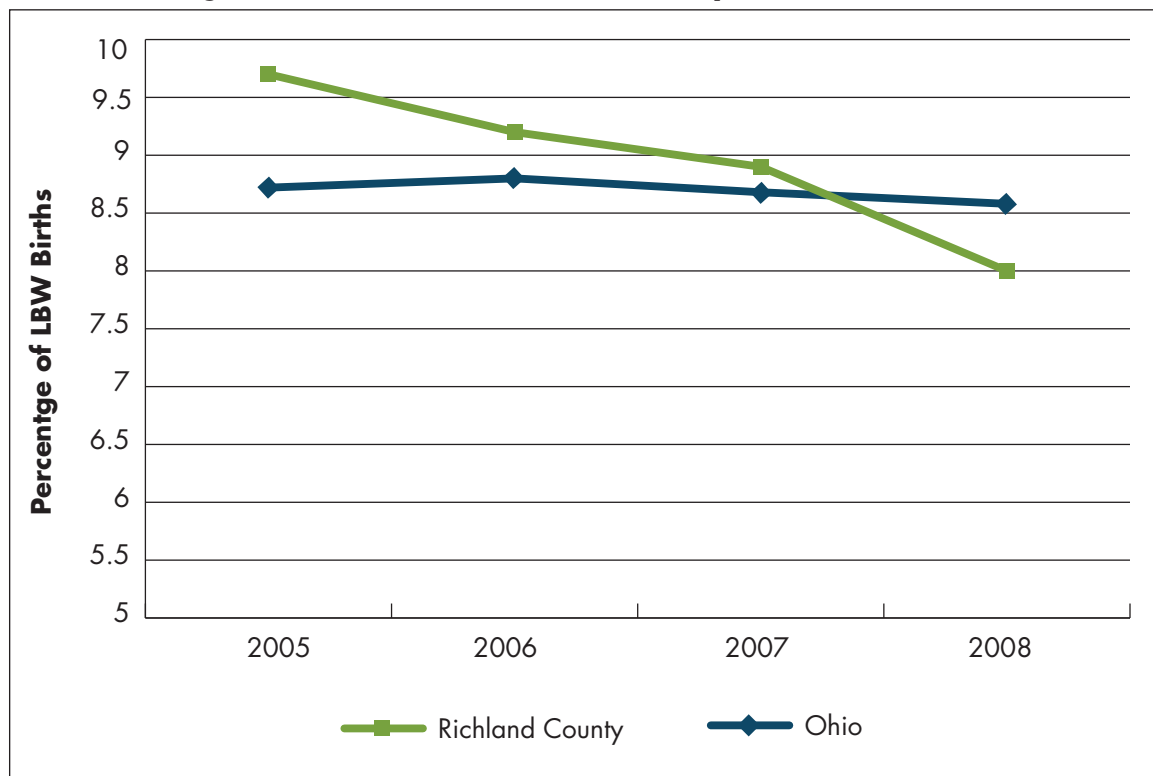
HUB Initiative	Location	Contact	IT Strategy	Outcome Focus	Certification Status
Ingham Pathways to Better Health	Ingham, Eaton, Clinton, Gratiot, and Montcalm Counties in Michigan		Web-based technology	Adults with chronic disease	In progress
Franklin County Pathways Community HUB	Franklin County, Ohio	Todd Dieffenderfer, Chief Alignment Officer David Ciccone AVP, Community Impact Senior. Impact Director, Health United Way of Central Ohio	Tablet technology	School readiness among early childhood population, healthy birth outcomes among high-risk pregnant women, workforce outcomes among young adults	Expect to begin certification process in 2016 after full HUB implementation

Primary Resources for Current Evidence

Note: Includes peer-reviewed publications and data analysis

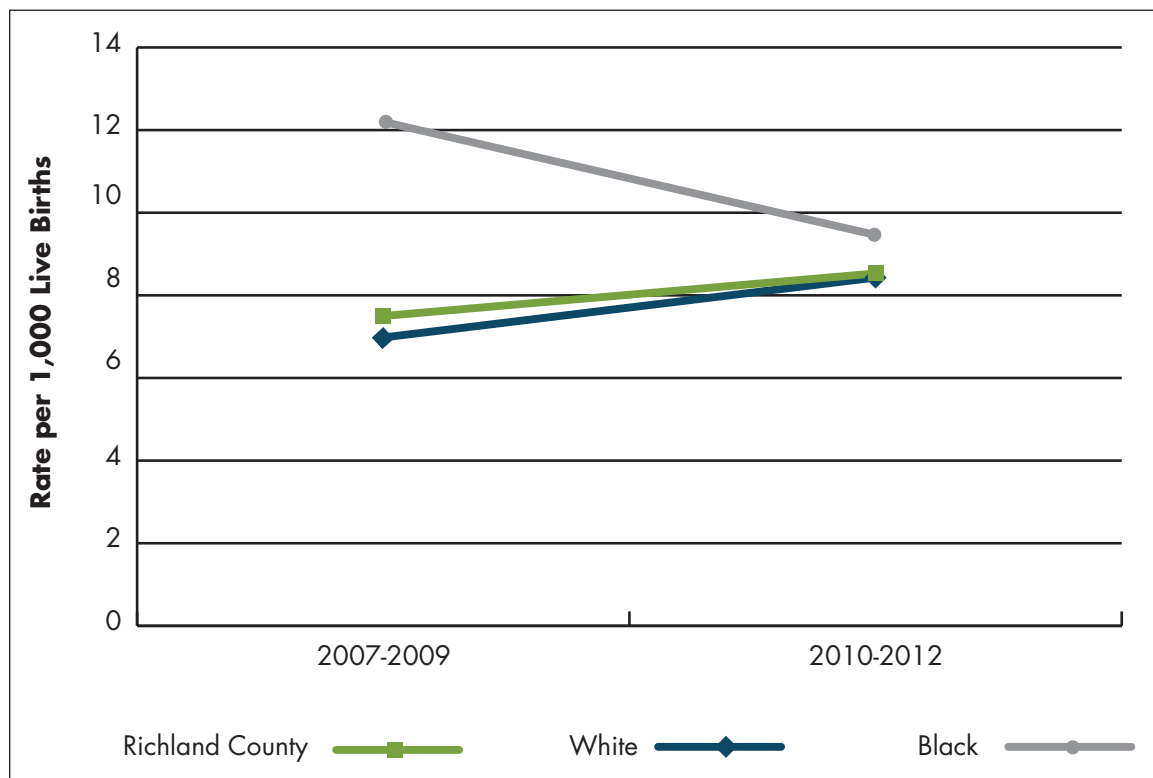
1. Redding S, Conrey E, Porter K, et al. Pathways Community Care Coordination in Low Birth Weight Prevention. J Matern Child Health 2015;19(3):643-50. First online: 20 August 2014. <http://link.springer.com/article/10.1007/s10995-014-1554-4>. Demonstrated a 60 percent reduction in low birth weight and a more than 500 percent return on investment. This publication was accomplished with the Community Health Access Project and was conducted in collaboration with the Ohio Department of Health, the Centers for Disease Control and Prevention, and The Ohio State University.
2. Zeigler BP, Carter E, Redding S, et al. Care Coordination: Formalization of Pathways for Standardization and Certification. National Science Foundation Grant Award No. CMMI-1235364. https://www.rockvilleinstitute.org/files/Care_Coordination_Formalization_of_Pathways_for_Standardization_and_Certification.pdf. Demonstrated the critical effectiveness of pay-for-performance accountability within the model.
3. Alley DE, Asomugha CN, Conway PH, et al. Accountable health communities: addressing social needs through Medicare and Medicaid. N Engl J Med 2016 Jan 7;374(1):8-11. PMID:26731305.
4. Zeigler B, Redding S, Leath B, et al. Guiding principles for data architecture to support the Pathways Community HUB Model. eGEMs (Generating Evidence & Methods to improve patient outcomes) 2016;4(1):Art. 1.

Low Birth Weight Rates in Ohio and Richland County, 2005-2008



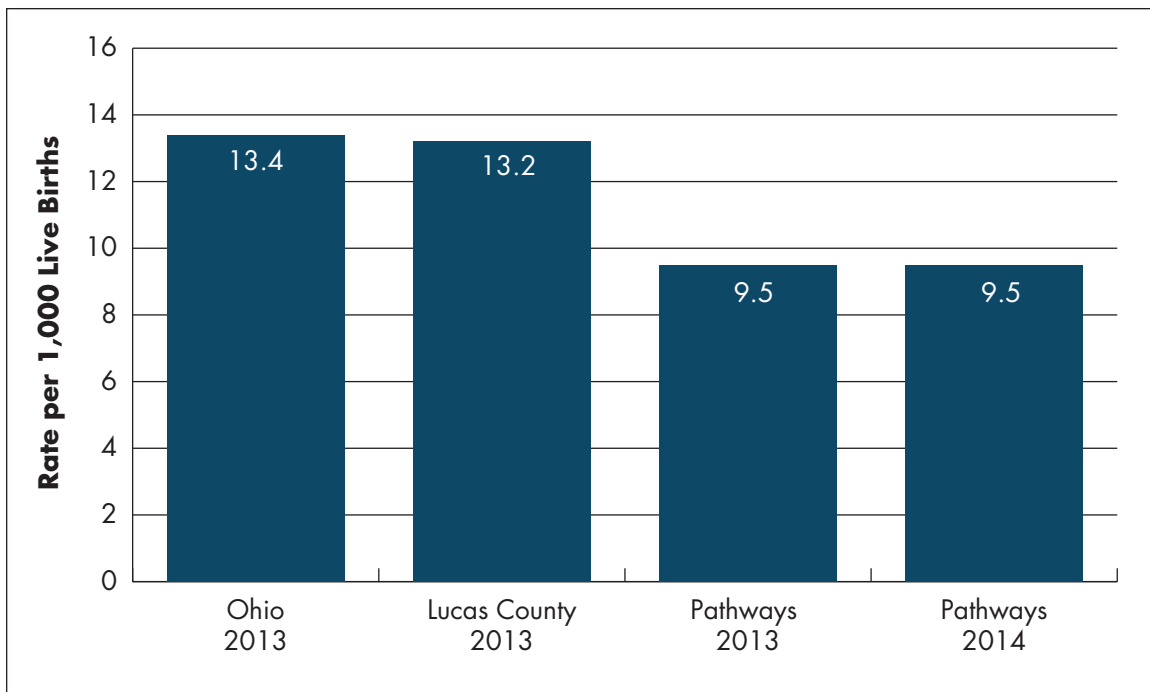
5. Countywide statistics during first Community HUB implementation from the Ohio Public Health Data Warehouse. <http://publicapps.odh.ohio.gov/EDW/DataCatalog>. See data below.
6. Countywide statistics during period of specific focus on African American expectant mothers in Richland County. During the same period of analysis, overall State infant mortality was demonstrated to be increasing. Data represented are from the Ohio Public Health Data Warehouse. <http://publicapps.odh.ohio.gov/EDW/DataCatalog>. See data below.
7. Toledo, Ohio, Northwest Pathways HUB data following implementation of the Pathways Community HUB model. See data below.

Richland County Infant Mortality Rate, 2007-2009 and 2010-2012, 3-Year Trend Data

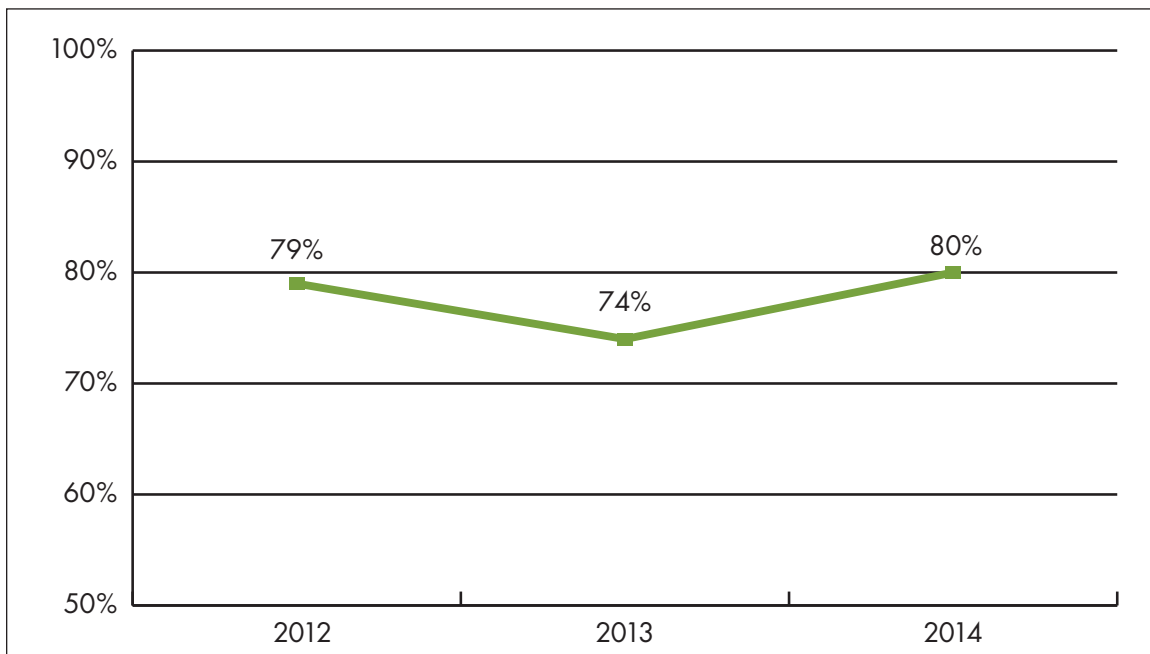


	2007	2008	2009	2010	2011	2012
Infant Deaths, Total	15	6	14	15	14	6
White Deaths	11	6	12	13	13	5
Black Deaths	4	0	2	2	1	1
Births, Total	1,606	1,523	1,517	1,339	1,353	1,410
White Births	1,436	1,365	1,353	1,199	1,220	1,260
Black Births	170	158	164	140	133	150

Lucas County African American Low Birth Weight Rates



Percentage of NW Ohio Pathways Clients Attending Postpartum Appointment, 2012-2014



In 2013, 63% of women on Medicaid attended postpartum appointment within 90 days.

8. The Muskegon Community Health Project established a Pregnancy Pathways program for high-risk mothers in Muskegon and Oceana Counties, with grants from the March of Dimes Michigan Chapter and the CHE-Trinity Call-to-Care Fund. A return-on-investment analysis was prepared by Greg Cline, Ph.D., for the initial 21-month period ending May 2014. For the 62 participants for whom he had complete claims data, Dr. Cline reported that the program cost per participant was \$1,567.52 for the Pathways to Healthy Pregnancy Program. Dr. Cline calculated that avoided costs for prevented low birth weight newborn babies was \$6,127.57 per participant. There was only one low birth weight baby in the cohort. The Pregnancy Pathways Program enrolled mothers from the highest risk group in Muskegon County and made their outcomes better than the Medicaid population and equal with that of the general population. This program is being continued with the use of Community Benefit funds.
9. Financing Community Health Workers: Why and How: The Future Is Now in Many Communities. Lansing, MI: Public Sector Consultants; January 2007. Produced with funding from the National Community Voices Initiative, Center for Primary Care, Morehouse School of Medicine, through the Columbia University Center for Community Health Partnerships. <http://pscinc.com/Publications/tabid/65/articleType/ArticleView/articleId/20/Financing-Community-Health-Workers-Why-How-Policy-Brief.aspx>
10. Panovska A, Scales B, Oxley S, et al. Medicaid Braided Funding Policy Brief. Columbus: Voices for Ohio's Children; November 2013. http://www.raiseyourvoiceforkids.org/Media/Documents/Policy%20Briefs/MedicaidBraided_Brief%20FINAL.pdf
11. Priority Setting for Healthcare Performance Measurement: Addressing Performance Measure Gaps in Care Coordination. Washington, DC: National Quality Forum; August 2014. https://www.qualityforum.org/Publications/2014/08/Priority_Setting_for_Healthcare_Performance_Measurement__Addressing_Performance_Measure_Gaps_in_Care_Coordination.aspx
12. "Case Studies" of Organizations Implementing Pathways

The Agency for Healthcare Research and Quality Innovations Exchange includes 10 "profiles" (similar to case studies) of organizations that have successfully implemented Pathways. Each write-up includes a capsule summary of the program, a description of the problem addressed, a descriptive summary of key program elements and the results achieved to date, background on the context and impetus for the program, a review of key planning and development steps, and a discussion of considerations for would-be adopters, including lessons related to getting started and sustaining the program. Web addresses for these profiles are provided below:

- Community Health Navigators Use Pathways Model to Enhance Access to Health and Social Services for Low-Income, At-Risk Residents: <https://innovations.ahrq.gov/profiles/community-health-navigators-use-pathways-model-enhance-access-health-and-social-services>
- Field-Based Outreach Workers Facilitate Access to Health Care and Social Services for Underserved Individuals in Rural Areas: <https://innovations.ahrq.gov/profiles/field-based-outreach-workers-facilitate-access-health-care-and-social-services-underserved>
- Program Uses "Pathways" to Confirm Those At-Risk Connect to Community Based Health and Social Services, Leading to Improved Outcomes: <https://innovations.ahrq.gov/profiles/program-uses-pathways-confirm-those-risk-connect-community-based-health-and-social-services>

- Michigan Pathways Project Links Ex-Prisoners to Medical Services, Contributing to a Decline in Recidivism: <https://innovations.ahrq.gov/profiles/michigan-pathways-project-links-ex-prisoners-medical-services-contributing-decline>
- County-Wide Collaborative Uses Pathways Model to Enhance Access to Insurance, Primary Care, and Mental Health Services for Low-Income Children: <https://innovations.ahrq.gov/profiles/county-wide-collaborative-uses-pathways-model-enhance-access-insurance-primary-care-and>
- Pathway Helps Massachusetts Residents Develop and Implement Debt-Reduction Strategies, Leading to 60-Percent Reduction in Medical Debt: <https://innovations.ahrq.gov/profiles/pathway-helps-massachusetts-residents-develop-and-implement-debt-reduction-strategies>
- Community Health Collaborative Reduces Inappropriate Emergency Department Use by Providing Access to Health Care, Social Support for Low-Income Clients: <https://innovations.ahrq.gov/profiles/community-health-collaborative-reduces-inappropriate-emergency-department-use-providing>
- Volunteer Provider Network Cares for Uninsured Working Poor, Leading to Lower Utilization and Costs, Better Outcomes, and Positive Return on Investment: <https://innovations.ahrq.gov/profiles/volunteer-provider-network-cares-uninsured-working-poor-leading-lower-utilization-and-costs>
- Hospital Partnership Offers Pathways-Based Case Management Program, Leading to Enhanced Access to Appropriate Care for Uninsured: <https://innovations.ahrq.gov/profiles/hospital-partnership-offers-pathways-based-case-management-program-leading-enhanced-access>
- Community Health Worker Agencies Partner With Emergency Medical Service Providers To Identify Frequent Callers and Connect Them to Community-Based Services, Leading to Fewer 911 Calls: <https://innovations.ahrq.gov/profiles/community-health-worker-agencies-partner-emergency-medical-service-providers-identify>

Sample Pathways Forms*

Pathways Initial Client Enrollment Form (Please print clearly)

Agency Name: _____

Community Health Worker: _____

Date of Enrollment: _____

Where Client Was Found: _____

Client Information

Full Name: _____

Address: _____

(include street, city, and ZIP code)

Date of Birth: _____ / _____ / _____
(Month) (Day) (Year)

Race (Check all that apply):

☐ American Indian/Alaska Native ☐ Asian ☐ African American/Black
☐ Pacific Islander ☐ Caucasian/White ☐ Other _____

Ethnicity: ☐ Hispanic ☐ Non-Hispanic

Risk Factors (see next page for codes):

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L
☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U

Due Date: _____ / _____ / _____
(Month) (Day) (Year)

☐ Buckeye ☐ Paramount ☐ United Healthcare ☐ Grant Funded

Please fax enrollment form to Pathways Administrator at 419-842-0999.

*Up-to-date and more extensive resources and contact information for technical support are available at the PCHCP Web page at <https://pchcp.rockvilleinstitute.org/>.

Risk Factor Codes for Pathways Client Enrollment

- A. African American
- B. Drug use
- C. Tobacco use
- D. No insurance
- E. Women with previous birth in last 18 months
- F. Late entry into prenatal care (after 13 weeks)
- G. No transportation
- H. Unaware of the pregnancy
- I. Domestic violence
- J. Poor living environment
- K. Poor health of the mother
- L. Noncompliance with medical appointment
- M. Personal problems
- N. Unwanted pregnancy
- O. Mental illness
- P. Homeless
- Q. Less than 18 years old
- R. Unmarried
- S. Low income
- T. Prior poor birth outcomes
- U. Residing in a ZIP Code with a history of a high percentage of low birth weight (43604, 43605, 43606, 43607, 43608, 43610, 43615, 43620)

Sample Checklists

The following are examples of initial checklists that include “trigger questions”—i.e., questions where a “yes” answer indicates that a Pathway should be assigned to the client. The checklist, which is completed with the enrollment form, is critical, since many clients will not volunteer important information (e.g., about spousal abuse, losing health insurance coverage) unless specifically asked.

CHW Pregnancy Checklist

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about.	
		Do you need health insurance for yourself? If yes, determine Healthy Start/HF eligibility. 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	
		Do you need prenatal care? Consider Referral Pathway.	
		Do you need a primary care doctor? If yes, which services do you usually use? 1-ER, 2-Urgent care, 3-Walk-in clinic. Consider Medical Referral Pathway.	
Yes	No	Home and Transportation	Q#
		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative’s car, 4-Other.	
		Do you have problems with providing: 1-Housing (1A - About to be evicted, 1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s).	
Yes	No	Nutrition, Safety, and Habits	Q#
		Do you plan to breastfeed?	
		Are you currently taking prenatal vitamins?	
		Do you smoke cigarettes? 1-Less than half pack per day, 2-Half to whole pack per day, 3-One-two packs per day, 4-More than two packs per day, 5-Interested in decreasing or quitting. Consider Smoking Cessation Pathway. Please indicate any level of reduction in smoking during pregnancy.	
Yes	No	Employment, Training, Financial Support	Q#
		Are you looking for a job? 1-Need help finding a job, 2-Need help with resume, 3-Need training before getting job, 4-Felony record.	
		Are you currently sanctioned? 1-By DJFS, 2-The courts.	
		Do you have enough money each month to pay all of your bills? Consider Money Management Pathway.	

Q# = Qualifier number for question.

Yes	No	Emotional Health and Support	Q#
		Do you feel like you are under stress?	
Yes	No	Current Medical Issues	Q#
		Are you currently being treated for any of the following conditions? 1-Infections, 2-Asthma, 3-Chronic Medical Conditions, 4-Mental Health Problems. Write in type of illness and details.	
		Are you taking any medicines? 1-Prescribed by a doctor, 2-Over-the-counter medications, 3-Herbal or alternative medicines? List all medications currently taking.	
Yes	No	Current Pregnancy	Q#
		Have you been told by a health care provider that you were in preterm labor during this pregnancy? 1-On medication, 2-On bed rest, 3-Hospitalized.	
		Have you had any infections during this pregnancy? 1-Bladder, 2-Kidney, 3-Sexually transmitted disease, 4-Vaginal, 5-Respiratory, 6-Other (document in chart).	
		Did your health care provider tell you that you have any medical problems with this pregnancy? 1-Diabetes/gestational diabetes, 2-More than one baby, 3-High blood pressure/preeclampsia, 4-Anemia, 5-Inadequate weight gain, 6-Problems with the placenta, 7-Leaking amniotic fluid, 8-Rh negative blood type, 9-Other.	
Yes	No	Signs of Illness	Q#
		Have you had any: 1-Contractions, tightening, or pain in the abdomen, 2-Back/flank pain, 3-Spotting/bleeding, 4-Swelling of hand or face (NOT ankles), 5-Severe headaches, 6-blurred vision. Immediate notification of supervisor for any Yes answers.	
		Have you had any: 1-Breathing problems, 2-Pain with urination, 3-Fever or chills, 4-Vaginal discharge, 5-Vomiting, 6-Diarrhea, 7-Excessive tiredness, 8-Other. Immediate notification of supervisor for any Yes answers.	

Q# = Qualifier number for question.

CHW Postpartum Checklist

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about.	
		Do you need health insurance for yourself? If yes, determine Healthy Start/HF eligibility. 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	
		Do you need a primary care doctor? If yes, which services do you usually use? 1-ER, 2-Urgent care, 3-Walk-in clinic. Consider Medical Referral Pathway.	
Yes	No	Home and Transportation	Q#
		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing: 1-Housing (1A - About to be evicted, 1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s).	
Yes	No	Nutrition, Safety, and Habits	Q#
		Are you breastfeeding? 1-Breastfeeding only, 2-Supplementing with formula, 3-Having difficulty with breastfeeding, 4-Breastfeeding going well.	
		Do you need help childproofing your home?	
		Are you taking vitamins?	
		Do you smoke cigarettes? 1-Less than half pack per day, 2-Half to whole pack per day, 3-One-two packs per day, 4-More than two packs per day, 5-Interested in decreasing or quitting. Consider Smoking Cessation Pathway.	
Yes	No	Employment, Training, Financial Support	Q#
		Are you looking for a job? 1-Need help finding a job, 2-Need help with resume, 3-Need training before getting job, 4-Felony record.	
		Are you currently sanctioned? 1-By DJFS, 2-The courts.	
		Do you have enough money each month to pay all of your bills? Consider Money Management Pathway.	

Q# = Qualifier number for question.

Yes	No	Emotional Health and Support	Q#
		Do you feel like you are under stress?	
Yes	No	Current Medical Issues	Q#
		Are you currently being treated for any of the following conditions? 1-Infections, 2-Asthma, 3-Chronic Medical Conditions, 4-Mental Health Problems. Write in type of illness and details.	
		Are you taking any medicines? 1-Prescribed by a doctor, 2-Over-the-counter medications, 3-Herbal or alternative medicines? List all medications currently taking.	
Yes	No	Reproductive Health	Q#
		Are you sexually active now? 1-One partner, 2-Multiple sex partners.	
		Are you currently using a family planning method? 1-Abstinence, 2-Natural FP, 3-Condoms, 4-Diaphragm, 5-Shot, 6-Pill, 7-IUD, 8-Sterilization, 9-Other.	
		Are you having problems making it to your 6-week checkup? 1-If yes, initiate Referral Pathway.	
Yes	No	Signs of Illness	Q#
		Have you had any: 1-Breathing problems, 2-Pain with urination, 3-Fever or chills, 4-Vaginal discharge, 5-Vomiting, 6-Diarrhea, 7-Excessive tiredness, 8-Abdominal pain, 9-Depression, 10-Bleeding longer than 4 weeks? Immediate notification of supervisor for any Yes answers.	

Q# = Qualifier number for question.

CHW Pediatric, Birth-1 Year

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about your baby.	
		Do you need a primary care doctor for your baby? If yes, which services do you most commonly use? 1-ER, 2-Urgent care, 3-Walk-in clinic. Consider Medical Referral Pathway.	
		Do you need health insurance for your child? If yes, determine Healthy Start/HF eligibility. 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	
Yes	No	Home and Transportation	Q#
		Do you need help with transportation for child to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing any of the following for your child: 1-Housing (1A - About to be evicted, 1B - Homeless), 2-Food, 3-Clothing, 4-Utilities, 5-Furniture, 6-Car Seat, 7-Crib. Consider Referral Pathway(s).	
Yes	No	Nutrition, Safety, and Habits	Q#
		Is your baby having any problems with feeding? If yes, document in chart.	
		Is your baby breastfeeding?	
		Do you need a working smoke detector? If yes, 1-smoke detector provided and education given.	
		Does baby sleep on his/her stomach? If yes, give detailed information about importance of putting baby on his/her back to sleep.	
		Do you need child care?	
		Did you go over age-appropriate safety information?	
Yes	No	Development	Q#
		Did you discuss brain development and the importance of talking to, reading to, holding, and interacting with the baby?	
		Did you discuss the importance of strengths-based parenting (encouraging your child)?	
		Has your baby been diagnosed with any developmental delays or problems? If yes, 1-screen completed and normal, 2-screen completed and abnormal. Consider Developmental Referral Pathway.	

Yes	No	Disease Prevention	Q#
		Does anyone in your home smoke? 1-Client, 2-Partner/Spouse, 3-Other. Initiate Smoking Cessation Pathway and discuss effects of secondhand smoke.	
		Is your baby missing any immunizations? Consider Immunization Pathway.	
Yes	No	Current Medical Issues	Q#
		Are you giving your baby any medicines? 1-Prescribed by a doctor, 2-Over-the-counter medications, 3-Herbal or alternative medicines, 4-Prescribed by a doctor but cannot afford.	
		Is your baby currently being treated for: 1-Infections, 2-Asthma, 3-Chronic Medical Conditions. Write in type of illness and details.	
Yes	No	Signs of Illness	Q#
		Is your baby having: 1-Difficulty breathing, 2-Vomiting, 3-Diarrhea, 4-Feeding problems, 5-Fever or chills, 6-Jerking of arms or legs, 7-Change in skin color (blue lips, yellow skin), 8-Other. Consider Sick Child Pathway. Immediate notification of supervisor for any Yes answers.	

Q# = Qualifier number for question.

CHW Adult Male

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about.	
		Do you need a primary care doctor? If yes, which services do you most commonly use? 1-ER, 2-Urgent care, 3-Walk-in clinic. Consider Medical Referral Pathway.	
		Do you need health insurance? If yes, determine Healthy Start/Healthy Family eligibility. 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	
Yes	No	Home and Transportation	Q#
		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing: 1-Housing (1A - About to be evicted, 1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s).	
Yes	No	Nutrition, Safety, and Habits	Q#
		Do you smoke cigarettes? 1-Less than half pack per day, 2-Half to whole pack per day, 3-One-two packs per day, 4-More than two packs per day, 5-Interested in decreasing or quitting. Consider Smoking Cessation Pathway.	
Yes	No	Employment, Training, Financial Support	Q#
		Are you looking for a job? 1-Need help finding a job, 2-Need help with resume, 3-Need training before getting job, 4-Felony record.	
		Are you currently sanctioned? 1-By DJFS, 2-The courts.	
		Do you have enough money each month to pay all of your bills? Consider Money Management Pathway.	
Yes	No	Emotional Health and Support	Q#
		Do you feel like you are under stress?	
Yes	No	Current Medical History	Q#
		Are you currently being treated for any of the following conditions? 1-Infections, 2-Asthma, 3-High Blood Pressure, 4-Other Chronic Medical Conditions, 5-Mental Health Problems. Write in type of illness and details.	
		Are you taking any medicines? 1-Prescribed by a doctor, 2-Over-the-counter medications, 3-Herbal or alternative medicines? List all medications currently taking.	
Yes	No	Reproductive Health	Q#
		Are you sexually active now? 1-One partner, 2-Multiple sex partners.	
		Are you currently using a family planning method? 1-Abstinence, 2-Natural FP, 3-Condoms, 4-Diaphragm, 5-Shot, 6-Pill, 7-IUD, 8-Sterilization, 9-Other.	

Q# = Qualifier number for question.

Glossary of Abbreviations Used in This Report

CCA - Care coordination agency

CCC - Community care coordinator

CCCLN - Community Care Coordination Learning Network

CHAP - Community Health Access Project (Mansfield, OH)

CHIP - Community Health Improvement Plan (Saginaw, MI)

CHW - Community health worker

CMS - Centers for Medicare & Medicaid Services

ED - Emergency department

FTE - Full-time equivalent

HCAN - Health Care Access Now (Cincinnati, OH)

HIPAA - Health Insurance Portability and Accountability Act

HRSA - Health Resources and Services Administration

LBW - Low birth weight

MAPP - Mobilizing for Action through Planning and Partnerships (Saginaw, MI)

MCHP - Muskegon Community Health Project (Muskegon, MI)

NEON - Northeast Oregon Network

PCHCP- Pathways Community HUB Certification Program

QI - Quality improvement

RUAH - Rural and Urban Access to Health (Indianapolis, IN)

RVU - Relative value unit

SIM - State innovation model

Other Resources

- Pathways: Building a Community Outcome Production Model. Mansfield, OH: Community Health Access Project; 2010.
- 20 Predictors of a Successful Project. In Virginia Health Care Foundation Grant Guidelines, pp. 14-15. http://www.vhcf.org/wp-content/uploads/2010/09/Grant-Guidelines-12_2_12.pdf
- Torres GW, Margolin FS. The Collaboration Primer: Proven Strategies, Considerations, and Tools to Get You Started. Health Research and Educational Trust, Chicago, Illinois. This guide provides practical advice on how to get started on a collaborative project; it includes a checklist of key areas required for effective collaboration, along with a detailed list of questions within each area to gauge a community's readiness to work together. <http://www.hret.org/upload/resources/collaboration-primer.pdf>
- Oregon Health Policy Commission. Community-Created Health Care Solutions in Oregon. Prepared by the Local Delivery Systems Model Workgroup and Marian Blankenship. This report reviews the efforts of various communities within Oregon to develop programs to serve at-risk populations and includes a discussion of common lessons learned across sites. <http://www.oregon.gov/oha/OHPR/HPC/docs/2006/surveyofcommunitycreatedhealthcaresolutionsinoregon06.pdf>
- Dees JG. The Meaning of "Social Entrepreneurship." Funded by the Kauffman Foundation. Available at: <https://entrepreneurship.duke.edu/news-item/the-meaning-of-social-entrepreneurship/>



AHRQ Publication No. 15(16)-0070-EF
January 2016

MICHIGAN PUBLIC HEALTH INSTITUTE

Project Title: “Michigan pathways to better health”

Geographic Reach: Michigan

Funding Amount: \$14,145,784

Estimated 3-Year Savings: \$17,498,641

Summary:

The Michigan Public Health Institute (MPHI), in partnership with the Michigan Department of Community Health (MDCH) and local community agencies, implements the Michigan Pathways to Better Health (MPBH) initiative. MPBH supports the CMS goals of better health, better care, and lower cost by assisting beneficiaries to address social service needs and link them to preventative health care services.

MPBH is based on the Pathways Community HUB Model developed by Drs. Sarah and Mark Redding of the Community Health Access Project (CHAP). Community Health Workers (CHWs) are trained and deployed to assist Medicaid and/or Medicare adult beneficiaries with two or more chronic conditions with health and social service needs (such as primary care, housing, food, and transportation). In other states, the model has improved health outcomes and lowered healthcare costs.

Three high-need counties (and selected adjacent counties) are served: Ingham, Muskegon and Saginaw. In each county, a number of organizations work together to implement the model. The Lead Agency is the fiduciary, managing contracts and finances, and providing project oversight. Referrals to the program are made by healthcare providers, social service agencies, CHWs, and other community agencies. The Pathways Community HUB conducts outreach, accepts referrals, determines client eligibility, enrolls clients and assigns clients to a Care Coordination Agency (CCA). The HUB also manages the IT function, provides quality monitoring and improvement, and reports on outcomes to the CCAs and the community. CCAs deploy and manage the CHW workforce, receiving assignments from the HUB. Partners work together to identify, recruit, and train CHWs who live in the community. Before serving clients, CHWs receive training based on a curriculum developed by Dr. Sarah Redding. As CHWs work in the field, they are mentored by experienced CHWs and supervised by a registered nurse and/or social worker. CHWs do not provide direct healthcare or human services, but link clients to these services.

Over three years, MPBH will employ 75 CHWs and serve over 13,000 clients. The project will demonstrate the role of CHWs and Pathways Community HUBs in improving health outcomes and chronic disease management, while lowering healthcare costs by an estimated \$17,498,641.

Pathways Community Care Coordination in Low Birth Weight Prevention

**Sarah Redding, Elizabeth Conrey, Kyle
Porter, John Paulson, Karen Hughes &
Mark Redding**

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Pathways Community Care Coordination in Low Birth Weight Prevention

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Abstract The evidence is limited on the effectiveness of home visiting care coordination in addressing poor birth outcome, including low birth weight (LBW). The Community Health Access Project (CHAP) utilizes community health workers (CHWs) to identify women at risk of having poor birth outcomes, connect them to health and social services, and track each identified health or social issue to a measurable completion. CHWs are trained individuals from the same highest risk communities. The CHAP Pathways Model is used to track each maternal health and social service need to resolution and CHWs are paid based upon outcomes. We evaluated the impact of the CHAP Pathways program on LBW in an urban Ohio community.

Women participating in CHAP and having a live birth in 2001 through 2004 constituted the intervention group. Using birth certificate records, each CHAP birth was matched through propensity score to a control birth from the same census tract and year. Logistic regression was used to examine the association of CHAP participation with LBW while controlling for risk factors for LBW. We identified 115 CHAP clients and 115 control births. Among the intervention group there were seven LBW births (6.1 %) compared with 15 (13.0 %) among non-CHAP clients. The adjusted odds ratio for LBW was 0.35 (95 % confidence interval, 0.12–0.96) among CHAP clients. This study provides evidence that structured community care coordination coupled with tracking and payment for outcomes may reduce LBW birth among high-risk women.

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Introduction

Infant mortality rates are used as an indicator for the health of a community. To prevent infant deaths, mothers need to be healthy, live in a safe environment, and have access to quality care. Reducing low birth weight (LBW) and premature births has been identified as a key strategy to decrease infant mortality [1]. While infant mortality rates in the US have improved over the past decades, they have been stagnant in Ohio. In fact, Ohio ranked second worst for black infant mortality among all states, and fourth worst for overall infant mortality in 2010 [2, 3]. Nationally, despite overall improvements, the 2011 Centers for Disease

Control (CDC) Health Disparities and Inequalities Report showed that large disparities in infant mortality rates persist [4].

Strategies that incorporate the community and directly reach out to women at greatest risk for poor birth outcomes may help communities move towards health equality. Home visiting services are one strategy used to improve birth outcomes and have received increased attention and focus on providing evidence-based services to vulnerable children and families through the Affordable Care Act and the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program [5]. Although home visiting has been shown to be effective in impacting parent behaviors, child cognitive outcomes and maternal life course, the impact on birth outcomes is not as clearly evident [6, 7].

The Community Health Access Project (CHAP) is a nonprofit, community based organization that has been providing care coordination services in Richland County, Ohio since 1999. CHAP utilizes community health workers (CHWs) to identify women at risk of having poor birth outcomes, connect them to health and social services, and track each identified issue to a measurable completion. CHAP's intensive home visiting model uses an accountability tool called Pathways [8, 9]. A Pathway addresses clearly defined actions towards problem resolution and is not considered complete until a measurable outcome is achieved. One participant may be assigned to many different Pathways depending on the problems identified during the initial interview and subsequent home visits [10]. As in most communities, Richland County had geographic areas of health inequality. CHAP used a mapping strategy to determine the census tracts where the unfavorable birth outcomes were disproportionately occurring. The infant mortality rates in Richland County from 2001 to 2005 were 6.7 infant deaths per 1,000 live births for white women, and 17.3 for African-American women [2].

The impact of CHWs has been difficult to document. The Agency for Healthcare Research and Quality (AHRQ) released a report on the outcomes of CHW interventions in 2009, based on 15 different programs, which showed minimal impact on birth outcomes [11]. The CHAP model differs from those programs previously studied in that an accountability measurement tool—Pathways—was used to track each health or social issue a pregnant client faced through to a measurable completion. Additionally, contracts were developed with funders to pay for completed Pathways or outcomes [8, 9].

We evaluated if LBW would be reduced when women at risk of having a LBW infant were provided with intensive home visiting and community based care coordination by CHWs, and Pathways were used to document outcomes. The primary objective was to compare the adjusted odds of LBW between CHAP recipients and non-CHAP recipients.

Secondary objectives were a comparison of adequacy of prenatal care and a cost savings evaluation.

Methods

The CHAP Intervention

Initially, 4 years of birth certificate data were used to identify where the LBW births were occurring in Richland County. Eligibility for participation in CHAP was based on residence in a census tract with high LBW and poverty rates. Seven census tracts comprised the program-eligible communities; two of these census tracts (6 and 7) represented only six percent of the county population, but almost thirty percent of all county LBW births.

The CHWs that provided home visiting services here were hired from the program-eligible communities and trained at the local community college. CHAP developed an extensive CHW-specific training curriculum that was delivered for college credit. CHWs were supervised by either a registered nurse or physician.

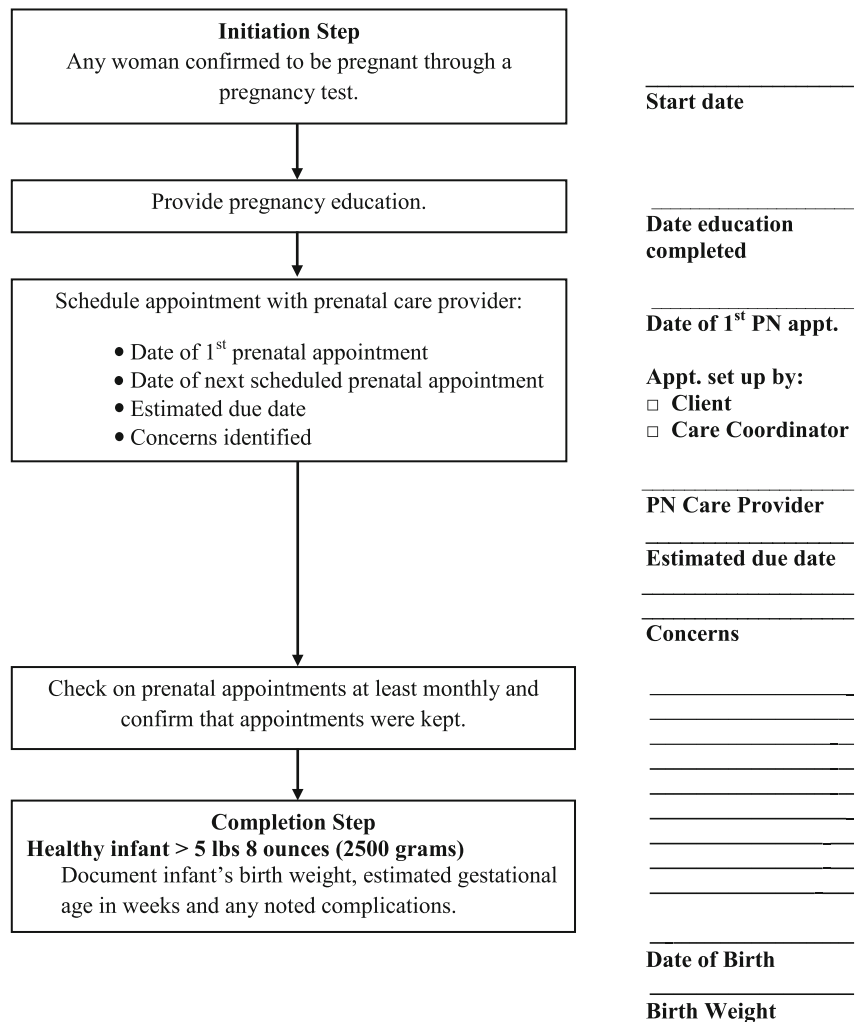
Community health workers (CHWs) functioned as community care coordinators, not providers of direct services, and assisted participants to overcome barriers faced in obtaining necessary health or social services. CHAP developed checklists to be used at each face-to-face home visit encounter between the client and the CHW. A “yes” answer to certain questions triggered the initiation of a defined Pathway. For example, if a client answered “yes” to the question—“Do you need a medical home?”—then a Medical Home Pathway was initiated.

Pathways are tools to track each identified health or social issue through to a measurable completion or outcome; typically confirmation that the client actually received the medical or social service is required. The Medical Home Pathway tracks the participant's connection to an ongoing source of primary care and is not documented as complete until the CHW confirms that the client has a medical home. If the client does not connect with a medical home, then the Pathway is closed as “finished incomplete”; recording that the desired outcome was not achieved. In a similar fashion, the Pregnancy Pathway confirms the connection to and maintenance of prenatal care and is not complete until delivery of a viable normal birth weight infant (Fig. 1). A full description of the model can be found in the Agency for Healthcare Research and Quality “Connecting Those at Risk to Care” publications [8, 9].

Contracts were developed between funders and CHAP with payment tied to specific Pathway benchmarks and Pathway completions. In addition, the CHWs received incentive payments if they completed a designated number

Fig. 1 Pregnancy pathway

Client Name _____ **Date of Birth** _____
Care Coordinator _____



Date & reason finished incomplete: _____

of Pathways. This strategy improved the accuracy of Pathway tracking within the agency, because monitoring was occurring both programmatically and operationally.

Study Population and Data Sources

The study was limited to census tracts in which at least five women received CHAP care coordination and gave birth in the time period 2001–2004 (tracts 3, 4, 5, 6, 7, 8, 10 in Richland County, Ohio). Only singleton births were included in the analysis. CHAP medical records were identified for all women meeting the study criteria and all were successfully matched to an Ohio live birth record. Data on the mother's trimester of enrollment into CHAP and the number of Pathways initiated were extracted from CHAP records. All other study data were from Ohio vital statistics records. Because CHAP clients had more risk

factors for LBW than the general population within each census tract, propensity score matching was performed to select a comparison group with a similar distribution of risk factors from Ohio vital statistics records [12, 13]. The matching process consisted of estimating propensity scores using a logistic regression model, then matching CHAP clients to controls with similar propensity scores. The logistic regression model was fit to the data from eligible mothers, with CHAP client (yes/no) as the dependent variable. Predictors of CHAP enrollment in this model included mother's age (<16, 16–18, >18), race (African-American or white), education (if >18 years old: less than high school, high school graduate, one or more years of college), marital status, census tract, and delivery year. All two-way interactions were tested; none were statistically significant and all were dropped from the model. From this logistic regression model, a score reflecting the probability

of CHAP enrollment was estimated for each eligible mother.

Next, the propensity score was used in an optimal matching algorithm to match each CHAP recipient to one control. Optimal matching is known to be superior to nearest-neighbor or “greedy” matching [14]. Exact matches for county and delivery year were required.

This study was exempted by the Ohio Department of Health Institutional Review Board and conducted in accord with prevailing ethical principles.

Analysis

To evaluate the CHAP program’s impact on LBW, logistic regression models were fit to the LBW outcome. First, the unadjusted LBW odds ratio for CHAP mothers versus non-CHAP mothers was calculated. Then, two multivariate logistic regression models were fit, the primary with only non-modifiable risk factors and a secondary also including factors modifiable by the CHAP program. Multivariable adjustment was also appropriate, as propensity score matching and multivariable adjustment are often used in combination to reduce potential bias [15]. The primary model was “non-modifiable only” because it is less likely to over adjust for the mediating effects of CHAP intervention. Covariates included in the primary model were the propensity score matching variables (mother’s age, race, education, marital status, census tract, and delivery year), previous preterm or LBW delivery and tobacco use during pregnancy (none vs. any throughout pregnancy, thus non-modifiable). Other risk factors considered for inclusion in the secondary model were hypertension (chronic or pregnancy-associated), eclampsia, incompetent cervix, renal disease, and uterine bleeding. However, only hypertension was added to the secondary model because there were very few occurrences of the other conditions.

To evaluate the secondary objective, the CHAP program’s impact on the adequacy of prenatal visits, an ordinal logistic regression model was fit to adequate prenatal visits versus less than adequate prenatal visits based on the Kotelchuck index [16]. A logistic regression model was also fit to first trimester prenatal care versus other than first trimester prenatal care.

The number of LBW births prevented was estimated by subtracting the observed number of LBW deliveries from the number expected in the study population if there had been no CHAP intervention. The calculation required the relative risk, for which the odds ratio was considered a sufficient estimate (unadjusted relative risk = 0.43 and unadjusted odds ratio = 0.47). The estimate was taken from the model adjusting for both hypertension (modifiable) and non-modifiable risk-factors. First, the fraction of LBW births not prevented by CHAP was calculated as

Table 1 Characteristics of community health access project (CHAP) clients, all non-CHAP mothers* identified from birth certificates, and matched controls

	CHAP clients (n = 115)	Matched controls (n = 115)	All non-CHAP* Births (pre-matching)* (n = 1,443)
<i>Age</i>			
<16	16 (13.9 %)	10 (8.7 %)	36 (2.5 %)
16–18	13 (11.3 %)	13 (11.3 %)	122 (8.5 %)
>18	86 (74.8 %)	92 (80.0 %)	1,285 (89.0 %)
<i>Race</i>			
African-American	78 (67.8 %)	80 (69.6 %)	325 (22.5 %)
White	37 (32.2 %)	35 (30.4 %)	1,118 (77.5 %)
<i>Education^a</i>			
Less than HS	28 (32.6 %)	29 (31.5 %)	220 (17.1 %)
High school graduate	36 (41.9 %)	40 (43.5 %)	628 (48.9 %)
Any college	22 (25.6 %)	23 (25.0 %)	436 (34.0 %)
<i>Marital status</i>			
Married	17 (14.8 %)	19 (16.5 %)	661 (45.8 %)
Not married	98 (85.2 %)	96 (83.5 %)	782 (52.2 %)
<i>Census tract</i>			
3	18 (15.7 %)	20 (17.4 %)	110 (7.6 %)
4	8 (7.0 %)	5 (4.4 %)	188 (13.0 %)
5	20 (17.4 %)	17 (14.8 %)	211 (14.6 %)
6	51 (21.7 %)	26 (22.6 %)	226 (15.7 %)
7	31 (27.0 %)	34 (29.6 %)	159 (11.0 %)
8	5 (4.4 %)	6 (5.2 %)	159 (11.0 %)
10	8 (7.0 %)	7 (6.1 %)	390 (27.0 %)
<i>Year of birth</i>			
2001	44 (38.3 %)	44 (38.3 %)	383 (26.5 %)
2002	34 (29.6 %)	34 (29.6 %)	347 (24.1 %)
2003	26 (22.6 %)	26 (22.6 %)	354 (24.5 %)
2004	11 (9.6 %)	11 (9.6 %)	359 (24.9 %)
Tobacco use ^b	45 (39.1 %)	43 (37.4 %)	528 (36.6 %)
Previous preterm or LBW delivery	3 (2.6 %)	2 (1.7 %)	11 (0.8 %)
Hypertension ^c	2 (1.7 %)	4 (3.5 %)	43 (3.0 %)
Eclampsia	2 (1.7 %)	2 (1.7 %)	16 (1.1 %)

* Single birth from census tract 3, 4, 5, 6, 7, 8, or 10

^a Among mothers >18 years of age

^b Defined as any tobacco use during pregnancy reported on birth certificate

^c Chronic or pregnancy-related

$$0.5 \quad OR \times 0.5$$

which is the fraction of study women in the non-CHAP group + CHAP risk relative to non-CHAP (CHAP odds ratio) multiplied by the fraction in the CHAP group. Next,

the observed number of LBW births was divided by this fraction and rounded to the nearest integer. This method was repeated using the lower and upper confidence limits of the odds ratio to obtain the confidence interval. This method is equivalent to multiplying the preventable fraction (1—odds ratio) by the fraction treated, subtracting that from one and multiplying the reciprocal by the number of observed events [17].

To estimate the potential cost savings of the CHAP program, we first estimated the number of LBW births avoided using the method described above. We then estimated the average cost of delivering the CHAP intervention per client by evaluating the cost per Pathway, cost per client, and the amount paid to CHAP per number of pregnant clients within grant and service contracts. The greatest cost of the program was time spent by a CHW to provide care coordination and the amount of time spent by a CHW was primarily driven by trimester of entry into CHAP.

To evaluate cost savings from LBW births averted by CHAP participation, we applied the average excess LBW costs provided in the 2006 Institute of Medicine (IOM) report [18] to our estimate of LBW births averted. Per IOM, in the first year of life, excess medical expenses per LBW infant are \$29,000 and long term costs (including maternal costs, early intervention, special education and lost household and labor market productivity) are \$48,275. The dollars saved per dollar invested was calculated by dividing the total cost savings for one prevented LBW infant by the total cost to serve enough pregnant women with Pathways focused care coordination.

Results

Characteristics of CHAP participants and non-participant controls are summarized in Table 1. The CHAP and non-CHAP groups did not differ significantly ($p < 0.05$) in any of the propensity score variables; the groups are within 2.6 % points for all levels of all propensity score variables with the exception of age, which had a 5.2 % point difference. There were no reported cases of incompetent cervix, uterine bleeding, or renal disease in either group.

A total of 653 Pathways were initiated for the CHAP participants, and all 115 women in this study finished a Pregnancy Pathway (7 were finished incomplete due to LBW). Including the Pregnancy Pathway, CHAP participants had an average of 5.6 Pathways tracked for health and social issues that were identified during the pregnancy and postpartum period. 102 Postpartum and Family Planning Pathways were completed for participants, confirming that 89 % of women attended their postpartum appointments and were using a family planning method. The most

common non-medical Pathways initiated were Employment (52 %), Adult Education (50 %), Smoking Cessation (39 %), Food Security (30 %), and Housing (27 %). Two major barriers that were identified to completion of Pathways included transportation and limited community resources for non-medical issues.

Women enrolled in CHAP care coordination from 2001 through 2004 had significantly lower adjusted odds of experiencing a low-birth weight delivery than non-CHAP women [adjusted odds ratio = 0.36, 95 % CI (0.12, 0.96)] (Table 2). There were no significant differences between the adjusted odds of the adequacy of prenatal visits or the timing of the first prenatal visit between CHAP participants and non-CHAP mothers. This finding is different from other home visiting studies that have shown a dosage effect of prenatal home visiting in at-risk women [19, 20].

Fifty-six percent of clients in this study entered CHAP in the first trimester of pregnancy, 20 % in the second trimester and 24 % in the third trimester. The estimated cost to provide Pathways community care coordination by CHAP in the time period studied averaged \$751 per pregnant client. An estimated 10 LBW births (1 prevented per 11.5 participants) were prevented by participation in the CHAP program from 2001 through 2004 (95 % CI = 1, 17). The cost savings in the first year of life, for each dollar invested in Pathways based community care coordination was \$3.36, and the long term cost savings was \$5.59 for each dollar invested.

Discussion

Pregnant women who participated in CHAP, a structured community-based care coordination program provided by CHWs and coupled with Pathways tracking and payment for outcomes, had a significantly lower probability of delivering a LBW infant. CHAP participants living in the targeted census tracts were at an increased risk for poor birth outcomes compared to the general population—67.8 % African-American, 25.2 % age 18 or younger, 85.2 % unmarried, and 39.1 % tobacco users. A challenge to determining the effectiveness of CHW interventions has been identifying a valid control group that effectively accounts for social determinants and their impact on outcomes [21, 22]. Use of an optimal matching algorithm using propensity scores allowed each CHAP recipient to be matched with one control and supported estimation of the number of LBW births prevented.

Areas of health inequalities—whether related to birth outcomes or chronic diseases—can be easily mapped in communities. This study demonstrates the value of identifying communities with disparately poor health outcomes and directly reaching out to individuals within those

Table 2 Odds ratios and 95 % confidence intervals for pre-term birth

Variable ^a	Unadjusted	Primary model: adjusts for non-modifiable risk-factor covariates ^b	Secondary model: adjusts for all risk-factor covariates ^c
CHAP versus non-CHAP	0.43 (0.16, 1.07)	0.36 (0.12, 0.96)	0.37 (0.12, 1.02)
<i>Age</i>			
<16 versus >18		1.58 (0.40, 6.28)	1.17 (0.42, 6.70)
16–18 versus >18		2.13 (0.66, 6.85)	2.11 (0.65, 6.84)
<i>Race</i>			
African-American versus White		1.13 (0.35, 3.70)	0.93 (0.28, 3.09)
<i>Marital status</i>			
Not married versus married		3.06 (0.87, 10.0)	4.11 (1.06, 15.92)
<i>Previous preterm or LBW delivery</i>			
Previous preterm or LBW delivery		3.06 (0.50, 18.52)	3.44 (0.55, 21.43)
<i>Tobacco use</i>			
Tobacco use		4.76 (1.92, 11.84)	5.09 (2.01, 12.87)
<i>Hypertension</i>			
Hypertension			6.25 (0.91, 43.16)

^a Census tract comparisons excluded

^b Mother's age (<16, 16–18, >18), race (African-American, white), marital status, census tract, previous preterm or LBW delivery, tobacco use at any time during pregnancy (y/n)

^c All from primary model and additionally hypertension (chronic and/or pregnancy-associated)

communities, engaging them through care coordination, connecting them to health and social service interventions, and measuring the results through an accountable measurement tool.

Community health workers perform their work by approaching the whole person—and take into consideration their social, environmental, psychological and health needs in order to impact health outcomes. This is evidenced by the additional Pathways initiated by CHWs in this study for issues related to food security, housing, transportation, employment, and education. These additional Pathways had to be addressed in coordination with preventive health care needs and consideration of the client's priorities of care. Health and social service siloes exist in communities, and individuals living in poverty often face barriers in accessing these critical services. The community-based care coordinator serves an important role on the healthcare team because of their trusted relationship with the client. They are able to identify key non-medical issues and are skilled in navigating the fragmented health and social service systems.

Some social determinants of health can be addressed at the population level—such as safe drinking water, smoking in public places, elimination of food deserts and safe sidewalks—but individually addressable social determinants also represent a significant intervention opportunity. Housing, education, employment, food security, and many other critical issues can be identified and addressed with effective and accountable care coordination to improve individual progress, reduce stress, and improve health for those individuals at greatest risk.

The CHAP Pathways Model provided the measurement tool to monitor successful connections to both health and social services. Pathways were developed as the pay-for-performance model for CHAP's contracts and were an

important part of the care plan, documentation, and reporting in this study.

There were several limitations in this study. First, although data was collected over a 4-year time period, the total number of women in the CHAP intervention group was small, reflecting the size of program enrollment within the targeted census tracts over the time period studied. A larger sample size would have provided more precise estimates of odds ratios and more power to detect significant differences in all models. Second, there was no random assignment to CHAP intervention or control. Although we attempted to control for bias as much as possible through propensity score matching and covariate adjustment, some selection bias may remain. Additional evaluations, with randomized group assignments, larger numbers of participants, and in different locations are needed to replicate and confirm our findings. Third, the evaluation was limited by the vital statistics records on what cofounders and outcomes we could study. For example, prenatal smoking is potentially modifiable through CHAP with a Pathway that included specific education and support to help patients reduce or quit smoking; however smoking status by trimester was not standard documentation on the Ohio birth certificate. Future work should control for first trimester smoking status and other factors related to low birth weight. Finally, the evaluation was limited by the quality of birth certificate data, which is shown to generally be specific, but not sensitive, as a source of maternal complications [23, 24]. In contrast, birth weight data from the birth certificate has been shown to be more reliable [25].

CHAP may reduce LBW delivery among high risk women through multiple mechanisms. As there were no differences in prenatal care initiation between groups, improvement in early prenatal care does not appear to be

one, and this finding is consistent with other studies [26]. However, factors besides medical care are known to impact health outcomes and models of care that address both medical and social factors show promise in reducing LBW [27–30].

This study represents our initial experience with using the Pathways Model to quantify and track care coordination provided to high risk pregnant women. Since the model's inception, effort has been placed on refining the measurement and tracking process of the Pathways. It was not possible in this study to identify which Pathways specifically led to improved birth outcomes. Newer technology for Pathway tracking has remedied that and can support future research. CHAP participants were initially identified as being at increased risk by where they lived (identified census tracts), but now we have the capability to monitor risk throughout the care coordination period. Our preliminary study can be incorporated into the larger movement to create a national home visiting research network that works to promote the translation of research findings into policy and practice [31].

Starting from an American Academy of Pediatrics—Community Access to Child Health (CATCH) Grant in 2001—the Pathways Model was further developed to embrace multiple care coordination agencies within a service region. The Pathways Community HUB Model is designed to identify the most at-risk individuals in a community, connect them to evidence-based interventions, and measure the results [8, 10]. The HUB Model was developed and piloted by CHAP in 2004 in Richland County, Ohio based on the success of these initial findings. The model was recognized by the Agency for Healthcare Research and Quality (AHRQ) Innovations Exchange and a learning network was established to further study the model [8, 9]. The Pathways Community HUB does not directly provide care coordination services, but subcontracts with care coordination agencies serving vulnerable populations in the community. The community HUB works to coordinate and track progress for all of the agencies within a community providing care coordination. The HUB serves to register and collect focused data on each client served using common Pathways to track quality and outcomes. This model eliminates duplication of care coordination and provides standard quality measurements, allowing care coordination agencies to focus on the most vulnerable community members and strive towards improving overall health outcomes. The Kresge Foundation has recently supported an initiative to develop a standard approach for certification of communities utilizing the Pathways Community HUB Model to assure consistent quality of care coordination.

As stated by CDC, health disparities “must be addressed with intervention strategies related to both health and social

programs” [1]. This study shows that structured community-based care coordination coupled with standardized and accountable tracking tools and payment for outcomes may reduce LBW delivery among high-risk pregnant women. The Pathways Model allows for targeting the diversity of needs across racial, ethnic and other sociodemographic distinctions. Identifying communities with disparately poor health outcomes and ensuring the connection of residents to health and social programs can potentially reduce persistent inequalities in health.

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Altarum Institute

We who serve disabled and frail elders see the effort of CMMI and CMS to explore providing social supports as a very important policy direction toward improved health, and not only for youth, but for dependent persons in adulthood. Not all of us can take care of our daily needs in adulthood; indeed, most of us will have a period of a few years at the end of life when illness and frailty make us dependent again. The supportive services that CMS tests for children should also be explored for adults who must rely upon others for daily self-care.

The discipline of pediatrics was established in the late 19th century as acknowledgement that kids aren't just small adults because they require a different approach to their care on multiple levels. As acknowledged in the RFI the care of vulnerable children often requires access to a variety of social services and supports "critical for healthy growth and development" and "inadequate or inconsistent access" often results in adverse physical and psychological impacts over their lifetime. Likewise, older adults with advanced illness, cognitive impairment or physical frailty and other adults with physical and/or behavioral health disabilities are similarly vulnerable and in need of a care model that integrates needed social services and supports into their care. Failure to do so often results in much suffering, early death, and a much higher total cost of care.

Our team has been working for many years to develop a fully workable and efficient model of care for frail and disabled elders, now called MediCaring Communities (<https://www.amazon.com/dp/1481266918>). All of the evidence available points to the urgent need to enhance supportive services in the U.S. Many studies show that this strategy improves care and reduces costs, and comparison with other countries just underscores the need to balance and integrate medical and social services for this population.

Communities differ widely in the availability of needed services. In the U.S., no process is in place for a geographic community to monitor supply and demand or obstacles to delivery and quality of provided services. Alongside CMS work for pediatrics, we encourage CMS to assure that this critical element is addressed in considered models for frail, disabled, or ill adults. At least some demonstration projects for adults must engage in community-building and ongoing monitoring of the well-being of the geographic community. CMS should encourage exploration of geographic service provision, perhaps on the PACE model.

CMS should encourage and evaluate models for adults where health care providers and social service providers have partnered in providing integrated service delivery, perhaps starting with PACE (Question 2 on Page 4). CMS should encourage programs that are proving to be successful in comprehensive care and care planning to enroll persons who are not yet Medicaid-eligible, thus providing good care to all in need in the community rather than only to poor people. Working with those who still have income and assets also will slow spend-down to poverty and Medicaid, and that goal should be explicit and monitored. The federal efforts in information technology for health care should include supportive services so that beneficiaries have a consolidated record to enhance their care planning and service delivery and so that entities established to help improve system function have useful records with which to work (Question 6 on page 4).

We are especially hopeful that CMS/CMMI staff concerned with adults will consider carefully the remarkable possibilities that creative answers to Question 2 on page 5 offer – "How could health care

providers be encouraged to provide collaborative services with health-related social service providers for a designated [frail or disabled adult] population's health and social needs?" We would be glad to help and to help bring other concerned organizations into the discussion. Our MediCaring Communities model would work well as a response, and we hope that CMS/CMMI will allow implementation in some pilot communities in the coming few years.

One element that deserves more development is the influence of the geographic community on supportive services. For children, no one can really do lead abatement in apartment 201 because the children there are on Medicaid and not do lead abatement on apartment 202 because that family has just a little more income and is not relying on Medicaid for medical care coverage. The same is true for reduction of allergens, child abuse, safety of playgrounds, and a large number of other elements of the child's environment. Community matters for children, and improvements have to be able to improve the lot of all children, not just those with particular insurance cards. The same is true of dependent elders. Whether a disabled elderly person can continue to live in his or her home often depends on issues like whether the housing stock of their community has required bathrooms to be wheelchair accessible, and whether the transportation system provides adapted transportation, and whether meal delivery at home is available without a long wait. These, and the availability of a suitably trained workforce, again point to the centrality of geographic community as an important element of system design. CMS/CMMI would do well to develop insight and promising practices regarding communities being able to monitor and influence their own systems.

We applaud the effort of CMS/CMMI to take social environment and supportive services seriously and to begin to allow Medicaid/CHIP programs to work on these issues. We also encourage CMS/CMMI to extend the same spirit of learning and innovation to elders and disabled adults.



Altarum
Institute.pdf

July 17, 2018

To:

Re: RFI seeking input on improving pediatric care

From: Joanne Lynn, Director, Center for Elder Care and Advanced Illness, Altarum Institute

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Altarum Institute-Michigan Caries Prevention Program

Good evening,

We are pleased to submit the attached response to the Pediatric Care Improvement Request for Information.

Please feel free to contact me if you need any further information.

Thank you,



Altarum
Institute-Michigan C

Transforming Pediatric Care Delivery and Care Coordination

Leveraging Lessons Learned from Innovations in Children's Health Care Delivery

Response to Center for Medicare and
Medicaid Innovation Request for Information
on Pediatric Alternative Payment Model
Concepts

April 6, 2017

Altarum Institute and the Pediatric Care Delivery Experience

Altarum Institute, a Michigan-based nonprofit research and innovation organization, is delighted to provide a response to the Request for Information on Pediatric Alternative Payment Model Concepts released by the Center for Medicare and Medicaid Innovation. Our mission to serve the public good by solving complex systems problems to improve human health – integrating research, technology, analysis, and consulting skills – has led us to the forefront of children’s health initiatives, in particular those that focus on improving the health of children and youth covered by Medicaid and Children’s Health Insurance Program (CHIP) through state-driven integration of health care and health-related social services. For more than 25 years, Altarum has designed, conducted, and evaluated children’s health initiatives at the organizational, community, state, and federal levels. Our staff are sought for their ability to create and implement strategies for timely and appropriate delivery of community-based, cost-effective, and integrated care- with an emphasis on children with or at-risk for developmental, social, emotional, or behavioral health challenges, intellectual and physical developmental delays, and those with complex and/or chronic health conditions. Our programs in children’s healthcare delivery cover a breadth of critical topic areas including childhood obesity prevention, improved healthcare for children in the foster care system, increasing food security and access to healthy foods for at-risk children, and development of Children’s Health Insurance Program Reauthorization Act (CHIPRA) Quality Measures. For more about Altarum’s pediatric care initiatives, please see the *About Us* section at the end of this document.

As leaders in the children’s healthcare delivery arena, we understand the need for the development of a new pediatric health care payment and service delivery models, understand firsthand the barriers to integration and collaboration between providers, and are able to develop effective strategies to overcome such barriers. In recent years, Altarum has become a significant thought leader in the field of testing innovative payment and service delivery models to reduce program costs and improve quality of care for Medicare, Medicaid, and CHIP beneficiaries- in particular, in the children’s oral health arena.

Through Altarum’s Smile Connect® program (formerly known as the Michigan Caries Prevention Program), Altarum has experienced firsthand what it takes to transform pediatric care delivery and coordination at a large scale. SmileConnect®’s integrated care model places a high emphasis on multidisciplinary service delivery, with a specific focus on the unique needs of children covered by Medicaid and CHIP. The model sheds light on the critical elements necessary to promote value-based preventive care in this population, and to create a system that enables coordinated care between physical

Altarum’s Lessons Learned

Altarum has extensive experience in tackling the complex systems problems to improve health, and in

2014 developed a comprehensive solution to transform the oral healthcare delivery system for publicly insured children in Michigan.

SmileConnect® was developed with support from the Center for Medicare and Medicaid Innovation, and for the past three years, has worked to improve care delivery for children in medical, dental, as well as community and social service settings.

Through SmileConnect® and other pediatric-focused healthcare innovation efforts, Altarum learned firsthand what it takes to transform pediatric care delivery and coordination at a large scale:

- Payment models alone are not enough to elicit sustained provider behavior change
- Robust technical assistance and continuing medical education have been instrumental in creating sustained behavior change among medical providers in Michigan
- Investment in technology infrastructure was necessary to enable real-time collaboration and true integration of services
- Leveraging social service providers in referring patients to appropriate care was very well received

These and other lessons learned are described in the following response.

and health-related social service providers. While focused on oral health, the model depends on coordinated partnerships between child- and youth-focused healthcare and health related social service providers. Thus, lessons learned under the SmileConnect® program can be generalized to add value to the discussion of a large-scale effort to create an integrated and coordinated pediatric care delivery model, especially since complex system-level issues, similar to those seen in oral health, are preventing the widespread integration of health-related social services into health care delivery. For example, primary care providers nationwide recognize the unmet social needs of their patients but lack the training, tools, and technology infrastructure to address issues like food insecurity, nutrition, housing, and transportation.

The SmileConnect® Program

The **SmileConnect®** Program was created because Altarum recognized the profound need for children's oral healthcare reform. Tooth decay is the most common chronic disease affecting children today, with children from the lowest socioeconomic groups experiencing issues at significantly higher rates and at younger ages. It is five times more common than asthma, yet is largely preventable¹. Between 41% and 55% of children ages 2–11 years suffer from tooth decay, and more than 34% of this decay is left untreated, a fact compounded by limited access to dental care.² Despite having oral health coverage, less than 40% of Medicaid-eligible children had a dental visit in 2013³. Consequences of untreated decay in children can affect development and quality of life, and can eventually develop into detrimental and costly long-term effects. Thus, it is critical that children across the socioeconomic spectrum receive early access to oral health care and prevention, allowing each child the opportunity to eat, speak, learn, and play without pain. However, to date, little progress has been made in reducing children's tooth decay, particularly for publicly insured children facing health disparities.

Unfortunately, complex systems-level challenges continue to pose a significant burden on reducing dental caries in children, particularly within low income populations. There is a critical need for better collaboration and care coordination between medical, dental, and other health and social service providers, however, both medical and dental providers face several challenges that inhibit their ability to provide comprehensive, appropriate oral healthcare delivery. Primary care providers nationwide receive limited to no training in oral health prevention, and often are thus underutilized as early initiators of preventive oral health care during early well-child visits. Meanwhile, low reimbursement rates for dental providers create a chronic shortage of providers willing to see publicly insured patients. Finally, with silos created by insufficient technology infrastructure to support communication, a lack of transparency and interoperability of patient records systems, and lacking referral resources, providers continue to struggle with coordinating children's oral health care between medical and dental settings, which further impacts their ability to provide comprehensive and optimal care.

In 2014, Altarum became one of a small number of grantees across the nation to receive a Round 2 Health Care Innovation Award (HCIA) from the Center for Medicare and Medicaid Innovation. This award

and delivery of oral healthcare in both the medical and dental settings and ensure that children receive early preventive care and establish a dental home in order to reduce adverse outcomes associated with untreated dental caries. For the past three years, SmileConnect® has worked to bring sustained, system-wide improvement to children's oral health in Michigan. In collaboration with Delta Dental of Michigan, the University of Michigan School of Dentistry, and the Michigan Department of Health and Human Services,

¹ Vargas CM, Crall JJ, Schneider DA. Sociodemographic distribution of pediatric dental caries: NHANES III, 1988–1994. *J Am Dent Assoc.* 1998;129:1229–38.

² Pew Charitable Trusts. *A Costly Dental Destination*. Pew Children's Dental Campaign Issue Brief, February, 2012.

³ Centers for Medicaid & Medicare Services (CMS). Early Periodic Screening Diagnosis and Treatment Form CMS-416, Michigan 1999–2011. <http://www.medicaid.gov/Medicaid-CHIP-ProgramInformation/By-Topics/Benefits/Early-and-Periodic-Screening-Diagnostic-and-Treatment.html>

the program has four core program components, which all work to increase the number of low-income children who receive preventive dental services, reduce the proportion of low-income children with tooth decay, and reduce the total cost of care among 1 million publicly insured children.

In just under three years, SmileConnect® has generated impressive results. Our **SmileConnect® Continuing Medical Education (CME)** program has trained over 1,500 providers to provide oral health screenings, fluoride varnish applications (recommended by the American Academy of Pediatrics (AAP) as an effective and low-cost caries prevention measure), and referrals to dental homes during well-child visits, where children are more likely to be seen at an early age before seeing a dentist. In the practices we've trained, 70-93% of children are now receiving appropriate care, up from just 4-13% previously. **SmileConnect® Clinical** has developed a first-of-its-kind dental monitoring system, which uses innovative technology to promote electronically documented oral healthcare and care coordination between medical and dental providers. **SmileConnect® Reporting** has created a Meaningful Use Specialized Registry that houses valuable information related to a child's access to and utilization of preventive oral health services in both the medical and dental environments, with over 1,500 medical providers already attesting to its use. Finally, recognizing the need for options for children unable to access clinical settings, **SmileConnect® Community**, has pioneered a novel social networking solution, which has delivered oral health services and resources to more than 10,000 children in their classrooms that would otherwise have been left without care, and has integrated oral health education and dental referrals into Detroit Women, Infants, and Children (WIC) clinics serving an average of 23,000 children monthly.

In the following sections, we provide additional information on the SmileConnect® program and in response to the Center for Medicare and Medicaid Innovation's request for information on pediatric alternative payment model concepts, select lessons learned from the SmileConnect® program have been detailed in Sections 1.0-5.0.

1.0 Payment models alone are not enough to elicit sustained provider behavior change

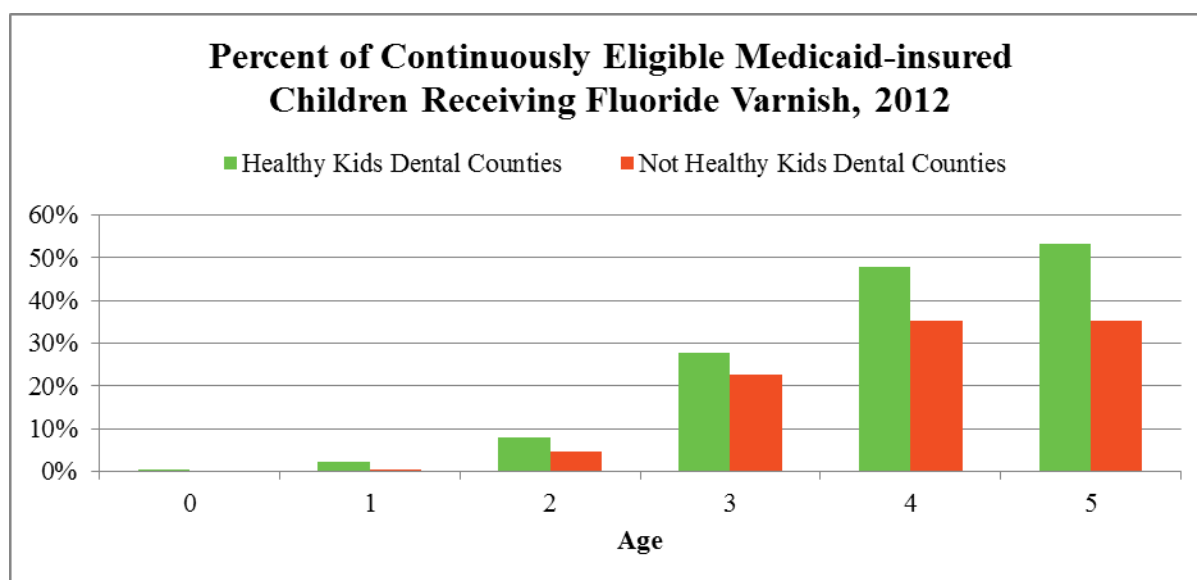
Section II. Question 4: Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished?

Section II. Question 7: What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

In the current healthcare environment, and transition of many health systems and organizations from volume-based care to value-based care, payment models are garnering more attention than ever. Recent innovative programs such as Medicaid Health Homes, the Medicaid Innovation accelerator Program, the State Innovation Models Initiative, and the Quality Payment Program have demonstrated a continued investment in approaches to improving the quality and reducing the cost of care. Altarum has engaged heavily in assisting providers in readying for these coming changes, as the state's ONC-funded Regional Extension Center (REC), the Michigan and Ohio lead for the Great Lakes Practice Transformation Network (PTN), and as the lead of the 7 state QPP support entity, covering the entirety of CMS Region 5 (plus Kentucky.) While there have been many lessons learned around the power of payment innovation through these direct-to-provider technical assistance programs, Altarum's work in children's oral health has demonstrated that payment model work alone is often not enough to elicit the type of behavior change necessary to impact clinician behavior long-term.

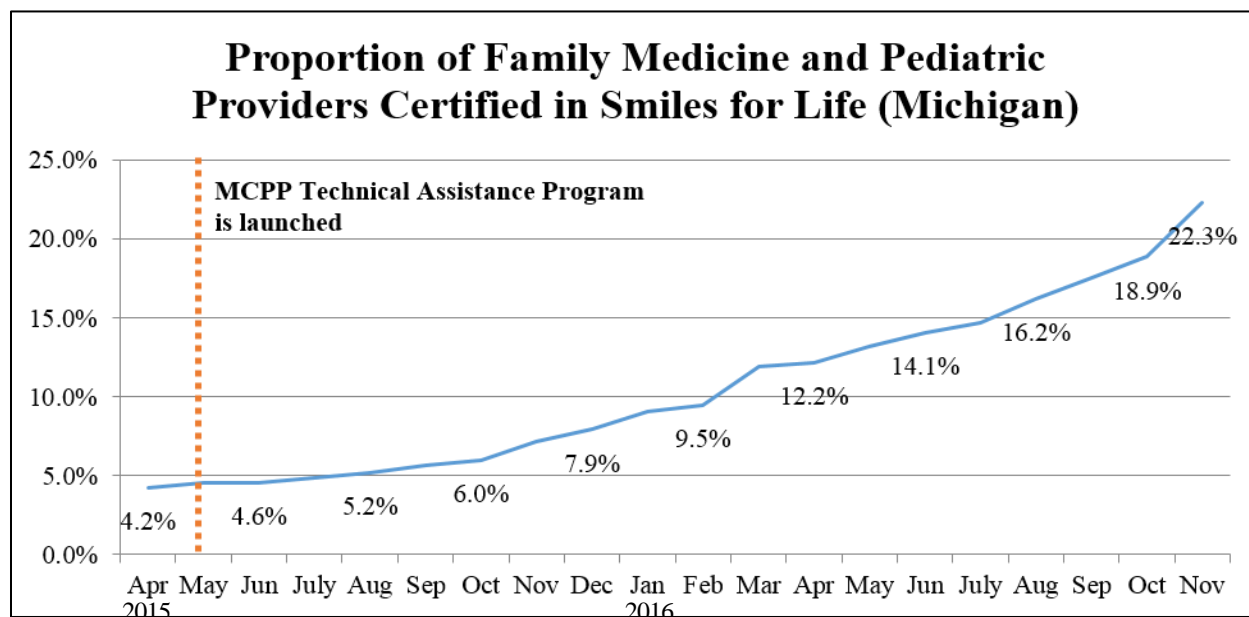
Michigan has a unique environment around children's oral health access, with previous payment model innovations paving the way for SmileConnect® to address other systemic-level challenges and barriers to access. The Healthy Kids Dental payment model, based on a Medicaid waiver for the pediatric Medicaid dental benefit in Michigan, was expanded in phases statewide to Michigan's 83 counties from 2000-2016. Enrollment into the Healthy Kids Dental program is automatic with a child's enrollment in Medicaid or CHIP (In Michigan, this program is called MICHild). With higher reimbursements for dentists, and Delta Dental managing the administrative interaction with dental practices, the program significantly increased participation among dentists in Medicaid (Figure 1), and thus significantly impacted utilization for children less than 21 years of age. However, despite the success in engaging dentists to participate in Medicaid, it did not have much of an effect on utilization among children younger than age 3. This suggests that additional interventions may be needed to increase awareness among parents and health care providers of the importance of having children see a dentist before age 3.

Figure 1. Impact of Healthy Kids Dental Program on Dental Utilization by Age



Among Michigan medical providers, for years there has been a reimbursement available for preventive oral health service provision during well-child visits. Yet, prior to 2015, the rates for these services being provided, as well as rates of physicians billing for these services, has been historically low (e.g., only 3% of primary care providers in Michigan were billing for these services in 2015). SmileConnect®, then known as the Michigan Caries Prevention Program (MCP) (www.MITeeth.org), launched its primary care provider training in 2015, which has had a significant impact on these rates, bringing this number to approximately 22% of primary care providers in the state providing these services and billing for them (See Figure 2 below). The effectiveness of this comprehensive and high touch approach as opposed to just offering payment alone underscores the need for training and technical assistance to increase providers' comfort level with implementing new services or changes to their workflow.

Figure 2. Michigan Medical Providers Eligible to Bill for Preventive Oral Health Services



2.0 Robust technical assistance and continuing medical education have been instrumental in creating sustained behavior change among medical providers in Michigan

Section I. Question 1: What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

Section II. Question 9: What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

Across the country, states struggle to close the gap related to current clinical care and compliance with Medicaid policy guidelines. All too often primary care providers are faced with shifting policies that lack available resources to be truly compliant in order to ensure standards of care are met. The foundation of the SmileConnect® CME initiative started as a result of Michigan's primary care oral health landscape missing the mark in relation to Medicaid care guidelines that were rolled out in 2008, that required primary care providers to provide preventive oral health services during well-child visits⁴. Then in 2012, in order to bill Medicaid for providing these services, a special "Smiles for Life" certification was required, which is a national oral health curriculum endorsed by the American Academy of Pediatrics.⁵ Further, most providers are not aware they can bill most insurers for oral health screenings and fluoride varnish applications. As of

⁴ Michigan Department of Community Health. EPSDT Periodicity Schedule of Age One Oral Health Screening; Fluoride Varnish Program for Infants and Children up to Age Three; Referrals to Dentists. Medical Services Administration. 2008; MSA 08-50.

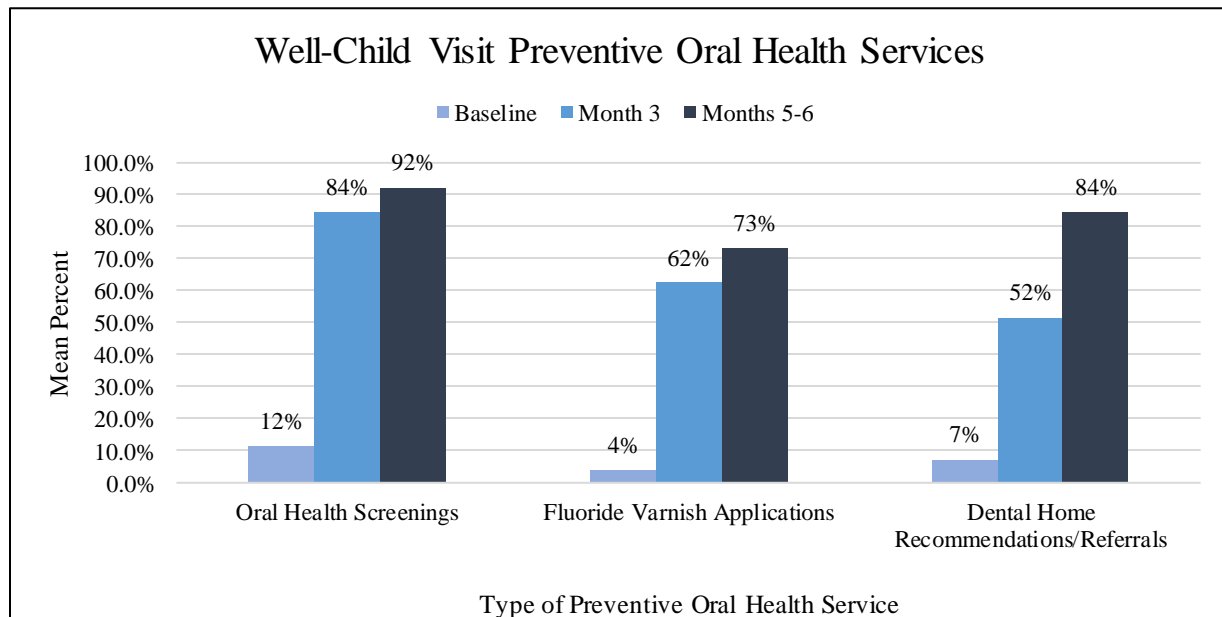
⁵ Michigan Department of Community Health. Online Oral Health Training for Medical Providers. 2012; MSA 12-16.

May 2015, approximately 145 primary care providers in Michigan were Smiles for Life certified, representing less than 4% of eligible primary care providers in the state providing preventive oral health services during well-child visits, despite policies being implemented and reimbursement being made available (see Figure 2 above). As a result, an extremely low percentage of children participating in Medicaid/MiChild received preventive oral health services in the primary care setting.

Achieving sustainable provider behavior change through improving quality performance depends on available incentives that act as a catalyst for change and having the right level of technical assistance resources. The SmileConnect® initiative's direct-to-provider technical assistance program to primary care providers included a 1-hour in-person or remote training with the whole clinic to learn how to incorporate pediatric preventive oral health services (i.e., fluoride varnish applications, oral health screenings, and dental home recommendations/referrals) during well-child visits in alignment with the American Academy of Pediatrics (AAP) Bright Future periodicity schedule recommendations and Michigan's Medicaid policies.

As an incentive for participation, approval was obtained to provide 30-50 Continuing Medical Education (CME) credits and 20-25 Maintenance of Certification (MOC) Part IV credits for eligible providers who successfully completed two linked improvement cycles of Plan-Do-Study-Act over a period of 7 months. The MOC credits help providers fulfill board certification requirements, a four-part framework to measure core competencies among medical providers. The Part IV component is for a quality improvement activity, which can be challenging for practices to self-direct in completing this. The SmileConnect® CME program's inclusion of MOC credits creates a more desirable program in helping meet provider's needs for board certification while providing them with hands-on support through the technical assistance (TA) provided. The design of the TA allowed the program to assist and assess the adoption rates of the interventions at the local clinic level. TA was provided by trained Implementation Specialists who were available on a regular basis to review the clinic's implementation performance, aid the clinic in overcoming barriers and challenges, and assist with identifying optimal clinical workflow solutions. Preliminary results show that among the clinics that have completed the SmileConnect® CME and MOC Part IV activity, rates of preventive oral health services provided during 9-and 12-month well-child visits significantly improved at a rate of 70-90% from the pre-training baseline period. Most importantly, implementation was sustained during the activity period.

Figure 3. Clinician Behavior Change During 9-And 12-Month Well-Child Visits



Medicaid policy becomes effective and impactful once active compliance is achieved. Today, directly due to SmileConnect®'s ability to create a positive shift among 1,500 primary care providers and 1,550 clinical support staff to adopt Michigan's Medicaid oral health policy, more than 500,000 children now have access to early preventive oral health care services. Increasing impact of and compliance with the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) child health component of Medicaid-based policies through technical assistance and continuing medical education incentives should be viewed as a necessary fundamental requirement for future policy changes. Without TA and continuing medical education being provided as available resources, Michigan's original policy regarding the integration of preventive oral health services into primary care from 2008 to 2014, had negligible impact. In under three years, the MCPP has achieved better care, better health, and ultimately lower long-term costs for children. The need for technical assistance does not completely diminish after completing the 7-month quality improvement activity; on the contrary, providers need ongoing support, at a lower level than what was needed initially, to continue sustaining alignment of care with care requirements.

The value of early prevention is readily proven by increasing access to services at a younger age. Children who encounter decreased access to preventive care are at a heightened risk of experiencing dental caries, the most common chronic disease among children.^{6,7} Based on the American Academy of Pediatrics (AAP) Bright Futures guidelines, children will often see their pediatrician eleven times by age 2 years.⁸ Findings from Marinho, Worthington, Walsh, and Clarkson (2013), found that six to nine children in every ten are affected by dental caries, and the provision of preventive oral health services, especially fluoride varnish in the primary care setting during well-child visits is increasingly critical to preventing dental caries.

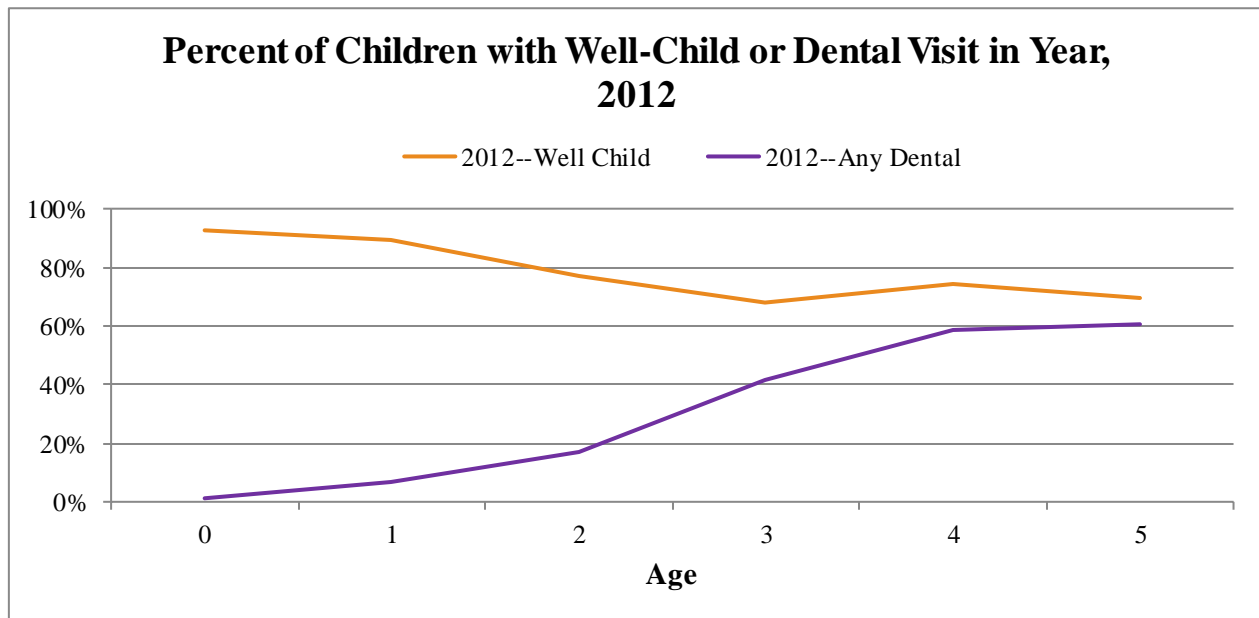
⁶ Lewis C, Lynch H, Richardson L. Fluoride Varnish Use in Primary Care: What Do Providers Think? Pediatrics. 2005; 115: e69-e76.

⁷ National Academy for State Health Policy. The Role of Physicians in Children's Oral Health. 2008. <http://nashp.org/sites/default/files/Fluoride%20Varnish%20Monitor.pdf>. Accessed March 27, 2017.

⁸ American Academy of Pediatrics Bright Futures guidelines. Recommendations for Preventive Pediatric Health Care. 2017. https://www.aap.org/en-us/Documents/periodicity_schedule.pdf. Accessed March 27, 2017.

Preventive interventions within the first year of life are critical, and can alter the trajectory of dental disease risk through parental/legal guardian education and enforcing risk reducing behaviors and habits. By providing primary care providers with the resources (e.g., adequate payment), education through CME, and effective TA, children will have increased access to preventive oral health services where they are seen most – during well-child visits.

Figure 4. Comparison of Michigan Medicaid Beneficiaries that have a Medical Well-Child Visit Versus a Dental Visit



Based the review of ten existing research trials carried out by the Cochrane Oral Health Group, fluoride varnish applications effectively impacted the reduction of dental caries, with evidence suggesting a 37% reduction in decayed, missing and filled tooth surfaces.⁹ Well-child visits present an important opportunity to safeguard young children from dental disease, ultimately lowering overall care costs, through preventive oral health service provision and coordinated medical and dental care team collaboration.

Skills gained from participating in technical assistance tied with medical education incentives can be utilized to make improvements across many other care practices. Models of medical education that are built upon a quality improvement framework that encompasses cycles of PDSA show that beyond the effect on behavior change, there are lasting organizational improvements.¹⁰ Shojania, Silver, and Levinson (2012) reinforced the fact that in order to achieve optimal outcomes, quality improvement that incorporates data-guided improvement and facilitates continuous performance data review, helps inform solutions and thus aiding in sustainment of behavior change.

⁹ Marinho VCC, Worthington HV, Walsh T, Clarkson JE. Fluoride varnishes for preventing dental caries in children and adolescents. The Cochrane database of systematic reviews. 2013:CD002279.

¹⁰ Shojania KG, Silver I, Levinson W. Continuing medical education and quality improvement: a match made in heaven? Annals of internal medicine. 2012;156:305.

3.0 Investment in technology infrastructure is necessary to enable real-time collaboration and true integration of services

Section I. Question 3: What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

Section II. Question 3: What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

Care coordination is a valuable component to improving the quality of care, reducing duplication of care, and increasing patient satisfaction¹¹. Comprehensive treatment of pediatric chronic care conditions often requires communication between providers across care settings. The ability to convey information about provided care, the patient's treatment plan, and refer to appropriate care as needed is key to seamless coordination and optimal use of resources. There are often challenges with communication and efficient use of resources when coordinating between multiple state agencies and provider types. Access to incomplete information results in duplication of efforts and can delay care provision for children. (i.e., fluoride varnish information between medical and dental, connecting care coordinators to up to date dental referral resources). Technology presents an opportunity to connect providers in different settings, as well as care teams in rural and underserved communities to resources to which they don't have access. Developing policies around standardizing the way providers communicate with specialists around common pediatric conditions such as dental decay, asthma, diabetes, etc., will help promote better quality of care.

Early Childhood Caries (ECC), is an example of a condition that can be avoided by bringing together all members of the care team, the medical and dental providers as well as other health related providers, including WIC staff, care coordinators, and school based clinics. Care coordination is a key component to effectively improving oral health behaviors and reducing the burden of oral health disease in children. As primary care providers become more involved in the provision of preventive oral health services, counseling patients and identifying behavior risks, and referring patients to appropriate dental care, supporting communication between these providers will play a significant role in reducing duplicative care, increasing timely provision of restorative care, and improving quality of care.

Technology presents a systems-level solution that serves as an enabler to reduce barriers to quality care and is scalable to other states. As part of an initiative to reduce the burden of oral health disease in Michigan, Altarum built and launched a statewide oral health monitoring system, SmileConnect® Clinical. This innovative system allows for documentation and tracking of the provision of oral health services, facilitates expedient referral between the medical and dental provider communities, and gathers population-level information on oral health measures and utilization, therefore enabling effective patient tracking and quality monitoring. SmileConnect® Reporting, a database registry of SmileConnect® Clinical, facilitates a deeper understanding of the scope and trends of problems in care and care delivery, facilitates behavior

¹¹ Care Coordination. AHRQ--Agency for Healthcare Research and Quality: Advancing Excellence in Health Care. <https://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/index.html>. Published May 1, 2015. Accessed March 27, 2017.

change in providers, allows for timely and accurate measurement of care and gaps in care coordination, and promotes accountability and informed reporting on program progress and goal achievement. The SmileConnect® Clinical application was built leveraging a modular framework, allowing for easier integration with other systems and adoption by other users. In order to expand its impact beyond the pediatric population in Michigan, the SmileConnect® Clinical team is engaged in discussions with state public health agencies, including Child Welfare and WIC departments, to broaden use of SmileConnect® Clinical as a referral and coordination resource for special populations and is currently working to integrate the application with 10 other electronic health records to help further incent its use in clinical settings.

SmileConnect® Community presents another technology solution that focuses on providing effective volunteer care in the community. Altarum built a social-networking web application (www.SmileConnect.org) that leverages philanthropic donations of dental supplies and the existing skilled workforce to fulfill the need for oral health education and preventive services among children in their local communities. Dental providers, as well as dental and dental hygiene students, often volunteer and are valuable resources for education and preventive services. To streamline the process of making these local connections, SmileConnect® Community allows teachers and community organizations to easily post requests for oral health resources and services, which are made available to those who can directly connect with them to help meet their need.

There is a potential for additional web applications that encourage coordination across traditional and non-traditional care settings. The development of PediaMAP (Pediatric Monitoring, Assessment, and Prevention), a third party application, has received very high stakeholder support among Child Welfare Service leadership, and if funding is secured, the initial step of PediaMAP aims to improve referrals to early intervention services for infants and toddlers in foster care, birth to three years of age, with developmental delays and/or disabilities. A timely automated referral process, that incorporates bi-directional sharing of basic care information, is needed to improve the coordination of care between child welfare teams and Early On®. Mechanisms employed in this application could be used to connect pediatric primary care providers with social services providers to coordinate services related to managing chronic conditions. Data collected through use of the application will provide the foundational database for quality monitoring of pediatric disease in all settings – including rural and tribal settings. **Pioneering an interoperability pathway between systems of care and interagency departments is the first step in shifting the care landscape,** not only for Michigan's child welfare system, but has tremendous potential nationally.

Care providers welcome technology solutions that add value for their patients with minimal interruption to existing workflows. As a result of the value experienced through the SmileConnect® Clinical and Community applications, users continue to sign up to document fluoride varnish, place referrals, and volunteer to provide free oral health services in the community. SmileConnect® Clinical has over 1,000 fluoride varnish and oral screenings, and over 100 dental referrals. SmileConnect® Community is active in over 25 states and through its services is set to impact nearly 21,000 children with needed resources.

4.0 Leveraging social service providers in referring patients to appropriate care has been very well received

Section II. Question 2: Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

Section II. Question 3: What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

SmileConnect® Community additionally piloted a supplementary WIC oral health integration activity in five WIC clinics in urban Detroit, engaging WIC staff in integrating oral health education and dental referrals into their nutrition education visits with mothers and their young children. These five clinics are very busy, seeing an average of 23,000 children and infants monthly. Based on focus groups conducted with WIC staff following the training and implementation of the new nutrition education and referral activity, the WIC staff felt discussing oral health was a natural parallel to many of the standard discussions around proper nutrition, so it was not disruptive to add into their workflow, and this new referral resource helped to fulfill an unmet need among their clients.

Michigan WIC utilizes a management information system (MIS) called MI-WIC, which captures the encounter data, including the nutrition education topic discussed, referrals provided to the family, and any other pertinent information to the family's experience in WIC. Michigan WIC has been very supportive of adding a list of dentists into their MI-WIC referral system as part of the WIC oral health integration pilot, and WIC staff has indicated that providing these new dentist referrals has been a positive add to their coordinated approach. While we are still evaluating the rates of referrals provided and their efficacy in connecting children to a dental home, we have gathered very positive indications as to the success of these new referrals from the focus groups conducted. In fact, Michigan WIC and the partners in this pilot effort were so pleased with the results from the initial five clinics, that we are expanding these successful strategies and lessons learned to an additional 16 WIC clinics in 3 of Michigan's most populous urban counties, including additional clinics in Detroit, with an expected impact for the second pilot year to be an additional 46,000 children and infants served monthly by these new WIC clinics.

Additionally, as described in Section 3.0, the discussions with Michigan Child Welfare Service leadership have progressed well. A training was conducted in March 2017 for the 34 Health Liaison Officers that are responsible for the health and well-being of Michigan's ~14,000 foster children. The training focused on engaging the Health Liaison Officers prior to obtaining access to SmileConnect® Clinical for the purposes of understanding their workflow barriers, discussing how they plan to use the tool, and identifying ways the tool could be improved to ensure their adoption of it. Ultimately this training will help lead SmileConnect® Clinical to improve systematic supports in order to advance care coordination between the Child Welfare, primary care, and dental providers.

Based on the feedback and experiences of both the WIC and Child Welfare staff, utilizing enabling technology to support them in care coordination and care management is welcomed, as referrals to appropriate care are a key part of the mission of these agencies. We found that these **social service providers are willing to use technological advancements but require more resources and education** to be able to electronically refer the highest risk patients to appropriate care. Both the WIC and Child Welfare staff user interfaces for the SmileConnect® tools were developed based on their insight and

engagement in the design. Most notably, the staff training conducted with both of these provider groups offered key insights into their unique workflows. Adoption, implementation, and meaningful use of technology was welcomed, especially if its use made it easier for them to do the right thing for their clients.

Community-based education and prevention is essential for combatting oral health disparities and increasing oral health literacy in children and families across the socio-economic spectrum. There are some regions in Michigan where the dental capacity is not enough to meet the needs of the Medicaid-insured children, due to geographic distributions of dentists, also known as health professional shortage areas. Alternative care strategies, such as the WIC pilot and new social networking innovations, such as SmileConnect® Community, have been innovative in increasing access to community-based education and connecting volunteer dental professionals and students with children and family who need it and would otherwise have difficulty accessing preventive care. To date, SmileConnect® Community has connected direct preventive services, education, and oral health supplies to over 10,000 children across 25 states. These requests have come from a variety of locations, including WIC clinics, tribal organizations, Head Start classrooms, schools, refugee support programs, and others. The nontraditional community-based organizations have been critical in helping to identify the children most in need of oral health care and education, and by using the SmileConnect® Community tool, have helped make new connections in their community, working towards a more transparent and coordinated system of care delivery. The SmileConnect® Community tool is built to be a national resource, and can easily be integrated into a potential model for oral health care community engagement and outreach. The framework behind the tool, facilitating connections between those who need resources, and those who can provide them, is a simple concept that can be useful for other disease conditions and populations in need as well.

5.0 Investment in Provider Behavior Change, Innovation Technology, and Care Coordination is Key to the Success of any Pediatric Care Payment and Service Delivery Model.

Building a comprehensive integrated and coordinated care delivery system will improve the health of children across the United States, particularly for children covered by Medicaid and CHIP programs. However, developing this type of care model will require specific strategies and inputs to truly facilitate family-centered, community-based, culturally appropriate, cost-effective, coordinated, and integrated care delivery. While alternative payment models that promote payment for value instead of volume are critical to shared accountability and cost-savings, payment models alone will not elicit the sustained provider behavior change that is necessary to promote preventive and coordinated care delivery.

In the above response, we shared the critical innovations beyond alternative payment models that have enabled SmileConnect® to improve preventive and coordinated care delivery for publicly insured children across Michigan. With our continuing medical education program as an example, we showed that achieving sustainable provider behavior change through improving quality performance depends on available incentives that act as a catalyst for change and having the right level of technical assistance resources. Using SmileConnect® Clinical as a case-study, we demonstrated that investment in technology infrastructure is necessary to enable real-time collaboration and true integration of services, and that care coordination is a valuable component to improving the quality of care, reducing duplication of care, and increasing patient satisfaction. We discussed our experience working with community-based social service providers, showing that leveraging social service providers in referring patients to appropriate care is well received- but that social service providers need more education and resources to refer the highest risk patients to appropriate care. Finally, we showed that community-based education and prevention is essential for combatting health disparities in children and families across the socio-economic spectrum, and

that technological innovations combined with social networking can help connect critical resources and personnel to those that need it most. Combined, we demonstrated that medical and dental providers welcome new interventions that add value and make it easier to do the right thing for the pediatric population they serve.

Our work with SmileConnect® continues to demonstrate how an integrated care delivery model which invests in sustained provider behavior change, innovative technology, and care coordination offers greater impact and higher return on investment than payment model work done alone. As the Center for Medicare and Medicaid Innovation moves forward with the development of a new pediatric health care payment and service delivery model, we welcome further discussion around how the SmileConnect® model can help inform and develop the draft model concept to improve the health of children and youth covered by Medicaid and CHIP nationwide.

About Us



Altarum is Transforming Health Care

Altarum Institute is a nonprofit organization with more than 60 years of experience researching, developing, and implementing solutions that serve the public good.

Altarum staff members are sought for their leadership in identifying, understanding, and solving critical systems issues that impact health and healthcare. From designing and developing health IT systems to working with healthcare insurers, providers and policy-makers to foster clinical quality improvements, Altarum is widely acknowledged as a valued, pragmatic and objective partner of utmost competence and integrity. Staff working within our *Health Innovations and Technical Assistance Group* provide leadership, improve understanding, solve problems and work with integrity all in the context of modernizing health systems. **We believe that health can be improved through optimal application of technology to public health and healthcare delivery systems – making them more efficient and effective.** From coordinating care delivery to empowering healthcare consumers, information and the tools we use to share it provide the foundation for tomorrow's possibilities.

Informing Policy and Practice

Expert analysis guides important policy decisions. At Altarum, we excel at such analysis, helping policymakers evaluate the implications of healthcare programs and policy options. While health IT and technical assistance is recognized as an enabler of change in the way medical care is delivered and paid for,

there is a growing need for clear evidence linking specific tools/implementations and care models to outcomes. We recognize the complexity of factors that affect policy choices and dictate their impacts. We conduct policy analysis from a systems perspective, taking into account multiple influences, considerations, trade-offs and competing goals.

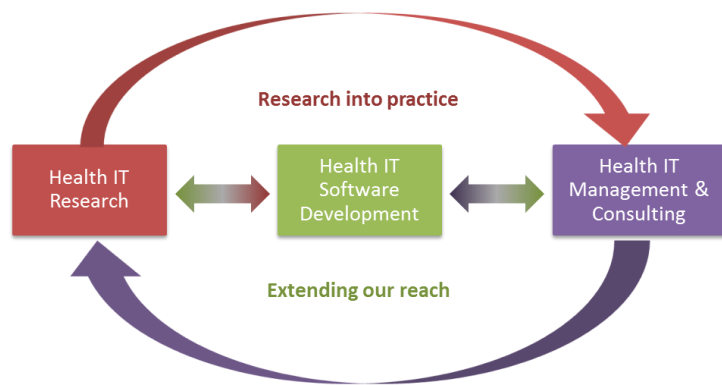
We work with the best and brightest minds of the nation's top health IT researchers. From research and project collaborations to our use of expert panels, Altarum not only brings a depth of health IT expertise to our research but also a candid objectivity based in understanding the practical realities of real-world healthcare delivery. Our team is well-versed in qualitative research methods and our experience of working directly with thousands of healthcare providers adds to the richness of our research insights.

From highlighting the importance of health IT usability to evaluating new models of provider-delivered care management, our research is shaping policy and the practice of medicine today and in the future.

Driving Transformative Change

Our staff members have a passion for what is possible. From building the nation's first immunization registry that includes care delivered in both public and private settings to our recent healthcare innovation award from the Center for Medicare and Medicaid Innovation, we pride ourselves as agents of change.

Envisioning what's possible starts with a robust understanding of the structures, processes and outcomes of existing systems of care. Innovative ideas arise from asking provocative and challenging questions about why things are the way they are and what would happen if they were different. The challenge is then to get others to embrace these novel ideas and work toward a shared vision of the future. Our team is inspired to make a difference in the world. We advance understanding and are able to execute effective strategies to overcome barriers to change. In partnership with our clients and funders, our team envisions new possibilities and builds the consensus necessary to achieve them, pulling together diverse stakeholders and leading organizations and communities to a brighter future.



Fostering Efficient and Effective Practice

Healthcare quality is a function of evidence and policy, accelerated by technical assistance. At Altarum, we understand that good policy based in solid evidence isn't enough. The thousands of dedicated men and women working throughout our health system need support as they adopt new strategies to improve the efficiency and effectiveness of the practice of medicine. Our staff members provide direct technical assistance to healthcare providers, helping them meet new regulations, optimize workflows, meaningfully use new technologies, and better manage patient populations. Through technical assistance, Altarum helps accelerate the adoption of best practices and advance our national objectives: improving patient experience, improving the health of populations and reducing the cost of healthcare.

Advancing Public Health

Altarum has a rich history of developing the public health infrastructure in Michigan. Over the past fifteen years, from our early development work on the Michigan Care Improvement Registry in 1997 to today, Altarum has informed technology policy, modernized public health systems, improved information flows to state systems, and fostered quality and safety gains for patients in the state.

From enhancing the effectiveness of population health improvement efforts to continually improving the State's surveillance capabilities, our team is proud of our many accomplishments and the impact we've had on public health in Michigan.

Innovating Child and Adolescent Health

For more than 25 years, Altarum has designed, conducted, and evaluated children's health initiatives at the organizational, community, state, and federal levels. Our staff are sought for their ability to create and implement strategies for timely and appropriate delivery of community-based, cost-effective, and integrated care- with an emphasis on those with or at-risk for developmental, social, emotional, or behavioral health challenges, intellectual and physical developmental delays, and those with complex and/or chronic health conditions. Our programs in children's healthcare delivery cover a breadth of critical topic areas including childhood obesity prevention, improved healthcare for children in the foster care system, increasing food security and access to healthy foods for at-risk children, and development of Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Measures.

The Institute's work in early childhood system building initiatives dates back to the mid-1990s. Early work centered on providing technical assistance to a variety of initiatives funded through the Maternal and Child Health Bureau. Altarum's efforts supported 112 Community Integrated Services grantees, the Healthy Child Care America initiative, and the Early Childhood Comprehensive Systems Initiative. Together, these efforts involved work with leading national early childhood organizations and teams of expert practitioners in every state. Select summaries of Altarum's current work in the child and adolescent health arena have been included below.

Improving Oral Health for At-Risk Kids: The SmileConnect® Program

Tooth decay is the most common chronic disease affecting children today, with children from the lowest socioeconomic groups experiencing issues at significantly higher rates and at younger ages. Altarum Institute, in collaboration with Delta Dental of Michigan, the University Of Michigan School Of Dentistry, and the Michigan Department of Health and Human Services, is working to increase oral health screening rates, improve coordination and referrals between medical and dental professionals, and significantly reduce the level of adverse outcomes associated with untreated dental caries in this critical population. In just under three years, SmileConnect® has generated impressive results. Our **SmileConnect® CME** program has trained over 1,500 providers to provide oral health risk assessments, fluoride varnish application (recommended by the American Academy of Pediatrics (AAP) as an effective and low-cost caries prevention measure), and referral to dental homes during well-child visits, where children are more likely to be seen at an early age before seeing a dentist. In the practices we've trained, 70-93% of children are now receiving appropriate care, up from just 4-13% previously. **SmileConnect® Clinical** has developed a first-of-its-kind dental monitoring system, which uses innovative technology to increase documentation of care and care coordination between medical and dental providers, with over 1,500 medical providers already attesting to its use. **SmileConnect® Reporting** has created a Meaningful Use Specialized Registry that houses valuable information related to a child's access to and utilization of preventive oral health services in both the medical and dental environments. Finally, recognizing the need for options for children unable to access clinical settings, **SmileConnect® Community**, has pioneered a novel social networking solution, which has delivered oral health services and resources to more than 10,000 children in their classrooms that would otherwise have been left without care, and has integrated oral health education and dental referrals into Detroit Women, Infants, and Children (WIC) clinics serving an average of 23,000 children monthly.

Evaluation of a Comprehensive Oral Health Services Program in School-Based Health Centers Health Resources and Services Administration (HRSA)

In 2011, the Maternal and Child Health Bureau awarded grants to 12 organizations as part of a four-year pilot program to increase access to oral health care and assure the delivery of quality oral health preventive and restorative services to children through school-based health centers (SBHCs). Altarum was contracted

by HRSA to conduct an evaluation of the success and challenges of the grantees assessing integration (with schools and SBHCs), efficacy (e.g., reduced prevalence of dental caries), and sustainability (continuing all services into the post-grant period). Altarum conducted this evaluation using a mixed-methods approach. Quantitative methods were used to assess data on processes and outcomes from grantees' yearly reports to MCHB. Altarum Evaluators also conducted and analyzed key informant interviews to identify programmatic challenges, and the strategies grantees used to overcome them. The evaluation output included an executive summary as well as a manuscript which was accepted in the Maternal and Child Health Journal. The results of Altarum's evaluation were also presented at 2016 AcademyHealth Annual Research Meeting, the 2016 CityMatch Leadership & MCH Epidemiology Conference, and the 2016 American Public Health Association Annual Meeting and Expo.

Enhancing the Delivery of Nutrition Education to Low-Income Populations

The benefits of consuming a healthy diet are well-documented, yet many people face significant barriers to accessing healthy foods, especially low-income populations. These barriers include but are not limited to a lack of financial means, lack of knowledge about what constitutes a healthy diet, and a lack of understanding or confidence relative to shopping for and preparing healthy foods. Altarum Institute's Center for Food and Nutrition (CFAN) provides expert consultation to nutrition program providers to address these critical public health issues. CFAN is a nationally recognized leader in nutrition program research at the national, state, and local levels—most notably for the Supplemental Nutrition Assistance Program-Education (SNAP-Ed) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The group currently provide formative and evaluation research, needs assessments, strategic planning, technical assistance, and training to develop effective service delivery models and nutrition education strategies that promote the adoption of positive nutrition and health-related behaviors, and continue to develop innovative models to improve healthy foods and nutrition for families across the U.S. and across the socioeconomic spectrum.

Leveraging Technology to Improve Outcomes for Michigan's Foster Care Children

Funded by the Michigan Health Endowment Fund and in partnership with the Michigan Department of Health and Human Services Child Welfare Medical Unit, Altarum Institute is working to design an information exchange solution to facilitate the timely exchange of oral health information between health care providers and caseworker teams serving Michigan's 14,000 children in foster care. The project will advance care planning and coordination of health services by educating and training 34 Health Liaison Officers, who are responsible for managing all health care needs for these children, to use a first-of-its-kind statewide oral health monitoring system, SmileConnect® Clinical. This project is increasing care coordination and access to care for Michigan's foster care system, laying the groundwork for quality care and streamlined Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) for Children in Foster Care.

Integrating Physical and Behavioral Health in the Correctional Care Environment

The Correctional Care Integration Project (CCIP) is a collaborative program working to address the need to improve care coordination and information sharing between behavioral and physical health providers working with vulnerable children and young adults in the corrections system of Washtenaw County. Led by Washtenaw County Community Mental Health (WCCMH), and in partnership with Altarum's Michigan Center for Effective IT Adoption (M-CEITA), PCE Care Management, Great Lakes Health Connect, Correct Care Solutions, and Washtenaw County's sheriff's office and children's services, the program aims to leverage strong community relationships to improve the quality and coordination of care for children and young adults who pass through the Washtenaw County correctional system. This builds upon previous work done by WCCMH and Altarum Institute to facilitate bi-directional sharing of behavioral health and medical information in Michigan, including experience as one of the first Community Mental Health Service Programs to implement electronic consent management (eConsent) and actively exchange health information through a HIE. In the CCIP, Altarum is leading the workflow assessment and implementation

portion of the project, working in close collaboration with the clinical sites to develop a set of individualized assessment and implementation support services. M-CEITA staff are reviewing clinic operations to identify technical, operational or training needs required to support the new workflow, and will work to support the evaluation of the newly implemented HIE. This project, first of its kind in Michigan, is implementing the exchange of behavioral and physical health information in Washtenaw County's correctional system, providing a foundation for integrated and coordinated care, and a platform for addressing the high burden of disease among children and young adults within the justice system nationwide.

Preventing Chronic Disease through nutrition and Physical Activity

Altarum is working to promote healthy lifestyles among Michigan residents of all ages. Our researchers support the Michigan Department of Health and Human Services in evaluating and strengthening community-based initiatives, including:

- The physical Activity and Healthy Eating Before/After School and Summer program, which promotes nutrition and fitness among youth;
- 4x4 Health and Wellness Initiative Community coalitions, designed to reduce obesity and empower people to make healthy choices;
- The nutrition Environment Assessment Tool, an online instrument designed to help communities support healthy eating environments; and
- Building Healthy Communities, a program to promote evidence-based policy, systems, and environmental change initiatives to prevent chronic illness.

American Academy for Cerebral Palsy and Developmental Medicine

To whom it may concern:

We represent the advocacy committee of the American Academy for Cerebral Palsy and Developmental Medicine. Our organization is an interdisciplinary group composed of physicians, physical therapists, occupational therapists, speech therapists, nurses, and research scientists who are committed to advancing the care of children with cerebral palsy and other childhood-onset disabilities. We are writing in comment to the Centers for Medicare and Medicaid Services (CMS) request for information on methods to improve the quality and reduce the cost of healthcare for the nation's children.

Accountable care organizations can be of benefit, but benchmarks need to be considered carefully. We work with a very complex and heterogeneous patient group, and often benchmarks for typically developing children are not applicable to this population. One could consider looking at benchmarks that are diagnosis specific, but also take into consideration the multitude of children with disabilities where a diagnosis has not yet been identified.

Local areas should have the flexibility to apply guidelines depending on their population's needs. One must take into account the access to care limitations, including transportation difficulties for specialized care, as well as home-based services. Coordination of care is needed in both highly-populated areas as well as more rural areas of the country. Expansion of telemedicine services, and the resources to support the expansion, are critical for increasing access to care and would reduce the cost of transportation for healthcare visits.

Further, children with cerebral palsy and other childhood-onset disabilities are medically complex, and they often require medical services from a number of healthcare specialists. Thus, improved coordination of care to limit repeat tests and unnecessary procedures, as well as a greater emphasis on child-centered care, would not only improve the quality of care for these children but reduce costs.

Thank you very much for your consideration.

American Academy of Child and Adolescent Psychiatry

Dear Ms. Bassano and Ms. Tabe-Bedward,

I am writing today to respectfully request an extension of the comment deadline for the recent Request for Information on Pediatric Alternative Payment Model Concepts. The seven-page document asks for information on several detailed and important topics on a design and draft model that will focus on improving the health of children and youth covered by Medicaid and CHIP through state-driven integration. The American Academy of Child and Adolescent Psychiatry is especially interested in this topic, and is planning to provide comments in response to the Request for Information, but finds that the short time-frame to be prohibitive.

AACAP is not alone in struggling to provide thorough and well-vetted comments to CMMI on this important topic, and is therefore requesting reconsideration of the comment deadline, which is March 28. Even an additional week would be helpful to those who are working to provide useful information to the agency on this important topic.

Thank you for your consideration.

Regards

American Academy of Family Physicians

Good afternoon,

Attached please find a letter from the American Academy of Family Physicians in response to the CMS request for info on pediatric APMs. Please let me know if the AAFP can provide anything further. Thank you

See attachment for RFI response.



American Academy
of Family Physicians.



March 27, 2017

Seema Verma, MPH, CMS Administrator
Centers for Medicare & Medicaid Services
U.S. Department of Health and Human Services

Dear Administrator Verma:

On behalf of the American Academy of Family Physicians (AAFP), which represents 124,900 family physicians and medical students across the country, I write in response to the [request for information](#) on pediatric alternative payment model (APM) concepts as posted by the Centers for Medicare & Medicaid Services (CMS) on February 27, 2017.

The AAFP fully recognizes the leading role CMS takes in partnering with states and physicians regarding the health care coverage for more than one in three American children. Our commitment to low-income individuals and families is reflected in family physicians' participation in the Medicaid program. Currently, more than two-thirds (68%) of family physicians participate in the Medicaid program and accept new patients into their practices. Participation in Medicaid by family physicians is at its highest level since the AAFP began monitoring the issue in 2004. We are therefore pleased to comment on the design of APMs focused on improving the health of children and youth covered by Medicaid and the Children's Health Insurance Program (CHIP).

About Family Medicine

Family medicine plays a critical role in delivering care to Medicare, Medicaid, and CHIP beneficiaries in every community across the country. Family physicians are dedicated to treating the whole person. Family medicine's cornerstone is an ongoing, personal patient-physician relationship focusing on integrated care. Unlike other specialties that are limited to a particular organ or disease, family medicine integrates care for patients of all genders and every age, and advocates for the patient in a complex health care system. Because of their extensive training, family physicians are the only specialists qualified to treat most ailments and provide comprehensive health care for people of all ages— from newborns to seniors. Family physicians deliver a range of acute, chronic, and preventive medical care services and play an essential role in a wide range of communities from rural to urban settings.

In addition to diagnosing and treating illness, they also provide preventive care, including routine checkups, health-risk assessments, immunizations, screening tests, and personalized counseling on maintaining a healthy lifestyle.

The foundational role of family medicine in care delivery is clearly illustrated by the following:

- Family physicians are the most visited specialty—especially in underserved areas. Family physicians conduct approximately [one in five](#) office visits. This represents more than 192 million visits annually, which is 48 percent greater than the next most visited medical specialty. Family physicians provide more care for America's underserved and rural populations than any other medical specialty. More than two-thirds (68%) of family physicians participate in the Medicaid program and accept new patients into their practices.
- Strengthening primary care is critical to driving greater value for patients, payers, and communities. Transformation cannot be overly complex and burdensome to operationalize. However, there is not a one-size-fits-all solution, as patient panels, populations, and primary care practices vary. There is an emerging consensus that strengthening primary care is imperative to improving individual and population health outcomes, as well as to restraining the growth of health care spending.
- The complexity of care provided by family physicians is unparalleled in medicine. [Data](#) show that family physicians address more diagnoses and offer more treatment plans per visit than any other medical specialty. Furthermore, the number and complexity of conditions, complaints, and diseases seen in primary care visits is far greater than those seen by any other physician specialty. CMS and private payers must make new investments in primary care to truly capture and realize the value proposition of family medicine and primary care.
- Primary care is particularly affected by longstanding inequities in payment that must be corrected if it is to be the foundation of a transformed, patient-centered health system. Historically, family physicians' services have been undervalued in terms of payment rates in both Medicaid and Medicare. In 2012, the Medicaid and CHIP Payment and Access Commission [reported](#) that Medicaid payment rates "for a representative sample of primary care services eligible for the ACA payment increase were 58 percent of Medicare rates." [Research](#) shows that Medicare fee-for-service "(FFS) is not only flawed for its strong incentives to increase volume, but also in its disproportionate reimbursements for procedural rather than cognitive care." Payment experts offer similar assessments of the problems with testing and building value-based payment models on a flawed physician fee schedule. Though the *Health Care Education and Reconciliation Act (HCERA)* specified that Medicaid payments for primary care services would be at Medicare levels for certain primary care physicians in 2013 and 2014, this effective provision has expired. The AAFP is dismayed that many state Medicaid programs and Medicaid Managed Care Organizations have reverted to payment rates for primary care services that are lower than Medicare's rates. These reductions threaten access for millions of patients by dramatically cutting Medicaid payments for eligible primary care physicians.
 - The AAFP strongly urges CMS, Congress, and state Medicaid agencies to address this threat through policies that maintain Medicaid payments for primary care services at Medicare levels for primary care physicians treating Medicaid and Medicaid Managed Care.
 - It is essential that CMS ensure any pediatric APM be based on sufficient payment rates and incentives necessary to drive value of care over volume.

AAFP Principles to Support Patient-Centered Alternative Payment Models

The AAFP supports moving a larger percentage of payments from traditional FFS towards patient-centered APMs, and we support the creation of innovative payment models across payers that

achieve better care, smarter spending, and healthier people. The AAFP believes that to be truly successful in improving care and reducing cost, APMs need a strong foundation of primary care.

With implementation of the *Medicare Access and Children's Health Insurance Program Reauthorization Act*, the development of new APMs is accelerating. While some of these models may deliver comprehensive, longitudinal care, many run the risk of perpetuating (or even exacerbating) the fragmented care many patients receive under the current FFS system. Evidence shows that health systems built with primary care as the foundation have positive impacts on quality, access, and costs.

The AAFP only supports patient-centered advanced primary care models that promote comprehensive, longitudinal care across settings and hold clinicians appropriately accountable for outcomes and costs. To support the development and implementation of APMs that accomplish these objectives, the AAFP has developed a set of [principles to support patient-centered APMs](#). These principles to guide our evaluation of proposed models to ensure that they place patients—and not clinicians—at the center, and we strongly encourage CMS and developers of APMs to closely consult and adhere to these principles. In summary, APMs:

- Must Provide Longitudinal, Comprehensive Care
- Must Improve Quality, Access, and Health Outcomes
- Should Coordinate with the Primary Care Team
- Should Promote Evidence-based Care
- Should be Multi-payer in Design

Advanced Primary Care - Alternative Payment Model (APC-APM)

As referenced in our February 16, 2017 [letter](#) to the Physician-Focused Payment Model Technical Advisory Committee (PTAC), the AAFP will soon submit a physician payment proposal—Advanced Primary Care: A Foundational Alternative Payment Model (APC-APM) for Delivering Patient-Centered, Longitudinal, and Coordinated Care. We will request that the PTAC review the model, provide feedback to the AAFP on it, and promptly recommend it to CMS for approval and nationwide expansion.

Primary care is the primary access point to the health care system for millions of Americans across a diverse range of communities. The AAFP's APC-APM proposal is an opportunity for CMS to make advanced APMs broadly accessible to Medicare, Medicaid, CHIP, and private payer beneficiaries—and to impact quality and spending in other parts of the health care system. We feel this will help achieve the goals of improving overall health outcomes of Medicare, Medicaid, and CHIP beneficiaries and the health of communities, as well as bring stability to the Medicare, Medicaid, and CHIP programs.

The APC-APM is built on the principle that patient-centered primary care is comprehensive, continuous, coordinated, connected, and accessible from the patient's first contact with the health system. While the APC-APM aims to improve clinical quality through the delivery of coordinated, longitudinal care—assessed through the Core Quality Measure Collaborative measure sets—the broader goal of the APC-APM is to use this approach to deliver care in a manner that improves patient outcomes and reduces health care spending, such as through decreased inpatient and emergency department visits.

Supporting information about the value of primary care to patients and payers in terms of its positive effects on costs, access, and quality, as well as policy details on how the APC-APM would advance these goals are described in the AAFP's position paper, "[Advanced Primary Care: A Foundational Alternative Payment Model \(APM\) for Delivering Patient-Centered, Longitudinal, and Coordinated Care](#)." In it, we present a transformational, primary care focused, and patient-centered model, including:

- The definition and recognition of an APC-APM participating physician;
- An appropriate, four-step methodology to attribute patients to the APC-APM;
- How global and performance-based incentive payments should be structured and made;
- Reporting quality measures and the calculation of value based payments; and,
- Financing for the model.

The proposal that we plan to submit to PTAC elaborates on and further develops the model outlined in this position paper.

We appreciate the opportunity to comment and make ourselves available for your questions. Please contact Robert Bennett, Federal Regulatory Manager, at 202-232-9033 or rbennett@aafp.org.

Sincerely,



Wanda D. Filer, MD, MBA, FFAFP
Board Chair

CC:

-Patrick Conway, M.D., M.Sc., Deputy Administrator for Innovation & Quality, CMS Chief Medical Officer
-Deidre Gifford, M.D., M.P.H., Deputy Director, Center for Medicaid and CHIP Services
-Ellen-Marie Whelan, N.P., Ph.D., Chief Population Health Officer, Center for Medicaid and CHIP Services
-Alex Billioux, M.D., D.Phil., Director, Division of Population Health Incentives and Infrastructure, Center for Medicare & Medicaid Innovation

American Academy of Pediatrics

Greetings,

Thank you for the opportunity to comment on Pediatric Alternative Payment Model Concepts. Attached you will find the response comments from the American Academy of Pediatrics. Please do not hesitate to contact us with any questions on these comments or similar matters.

See attachment for response:



American Academy
of Pediatrics.pdf

American Academy of Pediatrics

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March 24, 2017

Patrick Conway, MD, MSc, FAAP

Deputy Administrator for Innovation and Quality and Director, Center for Medicare & Medicaid Innovation
U.S. Centers for Medicare & Medicaid Services

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Fayetteville, GA

Dear Dr Conway:

On behalf of the American Academy of Pediatrics, a nonprofit professional organization of 66,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults, thank you for the opportunity to respond to the Center for Medicare and Medicaid Innovation's Request for Information on Pediatric Alternative Payment Model Concepts.

Children are cared for in a constantly evolving health care system. The foundation of the pediatric practice is the family-centered medical home, a concept first described by pediatricians in the 1960's. In a family centered medical home, the pediatric care team works in partnership with a child and a child's family to assure that all the medical and non-medical needs are met. Partnerships can help the family/patient access, coordinate and understand services that are important for the overall health of the children and family including specialty care, educational services, out-of-home care, family support and other public and private community services.

Most innovation related to the implementation of value-based payment models has focused in adult populations. Children's care is often financed by Medicaid, which while chronically underfunded, provides flexibility and opportunity for innovation through its federated nature. Inherent differences exist between adults and children, which necessitate special consideration when implementing value-based payment models in pediatric populations. Integration of health care, health-related social services and educational services require robust infrastructure, including but not limited to HIT/HIE, aligned quality measures, and coordinated care. These infrastructure items are suboptimal at present. The timeline for return on investment is longer in pediatrics, and cost savings may not be realized in the health care realm. Therefore, the "value equation" may be more complex.

The AAP is in support of CMMI's efforts to test pediatric alternative payment model concepts, including the integration of health care and health-related social services. Thank you for the opportunity to comment and for your attention to the views of the American Academy of Pediatrics. If you have any questions regarding this or other system reform matters, please contact Anne R. Edwards, MD, FAAP at

Sincerely,

A handwritten signature in black ink, appearing to read "Fernando Stein".

Fernando Stein, MD, FAAP
President

AAP Comments: Pediatric Alternative Payment Model Concepts

Children as a Unique Population

Children differ from adults and payment models that are tested should take these differences into account. Stille et al¹ described unique differences between children and adults: development, dependency, differential epidemiology, demographics, and dollars. Children have an upward developmental trajectory, with need and abilities changing over time; they require “habilitative” rather than “rehabilitative” support. Young children are dependent on families/caregivers to care for them and as such, these individuals are integral partners of the healthcare team and health outcomes for children. From a differential epidemiologic perspective, children, in general, are healthier than adults, and the goal of pediatrics is to optimize that health. While certain chronic conditions, e.g. asthma, obesity, affect larger numbers of children, a significant number of relatively rare chronic diseases exist in the pediatric population, and an increasing number of children are medically complex. Considering demographics, children have disproportionately higher rates of poverty and ethnic/racial diversity than in adult populations. From a dollar standpoint, the overall cost of pediatrics is low while the return on investment is realized over a lifetime.

Medicaid and CHIP present distinct opportunities to build new payment and delivery system models that take into consideration all the health care needs of children—and to incorporate social service, education, public health, human service, and other programs that address socioeconomic factors influencing child and family health. As alternate payment models are developed, key elements should be considered.

Pediatric Practices

Pediatric practices may be in varying stages of transformation based on past support for infrastructure change and current capacity. This should be considered as new payment models are implemented. Medicaid is also in a unique position to identify opportunities and supports that children need and build them into payment and delivery system models that ensure they are provided. Medicaid’s Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program (with its inherent focus on preventive care), coverage of preventive services *recommended by* a physician and backed by the interdisciplinary Bright Futures guidelines, coverage of care coordination, and health homes all provide a strong base for future payment models. Prior state innovations through Section 1115 waivers, Delivery System Reform Incentive Payment (DSRIP) initiatives, and others² mainly focused on adult populations and should be evaluated in a systematic manner, with the input of pediatric primary, specialty, and subspecialty care, to determine their applicability toward building a new payment model specific to pediatrics.

Infrastructure Needs

System-level infrastructures will require enhancement to effectively integrate health care and health-related social services. To do this, health information technology will need further support, especially to address interoperability and data sharing needs between sectors. Enrollment processes that are streamlined and connected will improve patient and family experience. Quality measures should align not only across health entities but also across sectors. To implement a value-based payment model that supports integration and accountability for a population, multi-payer models should be encouraged and supported. Payment models which promote different care models within a practice lead to administrative burden and potential disparate care for families based on insurance. Such payment models will need to

¹ Stille C, et al The Family-Centered Medical Home: Specific Considerations for Child Health Research and Policy. The Family-Centered Medical Home: Specific Considerations for Child Health Research and Policy. *Academic Pediatrics*. 2010;10(4):211-217.

² Bachrach D, Guyer J, Levin A. Issue Brief: Medicaid Coverage of Social Interventions: A Road Map for States. Milbank Memorial Fund. July 2016. <https://www.milbank.org/publications/medicaid-coverage-social-interventions-road-map-states/>. Accessed March 15, 2017.

invest in infrastructure as incentives alone will work slowly. Medicaid/CHIP programs are well prepared to lead these efforts. Families need to continuously be engaged in any transformation - understanding the many problems that families experience can best guide change and greater efficiency across systems. Without family engagement and enrollment, optimal health outcomes will not be realized.

Return on Investment

The return on investment for pediatric care varies significantly than for adult-focused care. While some short-term savings may be recognized in pediatric patients, e.g. ED utilization related to specific conditions (e.g. asthma) or utilization (e.g. inappropriate use of medication, radiologic testing). Much of the return on investment occurs over a longer life course. In addition, these cost savings may not be fully realized in the health care sector, but rather, for example, in the education sector as healthy children realize an increased ability to learn resulting in improved academic achievement and lesser need for special education, or in the workforce as healthier children lead to more productive parents/caregivers.³

Additional opportunities for return on investment in pediatrics exist, such as:

- Integrated health systems might better address adverse childhood events (ACE's) resulting in decreased chronic illness burden, including mental health issues, as children reach adulthood.
- Early developmental screening, including social emotional screening with appropriate follow up and intervention can limit development of expensive adolescent mental health and substance abuse issues.
- High rates of immunization among children save substantial dollars each year, and models should continue to promote and support high rates of immunization.

Having shared accountability for a population of children and making efforts to coordinate care, to reduce duplication, and to provide timely and effective care for children will lead to a healthier cohort of adults.⁴

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Question 1: What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comments on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs and the level and range of technical assistance entities might require to support an effective model.

The Academy believes that greater integration between health care and health-related social services is highly desirable, as the fundamental determinants of children's health and well-being, and subsequently the health and well-being of the adults they will become, are rooted in social, environmental, and behavioral factors that lie beyond the purview of the health care system.⁵

Increasingly, the major threats to the healthy development of America's children stem from problems that cannot be addressed adequately by the practice model alone. These problems include infant mortality;

³ Wagnerman, K, Chester, A., et al. Medicaid is a Smart Investment in Children. *Georgetown University Health Policy Institute Center for Families and Children*

⁴ Belli PC, Bustreo F, Preker A. Investing in children's health: what are the economic benefits? *Bulletin of the World Health Organization*. 2005;83: 777-784.

⁵ AAP Council on Community Pediatrics and Committee on Native American Child Health. Health Equity and Children's Rights. *Pediatrics*. 2010;125(4):838-849. <http://pediatrics.aappublications.org/content/125/4/838>. Accessed March 17, 2017.

preventable infectious diseases; dental caries; sedentary lifestyles; chronic health care needs; obesity, metabolic syndrome, and other historically adult-onset chronic diseases; high levels of intentional and unintentional injuries; exposure to violence in all forms; risks of neurodevelopmental disabilities and illnesses from exposure to environmental tobacco smoke, lead, and other environmental hazards; substance abuse; mental health conditions; poor school readiness; family dysfunction; sexual health, unwanted pregnancies, and sexually transmitted diseases; relatively low rates of breastfeeding; social, medical, behavioral, economic, and environmental effects of disasters; and inequitable access to medical homes and basic material resources and poverty.⁶

Poverty is an important social determinant of health and contributes to child health disparities. Children who experience poverty, particularly during early life or for an extended period, are at risk of a host of adverse health and developmental outcomes through their life course.⁷

The AAP recommends that its members work to link families to services as early as possible. The AAP recommends that pediatricians and other health care providers use validated screening tools and work together with public health departments, school districts, child welfare agencies, community and children's hospitals, and colleagues in related professions to identify and decrease barriers to the health and well-being of children in the communities they serve. Home visiting as well as evidence-based early literacy programs and healthy early child development and effective parenting programs in the office should be promoted and supported through payment. For coordinated delivery systems to realize success, payment and financing systems must be appropriately aligned and recognize clinicians who provide population-based prevention.⁸

An integrated pediatric health care and health-related social service delivery model should be grounded in the patient- and family-centered medical home approach to care, with a particularly strong emphasis on family engagement and family-centered care. Family-centered care has been shown to improve patient and family outcomes, increase family and professional satisfaction, decrease health care costs, and improve effective use of health care resources.⁹

A model of care that coordinates health care and health related social services is particularly important for families of children and youth with special health care needs (CYSHCN), including the growing population of children diagnosed with mental health conditions, as they require a greater number of services, and outcomes are substantially improved when these services are integrated within primary care.

Question 2: Where pediatric health care providers have partnered, and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits. Additionally, what program integrity strategies were employed where these partnerships exist?

The Academy applauds CMMI for exploring ways to integrate social services. For children, the social

⁶ AAP Council on Community Pediatrics. Community Pediatrics: Navigating the Intersection of Medicine, Public Health, and Social Determinants of Children's Health. *Pediatrics*. 2013;131(3):623-628.

<http://pediatrics.aappublications.org/content/131/3/623>. Accessed March 17, 2017.

⁷ AAP Council on Community Pediatrics. Poverty and Child Health in the United States. *Pediatrics*. 2016; 137(4):e20160339. <http://pediatrics.aappublications.org/content/137/4/e20160339>. Accessed March 17, 2017.

⁸ AAP Council on Community Pediatrics. Community Pediatrics: Navigating the Intersection of Medicine, Public Health, and Social Determinants of Children's Health. *Pediatrics*. 2013;131(3):623-628.

<http://pediatrics.aappublications.org/content/131/3/623>. Accessed March 17, 2017.

⁹ AAP Committee on Hospital Care. Family Centered Care and the Pediatrician's Role. *Pediatrics*. 2003;112(3):691-696. <http://pediatrics.aappublications.org/content/112/3/691>. Accessed March 17, 2017.

services that are “health-related” are much broader than those described in the RFI (e.g. early education and home visiting which may begin prenatally). Without embracing a broader set of social services, obtaining input from patients and families about what is important to them, and incorporating requirements and financing to facilitate the interaction between health and social services, the impact of innovative services delivery on children’s health will be limited.

Question 3: What policies or standards should CMS consider adopting to ensure that children, youth, and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as part of a new care delivery model for children and youth?

In rural/underserved communities, barriers include lack of services and transportation. States may consider implementing and supporting telehealth, telementoring and workforce training as models of care for children and youth. Enhanced payment to dentists, mental health clinicians and subspecialists in rural areas may increase participation.

An additional challenge in rural communities is the lower number of covered individuals and the volume of services. It is may not be possible to accrue required cost savings. Also, a small number of unexpected high utilizers or catastrophic incidents can mask any savings. Many key pediatric subspecialists may be hours or states away to support CYSHCN, and narrow networks may lack critical services for these children. Rural communities must not be held to the same levels as other, more populous systems.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

Question 3: What infrastructure development (EMR, HIE, IT systems, contracts/agreements, training programs, or other process) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers?

The AAP’s position on Electronic Health Records (EHRs) has been as follows:

- EHRs have the potential to provide value to the care of children.
- EHRs are necessary to facilitate the Medical Home – a core pediatric concept.
- EHRs are far from perfect and provide significant problems and challenges.
- EHRs must be improved in collaboration with government, vendors, stakeholders, patient advocates, and privacy experts to improve care to children.

An interoperable health information technology system (or well-functioning health information exchange) is needed to effectively integrate health care and health-related social services. Currently, there are deficiencies not only in the pediatric functionality of Electronic Health Records (EHRs), but also in the ability to exchange health information efficiently.

The AAP has been involved in programmatic activities aimed to improve pediatric functionality in EHRs over the course of the last decade, including working with the Agency for Healthcare Research and Quality as a subcontractor to develop the Model EHR Format and the more recent Model EHR Enhancement. The Academy believes the model EHR Format for children could serve as a framework upon which specifications for an integrated health information infrastructure is built.

Data from the Office of the National Coordinator for Health Information Technology suggest that participation rates in the Medicaid EHR incentive program are quite low (17.2% nationally) and lag other physician groups. This data further suggests that pediatricians are falling behind the attestation of

Meaningful Use signaling the lack of engagement in the program. This poses another challenge in the goal of health information exchange between health care and health-related social services.

Schools and other community services, including public health, lack robust pediatric-friendly IT systems. Interoperability between these IT systems and EHRs remains a challenge. Data-sharing is complicated by varied privacy requirements between the sectors.

The Academy supports the overarching goal of interoperability and the role it plays in the provision of safe, high quality healthcare. Unless true incentives for health information exchange are created, we believe interoperability will remain elusive.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

Question 1: To what extent is service integration occurring for children and families at the state, tribal, and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies?

Some of the challenges include data sharing, no ability or requirement for “braided” or blended funding, changing and tightening of admission criteria to programs (e.g. Early Intervention) and varied measures between sectors. To fully support an operation of a truly integrated service model, these challenges will need to be further addressed.

Question 4: Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health related social service programs, how has this been accomplished?

Opportunities exist to remove further barriers to eligibility determinations and enrollment, not just for Medicaid/CHIP, but for the many programs that address other social determinants of health children face. As an example, in 2015 CMS gave states the option of using Supplemental Nutrition Assistance Program (SNAP) eligibility determinations to identify individuals who are income eligible for Medicaid but not yet enrolled.¹⁰ Similar streamlined enrollment procedures should be created in a bidirectional manner for other health and social service programs, so that those individuals and families found eligible for one health or social service program can also be more readily enrolled in others for which they are eligible. This would help complete the “no wrong door” approach to health coverage, where families are screened for programs no matter where they initially “touch” the application process.

To do so, Medicaid and other social service programs will need financial and infrastructure support to allow for more streamlined processes to identify and enroll eligible individuals into appropriate programs.

Question 8: What role do models of care such as ACOs play in the pediatric environment? Are pediatric ACOs commonly understood to represent payment arrangements, care delivery models, or both? How are pediatric ACOs the same or different from adult-focused ACOs? What opportunities do pediatric ACOs have for integration with community and health services systems?

¹⁰ Letter: Policy Options for Using SNAP to Determine Medicaid Eligibility and an Update on Targeted Enrollment Strategies. Centers for Medicare and Medicaid Services. August 2015. <https://www.medicaid.gov/federal-policy-guidance/downloads/sho-15-001.pdf>. Accessed March 17, 2017.

Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

As models of care delivery and financing, ACOs are relatively new and evolving and there are no prescribed configurations regarding providers and payers (including MCOs), especially in pediatrics. Opportunities exist to build off nascent state Medicaid initiatives (albeit mainly adult) on accountable care organizations (ACOs),^{11,12} incorporation of social determinants of health,^{13,14} and value based purchasing^{15,16} to build a payment model that is specifically child focused. In addition, Medicaid and CHIP have the benefit of being statewide programs and can use state tools to conduct geospatial analysis and community needs assessments to guide place-based approaches to addressing social determinants of health in the community.^{17,18}

For ACOs or any other type of Alternative Payment Model (APM), it is vital to recognize the distinctions between pediatric and adult population health. Compared to adults, children have higher rates of poverty which influences the prevalence and severity of disease and access and response to treatment.¹⁹ Children have prevalent chronic conditions such as asthma, obesity, neurodevelopmental conditions, and behavioral and mental health conditions,²⁰ but are generally healthier overall, with 31.6% of physician office visits in children 0-21 years of age for preventive care, while 16.8% of visits relate to chronic conditions, as opposed to 45.1% of visits for chronic condition management in adult populations.²¹ For the pediatric population, often it is not the patient but the adult parent or caregiver that strongly influences the health and well-being of children. For these reasons, the Academy believes there are inherent risks to bundling the care of adults and children into one health care delivery and financing system, and recommends that alternative payment models be implemented in pediatric-only populations, taking the unique characteristics of this group into account.

¹¹ The Rise and Future of Medicaid ACOs. Leavitt Partners. September 2015.

<http://leavittpartners.com/2015/09/the-rise-and-future-of-medicaid-acos/>. Accessed March 17, 2017.

¹² Medicaid Accountable Care Organizations: State Update. Center for Health Care Strategies, Inc. January 2017. <http://www.chcs.org/resource/medicaid-accountable-care-organizations-state-update/>. Accessed March 17, 2017.

¹³ Bachrach D, Guyer J, Levin A. Issue Brief: Medicaid Coverage of Social Interventions: A Road Map for States. Milbank Memorial Fund. July 2016. <https://www.milbank.org/publications/medicaid-coverage-social-interventions-road-map-states/>. Accessed March 17, 2017.

¹⁴ Spencer A, Freda B, McGinnis T, et al. Measuring Social Determinants of Health among Medicaid Beneficiaries: Early State Lessons. Center for Health Care Strategies, Inc. December 2016. <http://www.chcs.org/resource/measuring-social-determinants-health-among-medicaid-beneficiaries-early-state-lessons/>. Accessed March 17, 2017.

¹⁵ Leddy T, McGinnis T, Howe G. Value-Based Payments in Medicaid Managed Care: An Overview of State Approaches. Centers for Health Care Strategies, Inc. February 2016. <http://www.chcs.org/resource/value-based-payments-in-medicaid-managed-care-an-overview-of-state-approaches/>. Accessed March 17, 2017.

¹⁶ Value-Based Payment Models for Medicaid Child Health Services. Bailit Health. July 2016. <http://www.uhfnyc.org/publications/881145>. Accessed March 17, 2017.

¹⁷ Heiman HJ, Artiga S. Issue Brief: Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity. The Henry J. Kaiser Family Foundation. November 2015. <http://files.kff.org/attachment/issue-brief-beyond-health-care>. Accessed March 15, 2017.

¹⁸ Stille C, Turchi RM, Antonelli R, et al. The Family-Centered Medical Home: Specific Considerations for Child Health Research and Policy. *Academic Pediatrics*. 2010;10(4):211-217.

¹⁹ AAP Council on Community Pediatrics. Poverty and Child Health in the United States. *Pediatrics*. 2016; 137(4):e20160339. <http://pediatrics.aappublications.org/content/137/4/e20160339>. Accessed March 17, 2017.

²⁰ Van Cleave, et al. Dynamics of obesity and chronic health conditions among children and Youth. *JAMA*. 2010;303(7):623-630.

²¹ AAP analysis of data from the 2011-2013 *National Ambulatory Medical Care Survey*.

The AAP collaborated with Leavitt Partners to explore existing pediatric ACO models and characterize key components, which were published in 2017. *Pediatric ACOs: Insight from Early Adopters* identifies several factors vital for pediatric ACOs to effectively care for and sustain an APM for pediatrics.²²

- To support clinical transformation, adequate capital is necessary not only for initial financing but to support infrastructure, staffing, data collection and management and linkages with key groups.
- Pediatric leadership is critical throughout the design, implementation and on-going management process.
- Use of pediatric trained care coordinators and case managers are necessary to support the pediatric medical home.
- The ACO framework should include:
 - care strategies proven to be effective for pediatric populations, such as care management.
 - description of proper referral pattern to aid primary care providers and specialists to understand their roles in population management.
 - endorsement of integration of oral and behavior health as well as attention to social determinants in the practice.
 - integrated data collection. All pediatric ACOs in the report noted difficulties in obtaining adequate data for quality measurement, with their Medicaid programs. These problems reflect limited data management capacity in many Medicaid agencies and they also reflect, in part, the use of managed care intermediaries who have limited incentive to provide needed data. The diverse formats and sources of claims make analysis difficult and that inadequate data create significant barriers effect change in an APM environment.
 - quality measures need to assess the long-term savings along with life-course measures that are specific to the pediatric population that are utilized by all payers.
 - new technologies as well as HIT and EHR must have pediatric specific components and standards.

Question 9: What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?
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The following general principles are applicable for any payment and care delivery model serving children, (i.e., ACOs, MCOs and APMs)

- A guiding principle for any type of pediatric APM is to ensure that there is sufficient funding to cover the total costs for:
 - Episodic encounters common to pediatrics (i.e., wellness, preventive and problem oriented medical, oral health, mental and behavioral health services as well as non-face to face care).
 - Specific pediatric medical home functions including but not limited to care management, care coordination, patient and family education, counseling and consultative services, community integration services, anticipatory guidance and transition planning.
 - Identification of patient characteristics that necessitate higher utilization of medical services and medical home services as noted above. APMs lacking an adequate risk adjustment tool may end up penalizing practices that take on a proportionally higher

²² Perrin, JM, et al. Pediatric Accountable Care Organizations: Insight from Early Adopters. *Pediatrics*. 2017;139(2):e20161840. <http://pediatrics.aappublications.org/content/139/2/e20161840>. Accessed March 17, 2017.

rate of complex patients, including children with medical and social complexity. Risk adjusted payments must account for the medical and social severity and acuity of the patient panel

- Maintenance of health information technology and its application to quality improvement activities and population health.
- Pediatric payment systems based on value or return on investment needs to account for the long-term investment opportunity as well as the thin margins for short-term savings inherent in pediatric care delivery systems.
- All APMs providing pediatric care should be designed with the input of primary care and medical and surgical specialty pediatricians having relevant experience in practice and financing.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

Question 2: How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

The unique nature of pediatric care has driven pediatricians to incorporate care coordination within the practice setting, not only for children with complex medical needs, but for all children with a short term need for coordinated services among social and community services to address familial, and social needs.

For any APM and population health model, care coordination is integral. Pediatric trained case managers are best equipped to address pediatric cases as opposed to generic or adult oriented care managers.²³ APMs may also begin to fill gaps in existing payment structures.

To support pediatrician's facilitation of care coordination, any payment model must provide adequate incentives to cover the financial costs for care coordination. Currently, payers are not uniform in benefits coverage and payment for non-face to face services such as care coordination, telehealth, and consultation services. Appropriate payment for these services under a fee-for-service or an alternative payment model is essential to encourage collaborative services.

a. What payment models should CMS consider?

When designing a value based payment model for pediatrics, it is critical to note that Medicaid fee schedules and capitated payments to primary care, specialty, and subspecialty providers are significantly lower than payments for comparable services from Medicare and private insurance companies in most states. Low Medicaid payment is the primary reason that physicians limit participation in the program, with resulting barriers to patient access for primary and subspecialty health care services.²⁴ Furthermore, payment in the medical home context must be sufficient to enable pediatric primary and medical subspecialty care practices to support the services of a comprehensive care team, which may include nurses, care coordinators, mental health professionals, social workers, psychologists, dieticians, pharmacists, and administrative professionals. Financing mechanisms must be developed to allow pediatricians to be paid prospectively to acquire and maintain necessary health information technology and other practice infrastructure supports, including after-hours phone triage services, care coordinators,

²³ Perrin, JM, et al. Pediatric Accountable Care Organizations: Insight from Early Adopters. *Pediatrics*. 2017;139(2): e20161840. <http://pediatrics.aappublications.org/content/139/2/e20161840>. Accessed March 17, 2017.

²⁴ AAP Committee on Child Health Financing. Medicaid Policy Statement. *Pediatrics*. 2013;131(4). <http://pediatrics.aappublications.org/content/early/2013/03/27/peds.2013-0419>. Accessed March 17, 2017.

etc. Publication of the RUC-recommended values for pediatric services is a necessary piece to ensuring that value-based payment models are calculated in a fair manner.

The overall objective of pediatric health care is to support the healthy growth and development of children so they reach adulthood with their full potential. APM models and return on investment (ROI) measures need to incorporate the value of pediatrics that includes the long-term clinical, financial, and societal outcomes. Payer models of ROI not only should consider short-term cost savings (e.g., preventable admissions for asthma), but also long-term reduction of mortality and improvement of quality of life through preventive screening services, anticipatory guidance, and counseling. Early childhood health interventions have also been shown to have positive financial ROI and societal outcomes in non-medical arenas, such as literacy, crime, and income.²⁵

b. Specific approaches to attribution and risk-adjustment to be considered?
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As stated, pediatric population health is much different from adults and any risk adjustment methodology needs to account for these differences. The dependent nature of children on adult caregivers requires consideration of the caregiver's role as a variable in any predictive measures. The education, income level, and mental health status of the parent (e.g. maternal depression and substance use) need to be recognized as impacting a child's health status. Pediatric risk adjustment models need to include measures of parental well-being - e.g. maternal depression, poverty, homelessness and substance use. Such considerations are not required in risk adjustment models for the adult patient.

Because of developmental stages, the risk management model for pediatrics must be delineated among age groups. Additionally, the epidemiology of disease is quite different in pediatrics than for adults. Certain chronic conditions treated for adults (cardiac, pulmonary and renal conditions) that tend to replicate year after year are relatively uncommon for children. Whereas in pediatrics, children are more prone to unpredictable bouts of acute infections or injuries.

Lastly, it is important to note that most pediatric practices do not have sophisticated payment data or adequate sample size to perform their own actuarial calculations and compute risk adjustment which are necessary in negotiating any type of risk bearing payment model.

Concerning risk adjustment and attribution models for pediatric payment, it is recommended that APMs:

- Allow for exclusions of costs or risk adjustments, when appropriate. Medically complex children incur 14.2 times the costs of medical care that healthy children do.²⁶ Adjustment of risk for pediatric APMs might include risk adjustment/stratification or carveouts for prolonged hospital care (e.g., NICU stays for extreme prematurity) or specialized services (e.g., residential mental health or complex surgery).
- Sufficiently detail the methodology for payer computation of any provider-level metric, such that the provider can precisely reproduce the calculation, including the provision of raw data sources, where applicable. Quality measures should define terms such as "active patient" and "up to date" in unambiguous languageⁱ; payment mechanisms that use undisclosed "proprietary criteria" are not acceptable. Methodology for patient attribution and provider cost attribution should be particularly clear and timely.

²⁵ 13% ROI Research Toolkit. Heckman. <https://heckmanequation.org/resource/13-roi-toolbox/>. Accessed March 17, 2017.

²⁶ Kuo DZ, Melguizo-Castro M, Goudie A, et al. Variation in Child Health Care Utilization by Medical Complexity. *Maternal and Child Health Journal*. 2015;19(1):40-48.

- Use sophisticated attribution methods drawing from multiple data sources. Single-source performance data may be incomplete and thus inaccurately represent physician performance. While “the responsible decision maker” is usually attributed to a physician, the treating facility or the health plan may have the largest impact on variable costs.^{27, 28}

c. Advantages and disadvantages of payment models

Regarding specific APM methods and pediatrics the following provides a pediatric perspective on APMs currently in place:

- Bundled payments: may be appropriate as a payment method when services and provider responsibilities are well defined and straightforward. However bundled payments are considered inappropriate when goals are complex and responsibilities overlap.
- Per member per month (PMPM) payments generally have been used to support care coordination. External funding of care coordination, rather than requiring a practice to support it with general revenues, leads to faster implementation.²⁹
- Pay for Performance: may be appropriate for some health care delivery efforts which might include those that reduce overutilization of interventions (e.g., unnecessary prescription of antibiotics and medical imaging) that are controlled by the physician, or improve access (e.g., paying bonuses for patients seen on weekends or after hours). Withhold payments are strongly discouraged. Withholding payments to practices is counter-intuitive to improving quality as they do not provide support to the practice to build capacity to achieve the desired standard.

d. Are different payment models appropriate for different providers, populations?

To reiterate, guiding principles for any type of pediatric APM must ensure sufficient funding to cover the total costs for:

- Episodic encounters common to pediatrics (i.e., wellness, preventive and problem oriented medical, oral health, mental and behavioral health services as well as non-face to face care).
- Specific pediatric medical home functions including but not limited to care management, care coordination, patient and family education, counseling and consultative services, community integration services, anticipatory guidance and transition planning.
- Identification of patient characteristics that necessitate higher utilization of medical services and medical home services as noted above. APMs lacking an adequate risk adjustment tool may end up penalizing practices that take on a proportionally higher rate of complex patients, including children with medical and social complexity. Risk adjusted payments must account for the medical and social severity and acuity of the patient panel
- Maintenance of health information technology and its application to quality improvement activities and population health.

Question 4: How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals’ community benefit dollars be combined to support an integrated care delivery model?

²⁷ Accuracy of electronic quality reporting varies across quality measures. AHRQ, Research Activities. July 2013. <http://www.ahrq.gov/news/newsletters/research-activities/13jul/0713ra9.html>. Accessed March 17, 2017.

²⁸ Hirth RA, Turenne MN, Wheeler JR, et al. Provider monitoring and pay-for-performance when multiple providers affect outcomes: An application to renal dialysis. *Health Serv Res.* 2009;44(5 Pt 1):1585-602.

²⁹ Van Cleave J, Boudreau AA, Mcallister J, et al. Care coordination over time in medical homes for children with special health care needs. *Pediatrics.* 2015;135(6):1018-26.

A critical area for APMs to support an integrated care model is to remove obstacles and adequately fund integrated oral health and behavioral/mental health care in the primary pediatric care setting.

Comprehensive benefits coverage and effective financing systems for children's oral health and mental health in primary care are essential in building a successful comprehensive system of care. However, numerous challenges and barriers impact not only financing and service delivery systems but also children's access to oral health, and behavioral/mental health services. These issues include:

- Limitations on coverage for oral health and mental health services in public and private health insurance systems.
- Inadequate payment for oral health and behavioral/mental health services, including preventive services, to primary care clinicians and other key professionals.
- Payer billing and coding rules and regulations that impede the provision of oral health and behavioral/mental health services by primary care clinicians and other types of clinicians.
- Carve-outs in health plans that limit the ability of primary care clinicians to identify and treat oral health and behavioral/mental health conditions early and make direct referrals for appropriate services, thereby creating access barriers to services for children and their families.
- Lack of payment for case management and care coordination efforts.

Pediatric primary care offers a setting that encourages trusting, longitudinal relationships with the child and family often referred to as the 'primary care advantage.' The pediatric primary care advantage recognizes that pediatricians have unique opportunities to affect the overall health of children, including oral health and behavioral/mental health such as preventing problems by guiding parents in behavior management; identifying oral health and behavioral/mental health symptoms as they emerge, intervening early, before symptoms have evolved into disorders; providing treatment for more common mental health conditions; facilitating referral of children and their family members when specialty services are needed.

SECTION IV: PEDIATRIC MEASURES

Payers, plans, consumers, and physicians are utilizing quality measures in various forms to improve the overall quality of care, contain growing health care costs, and to differentiate themselves from competitors. The development and implementation of national pediatric measures have moved considerably slower than that of adults due to lack of evidence, risk adjustment, unreliable data sources, and small patient population for chronic pediatric conditions. Despite these challenges, there have been successful efforts to create a robust set of pediatric endorsed measures through many organizations including the National Committee for Quality Assurance, the Agency for Health Care Research and Quality, National Quality Forum, Children's Hospital Association, America's Health Insurance Plans, and the National Academy of Medicine.

The AAP is supportive of CMMI's interest in identifying measures that demonstrate improved quality as children transition to adulthood. While the AAP acknowledges the importance of seeking short- and long-term cost savings it is essential to note that measuring the value of children's healthcare is fundamentally different. Investments in child health have long term savings outcomes (healthy children mean healthier adults and thus less expensive consumers of healthcare).

Children with medical complexity highlight one specific area where innovative payment models have found success. There are several models around the country of integrated health systems that do a very good job of keeping children with medical complexity out of the hospital and healthy. Intermountain, Seattle Children's, Nationwide and Cincinnati Children's for example are some of the few that have good programs that cover all aspects of healthcare for these children.

The AAP is supportive of nationally standardized measures in pediatrics for widespread use and reporting; and has been working to identify a group of measures that are meaningful to the broad spectrum of child health and development. The AAP is interested in promoting measures that serve as indicators of success and can be used for payment while also identifying gaps in children's health. These gaps will provide direction to the application of quality improvement strategies, when needed. The AAP has a long history of partnership with the previously noted organizations including the CHIPRA Pediatric Quality Measures Program (PQMP). We encourage CMMI to leverage the experience and infrastructure of the PQMP to develop and test pediatric quality measures where gaps in care are identified.

The AAP recognizes that measures should be evidence based and consist of numerators and denominators when possible; however, understands linking quality improvement and pay for value do not require equally stringent specifications. When examining measures that are essential to child health and development, it is critical that CMMI understands the complexities of pediatric measure development and the dichotomy between a theoretical ideal and the practical reality. The AAP highlights the following considerations for CMMI when developing pediatric payment models:

- While the gold standard for measures is those that have a strong evidence base. The inclusion of measures that are meaningful to child health and development may be evidence informed rather than evidence based.
 - Identify measures for payment for pediatricians that can also be used to improve care quality.
 - Consider the evolution of measures that will change over time once care gaps are minimized and care is improved.
 - Examine the broad range and complexity of measures for pediatrics that include type of care (prevention/wellness, acute care, subspecialty care, mental/behavioral health, etc), sites of care (inpatient, outpatient, school-based, etc.), healthy behaviors, overuse and appropriate treatment, person and family centered care, and family and community engagement. Many of these measures will need to be developed for new models, especially related to person and family centered care as well as family and community engagement.
-

American Association of Nurse Anesthetists

RFI - AANA Comments on Pediatric Alternative Payment Model Concepts RFI

Attached please find comments from the American Association of Nurse Anesthetists regarding the Request for Information on Pediatric Alternative Payment Model Concepts. If you have any questions, my contact information is below. Thank you.



American
Association of Nurse



March 13, 2017

Electronic Submission via

Patrick Conway, MD, MSc
Acting Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services

RE: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Conway:

The American Association of Nurse Anesthetists (AANA) welcomes the opportunity to comment on the Request for Information on Pediatric Alternative Payment Model Concepts. The issues addressed in our comment are outlined as follows:

- I. Background of the AANA and CRNAs**
- II. CMS Should Support Innovative Cost-Effective Models in Healthcare Delivery such as Non-medically Directed Anesthesia Services Performed by CRNAs**
- III. Encourage the Strategic Use of Anesthesia Services in the Development of New Pediatric Healthcare Payment Models**
- IV. For Anesthesia, Interoperability of Health Information Should Communicate Across the Continuum of Patient Care and EHRs Should Use Standardized Taxonomies Across Technology Platforms**
- V. The Focus of Measurement of Interoperability Should Not Be Limited to Only Use of Certified EHR Technology**

I. Background of the AANA and CRNAs

The AANA is the professional association for Certified Registered Nurse Anesthetists (CRNAs) and student registered nurse anesthetists (SRNAs). AANA membership includes more than 50,000 CRNAs and SRNAs, representing over 90 percent of the nurse anesthetists in the United States. CRNAs are advanced practice registered nurses (APRNs) who personally administer

approximately 43 million anesthetics to patients each year in the United States. Nurse anesthetists have provided anesthesia in the United States for 150 years, and high-quality, cost-effective CRNA services are in high demand. CRNAs are Medicare Part B providers and since 1989 have billed Medicare directly for 100 percent of the physician fee schedule amount for services.

CRNAs are involved in every aspect of anesthesia services including a pre-anesthesia patient assessment, obtaining informed consent for anesthesia administration, developing a plan for anesthesia administration, administering the anesthetic, monitoring and interpreting the patient's vital signs, and managing the patient throughout the surgery. CRNAs also provide acute, chronic, and interventional pain management services. CRNAs provide anesthesia for a wide variety of surgical cases and in some states are the sole anesthesia providers in nearly 100 percent of rural hospitals, affording these medical facilities obstetrical, surgical, trauma stabilization, and pain management capabilities. Nurse anesthesia predominates in Veterans Hospitals and in the U.S. Armed Services. CRNAs work in every setting in which anesthesia is delivered including hospital surgical suites and obstetrical delivery rooms, ambulatory surgical centers (ASCs), pain management facilities, and the offices of dentists, podiatrists, and all types of specialty surgeons.

Numerous peer reviewed studies have shown that CRNAs are safe, high quality and cost effective anesthesia professionals who should practice to the full extent of their education and abilities. According to a May/June 2010 study published in the journal *Nursing Economic\$*, CRNAs acting as the sole anesthesia provider are the most cost-effective model for anesthesia delivery, and there is no measurable difference in the quality of care between CRNAs and other anesthesia providers or by anesthesia delivery model.¹ An August 2010 study published in *Health Affairs* showed no differences in patient outcomes when anesthesia services are provided by CRNAs, physicians, or CRNAs supervised by physicians.² Researchers studying anesthesia

¹ Paul F. Hogan et al., "Cost Effectiveness Analysis of Anesthesia Providers." *Nursing Economic\$*. 2010; 28:159-169. http://www.aana.com/resources2/research/Documents/nec_mj_10_hogan.pdf

² B. Dulisse and J. Cromwell, "No Harm Found When Nurse Anesthetists Work Without Physician Supervision." *Health Affairs*. 2010; 29: 1469-1475. <http://content.healthaffairs.org/content/29/8/1469.full.pdf>

safety found no differences in care between nurse anesthetists and physician anesthesiologists based on an exhaustive analysis of research literature published in the United States and around the world, according to a scientific literature review prepared by the Cochrane Collaboration, the internationally recognized authority on evidence-based practice in healthcare.³ Most recently, a study published in *Medical Care* (June 2016) found no measurable impact in anesthesia complications from nurse anesthetist scope of practice or practice restrictions.⁴

CRNAs play an essential role in assuring that rural America has access to critical anesthesia services, often serving as the sole anesthesia provider in rural hospitals and affording these facilities the capability to provide many necessary procedures. The importance of CRNA services in rural areas was highlighted in a recent study which examined the relationship between socioeconomic factors related to geography and insurance type and the distribution of anesthesia provider type.⁵ The study correlated CRNAs with lower-income populations and correlated anesthesiologist services with higher-income populations. Of particular importance to the implementation of public benefit programs in the United States, the study also showed that compared with anesthesiologists, CRNAs are more likely to work in areas with lower median incomes and larger populations of citizens who are unemployed, uninsured, and/or Medicaid beneficiaries.⁶

³ Lewis SR, Nicholson A, Smith AF, Alderson P. Physician anaesthetists versus non-physician providers of anaesthesia for surgical patients. *Cochrane Database of Systematic Reviews* 2014, Issue 7. Art. No.: CD010357. DOI: 10.1002/14651858.CD010357.pub2.
<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010357.pub2/abstract>

⁴ Negusa B et al. Scope of practice laws and anesthesia complications: No measurable impact of certified registered nurse anesthetist expanded scope of practice on anesthesia-related complications. *Medical Care* June 2016, http://journals.lww.com/lww-medicalcare/Abstract/publishahead/Scope_of_Practice_Laws_and_Anesthesia.98905.aspx.

⁵ Liao CJ, Quraishi JA, Jordan, LM. Geographical Imbalance of Anesthesia Providers and its Impact on the Uninsured and Vulnerable Populations. *Nurs Econ.* 2015;33(5):263-270.
<http://www.aana.com/resources2/research/Pages/NursingEconomics2015.aspx>

⁶ Liao, op cit.

AANA Comment: CMS Should Support Innovative Cost-Effective Models in Healthcare Delivery such as Non-medically Directed Anesthesia Services Performed by CRNAs

The AANA supports the aim of this alternative payment model which is to facilitate strategies for timely and appropriate delivery of family-centered, community-based, linguistically and culturally appropriate, cost-effective, and integrated services to all children and youth covered by Medicaid and CHIP. Alternative payment models have the potential to drive value-based healthcare delivery, particularly in anesthesia care and related services, and meet the triple healthcare aims of improving patient experience of care, improving population health and reducing health care costs. In the anesthesia and pain management arena, one innovative model that the agency should study as a cost-efficient model in healthcare delivery is non-medically directed CRNA anesthesia services.

In most respects, Medicare reimburses CRNAs and anesthesiologists the same rate for the same high quality service -- 100 percent of a fee for providing non-medically directed (CRNA) or personally performed (anesthesiologist) services. However, Medicare Part B also authorizes payment for “anesthesiologist medical direction”⁷ that provides a financial incentive for anesthesiologists to “medically direct” CRNAs who are capable of and are often providing patient access to high quality anesthesia care unassisted. While this RFI does not cover the Medicare program, many Medicaid policies use these anesthesia payment models. An anesthesiologist claiming medical direction services may be reimbursed 50 percent of a fee in each of up to four concurrent cases, a total of 200 percent over a given period of time, twice what the anesthesiologist may claim when personally performing anesthesia services in one case. Under medical direction, the CRNA may claim the remaining 50 percent of a fee for his or her case. Peer-reviewed evidence demonstrates anesthesiologist medical direction increases healthcare costs without improving value.⁸ The CMS has also stated that medical direction is a condition of payment of anesthesiologist services and not a quality standard.⁹

⁷ 42 CFR §415.110. <http://www.gpo.gov/fdsys/pkg/CFR-2003-title42-vol2/pdf/CFR-2003-title42-vol2-sec415-130.pdf>

⁸ Hogan, op cit.

⁹ 63 FR 58813, November 2, 1998, <http://www.gpo.gov/fdsys/pkg/FR-1998-11-02/pdf/98-29181.pdf>.

In demonstrating the increased costs associated with anesthesiologist medical direction, suppose that there are four identical cases: (a) has anesthesia delivered by a non-medically directed CRNA; (b) has anesthesia delivered by a CRNA medically directed at a 4:1 ratio by a physician overseeing four simultaneous cases and attesting fulfillment of the seven conditions of medical direction in each; (c) has anesthesia delivered by a CRNA medically directed at a 2:1 ratio; and (d) has anesthesia delivered by a physician personally performing the anesthesia service. (There are instances where more than one anesthesia professional is warranted; however, neither patient acuity nor case complexity is a part of the regulatory determination for medically directed services. The literature demonstrates that the quality of medically directed vs. non-medically directed CRNA services is indistinguishable in terms of patient outcomes, quality and safety.) Further suppose that the annual pay of the anesthesia professionals approximate national market conditions, \$170,000 for the CRNA¹⁰ and \$540,314 for the anesthesiologist¹¹. Under the Medicare program and most private payment systems, practice modalities (a), (b), (c) and (d) are reimbursed the same. Moreover, the literature indicates the quality of medically directed vs. non-medically directed CRNA services is indistinguishable. However, the annualized labor costs (excluding benefits) for each modality vary widely. The annualized cost of practice modality (a) equals \$170,000 per year. For case (b), it is $(\$170,000 + (0.25 \times \$540,314))$ or \$305,079 per year. For case (c) it is $(\$170,000 + (0.50 \times \$540,314))$ or \$440,157 per year. Finally, for case (d), the annualized cost equals \$540,314 per year.

Anesthesia Payment Model	FTEs / Case	Clinician costs per year / FTE
(a) CRNA Non-medically Directed	1.00	\$170,000
(b) Medical Direction 1:4	1.25	\$305,079
(c) Medical Direction 1:2	1.50	\$440,157
(d) Anesthesiologist Only	1.00	\$540,314
<i>Anesthesiologist mean annual pay</i>	<i>\$540,314</i>	<i>MGMA, 2014</i>
<i>CRNA mean annual pay</i>	<i>\$170,000</i>	<i>AANA, 2014</i>

¹⁰ AANA member survey, 2014

¹¹ MGMA Physician Compensation and Production Survey, 2014. www.mgma.com

If plans pay the same rate whether the care is delivered according to modalities (a), (b), (c) or (d), someone in the health system is bearing the additional cost of the medical direction service authorized under the Medicare regulations at 42 CFR §415.110. Pertinent to Medicaid, if a state Medicaid program reimburses for CRNA anesthesia services only to the extent that they are medically directed by an anesthesiologist (as is the case in Pennsylvania, for example), that policy is driving additional healthcare costs and waste without improving healthcare quality or access to care. This additional cost is shifted onto hospitals and other healthcare facilities, and ultimately to patients, premium payers and taxpayers. With CRNAs providing over 38 million anesthetics in the U.S., and a considerable fraction of them being “medically directed,” the additional healthcare costs driven by this medical direction service are substantial.

In addition, the most recent peer-reviewed literature makes clear that the requirements of anesthesiologist medical direction are often not met in practice – and if anesthesiologists submit claims to Medicaid for medical direction but did not perform all of the required services in each instance, then the likelihood of widespread Medicaid fraud in this area is high. Lapses in anesthesiologist supervision are common even when an anesthesiologist is medically directing as few as two CRNAs, according to a 2012 study published in the journal *Anesthesiology*,¹² the professional journal of the American Society of Anesthesiologists. The authors reviewed over 15,000 anesthesia records in one leading U.S. hospital, and found supervision lapses in 50 percent of the cases involving anesthesiologist supervision of two concurrent CRNA cases, and in more than 90 percent of cases involving anesthesiologist supervision of three concurrent CRNA cases. This study raises critical issues about Medicare claims compliance in a common and costly model of anesthesia delivery at a time when quality, cost-effectiveness, and best use of Medicare resources are the focus of healthcare reform. In the interest of patient safety and access to care, these additional costs imposed by medical direction modalities more than justify the public interest in recognizing and reimbursing fully for non-medically directed CRNA services within Medicare, Medicaid and private plans in the same manner that physician services are reimbursed.

¹² Epstein R, Dexter F. Influence of Supervision Ratios by Anesthesiologists on First-case Starts and Critical Portions of Anesthetics. *Anesth.* 2012;116(3): 683-691.

In conclusion, anesthesiologist medical direction reimbursement models contribute to increased healthcare system costs without improving access or quality, and also present fraud risk when medical direction requirements are not met by the anesthesiologist submitting a claim for such services. Therefore, CMS should consider such costs when developing and carrying out new systems for anesthesia reimbursement in new healthcare delivery models, and to favor reimbursement systems that support the most cost-effective and safe anesthesia delivery models such as for non-medically directed CRNA services.

AANA Comment: Encourage the Strategic Use of Anesthesia Services in the Development of New Pediatric Healthcare Payment Models

The AANA asks the agency to encourage the strategic use of anesthesia services in the development of new pediatric healthcare payment and service delivery models. Anesthesia professionals, such as CRNAs, play an integral role in these procedures as proper anesthesia services management can make a tremendous difference in terms of improving patient flow, patient safety, and ultimately in cost savings.¹³ Conversely, research shows that suboptimal care in the preoperative, intraoperative, or postoperative phases of surgery may compromise care, resulting in poor patient outcomes and unnecessarily higher healthcare costs.¹⁴ Anesthesia is a small portion of the variable costs associated with procedures involving pediatrics. We urge that any new pediatric payment models developed should emphasize the strategic consideration of the role of anesthesia delivery that is safe and cost-efficient and include the use of techniques such as Enhanced Recovery After Surgery (ERAS) programs, which help reduce costs and improve patient outcomes.¹⁵

¹³ See for example Rice AN, Muckler VC, Miller WR, Vacchiano CA. Fast-tracking ambulatory surgery patients following anesthesia. *J Perianesth Nurs*. Apr 2015;30(2):124-133 and Kimbrough CW et al. Improved Operating Room Efficiency via Constraint Management: Experience of a Tertiary-Care Academic Medical Center. *Journal of the American College of Surgeons* 2015; 221: 154-162.

¹⁴ Miller TE, Roche AM, Mythen M. Fluid Management and Goal-Directed Therapy as an Adjunct to Enhanced Recovery After Surgery (ERAS). *Canadian Journal of Anesthesia* 2015; 62 (2)" 158-168.

¹⁵ See for example Boulind CE, Yeo M, Burkill C, et al. Factors predicting deviation from an enhanced recovery programme and delayed discharge after laparoscopic colorectal surgery *Colorectal Dis*. 2011;14:103-110; Miller TE, Thacker JK, White WD, et al. Reduced length of hospital stay in colorectal surgery after implementation of an enhanced recovery protocol. *Anesth Analg*. May 2014;118(5):1052-1061; and Enhanced recovery care pathway. A better journey for patients seven days a week and better deal for the NHS. National Health Service 2012-2013. <http://www.nhs.uk/resources/publications/enhanced-recovery-care-pathwayreview.aspx>. Accessed February 25, 2015.

AANA Comment: For Anesthesia, Interoperability of Health Information Should Communicate Across the Continuum of Patient Care and EHRs Should Use Standardized Taxonomies Across Technology Platforms

As the agency is interested in comments related to infrastructure development, we offer the following recommendations regarding interoperability and communication of patient information across technology platforms when it comes to the realm of anesthesia. For anesthesia measures, we recommend that interoperability of electronic health records (EHRs) and other information systems should communicate across the continuum of patient care. Disparate information systems should interface between offices, clinics, hospitals, and pharmacy platforms to communicate across the patient's experience to increase patient safety, improve outcomes and decrease cost of care.

We also recommend that EHR systems should include standardized taxonomy and fields and require providers to use these across various platforms to optimize communication of care and interoperability. In the major anesthesia information management systems, some standardized taxonomies are present; however, valuable patient specific information is entered as free text or in unstructured data hindering data sharing and communication, in addition to making this information difficult to extract for quality reporting without manually reading the fields.

The Focus of Measurement of Exchange and Use of Interoperability Should Not Be Limited to Only Use of Certified EHR Technology

The AANA believes that a pediatric APM should not be restricted only to use of certified EHR technology. Smaller facilities and anesthesia groups may not have the funds and resources necessary to participate in use of a certified, comprehensive EHR, but may purchase a standalone AIMS that is added to the facility EHR. If the agency's goal is to measure true interoperability, and if smaller EHR companies can construct an AIMS that is affordable for use by smaller provider groups, then these groups should be included in this measurement. Furthermore, use of non-certified EHRs in measurement of interoperable EHR technology will also encourage

innovation in this field because having to get certified first will limit many programmers who are experimenting with novel methods of handling and accessing EHR data.

We thank you for the opportunity to comment on this RFI. Should you have any questions regarding these matters, please feel free to contact the AANA Senior Director of Federal Government Affairs, Ralph Kohl.

Sincerely,

A handwritten signature in black ink, appearing to read "Cheryl L. Nimmo". The signature is fluid and cursive, with a small flourish at the end.

Cheryl L. Nimmo, DNP, MSHSA, CRNA
AANA President

cc: Wanda O. Wilson, PhD, CRNA, AANA Executive Director
Ralph Kohl, AANA Senior Director of Federal Government Affairs
Randi Gold, MPP, AANA Associate Director Federal Regulatory and Payment Policy

American Congress of Obstetricians and Gynecologists

ACOG Response to RFI on Pediatric Alternative Payment Model Concepts

Please find attached to this email comments submitted on behalf of the American Congress of Obstetricians and Gynecologists in response to the Request for Information on Pediatric Alternative Payment Model Concepts. Please do not hesitate to contact me with any questions.

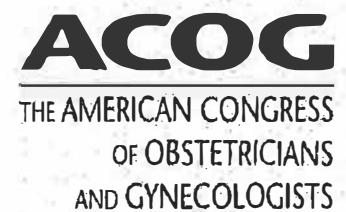
Thank you.

See attachment response.



American Congress
of Obstetricians and

Barbara S. Levy, MD, FACOG
Vice President, Health Policy



March 21, 2017

Patrick Conway, MD, MSc
Deputy Administrator for Innovation and Quality
Center for Medicare and Medicaid Innovation
Centers for Medicare and Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Conway:

On behalf of the American Congress of Obstetricians and Gynecologists (ACOG), representing over 58,000 physicians and partners in women's health, I am pleased to have the opportunity to respond to the Center Medicare and Medicaid Services' (CMS) Request for Information (RFI) on Pediatric Alternative Payment Model Concepts. As obstetrician-gynecologists (ob-gyns), we know firsthand that one of the best ways to ensure good child health outcomes is to provide high-quality maternity care. We are also cognizant of the importance of providing care for our adolescent patients to ensure they enter adulthood as healthy adults who are in control of their own fertility. We are dedicated to not only caring for our female patients of all ages, but also ensuring that their offspring have the best start possible in life. It is with these goals in mind that we submit the following comments.

What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

ACOG believes that adolescent females' reproductive health needs should be considered when designing payment models and integrated delivery systems in Medicaid and the Children's Health Insurance Program (CHIP). Adolescence is a critical time as teens transition from pediatric practices to adult ambulatory care settings. Adolescent females and young adult women are more likely to seek care from ob-gyns than from other primary care specialties, so it is important that models allow for patients to choose their provider rather than focusing only on pediatric practices.ⁱ

The transition period allows adolescents to be screened by ob-gyns for a wide variety of health issues and receive appropriate preventive care along with family planning services and supplies.ⁱⁱ While the rate of adolescent pregnancy has declined over the last several years, it is still much higher than in other developed countries.ⁱⁱⁱ The economic and societal consequence of teen pregnancy can be long-lasting and impact not just adolescents who get pregnant, but their offspring as well.^{iv,v,vi} It is imperative that alternative payment models recognize the reproductive health needs of adolescent females, along with the role and value that ob-gyns and other reproductive health providers have in treating, coordinating care, and providing community supports to this patient population. Financial incentive programs should

balance cost-saving interests at the system level with patient preference, quality performance, and health outcomes at individual and population levels. Financial incentive programs should guard against coercion or restricting care by ensuring adolescent patients' abilities, preferences, and values are respected. While we are not advocating for a payment model that incentivizes one form of family planning over any other, we strongly believe that to achieve long-term savings, adolescents' reproductive health needs should be incorporated into future payment and care delivery models.

ACOG also recommends that CMS look at care models that promote linkages between pediatricians and obstetricians. This may come in the form of co-located medical home models for maternity care and pediatrics or in facilitating data linkages between pediatricians and ob-gyns who are treating the mother-infant dyad. In particular, ACOG believes that CMS should foster models that incentivize pediatricians to provide the results of perinatal depression screenings with ob-gyns or other maternity care providers. As noted in the guidance issued on May 11, 2016, children whose mothers have depression may be at risk for long-term physical and behavioral health consequences.^{vii} Ensuring that all care providers have the necessary information about women's mental health status will facilitate better treatment with the ultimate goal of improving the health outcomes for women and children.

What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)?

ACOG recommends that models for adolescents must include a sufficient number of quality measures on reproductive health and the preventive services provided in reproductive health settings, including screenings for body mass index, cancer, sexually transmitted infections, depression, tobacco use, and intimate partner violence and immunizations. We would encourage the incorporation of *Non-Recommended Cervical Cancer Screening in Adolescent Females* as a measure of appropriate care delivery. With the exception of women who are infected with HIV or who are otherwise immunocompromised, ACOG recommends that women younger than twenty-one years should not be screened for cervical cancer regardless of the age of sexual initiation or the presence of other behavior-related risk factors.^{viii}

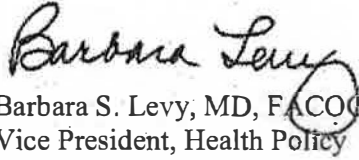
We also recommend the use of the measure *Human Papillomavirus Vaccine for Female Adolescents* in payment models to incentivize the delivery of evidence-based care. ACOG, as well as the Advisory Committee on Immunization Practices, recommend that adolescent females and males ages 11 to 12 years receive human papillomavirus (HPV) vaccination.^{ix} This timing increases the likelihood that adolescents have not yet been exposed to HPV through sexual activity and reduces the incidence of anogenital cancer and genital warts.

We also recommend the use of *Effective Postpartum Contraception* and *Use of Contraceptive Methods by Women Aged 15-20 Years* at the health insurance plan and population health level to monitor appropriate access to contraception. These measures are critical to addressing unintended pregnancy and optimizing perinatal outcomes. ACOG firmly believes in the need for Confidential, comprehensive contraceptive care and access to contraceptive methods for adolescents.^x

Again, thank you for the opportunity to comment on the Request for Information on Pediatric Alternative Payment Model Concepts. We hope you have found our comments helpful. We look forward to working with CMS as it continues its payment and delivery system transformation work. Should you have any

questions, please contact Elizabeth Wieand, Program Director of Payment and Delivery System Policy, at .

Sincerely,



Barbara S. Levy, MD, F.ACOG, FACS
Vice President, Health Policy

ⁱ Callahan, ST and Cooper, WO. (2010). Changes in ambulatory health care use during the transition to young adulthood. *Journal of Adolescent Health*, 46: 407-413.

ⁱⁱ The transition from pediatric to adult health care: preventive care for young women aged 18–26 years. Committee Opinion No. 626. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2015;125:752–4.

ⁱⁱⁱ Hamilton BE, Martin JA, Osterman MJK, et al. (2015). Births: final data for 2014. *Natl Vital Stat Rep*; 64(12):1-64.

^{iv} National Campaign to Prevent Teen and Unplanned Pregnancy. (2013). Counting it up – The public costs of teenage childbearing: Key data. Retrieved from: <http://thenationalcampaign.org/resource/counting-it-key-data-2013>

^v Perper K, Peterson K, Manlove J. (2010). Diploma attainment among teen mothers. *Child Trends, Fact Sheet*. Publication #2010-01. Retrieved from: http://www.childtrends.org/wp-content/uploads/2010/01/child_trend_-_2010_01_22_FS_diplomaattainment.pdf

^{vi} Hoffman SD and Maynard, RA. (2008). Kids having kids: Economic costs and social consequences of teenage pregnancy. Washington, DC: The Urban Institute Press.

^{vii} Centers for Medicare and Medicaid Services. (2016). CMCS Informational Bulletin: Maternal Depression Screening and Treatment: A Critical Role for Medicaid in the Care of Mothers and Children.

^{viii} Cervical cancer screening and prevention. Practice Bulletin No. 168. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2015;126:e38-43.

^x Access to contraception. Committee Opinion No. 615. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2015;125:250–5.

American Medical Group Association

Please accept the attached AMGA comment letter in response to CMMI's "Request for Information on Pediatric Alternative Payment Model Concepts."

Thank you.

See attachment for RFI response.



American Medical
Group Association.p



March 24, 2017

Ms. Seema Verma
Administrator
Centers for Medicare and Medicaid Services

Dear Ms. Verma:

On behalf of the AMGA we appreciate the opportunity to comment on the Center for Medicare and Medicaid Innovation's (CMMI's), "Request for Information on Pediatric Alternative Payment Model Concepts" (RFI). Founded in 1950, AMGA represents more than 440 multi-specialty medical groups and integrated delivery systems representing roughly 177,000 physicians who care for one-in-three Americans. Our member medical groups work diligently to provide innovative, high quality, patient-centered medical care that both improves patient outcomes and is spending efficient. For these reasons we have a significant interest in improving pediatric care particularly under Medicaid as one in three children, or 33 million are covered by the program.

Generally, AMGA strongly supports alternative payment models (APMs). For example, in our comments in response to the proposed MACRA rule, AMGA argued for full MIPS implementation. In that letter and in other comment letters AMGA has also argued for correlating quality to cost or correlating outcomes achieved over spending. AMGA has also argued for, or supported improvements to, the Medicare Shared Savings Program (MSSP). For example, AMGA supported including regional spending in calculating Accountable Care Organization (ACO) financial benchmarks and for providing stronger financial incentives for ACOs particularly Track 1 ACOs. AMGA also has been supportive of CMMI's efforts to expand its bundled payment initiatives, most recently the mandatory cardiac care and cardiac rehabilitation demonstrations.

Concerning pediatric APM "concepts" AMGA supports CMMI's interest in care that is more comprehensive, which the RFI describes as care for those with "developmental, social, emotional and behavioral health challenges, intellectual or physical developmental delays or disabilities, and/or those with complex and/or chronic health conditions." AMGA also recognizes the importance of better care coordination or "integrated service models" that include health-related social service agencies, community based organizations, and local school systems. AMGA particularly supports the development of pediatric quality measures as there are no national standards or national data sets. Those pediatric quality measures that do exist are, not surprisingly, largely process measures.

The RFI states, in part, CMMI is “exploring the development of a new pediatric health care payment and service delivery model.” The agency is seeking input on “improving the health of children” and the “integration of health care and health-related social services with shared accountability and cost savings.” CMS is particularly interested in “those with or at-risk for developmental, social, emotional or behavioral health challenges” or in sum “high-need, high-risk beneficiaries.” CMS states health needs “include providing for “safe living environments, responsive adult caregivers, and nurturing social relationships” that “are critical for health growth and development.” CMS recognizes “children and youth covered by Medicaid and the Children's Health Insurance Program (CHIP) may be exposed to such unfavorable social conditions and adverse childhood experiences, which could go unrecognized or unaddressed.” CMS therefore is interested in building better integrating pediatric health care and health-related social service models that, among other things, improve outcomes for children and “offer the greatest opportunity for generating savings.” Finally, CMS is also interested in “building upon its work on pediatric quality measures indicative of health outcomes” such that “health children become healthy adults.”

Given that CMMI is interested in “high-need, high risk children,” as well as “safe living environments,” recognizes children are “exposed to such unfavorable social conditions and adverse childhood experiences, which go unrecognized and unaddressed,” and desires to improve outcomes for children and generate the “greatest opportunity for savings,” we believe any CMMI-related pediatric APM demonstration would be failure unless it directly addresses child sexual abuse.

Per the CMMI's mention of “adverse childhood experiences,” CMS is well aware of the CDC's Adverse Childhood Experiences (ACEs) study. The ACEs study found 24.7 percent of girls, or one in four, and 16 percent of boys, or roughly one in six, are sexually abused before reaching age 18. As a result the longitudinal ACEs study also found victims of child sexual abuse frequently suffer life-long physical and mental harm including but not limited to: AIDS; alcoholism; chronic obstructive pulmonary disease, depression, illicit drug use; ischemic heart disease; liver disease; obesity; partner violence; risky sexual behavior; self-mutilation; smoking; and, numerous serious mental health disorders, including suicide and Dissociative Identity Disorder (DID) that is associated with high levels of impairment, high rates of treatment utilization and costs and can affect not surprisingly as many as 20 percent of psychiatric hospital patients. ACEs research has shown that compared with an ACEs score of 0, those with an ACEs score of 4 or more are twice as likely to be smokers, 12 times more likely to have attempted suicide, 7 times more likely to be alcoholic and 10 times more likely to have injected street drugs. Individuals with a score of 6 die nearly 20 years earlier on average.¹ In his sentencing of former House Speaker Denis Hastert last year on charges related to his sexually molesting boys, Federal District Court Judge Thomas Durkin recognized this reality when he stated, “the abuse was forty years ago, but the damage lasts today.” Not surprisingly, one of Hastert's victims died of AIDS in 1995.² The CDC estimates the total life time cost of child abuse and neglect is \$124 billion each year.

Despite the prevalence of child sexual abuse, again one in four girls and one in six boys, the suffering and early death caused by abuse and the health care and societal costs incurred, CMS along with related organizations remains silent on the issue. For example:

- CMMI has not addressed the issue. One might expect the Accountable Health Communities demonstration to address child abuse since the model is intended to, per

CMS' description, address the "critical gap between clinical care and community services in the current health care delivery system by testing whether systematically identifying and addressing the health-related social needs of beneficiaries' impacts total health care costs, improves health, and quality of care." The model does not. CMS simply states "for the purposes of the model, usual care also includes all federal and state reporting requirements (e.g., mandatory reporting of child abuse and neglect)."³

- Searching CMS' "state waiver list" website pages for "child sexual abuse" and "child abuse" yields only one document. It discusses Florida's AIDS care waiver.⁴
- CMS' "Core Set of Children's Health Care Quality Measures for Medicaid and CHIP," or the "Core Child Set," ignores the issue. None of the nine "primary care access and preventive care" measures are related to child abuse of any kind.⁵
- The National Quality Form (NQF) lists no "child sexual abuse" or any "child abuse" quality measures.⁶
- The Agency for Healthcare Research and Quality's (AHRQ's) annual Healthcare Quality and Disparities reports contain no discussion of the topic.⁷
- The Medicaid and CHIP Payment and Access Commission (MACPAC) has not discussed the topic. For example, MACPAC's June 2015 report chapter, "The Intersection of Medicaid and Child Welfare," contains no discussion of "child sexual abuse" or "child abuse."⁸

This is even more remarkable considering the number of highly publicized child sexual abuse cases and the complicity in ignoring these offenses over many decades. Here are six examples briefly summarized.

1. This past November, December, and February Dr. Larry Nassar, a former USA Gymnastics and Michigan State physician, was charged with numerous counts of criminal sexual misconduct and for possessing 37,000 child pornography images and videos of him sexually molesting girls. Beyond these charges, there are at present another 80 and counting related police complaints and several related civil lawsuits filed against Nassar. Before he retired in September 2015, Nassar served on the USA Gymnastics National Team's medical staff for 29 years and before he was fired last October, he also worked as a physician at Michigan State where for two decades he treated, among others, members of the university's women's basketball, crew, field hockey, figure skating, gymnastics, soccer, softball, swimming and track and field teams. Dr. Nassar was also associated with a Lansing-area girls' gymnastic club and a high school. Complaints against Nassar were first reported to Michigan State officials without consequence as far back as 1994. Beyond the Nassar case, because USA Gymnastics has over at least the past 20 years known of numerous similar cases, the organization kept sexual abuse files on more than 50 coaches but took no action, the USA Gymnastics President Steven Penny was forced to resign in mid-March.⁹
2. Also this month former Penn State President, Graham B. Spanier, was found guilty of child endangerment for failing to intercede in the Jerry Sandusky case. This past November the US Department of Education, acting under the 1990 Cleary Act, fined Penn State \$2.4 million for failing to report campus crimes and to take measures to adequately protect its students. Also this past fall, Mike McQuery who witnessed Sandusky raping a 10-year-old boy in a locker room shower in 2001 testified this past fall in a defamation and retaliation case that Penn State coaches Greg Schiano and Tom

Bradley were aware for years that Sandusky was raping boys. Sandusky was convicted in 2102 of 45 counts of child abuse dating back to 1994. Penn State made known last year the university paid a settlement stemming from Sandusky's abuse in 1971.¹⁰

3. Last April, former House Speaker Denis Hastert was sentenced to 15 months in prison for federal banking violations stemming from abusing high school boys beginning in the 1960s. (He lied about large bank withdrawals to cover up buying a victim's silence.) In the federal government's sentencing recommendation, prosecutors wrote, Hastert made his victims "feel alone, ashamed, guilty and devoid of dignity." "All of them carry the scars [the] defendant inflicted upon them." "It is profoundly sad," prosecutors wrote, the abuse was inflicted by "a man whom they trusted and whom they revered as a mentor and coach." In sentencing Hastert to 15 months in prison, Judge Durkin stated, "nothing is more stunning than having the words "serial child molester" and "Speaker in the House" in the same sentence." Nevertheless, no Congressional leader commented on the Hastert case. The day Hastert was sentenced, White House Press Secretary Josh Earnest could only state, "I don't have a specific response to that."¹¹
4. In 2013, USA Swimming Hall of Fame coach, Rick Curl, was convicted for sexually molesting a teenage swimmer three decades ago. While employed as a University of Maryland as a swimming and diving coach in the mid-1980s, the university became aware he had, before becoming an employee, admitted in writing to molesting a teenage female swimmer. Though the university forced Curl to resign in 1988, the university concluded the school had no duty to report Curl to the police. Curl went on to coach for another 25 years at a prominent Maryland swim club. There have been numerous other instances of sexual abuse by USA Swimming coaches. For example, in 2010, after 16-year-old Sarah Burt told her parents she was sexually abused by a USA Swimming coach, she drove to a busy intersection in Illinois, parked, promptly walked into traffic and was fatally struck by a semi.¹²
5. The Curl case did win the attention of Rep. George Miller, then ranking member of the House Education and Workforce Committee. In July 2014, Mr. Miller wrote an 11-page letter to the FBI requesting the agency "fully investigate USA Swimming's handling of both past and present cases of child sexual abuse." Mr. Miller's letter stated further, "it has become clear that child sexual abuse and sexual misconduct have plagued USA Swimming since its inception in 1980." (USA Swimming is the creation of the Congress's Ted Stevens Amateur Sports Act of 1978.) The FBI did nothing. In context of the Nassar case, The Washington Post recently reported on Miller's 2014 efforts. The article was titled, "Government Prove of Sex Abuse Prevention in Olympic Sports Went Nowhere."¹³
6. In the BBC Stuart Hall and Jerry Savile cases, Hall at age 86, was jailed in 2013 for admitting to assaulting 13 girls as young as 10 and Savile was posthumously charged in 2013 with 214 acts of sexual misconduct against boys, including some in hospice care, girls and women. Among other conclusions in Dame Janet Smith's 2016 "independent review into the BBC's culture and practices," she stated flatly, "children were not protected as they should have been." In response to Smith's and Dame Linda Dobbs' companion report, BBC Trust Chairwoman Rona Fairhead stated, "no one reading the reports can be in any doubt that the BBC failed them [the victims]." "It turned a blind eye, where it should have shown a light."¹⁴

7. As for the thousands of Catholic Church pedophile cases, in protest over Pope Francis's Pontifical Commission for the Protection of Minors (created in 2014) inaction that included the Commission's refusal to respond to victim's letters, Marie Collins, a survivor (molested at age 13 by a priest) resigned in early March from the Commission. The one other survivor serving on the Commission, Peter Saunders, also criticized the Commission for the same reason and left last year. To date no bishop, including Bernard Law who served as Archbishop of Boston for 18 years and made infamous in the film "Spotlight," has been punished for their complicity. In Cardinal Law's case in 2004, he was appointed in 2004 as Archpriest of the Basilica di Santa Maria Maggiore in Rome where he served until he retired in 2011.¹⁵

Equally tragic is the extent to which the child sexual abuse has been or is ignored. The Congress has not held a single hearing investigating child abuse, or at least offenses committed by coaches associated with USA Gymnastics, USA Swimming and other athletic governing bodies since these are, again, organizations the Congress-is-responsible-for-creating, or have the FBI conduct an actual investigation. California Senator Diane Feinstein has however recently introduced related legislation. On March 6 Senator Feinstein introduced a bill, far shorter than this comment letter, titled, "Protecting Young Victims of Sexual Abuse Act of 2017."¹⁶ The legislation would require USA Gymnastics and other like governing bodies to immediately report sexual abuse allegations and improve oversight of prevention policies and sexual abuse prevention training. It's doubtful this bill, if passed, will have any measurable effect. "Immediate" reporting is already required by law in all 50 states. The bill's oversight and training provisions already are being addressed by the US Olympics' SafeSport program which was initiated in 2012 though SafeSport's effectiveness to date has been called to task by, among others, ABC News and ESPN. Moreover, Feinstein's bill includes no enforcement mechanisms.

It is worth noting as well child sexual abuse also is ignored by the health policy press. As in the Sandusky, Curl and Hastert cases, there has been no mention to date of Dr. Nassar in, for example, the [Health Affairs Blog](#), [Inside Health Policy](#), [Kaiser Health News](#), [The Morning Consult](#), [Politico Pulse](#) or [RealClearHealth](#).

AMGA believes CMMI cannot credibly field a pediatric payment demonstration that is intended to improve "the health of children and youth covered by Medicaid and CHIP through state-driver integration of health care and health -related social services" that addresses "social, emotional, or behavioral health challenges" unless it intentionally addresses the prevention of child sexual abuse that, again, adversely affects one in five children – particularly since victims of child abuse of any kind are disproportionately poor, i.e., Medicaid beneficiaries.

This RFI presents CMS with a substantial opportunity to demonstrate leadership by signaling to the health provider and health policy communities the importance of not only recognizing child abuse but working to prevent it. This cannot remain simply a criminal enforcement issue or left to your colleagues in the Department of Justice.

Fortunately there are several programs the CMMI pediatric APM could model. For example, studies of Yale's "Minding the Baby," a reflective parenting program, have found program participants have stronger mother-child bonds, lower rates of child-protective referrals, higher child immunization rates and longer spacing between children when compared to control

groups. The Nurse Family Partnership and Home Visiting Program has shown a 48 percent reduction in child abuse and neglect. The Triple P Positive Parenting Program has shown significantly fewer cases of child maltreatment, lower rates of abuse cases, out of home placements, reductions in ED visits and hospitalizations for injuries.¹⁷

In addition, local Emergency Medical System (EMS) personnel are at the heart of many new community-based innovations. Therefore, AMGA recommends CMMI work to incorporate the nascent community paramedicine movement, which is expanding the roles of paramedics and emergency medical technicians (EMTs) by integrating them into the larger healthcare and social support systems. Community paramedic programs, also termed “mobile integrated healthcare,” are often used to close gaps in access to care for the most vulnerable that can lead to, in part, reduced emergency department visits. As abused children often have encounters with pre-hospital providers, such as paramedics and EMTs, AMGA recommends CMS use these providers as another tool, as they are trained in identifying possible abuse situations. We refer CMS to the 2010 Administration for Children and Families report, “The Role of First Responders in Child Maltreatment Cases: Disaster and Nondisaster Situations,” which notes first responders, “often are the first professionals to arrive at a scene where child maltreatment may have occurred or where children may be at risk for being abused or neglected.”¹⁸

We thank CMS for consideration of our comments. Should you have questions please do not hesitate to contact AMGA's David Introcaso, Ph.D., Senior Director of Public Policy

Sincerely,

President and CEO

Endnotes

1. The ACEs study is at: <https://www.cdc.gov/violenceprevention/acestudy/>. Sexual abuse prevalence statistics are at: <https://www.cdc.gov/violenceprevention/acestudy/about.html>.
2. See: <http://www.chicagotribune.com/news/nationworld/ct-pdf-transcript-of-sentencing-of-dennis-hastert-20160427-htmlstory.html>.
3. See: <https://innovation.cms.gov/initiatives/ahcm/faq.html>.
4. Search via: https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/waivers_faceted.html.
5. See: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2017-child-core-set.pdf>.
6. Search via: <http://www.qualityforum.org/Qps/QpsTool.aspx#qpsPageState=%7B%22TabType%22%3A1,%22TabContentType%22%3A1,%22SearchCriteriaForStandard%22%3A%7B%22TaxonomyIDs%22%3A%5B%5D,%22SelectedTypeAheadFilterOption%22%3Anull,%22Keyword%22%3A%22%22,%22PageSize%22%3A%2225%22,%22OrderType%22%3A3,%22OrderBy%22%3A%22ASC%22,%22PageNo%22%3A1,%22IsExactMatch%22%3Afalse,%22QueryStringType%22%3A%22%22,%22ProjectAct>

ivityId%22%3A%220%22,%22FederalProgramYear%22%3A%220%22,%22FederalFiscalYear%22%3A%220%22,%22FilterTypes%22%3A0,%22EndorsementStatus%22%3A%22%22%7D,%22SearchCriteriaForPortfolio%22%3A%7B%22Tags%22%3A%5B%5D,%22FilterTypes%22%3A0,%22PageStartIndex%22%3A1,%22PageEndIndex%22%3A25,%22PageNumber%22%3Anull,%22PageSize%22%3A%2225%22,%22SortBy%22%3A%22Title%22,%22SortOrder%22%3A%22ASC%22,%22SearchTerm%22%3A%22%22%7D,%22ItemsToCompare%22%3A%5B%5D%7D.

7. Search via: <https://www.ahrq.gov/research/findings/nhqrdr/index.html>.

8. At: <https://www.macpac.gov/wp-content/uploads/2015/06/Intersection-of-Medicaid-and-Child-Welfare.pdf>.

9. The Nassar case has been mostly widely reported by The Indianapolis Star. The newspaper has published approximately a dozen related articles over at least the past seven months.

Regarding Penny's resignation see https://www.washingtonpost.com/sports/olympics/usa-gymnastics-ceo-steve-penny-resigns-in-wake-of-sex-abuse-scandal/2017/03/16/fe4f27de-0a77-11e7-93dc-00f9bdd74ed1_story.html?utm_term=.243c765974d8.

10. See: https://www.washingtonpost.com/sports/colleges/former-penn-state-president-graham-spanier-convicted-of-child-endangerment/2017/03/24/d1936e34-109a-11e7-9b0d-d27c98455440_story.html and <https://www.ed.gov/news/press-releases/us-department-education-levies-historic-fine-against-penn-state-over-handling-sexual-misconduct-incidents>.

11. See note 2 and <https://www.whitehouse.gov/the-press-office/2016/04/27/press-briefing-press-secretary-josh-earnest-4272016> and <https://www.whitehouse.gov/the-press-office/2015/05/29/press-briefing-press-secretary-josh-earnest-52915>.

12. See, for example, https://www.washingtonpost.com/umd-lawyers-didnt-tell-police-that-swim-coach-rick-curl-had-abused-a-teen-girl/2013/05/29/5820f306-c8a4-11e2-9f1a-1a7cdee20287_story.html?utm_term=.3b3d6c29852d.

13. See: https://www.washingtonpost.com/sports/olympics/government-probe-of-sex-abuse-prevention-in-olympic-sports-went-nowhere/2017/02/20/75c8b0a6-d287-11e6-9cb0-54ab630851e8_story.html?utm_term=.b4a25e064934.

14. The Dame Smith report is at: http://www.bbc.co.uk/bbctrust/dame_janet_smith. Fairhead's statement is at: http://www.bbc.co.uk/bbctrust/news/statements/dame_janet_smith.

15. See, for example, https://www.washingtonpost.com/opinions/the-vatican-drags-its-feet-on-clergy-sex-abuse/2017/03/12/1efaf566-0443-11e7-b1e9-a05d3c21f7cf_story.html?utm_term=.bcbdb65ff8a1.

16. See: https://www.feinstein.senate.gov/public/_cache/files/d/6/d63652ba-a4f6-47e2-a499-afe5e2212f10/98DC4DFD82635C5F101E2647F860F066.usa-gymnastics-submitted-bill-3.6.17.pdf.

17. See: <http://medicine.yale.edu/childstudy/mtb/> and, for example, Francis Zimmerman and James A. Mercy, "A Better Start, Child Maltreatment Prevention as a Public Health Priority," Zero to Three (May 2010) at: https://vetoviolence.cdc.gov/apps/phl/docs/A_Better_Start.pdf.

18. See: <https://www.childwelfare.gov/pubPDFs/firstresponders.pdf>.

American Occupational Therapy Association

To Whom It May Concern,

Attached please find the American Occupational Therapy Association's timely submission in response to the Pediatric APM Concepts Request for Information.

Sincerely,

See attachment for RFI response.



American
Occupational Therap

Via online submission to

March 28, 2017

Dr. Seema Verma
Administrator
Department of Health and Human Services
Centers for Medicare & Medicaid Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Administrator Verma:

The American Occupational Therapy Association (AOTA) is the national professional association representing the interests of more than 213,000 occupational therapists, occupational therapy assistants, and students of occupational therapy. The science-driven, evidence-based practice of occupational therapy enables people of all ages to live life to its fullest by promoting participation in daily occupations or activities. In so doing, growth, development and overall functional abilities are enhanced and the effects associated with illness, injuries, and disability, are minimized. We appreciate the opportunity to provide feedback on this Request for Information (RFI) on the development of Pediatric Alternative Payment Model (APM) concepts. AOTA supports the benefits associated with the concept of ACO models that are intended to more efficiently and more effectively bridge the gap between pediatric patients' clinical health and social determinants of health. AOTA appreciates the opportunity to offer input towards discovery of innovative solutions to address existing challenges in pediatric healthcare delivery.

Similar to the challenges of designing and implementing a Medicare APM, a pediatric APM will be no different, and will undoubtedly face exceedingly more challenges with regard to successfully coordinating a complex pediatric patient's health. It is essential to address the health of the child as well as that of the caregiver. In this way, a family centered approach must be instituted. Thus, beyond just the clinical scope, CMS must additionally ensure parents and caregivers have the capacity on a variety of levels to facilitate in the care process throughout the child's life transitions.

Immediately apparent challenges:

- How will complex pediatric care be coordinated from multiple providers and in settings ranging from hospital to home? Such integrated service delivery will require ongoing communication and interprofessional collaborations.
- Physician referral, plan of care certification and recertification processes for medically necessary therapy services must be simple and free of administrative burden. Medicare programs' requirements serve as an excellent model that may be adopted by a pediatric APM to assure timely care is received by the child, and that prior authorization or similarly onerous coverage requirements do not act as a barrier to prompt, quality care.

- How is clinician attribution considered in circumstances involving multiple providers/settings?
- With regard to pediatric self-care and education/training of the parents: What mechanisms will be in place to ensure that caregivers or parents receive the necessary coaching and supports to implement the strategies? What metrics will be employed to indicate that the caregiving skills meet the daily family needs and priorities?
- What health literacy strategies will be employed to support family follow-through and consistency? Health care practitioners/social service providers require ongoing professional development to ensure that their services are both culturally sensitive and evidence-based.

The Role of Occupational Therapy within the Interprofessional Collaboration

The pediatric population will require considerations surrounding, but not limited to: improving children's access to care; receiving sound nutrition through the establishment of healthy family and school mealtime routines; securing safe living and play environments¹, promoting children's mental and physical health, identifying and supporting responsive adult caregivers, and nurturing social and community engagement and supports. Each of these elements is critical for a child and his/her family health, growth and development.

Occupational therapy practitioners are necessary team members who are well positioned to contribute to prospective interdisciplinary teams within an ACO due to:

- The holistic OT approach to address both mental and physical health;
- The focus on improving overall function and participation within contexts and environments;
- Expertise in modifying both activities and environments to reduce barriers to participation and;
- Focus on client-centered care and placing the goals of the client and family/caregiver at the center of treatment.

Public Health Service Delivery Approach

Evidence demonstrates that primary care providers tend to under detect developmental delays among infants and young children and furthermore, that families benefit from screening through increased awareness of appropriate developmental and behavioral expectations. Success in these models will be most evident in those that demonstrate earlier detection and intervention. It is critical that children with delays be identified as early as possible because intervention programs are more effective when initiated at a young age. Pediatric patients receiving care through an ACO have great potential to benefit from interventions of an occupational therapy practitioner providing early detection services, by conducting developmental screenings in day care centers, preschools, clinics, or in a physician's office.

¹ Fabrizio, S.E., Ito, M.A., & Winston, K. (2016). Effect of occupational therapy – led playgroups in early intervention on child playfulness and caregiver responsiveness: A repeated-measures design. *American Journal of Occupational Therapy*, 70, 7002220020. <http://dx.doi.org/10.5014/ajot.2016.017012>

The use of general screening tools could help qualify and easily identify patients who could benefit from occupational therapy services.² Universal level strategies include:

- Utilizing the occupational profile to assess the current family routines and priorities
- Coaching diverse families to improve engagement in safe and healthy daily routines such as sleep and play
- Employing preventative health strategies such as reducing screen time to promote growth and social development
- Consulting with day care providers and early educators to include preschool children with learning and physical differences so they have better access to both learning and social environments.

When a child receives a diagnosis, he/she can benefit from a comprehensive team of providers to assess and intervene to improve health and function within the natural environments where families engage (i.e., playground or home).³ In early intervention, occupational therapy practitioners help to prevent further delay, to promote growth and development, and to build the family capacity to care for their child. The final result comes in the form of positive outcomes in family interaction and decreased parental stress levels when developmental information and recommendations for activities are provided.

We would encourage CMS to look to the Early STEPs⁴ Pilot Program as an existing example of coordinated early intervention that goes beyond the clinical scope of a pediatric patient's health and achieves positive outcomes.

Background and achievements of the STEPs Pilot:

- 100% of infants screened through Early STEPs who are identified as having a delay will be referred to appropriate early intervention services
- Complete 50 free infant screenings for developmental delay/autism for at risk infants and toddlers by the end of year one
- Facilitates timely referral for services to foster the optimum development of Mid-South children and follow up to ensure that the families act on the early intervention referrals
- Develop collaboration among community resources in the Mid-South area that serve children and their families by creating an online support network
- Demonstrate an increase in caregiver self-efficacy through improved scores on the Early Intervention Parenting Self-Efficacy Scale by increasing knowledge of research-based parenting skills by providing free parenting educational services and support.

² Murphy, A. D., Griffith, V. M., Mroz, T. M., & Jirikowic, T. L. (2017). Health Policy Perspectives – Primary care for underserved populations: Navigating policy to incorporate occupational therapy into federally qualified health centers. *American Journal of Occupational Therapy*, 71, 7102090010. <http://dx.doi.org/10.5014/ajot.2017.712001>

³ Kingsley, K., & Mailloux, Z. (2013). Evidence for the effectiveness of different service delivery models in early intervention services. *American Journal of Occupational Therapy*, 67, 431-436. <http://dx.doi.org/10.5014/ajot.2013.006171>.

⁴ Screening for Therapy and Empowering Parents

Services Delivered in School Systems

Another huge piece of this dialogue to be considered is the aspect of services delivered in schools. In schools, occupational therapy practitioners foster academic achievement and social participation for all students. They support students in their early childhood and high school transition towards community living, further education, and career. They are considered a related service under the Individuals with Disabilities Education Act (IDEA) and one of the specialized instructional support personnel (SISP) under Every Student Succeeds Act (ESSA). Using multi-tiered systems of support (MTSS), occupational therapy practitioners support students of all abilities to learn and to participate in all school routines in the cafeteria, playground, and classroom.

Some of the integral services occupational therapy practitioners provide in schools include but are not limited to:

- Assisting students to develop daily skills necessary for community integration;
- Offer assistive technology strategies such as adapting books to improve literacy;
- Employ Universal Design for Learning (UDL) principles to support differentiated instruction;
- Offer targeted interventions to at-risk groups such as teen students/mothers, military students, or those with cultural differences;
- Support students who experience mental health conditions such as anxiety or depression as well as those with physical disabilities such as cerebral palsy.

Challenges for Rural and Underserved Areas

Pediatric care delivery issues surrounding Rural Health Clinics and underserved communities may be better addressed by allowing these areas to gain access to services across state lines and or/to work in conjunction and partner with health systems in quickly evolving MSAs. Additionally by allowing mobility outside of narrow networks and or/promoting connections with health care entities/social services outside of the area via telehealth is an important consideration that would undoubtedly enhance the value and delivery of specialized pediatric care.

The Importance of Health Literacy Activities

Family capacity and health literacy are critical components when identifying the strengths of a family's ability to promote self-care education/training. The Centers for Disease Control defines "health literacy skills" as those skills that people use to realize their potential in health situations. They apply these skills either to make sense of health information and services or provide health information and services to others. Anyone who provides health information and services to others also needs the skills to

- Help people find information and services
- Communicate about health and healthcare
- Process what people are explicitly and implicitly asking for
- Understand how to provide useful information and services

- Decide which information and services work best for different situations and people so they can act

Occupational therapy practitioners are well-positioned to facilitate and manage tasks surrounded around promoting and ensuring health literacy skills to the parents and care givers of pediatric patients. Specifically, with regard to ensuring children have access to the appropriate care they need, the distinct value of occupational therapy is found in customizing health literacy activities for parents and care givers. In this sense, it is not enough to simply supply parents with educational materials, but rather adapt activities and environments and to directly train parents to promote participation.

Head Start and Healthy Transitions

AOTA asserts that transition skill development begins in the early years as a child and family discovery their strengths, abilities, and goals. Skill building launches through activity gradations consisting of greater complexity and demands. As the child grows and as his/her health needs fluctuates, the occupational therapy practitioner is a key contributor to both assessing and intervening through activity and environmental analysis and modifications. The goal is to increase access and opportunity for participation and growth; it is to decrease barriers to engagement so the child and family can learn and grow. AOTA finds that the overall goals of these programs are excellent examples of objectives that should be at the center when it comes to the design and framework of any future model.

Head Start's mission to support children's growth and development in a positive learning environment through a variety of services, which include early learning, health, and family well-being are well-aligned with the Occupational Therapy Practice Framework.

Healthy Transitions focuses on accomplishing its overall goals by increasing awareness, screening and detection, outreach and engagement, referrals to treatment, coordination of care and evidence-informed treatment for this age group. "Health Transitions will increase awareness about early indications of signs and symptoms for serious mental health concerns; identify action strategies to use when a serious mental health concern is detected; provide training to provider and community groups to improve services and supports specific to this 16-25 age group; enhance peer and family supports, and develop effective services and interventions for youth, young adults and their families as these young people transition to adult roles and responsibilities. When needed, these services are to be continuous so that young people and their families experience a seamless transition across age groups.

For youth at risk Healthy Transitions focuses on outreach and engagement strategies, including the use of peer-to-peer and family supports, social media, and coordination across care delivery systems, including vocational training and higher education.

These strategies will ultimately connect young people to resources to help them maintain their health and develop skills to lead full, productive lives. Additionally, outreach and engagement will also create opportunities for early detection and intervention for those who begin to exhibit more serious problems over time.

Example: Long Term Benefits of Addressing a Complex Pediatric Patient in Earlier Life Stages - A Child with Autism Spectrum Disorder (ASD)

AOTA urges CMS to consider not only the financial incentives of addressing issues earlier that relate to the care of a complex child with an ASD diagnosis, but the long term benefits on the individual's life as well. As of August 2015, the Autism Society reported the following significant statistics with regard to costs and effects on individuals living with an ASD⁵:

- More than 3.5 million Americans live with an ASD
- Autism services cost U.S. citizens \$236-262 billion annually
- A majority of costs in the U.S. are in adult services - \$175-196 billion, compared to \$61-66 billion for children
- Cost of lifelong care can be reduced by 2/3 with early diagnosis and intervention.
- The U.S. cost of autism over the lifespan is about \$2.4 million for a person with an intellectual disability, or \$1.4 million for a person without intellectual disability
- 35 percent of young adults (ages 19-23) with autism have not had a job or received postgraduate education after leaving high school

Occupational therapy practitioners are experts at analyzing the interaction between clients and their engagement in occupations and the environment to support occupational performance and participation. Practitioners collaborate with individuals with ASD and their families across the lifespan, often beginning in early childhood and including multiple transitions into adulthood. Occupational therapy practitioners explore and use an array of interventions supported by evidence that facilitates participation of individuals with ASD in self-determined occupations. Twenty years of studies have shown that with professional support, parent-implemented interventions involving identifying everyday activities, settings, and child interests to support child learning during everyday activities, effectively promotes positive child outcomes.⁶

Occupational Therapy Practitioners' Role in Child Outcomes Reporting

AOTA encourages CMS to reach out to practitioners to encourage more participation and coordination in the data collection and outcome measurement process at both the state and federal level. AOTA is engaged in a National Quality Strategy to pursue development of quality measures sensitive to occupational therapy services. In addition, AOTA is an active member of the National Quality Forum (NQF) and has had members serve on NQF pediatric technical expert panels.

With regard to the quality of early intervention and preschool services targeting young children with developmental needs, we recommend that CMS utilize the data resulting from the COS

⁵ <http://www.autism-society.org/what-is/facts-and-statistics/>, last accessed on March 27, 2017.

⁶ Dunn, W., Cox, J., Foster, L., Mische-Lawson, L. & Tanquary, J. (2012). Impact of a contextual intervention on child participation and parent competence among children with autism spectrum disorders: A pretest-posttest repeated measures design. *American Journal of Occupational Therapy*, 66, 520-528.
<http://dx.doi.org/10.5014/ajot.2012.004119>.

(Child Outcome Summary) Process⁷, to assist in informing the progress of any future pediatric ACO. Occupational therapy involvement in the Child Outcome Summary (COS) process helps to highlight the distinct value of occupational therapy services in EI and preschool.

* * *

Thank you for the opportunity to provide feedback on Pediatric Alternative Payment Model concepts. AOTA looks forward to a continuing dialogue with CMS on coverage and payment policies that affect the ability of occupational therapists to provide quality coordinated care to pediatric patients.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ashley Delosh', with a stylized, cursive script.

Ashley Delosh, JD
Regulatory Analyst

⁷ The mandated permitted state autonomy regarding how child outcomes data should be gathered to report on each of three child outcomes including: 1. Social-emotional: Positive social relationships; 2. Knowledge and skills: Acquiring and using knowledge and skills; 3. Meets needs: Taking appropriate action to meet their needs.

American Optometric Association

Dear Ms. Seema Verma,

Thank you for this opportunity to provide comments in response to your Request for Information (RFI) on Pediatric Alternative Payment Model Concepts (<https://innovation.cms.gov/Files/x/pediatricapm-rfi.pdf>). Attached is the American Optometric Association's (AOA's) comment letter.

In addition to our written comments, we invite the Centers for Medicare & Medicaid Services (CMS) and Center for Medicare and Medicaid Innovation (CMMI) to meet with the AOA. Together, we can develop a service delivery model that ensures no child suffers needlessly from untreated eye and vision disorders.

To arrange a meeting, please contact Jensen N. Jose, Regulatory Policy Specialist, at jjose@aoa.org. We thank you again for this opportunity to address the needs of our children's eye and vision health.

See attachment for RFI response.



American
Optometric Associat



AMERICAN OPTOMETRIC ASSOCIATION

March 28, 2017

Seema Verma
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Dear Ms. Verma,

The American Optometric Association (AOA) represents 33,000 doctors of optometry and optometry students. The AOA is the voice of the nation's family eye doctors and the leading authority on eye health and vision care. Doctors of optometry serve patients in nearly 6,500 communities across the country, and in 3,500 of those communities are the only eye doctors. Ensuring that children receive the care they need is a critical issue and every day our member doctors provide high quality eye care to children across the country. The AOA is working to help families, teachers, pediatricians, and other health and education policymakers fully understand the link between healthy vision, learning efficiencies, and healthy childhood development. We appreciate the opportunity to provide comments in response to the Centers for Medicare & Medicaid Services (CMS) Request for Information (RFI) on Pediatric Alternative Payment Model Concepts.¹

As CMS explores new models of care for children that would improve quality and reduce care costs, we believe that it is critical that all children receive comprehensive vision care. Meeting children's vision and eye health needs is an important prevention and intervention strategy, and the AOA is concerned that the current service delivery model fails to meet those needs. Assurance of comprehensive eye examinations for children has potential for improved outcomes and savings for Medicaid/CHIP and health-related social service programs.

Children who never receive a comprehensive eye exam are many times forced to suffer with undiagnosed and untreated eye and vision disorders. Additionally, some children with undiagnosed and untreated vision problems that impede cognitive development can easily be misdiagnosed with mental health or behavioral conditions, such as attention-deficit/hyperactivity disorder (ADHD).² This can lead to children being prescribed inappropriate treatment and drugs with potentially harmful side effects while at the same time suffering from untreated eye and vision disorders during their most crucial years of neurological, cognitive, and academic development.

School-aged children increasingly rely on reading to learn, an activity that can become challenging and unenjoyable for a child with undiagnosed and untreated vision problems,

¹ <https://innovation.cms.gov/Files/x/pediatricapm-rfi.pdf>

² College of Optometrists in Vision development. ADHD & Vision. <http://www.covd.org/?page=ADHD>

including disorders such as convergence insufficiency or accommodative dysfunction. If children are given the appropriate comprehensive vision care needed by many families, they may be able to avoid years of reading difficulties, academic struggle, and possibly unnecessary special education services.^{3, 4, 5, 6,}

The National Academies of Science, Engineering and Medicine (NASEM) emphasized this point in its landmark report last year, “Making Eye Health a Population Health Imperative: Vision for Tomorrow.” The NASEM report explains that, clinically, “vision screenings” are tools that allow for “the possible identification, but not diagnosis, of eye disease and conditions” and further clarifies that, functionally, any type of vision screening is “a method to identify potential problems or irregularities with the visual system so that a referral can be made to an appropriate eye care professional for further evaluation and treatment.”⁷

Undiagnosed and untreated vision problems can also increase educational costs in the form of Individualized Education Programs (IEPs) and special education services, which might otherwise not be necessary, if their vision problems were treated. A study of students (ages 6-16) with IEPs found that they have high rates of undiagnosed and untreated vision problems affecting reading speed and comprehension.⁸ Proper diagnosis and treatment is essential to good health to avoid potential harms.

To address the critical need for all children to receive comprehensive vision care, the AOA recognizes that greater collaboration is necessary between pediatricians, behavioral mental health professionals, and doctors of optometry. CMS has already recognized the inherent value in appropriate communication among the care team members of our adult populations under Medicare. For the new Merit-Based Incentive Program (MIPS), the agency has signaled to doctors and their patients the high priority value of both the *Closing the Referral Loop: Receipt of Specialist Report*⁹ quality measure and the *Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care*¹⁰ quality measure which are entirely focused on necessary communication between care team members. A similar model is needed for our nation’s children.

Importantly, the need for comprehensive eye examinations and closing the referral loop was also underscored by the NASEM in its 2016 report, *Making Eye Health a Population Health Imperative: Vision for Tomorrow*. The report acknowledged the lack of appropriate referrals to eye care physicians and stated, “Unfortunately, referrals to ophthalmologists and optometrists from other health care professionals remain suboptimal.”¹¹ To address this concern, one of the nine final recommendations of the report directed state and local public health departments to

³ Goldstand S, Koslowe KC, Parush S. Vision, visual-information processing, and academic performance among seventh-grade schoolchildren: a more significant relationship than we thought? *Am J Occup Ther* 2005; 59:377-89.

⁴ Basch CE. Vision and the achievement gap among urban minority youth. *J Sch Health* 2011; 81:599-605.

⁵ Grisham D, Powers M, Riles P. Visual skills of poor readers in high school. *Optometry* 2007; 78:542-49.

⁶ Powers M, Grisham D, Riles P. Saccadic tracking skills of poor readers in high school. *Optometry* 2008; 79:228-34.

⁷ National Academies of Sciences, Engineering, and Medicine. 2016. Making eye health a population health imperative: Vision for tomorrow. Washington, DC: The National Academies Press. [Page 33](#).

⁸ Quaid P, Simpson T. Association between reading speed, cycloplegic refractive error, and oculomotor function in reading disabled children versus controls. *Graefes Arch Clin Exp Ophthalmol* 2013; 251:169-87.

⁹ <https://ecqi.healthit.gov/ep/ecqms-2017-performance-period/closing-referral-loop-receipt-specialist-report>

¹⁰ <https://ecqi.healthit.gov/ep/ecqms-2017-performance-period/diabetic-retinopathy-communication-physician-managing-ongoing>

¹¹ National Academies of Sciences, Engineering, and Medicine. 2016. Making eye health a population health imperative: Vision for tomorrow. Washington, DC: The National Academies Press. [Page 345](#).

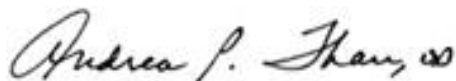
“partner with health care systems to align public health and clinical practice objectives, programs, and strategies about eye and vision health to...[i]dentify and eliminate barriers within health care and public health systems to eye care, especially comprehensive eye exams.”¹² The AOA would welcome the opportunity to partner with CMS to achieve the goals of the report. The AOA strongly urges CMS to ensure access to in-person comprehensive eye examinations with an eye doctor to safeguard children’s healthy vision.

For a new “Integrated Pediatric Health Care and Health-Related Social Service Delivery Model,” the AOA recommends that CMS test a new model of care whereby pediatricians are prompted to ask parents of children under six years of age whether the child has received a comprehensive eye examination by an eye doctor. If the parents do not affirm that the child has received a comprehensive eye exam, the pediatrician should refer the patient to an eye doctor. Furthermore, behavioral health professionals should ascertain whether a child at any age has had a comprehensive eye examination by an eye doctor before making a diagnosis of ADHD and placing the child on medication for hyperactivity. Once a child is provided a comprehensive eye examination, the eye doctor should report findings to the referring pediatrician or behavioral health professional. The AOA agrees with the NASEM report that to improve children’s vision, appropriate actions must be taken.¹³ This simple Integrated Pediatric Health Care and Health-Related Social Service Delivery Model would help provide better care for children, decrease potential harms from behavioral and learning misdiagnoses, increase needed communication between care team members and decrease misdirected or unnecessary medical and educational costs expended when a child’s vision condition is left undiagnosed and untreated.

AOA has just completed the evidence-based clinical practice guideline, *Comprehensive Pediatric Eye and Vision Examination*, designed to ensure that America’s children are provided with the most up to date and proven eye health and vision care services they need most. This first-ever resource of its type for the nation’s primary health care providers represents an important breakthrough in inter-professional consensus and cooperation and emphasizes proper care for our youngest and most at-risk patients. The AOA welcomes the opportunity to meet with leaders at the Center for Medicare and Medicaid Innovation (CMMI) to discuss this guideline and how we can work together to drive new models of care to improve eye health for children.

Please contact Jensen N. Jose, Regulatory Policy Specialist, at you have any questions or if you need more information.

Sincerely,

A handwritten signature in dark ink, reading "Andrea P. Thau, O.D." with a stylized flourish at the end.

Andrea P. Thau, O.D.
President, American Optometric Association

¹² *Id.* at [Page 448](#).

¹³ *Id.* at [page 454](#).

American Physical Therapy Association

Good afternoon,

Please find attached to this message, American Physical Therapy Association's response to the Pediatric Alternative Payment Model. We appreciate the opportunity to submit feedback to CMS on the future of innovation in the Medicaid space.

Please let us know if you need any additional information related to this response.

Thank you,



American Physical
Therapy Association

March 28, 2017

Patrick Conway, MD, MSc, Acting Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attention: CMS-1631-P
Mail Stop C4-26-05

Submitted Electronically

Re: [CMS-3321-NC] Request for Information Regarding Pediatric Alternative Payment Model Concepts

Dear Acting Administrator Dr Conway:

On behalf of our 95,000 member physical therapists, physical therapist assistants, and students of physical therapy, the American Physical Therapy Association (APTA) is pleased to submit comments in response to the Centers for Medicare & Medicaid Services (CMS) Request for Information regarding “Information on Pediatric Alternative Payment Model Concepts,” released February 27, 2017. APTA’s goal is to foster advancements in physical therapy practice, research, and education. The mission of APTA is to further the profession’s role in the prevention, diagnosis, and treatment of movement dysfunctions and the enhancement of the physical health and functional abilities of members of the public.

Pediatric physical therapists (PTs) work with children and their families to help children and youth reach their maximum potential to function independently; and promote active participation in home, school, and community environments. Pediatric PTs apply their expertise in movement and clinical decision making to the process of examination, evaluation, diagnosis, prognosis, and intervention. As primary health providers, PTs also promote health, wellness, and prevention as they implement a wide variety of supports for children from infancy through

young adulthood, in collaboration with their families and other medical, educational, developmental, and rehabilitation specialists.

This request for information will influence the implementation of an innovative payment model that will integrate pediatric health services, establish quality measures specific to pediatrics, and improve quality of pediatric health care overall.

Recommendations

Specifically, APTA recommends the following:

- 1) As CMS explores models that integrate pediatric health care and related services, the agency should consider policies that use technology to increase communication and coordination among members of the care team, the patient, and the patient's support structure. In particular, we encourage Medicaid to increase coverage for necessary care via telehealth, including physical therapist management, which will improve pediatric patients' access to therapy services, particularly in rural and underserved communities.
- 2) As CMS examines its existing eligibility and program requirements for children, youth, and their families, CMS should consider strategies that would improve access, reduce administrative burden, and eliminate barriers such as prior authorization and visit limits. Of specific concern is that some state Medicaid programs still maintain a referral requirement for access to physical therapist services. The referral requirement can delay care and weaken health outcomes for children, particularly those with chronic conditions requiring numerous therapy visits over time.
- 3) As CMS considers Medicaid mandatory benefits to be incorporated in a new integrated service delivery model, we strongly recommend that CMS include physical therapy as a mandatory benefit, as therapy is essential to improving patient outcomes, particularly among children and youth.

Our comments on each of these recommendations are discussed further below.

Section I: Integrated Health Care and Health-Related Social Service Delivery Model

APTA Recommendation: CMS should consider policies that expand Medicaid coverage for services provided via telehealth services, including physical therapist services, particularly in rural and underserved communities and patient populations.

Telehealth consists of electronic communications to deliver a host of health-related information and health care services, including physical therapy-related information and services, over large and small distances. Telehealth encompasses activities ranging from health promotion and education, advice, reminders, interventions, and monitoring of interventions. Telehealth is

projected to grow around the world to 1.8 million users in 2017, according to the World Market of Telehealth.

With the increasing reliance on technology to improve access to quality care, APTA urges CMS to revisit its policies on coverage of telehealth services to include physical therapists. Telehealth in physical therapy is applicable throughout patient care and consultation, as it allows physical therapists to effectively communicate with patients and provide more flexible care. Expanding Medicaid coverage of telehealth services to include physical therapy will ultimately allow access to physical therapists for those in rural or underserved areas.

As CMS pursues pediatric alternative payment models that emphasize both quality and multi-disciplinary service delivery, CMS should address gaps in its policies to provide increased Medicaid coverage for telehealth services. Expansion of telehealth coverage to include physical therapy and other specialized health services would allow for more flexible care delivery to Medicaid beneficiaries in need of comprehensive care from a team of providers. In addition, coverage for telehealth across a variety of providers can improve patient outcomes, decrease families' out-of-pocket spending, and promote greater adherence to rehabilitation programs.

The expanded coverage of telehealth can also help CMS realize its goal of encouraging providers to work with their states and tribes to take on greater accountability for the health and wellness of children and youth. Telehealth can promote increased collaboration among providers and social service institutions to better address the specific needs of patients throughout the complete care continuum, from the primary care visit to the rehabilitation services necessary to promote and maintain positive outcomes.

Section II: Operation of Integrated Service Model

APTA Recommendation: CMS should revisit referral requirements for physical therapy services and expand direct access to such care to more children and youth.

The request for information explored the consequences of varied eligibility criteria and program requirements, which can be difficult for children, youth, their families, and providers to manage. As a result, children and their families experience significant service gaps. As CMS explores innovative approaches to integrate child and youth services and reduce barriers to identifying, enrolling, and maintaining coverage, APTA strongly recommends that CMS revisit referral requirements for physical therapy services. Many state Medicaid programs continue to impose arbitrary restrictions on patients' direct access to therapy without a physician referral.

Such restrictions create significant delays in the provision of services to individuals who would benefit from treatment by a physical therapist. These delays often lead to higher costs, poorer functional outcomes, and frustration to patients. Physical therapists are qualified to furnish therapy independent of a referral, based upon their extensive education and clinical training in

the examination, evaluation, diagnosis, prognosis, and intervention of patients with a variety of clinical conditions.

In addition, other barriers to care such as prior authorization, limits on visits, and other administrative burdens limit the ability of any alternative payment model to reach its full potential.

Section III: Integrated Pediatric Service Model Payment and Incentive Arrangements

APTA Recommendation: APTA strongly recommends that CMS include physical therapy as a mandatory benefit, as therapy is essential to improving patient outcomes, particularly among children and youth.

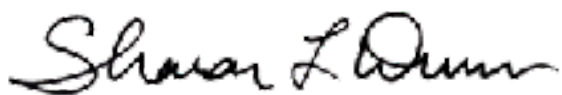
In its request for information, CMS raised the matter of Medicaid mandatory benefits. The mandatory benefits currently include inpatient and outpatient hospital services, physician services, and certified pediatric and family nurse practitioner services, among many others. However, physical therapy is currently listed as an optional benefit, although physical therapy is critical to the full scope of care for children and youth.

Incorporating physical therapy into the list of mandatory benefits, and thereby into services available under an integrated pediatric model, can ensure that children and youth associated with the model have complete access and coverage to necessary health care. The success of any integrated pediatric model will need to encompass providers and services across the entire spectrum of care, which should include physicians, nurses, physical therapists, and a variety of specialists. However, before such integration can take place, APTA encourages CMS to consider policies that expand Medicaid's mandatory benefits to include physical therapy, which is essential to the overall health of children and youth.

Conclusion

Once again, we thank CMS for the opportunity to respond to the request for information concerning integrated pediatric models and necessary policy changes. If you have any questions regarding our comments, please contact Sharita Jennings, JD, senior regulatory specialist at Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Sharon L. Dunn". The signature is fluid and cursive, with the first name "Sharon" being more prominent than the last name "Dunn".

Sharon L. Dunn, PT, PhD

President

SLD: sj

American Psychiatric Association

Hello,

I am writing to see whether it would be possible to extend your deadline for comments on the Request for Information on Pediatric Alternative Payment Model Concepts. I understand this RFI was released on February 27, and comments are due on March 28. However, our staff that cover CMS are on many, many CMS email lists, and we only learned of this recently through an email from SAMSHA, the Substance Abuse and Mental Health Services Administration.

This is a crucial topic, particularly in light of pending legislation that could bring real change to Medicaid state benefits, particularly for mental health and substance use. Having at least another week would allow us to prepare more detailed and thoughtful comments that could potentially provide greater input and assistance in this worthwhile effort.

I have also been in contact with the American Academy of Child and Adolescent Psychiatry, and they would also appreciate receiving additional time to prepare and submit their comments.

Best regards

American Society of Anesthesiologists

The American Society of Anesthesiologists (ASA) appreciates the opportunity to comment on CMS's request for information on pediatric alternative payment model opportunities. While we are supporters of CMS's healthcare redesign initiatives to move from volume to value through the establishment of alternative payment models, we, along with a cohort of other procedure-focused medical specialties, remain concerned with the lack of procedural-focused alternative payment options. These options are limited in spite of the fact that many of the early successes in the CMS bundled payment initiatives have been in procedural care. Furthermore, we remain committed to the principle that payment models should not only establish reasonable, well-defined risk/reward parameters, but also incorporate proven strategies that enhance provider coordination and patient care. We offer the following comments that directly address these concerns.

The ASA has been organizing and working with other medical and surgical specialties to implement the Perioperative Surgical Home (PSH) care delivery model in dozens of healthcare organizations across America. The PSH is a system of coordinated patient care, which spans the entire experience from decision of the need for any invasive procedure—surgical, diagnostic, or therapeutic—to

discharge from the acute-care facility and beyond. The PSH strives to achieve the triple aim of better patient experience, better healthcare, and reduced expenditures for all patients undergoing surgery and invasive procedures. The literature reporting the early experience with our PSH model shows very encouraging evidence of achieving these goals.

As part of our commitment to the PSH initiative, the ASA partners with Premier, Inc., a leading health care improvement company, to lead a national learning collaborative to develop, pilot and evaluate the PSH model. The second iteration of the collaborative has 57 diverse hospital and physician provider groups all contributing unique perspectives, with several focused on pediatric pilots.

As these pilots have matured, several core strategies have proven successful. The recognition that children and adults require different needs is critical. Adults typically have pre-defined surgical case types, with the primary reason for readmission being complications related to the surgery. Children, on the other hand, are more likely to have readmissions related to co-morbidities from lifelong chronic conditions. Therefore, pre-operative coordination of care, with a focus on optimal scheduling of interventions so that co-morbidities can be addressed prior to surgery or procedural care, is vital to improving the care of pediatric patients. The PSH program promotes activities such as the utilization of care managers or navigators in preoperative clinics to manage the patient's entire experience as well as establishing set care pathways and protocols that enhance the communication between disparate providers.

In addition to pre-operative protocols, post-operative communication and instructions are important. Discharging pediatric patients is often more difficult than adults because readiness is often measured day-to-day, rather than with pre-set times, as is more common with adults. Furthermore, since children rely on adults for their care post-discharge, establishing comprehensive, clear discharge instructions for the caretaker that communicate clear expectations on successful care can be a helpful deterrent to unneeded readmissions.

As is the case with any effective system of care, there is no single approach that delivers value and

improves the patient experience. However, the following core principles, as detailed above, are proven strategies that shift the focus of procedures from an acute episode to a continuum of care and should be considered by CMS:

- Implementation of pre-operative coordination of care techniques
- Optimization of a patient's co-morbidities prior to surgery
- Development of comprehensive, clear post-acute discharge instructions

If you have any questions regarding our comments or would like to further discuss the pediatric PSH concepts that we've showcased above, please contact Roseanne Fischhoff, Economics and Practice Innovations Executive

Sincerely,



American Society of
Anesthesiologists.p

March 28, 2017

Patrick Conway, M.D.
Deputy Administrator for Innovation & Quality
CMS Chief Medical Officer

RE: Center for Medicare and Medicaid Innovation Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Conway,

The American Society of Anesthesiologists (ASA) appreciates the opportunity to comment on CMS's request for information on pediatric alternative payment model opportunities. While we are supporters of CMS's healthcare redesign initiatives to move from volume to value through the establishment of alternative payment models, we, along with a cohort of other procedure-focused medical specialties, remain concerned with the lack of procedural-focused alternative payment options. These options are limited in spite of the fact that many of the early successes in the CMS bundled payment initiatives have been in procedural care.¹ Furthermore, we remain committed to the principle that payment models should not only establish reasonable, well-defined risk/reward parameters, but also incorporate proven strategies that enhance provider coordination and patient care. We offer the following comments that directly address these concerns.

The ASA has been organizing and working with other medical and surgical specialties to implement the Perioperative Surgical Home (PSH) care delivery model in dozens of healthcare organizations across America. The PSH is a system of coordinated patient care, which spans the entire experience from decision of the need for any invasive procedure—surgical, diagnostic, or therapeutic—to discharge from the acute-care facility and beyond. The PSH strives to achieve the triple aim of better patient experience, better healthcare, and reduced expenditures for all patients undergoing surgery and invasive procedures. The literature reporting the early experience with our PSH model shows very encouraging evidence of achieving these goals.

As part of our commitment to the PSH initiative, the ASA partners with Premier, Inc., a leading health care improvement company, to lead a national learning collaborative to develop, pilot and evaluate the PSH model. The second iteration of the collaborative has 57 diverse hospital and physician provider groups all contributing unique perspectives, with several focused on pediatric pilots.

¹ Feedback on CMMI Bundled Payment Programs presented at PTAC Public meeting: March 13, 2017; Washington, DC.
<https://aspe.hhs.gov/system/files/pdf/255736/PublicSessionSlides.pdf>

As these pilots have matured, several core strategies have proven successful. The recognition that children and adults require different needs is critical. Adults typically have pre-defined surgical case types, with the primary reason for readmission being complications related to the surgery. Children, on the other hand, are more likely to have readmissions related to co-morbidities from lifelong chronic conditions. Therefore, pre-operative coordination of care, with a focus on optimal scheduling of interventions so that co-morbidities can be addressed prior to surgery or procedural care, is vital to improving the care of pediatric patients. The PSH program promotes activities such as the utilization of care managers or navigators in preoperative clinics to manage the patient's entire experience as well as establishing set care pathways and protocols that enhance the communication between disparate providers.

In addition to pre-operative protocols, post-operative communication and instructions are important. Discharging pediatric patients is often more difficult than adults because readiness is often measured day-to-day, rather than with pre-set times, as is more common with adults. Furthermore, since children rely on adults for their care post-discharge, establishing comprehensive, clear discharge instructions for the caretaker that communicate clear expectations on successful care can be a helpful deterrent to unneeded readmissions.

As is the case with any effective system of care, there is no single approach that delivers value and improves the patient experience. However, the following core principles, as detailed above, are proven strategies that shift the focus of procedures from an acute episode to a continuum of care and should be considered by CMS:

- Implementation of pre-operative coordination of care techniques
- Optimization of a patient's co-morbidities prior to surgery
- Development of comprehensive, clear post-acute discharge instructions

If you have any questions regarding our comments or would like to further discuss the pediatric PSH concepts that we've showcased above, please contact [Roseanne Fischhoff](#), Economics and Practice Innovations Executive, at.

Sincerely,

A handwritten signature in cursive script, reading "J. Plagenhoef, M.D.", with a stylized flourish at the end.

Jeffrey Plagenhoef, M.D.
President
American Society of Anesthesiologists

American Speech-Language-Hearing Association (ASHA)

Dear Sir or Madam,

The American Speech-Language-Hearing Association (ASHA) is the national professional, scientific, and credentialing association for 191,500 members and affiliates who are audiologists; speech-language pathologists (SLPs); speech, language, and hearing scientists; audiology and speech-language pathology support personnel; and students. ASHA has carefully reviewed the Centers for Medicare & Medicaid Services' Pediatric Alternative Payment Model request for information. We appreciate your consideration and thank you for the opportunity to comment.

Cordially.

See attachment for RFI response.



American
Speech-Language-H



AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

March 27, 2017

Seema Verma, MPH
Administrator
Centers for Medicare & Medicaid Services
U.S. Department of Health and Human Services
Hubert H. Humphrey Building

RE: Pediatric Alternative Payment Model Request for Information

Dear Administrator Verma:

The American Speech-Language-Hearing Association (ASHA) is the national professional, scientific, and credentialing association for 191,500 members and affiliates who are audiologists; speech-language pathologists (SLPs); speech, language, and hearing scientists; audiology and speech-language pathology support personnel; and students. ASHA has carefully reviewed the Centers for Medicare & Medicaid Services' (CMS) Pediatric Alternative Payment Model (APM) request for information (RFI) and would like to offer comments on these topics:

- General principles for pediatric-focused APMs
- Challenges in existing pediatric-focused APMs

General Principles for Pediatric-Focused APMs

ASHA recognizes that there is an increased emphasis on moving from a fee-for-service volume based health care system to one that is aimed at improving health through value and patient outcomes. As CMS explores approaches to move children and youth who are enrolled in Medicaid and CHIP to APMs, we believe that the following concepts should be factored into any care redesign processes.

- **Pediatrics needs its own financial model that accounts for the long-term investment opportunity and the thin margins for short-term investments¹**

The demographics of children and youth are highly diverse and have factors that influence their care that are different from any other age group. Children often have higher rates of poverty, which influences the prevalence and severity of disease as well as access and response to treatment. Children and youth also face highly prevalent chronic conditions and neurodevelopmental conditions. Finally, as compared to adults, the trajectories for improved outcomes and lower costs for children are often long-term, with short-term savings less achievable. In pediatrics, it is important to show progress over time; not a definitive short-term outcome.

¹ Perrin, JM, Zimmerman E, Hertz A, et al. Pediatric Accountable Care Organizations: Insight from Early Adopters. *Pediatrics*. 2017; 139(2):e20161840

- **Evidence-informed vs. evidence-based quality measurement**

Pediatric interventions are often preventive in nature; therefore, evidence-based measures can be challenging because providers cannot ethically withhold medically necessary treatment. Supporting the development of pediatric-specific quality measures that assess overall long-term health and long-term savings, combined with shorter-term milestones, may be more appropriate for this population.

- **Care coordination and care transitions**

To support integrated service model concepts, it is important to adopt approaches that ensure proper referral patterns between the primary care physician and other treatment providers. While recent efforts on payment reform have intended to advance coordinated care models, much of health care delivery is still siloed. This is particularly true for complex, high-cost patients—those with fundamentally complex medical, behavioral, and social needs. Further, there is a need to streamline administrative burden for authorization, reauthorization, and the extension of services if needed.

- **Remove barriers to integration of social services with medical services**

Integrating clinical care services and non-medical services, such as housing and food, into social services has great potential to achieve better outcomes, reduce inequality, and increase cost savings. For example, through proper funding support, Medicaid managed care plans could coordinate with social and community interventions that are proven effective in improving outcomes and reducing costs.² In recognition that children and youth often receive services from an array of programs, it is critical that care coordination encompasses the full constellation of services and supports that contribute to the desired functional and financial outcomes of pediatric APM implementation.

- **Remove access barriers and promote effective telehealth tools**

Telehealth technologies can increase patient access to medical care, particularly in remote or underserved areas. State regulatory barriers that inhibit the adoption of telehealth should be reduced. These barriers include reimbursement ineligibility, and variations and restrictions in state licensure rules.

Audiologists and speech-language pathologists have demonstrated the capability to provide effective care through telehealth technologies for more than a decade and in various work settings. Telehealth venues include medical centers, rehabilitation hospitals, community health centers, outpatient clinics, universities, patients' homes, and residential health care facilities. There are no inherent limits as to where telehealth can be implemented as long as the services comply with national, state, institutional, and professional regulations and policies. Telehealth is being used in the assessment and treatment of a wide range of clinical

² Dzau, VJ, McClellan M, et al. Vital Directions for Health and Health Care. *National Academy of Medicine*. <https://nam.edu/wp-content/uploads/2017/03/Vital-Directions-for-Health-Health-Care-Priorities-from-a-National-Academy-of-Medicine-Initiative.pdf>

disorders, including articulation disorders, autism, dysarthria, fluency disorders, language and cognitive disorders, dysphagia, and voice disorders.

- **Ensuring access to providers through funding and reimbursement**

Sufficient Medicaid reimbursement is necessary to achieve access to care. The adequacy of Medicaid payments should be based on the true costs of delivering care. For example, payments could be adjusted for case-mix differences based on chronic conditions. ASHA opposes block granting proposals for Medicaid that would limit federal matching funds. Block granting and per capita caps based upon federal poverty census data within states would have a dramatic negative effect on children and youth in states where Medicaid has expanded and where optional populations are covered.

Challenges in Existing Pediatric-Focused APMs

- **Accountable Care Organizations (ACO)**

No one definition for Medicaid ACOs exists and its parameters vary from state-to-state. However, there appears to be common characteristics in that they promote patient-centered care and care coordination. According to an analysis conducted by Leavitt Partners on Medicaid ACOs, one area in which states need assistance in implementing ACOs is integrating long-term services and supports.³ For ACOs to become more meaningful from a patient and cost-saving perspective, states will need to consider implementing post-acute and long-term services and supports—these services are critical in order to provide comprehensive episodes of care. If states can more effectively incorporate long-term services and supports into their ACOs, then they could potentially enhance chronic disease management, reduce unnecessary emergency room visits, develop more efficient care transitions, and facilitate the proactive diagnosis and prevention of post-discharge conditions. Other areas in which states need assistance are (a) understanding how to deploy population health analytics to improve care and (b) integrating behavioral health for children, in particular.

- **Patient-Centered Medical Homes (PCMH)**

Currently, 26 states have Medicaid PCMH initiatives underway. Under this model, patient treatment is coordinated through the primary care physician to ensure patients receive care by employing care coordination and enhanced communication. ASHA is aware that pediatricians who participate in Arkansas' Medicaid PCMH program have elected to modify operational processes by focusing on therapy and behavioral health. Specifically, the clinic requires newly referred therapy patients to choose one therapy provider for their initial evaluation and a different therapy provider for their therapy services. The goal of this process is to adopt a “checks and balances” approach for patients so that the evaluation is independent of subsequent therapy services. Unfortunately, this requirement has created a barrier to therapy services in instances where access to participating Medicaid therapy

³ Leavitt Partners. The Rise and Future of Medicaid ACOs: themes, trends and takeaways. Available at: <http://leavittpartners.com/2015/09/the-rise-and-future-of-medicaid-acos-2/>.

providers is limited, particularly in rural areas. In addition, it is problematic for ensuring the most effective clinical treatment of patients.

Thank you for your consideration of ASHA's comments on the Pediatric APM RFI. If you require further information or clarification, please contact Daneen Grooms, MHSA, ASHA's director of health reform analysis and advocacy, at or Laurie Alban Havens, ASHA's director of private health plans and Medicaid advocacy, at

Sincerely,

A handwritten signature in cursive script that reads "Gail J. Richard". The signature is written in dark ink and is positioned above the printed name.

Gail J. Richard, PhD, CCC-SLP
2017 ASHA President

Ann & Robert H. Lurie Children's Hospital

Good morning,

Please find attached the response to your RFI for pediatric alternative payment models submitted by the Ann & Robert H. Lurie Children's Hospital of Chicago.

We are happy to answer any questions or provide more information on our experiences and perspective.

Thank you very much for this opportunity to provide input on such an important undertaking.

Best regards,



Ann & Robert H.
Lurie Children's Hos

March 28, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attention: _____

Dear Dr. Billioux:

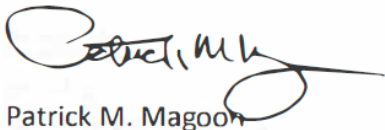
Thank you for this opportunity to provide our perspective on potential alternative payment models (APMs) for pediatric care. The Ann & Robert H. Lurie Children's Hospital of Chicago is pleased to share its experiences in providing care coordination services to children with medical complexity, as we have sought to build a pediatric accountable care organization (ACO) over the last several years.

We strongly support the development of robust, scalable and financially sustainable pediatric APMs to provide and coordinate care for children with medical complexity. This is a group of children who benefit substantially from strong linkages among primary care providers, subspecialists, social service providers, schools and many other organizations touching children's lives. It is a group that is not served adequately either by fee-for-service models or by managed care models of payment. Our experience has taught us that a provider-driven pediatric ACO offers the greatest opportunity of success. Indeed, community-based and social service organizations we have collaborated with also support this model.

Our model parallels the 'System of Care' approach developed by the Substance Abuse and Mental Health Administration's Child Mental Health Initiative; its focus is to align the incentives and community-based and social services in order to reduce the need for expensive 'crisis' care. Indeed, our multi-decade commitment to care coordination for children with medical complexity has resulted in a 50% decrease in inpatient annually and resulted in a 16% cost savings on the total cost of care to Illinois Medicaid for this population.

We look forward to working with you to explore promising innovations for the health of the children whose care is entrusted to us. If you have any questions on our comments, we would be happy to provide more information.

Sincerely,



Patrick M. Magoon

President & CEO

Patrick M. Magoon
President & CEO

Northwestern
FEINBERG SCHOOL
OF MEDICINE

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

CMS is interested in learning about pediatric alternative payment models (APM) (APM defined here as a payment model other than traditional fee-for-service) that emphasize both quality and multi-disciplinary service delivery, with consideration of the unique needs of children and youth covered by Medicaid and CHIP and the potential impacts on their health and well-being. In the model concept being explored, CMS proposes that pediatric health care systems and providers work with their states and tribes to take on accountability for the health and wellness of children and youth, with the families at the center of care planning, potentially sharing that accountability with health-related social service provider partners.

QUESTIONS:

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

Lurie Children's response: The Ann & Robert H. Lurie Children's Hospital of Chicago is pleased to share its experiences in providing care coordination services to children with medical complexity. The number of children and adolescents (ages 0-18) with severe chronic and complex conditions statewide in the Illinois Medicaid/CHIP program has increased from 45,138 in 2006 to 75,545 in 2010 (the last year for which we have access to data) – growing at a rate that is twice that of children without chronic conditions (Agrawal, et al., 2012). The increase in medically complex recipients has resulted in an inflation-adjusted increase of \$108.7 million in total Illinois Medicaid expenditures. In 2010, these recipients comprised 4.2% of Illinois Medicaid's pediatric population and their care required 35.5% of Illinois Medicaid payments for this age group.

We strongly support the examination of robust, scalable and financially sustainable pediatric APMs for providing and coordinating care for children with medical complexity. This is a group of children who benefit substantially from strong linkages among primary care providers, subspecialists, social service providers, schools and many other organizations touching children's lives. It is a group that is growing and that is not served adequately either by fee-for-service models or by managed care models of payment. Our experience has taught us that a provider-driven model offers the greatest opportunity of success because only such a model can address the **systemic barriers** to service delivery these children face. Indeed, community-based and social service organizations we have collaborated with also support this model.

Systemic barrier #1: Despite the increasing prevalence of chronic illness in children, most community-based primary care pediatric practices in the US focus on the care of children and youth who are generally well and whose needs typically encompass anticipatory guidance, immunizations, and treatment of acute illnesses (Wise, 2009). With relatively few children with medical complexity in any given practice, economies of scale often do not support the care coordination infrastructure and human resources to effectively care for this population, and often community-based primary care providers do not feel equipped to provide services to these children (Agrawal, 2012). Similar to primary care practices, it is our experience that individual MCOs also do not have the number of covered lives—even

in large markets—to take advantage of the economies of scale inherent in the patient base at a children’s hospital.

Systemic barrier #2: In contrast to adult medicine, pediatric subspecialists are in severe shortage nationally (Jewett, et al., 2005). In accessing subspecialty care, Medicaid patients face additional challenges beyond geography and waiting lists. A study in Illinois showed substantial barriers to access for children with Medicaid coverage versus commercial coverage because of Medicaid’s lower payment levels, leading many families to use emergency rooms to gain access to subspecialists (Bisgaier and Rhodes, 2011).

Systemic barrier #3: While children’s hospitals and specialists are concentrated in urban centers, children with complex medical needs are geographically dispersed, leading to challenges of access for children who do not live in the immediate vicinity of a children’s hospital (Mayer, 2006). In addition to geographic distance, state-to-state barriers in Medicaid/CHIP administration often make it challenging for providers and MCOs to manage the care of children with medical complexity, especially if a state has no children’s hospital that can provide the care a child needs or when the nearest children’s hospital that a family would prefer is located across state lines (Dobson, et al., 2013).

Confluence of systemic barriers: These co-occurring systemic challenges of (1) insufficient economies of scale in individual practices and plans, (2) widespread shortages in pediatric subspecialists, and (3) distance-related access challenges in pediatric care delivery result in a confluence of barriers that place the responsibility for care coordination for children with medical complexity in the hands of condition-specific subspecialists, or it is not conducted at all. Importantly, care coordination conducted by pediatric subspecialists may address the challenge of access to subspecialty care, but does not solve the problems of scale or geographic barriers and, furthermore, often fails to adequately manage complexities that fall outside the subspecialists’ expertise. We believe the research and our experience indicate that the lack of effective coordination leads to poorer health outcomes, higher costs, and greater dissatisfaction with services for children and their families.

Our experiences with coordinating care for this population have taken three forms.

- i. Lurie Children’s Primary Care at Uptown Clinic has focused for over twenty years on providing primary care to Medicaid and CHIP children, with a unique capacity to provide primary care integrated with subspecialty care. The Uptown Clinic has a comprehensive, wrap-around approach to children’s care that addresses medical and social concerns, and the practice has been officially designated a medical home by the National Committee on Quality Assurance. Over 80% of encounters annually at the Uptown Clinic are for children with Medicaid/CHIP coverage.

Subspecialty integration has drawn many medically complex children into this clinic and the clinic has responded by offering a wider range of care coordination services for medically complex children. Compared to similarly medically complex children served by other providers, Uptown Clinic has been able to reduce the total cost of care for medically complex children by reducing the frequency of inpatient stays by 50% and expanding the use of outpatient, community-based services. The reduction in the total costs of care to the Illinois Medicaid program for medically complex children was 16%. While the Uptown model of care demonstrates clear advantages for children with medical complexity, it is not scalable in its current form as the clinic operates at a financial loss for Lurie Children’s. If the savings the State

of Illinois receives from the clinic were shared with Lurie Children's, we would be able to scale this to more children.

- ii. Many of Lurie Children's subspecialty providers provide a full range of primary and tertiary care for the children they serve (e.g., cystic fibrosis, cancer, sickle cell anemia). Because these groups of children require an extensive array of pediatric subspecialty services, it is not always practical for them to have a formal primary care relationship. These clinics offer ready connections to social service providers routinely needed by their patients (e.g., durable medical equipment, home nursing, and parent support groups). This clinic model is not scalable, either, as the use of pediatric subspecialists for primary care and care coordination are not financially or practically feasible.
- iii. Lurie Children's Health Partners Care Coordination (LCHPCC) endeavors to take the learning from our Uptown Clinic and the subspecialty care coordination to scale. Founded in 2014 in response to an RFA from the Illinois Department of Healthcare and Family Services (HFS, Illinois' state Medicaid agency), LCHPCC operated for one year as a provider-owned care-coordination entity (CCE) until a newly elected administration shifted Medicaid/CHIP patients into managed care. LCHPCC has created partnerships with dozens of community-based medical and social service providers, and, as a provider-owned CCE, was able to replicate the favorable outcomes of the Uptown Clinic with reductions in frequencies of inpatient and emergency department encounters, and reductions in costs. LCHPCC now operates as a subcontractor to Medicaid MCOs; we have not yet been able to determine whether the subcontractor model will be equally as successful.

Organizations like LCHPCC can become financially feasible from the perspective of total costs of care in a way that is analogous to SAMHSA Children's Mental Health Initiative's System of Care (SOC) model. Like the SOC, Lurie Children's care coordination seeks to provide enough and the right kind of outpatient and community-based services to reduce the need for 'crisis care.' Where SOC's seek to reduce out of home placements (i.e., inpatient mental health admissions, juvenile justice detention and foster care placement), Lurie Children's model of care coordination seeks to reduce the need for expensive, protracted and preventable inpatient stays. Indeed, the reduction of inpatient stays experienced by the Uptown Clinic and the LCHPCC more than covers the costs of more robust outpatient and community-based services, leading to significant savings on the total cost of care for the State of Illinois, better outcomes for the patients, and higher family satisfaction with care.

Like SOC arrangements, when first established as a CCE, LCHPCC realigned the incentives for care providers through a shared savings approach so that all of our partners could be 'all-in' when it comes to prevention of inpatient stays and optimal outcomes. Of note, working under subcontracts with Medicaid MCOs does not allow this realignment of incentives. Indeed, savings may be achieved through care coordination in subcontracts with the MCOs, but currently there is no obligation for MCOs to share savings to the organizations that provide the services needed to avoid inpatient admissions.

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

Lurie Children’s response: When LCHPCC launched in 2014, we reached out to 88 community partners, offering a very wide range of services to the children enrolled in the entity. Services included housing support, mental health services, long-term care providers, home nursing, community-based palliative care, durable medical equipment suppliers and habilitative services. In addition, our care coordinators work hand-in-hand with schools to assure that the enrolled children have access to the full range of educational supports they require. The care coordinators are able to visit patients’ homes and are with the families at school meetings and subspecialty appointments, advocating for services and streamlining care above and beyond any mandatory benefits for this diverse population.

As with our Uptown Clinic, this ‘high-touch’ care coordination approach focuses on facilitating access to the full array of services and supports that children with medical complexity require and yet has reduced the total cost of care. It is too soon to determine whether this model has also yielded better health outcomes compared with children served under other models, but the families report fewer barriers to needed services. It is also unclear at this time whether the cost savings can be replicated under Medicaid MCO subcontracts.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

Lurie Children’s response: As mentioned earlier, significant geographic barriers exist that prevent access to pediatric subspecialists for rural children. Because of the shortages of most pediatric subspecialists, it is impractical to suppose that these providers could be easily accessible to children regardless of where they live. We offer telemedicine services to rural areas of Illinois and are often hindered in the expansion of these efforts because very few of these consultations and encounters are reimbursable through Medicaid/CHIP in Illinois. Thus, telemedicine for this group is not scalable or sustainable without statewide reforms, federal leadership, and payment parity.

State barriers also present a significant problem, especially for children living in rural communities who typically live a long distance from a subspecialty-trained provider who can meet their needs. The Children’s Hospital Association has put forward the ACE Kids Act, which would enable providers and state Medicaid agencies to serve the complex medical needs of children across state lines more effectively. Many children with medical complexity do not live in a state with a children’s hospital, or live very far from the only children’s hospital in the state. For example, children in southern Illinois live much closer to St. Louis Children’s Hospital in Missouri (within three hours of driving) than to Lurie Children’s Hospital in Chicago (six hours by car). Similarly, children in northwest Indiana live closer to Lurie Children’s Hospital in Chicago than either of two children’s hospitals in Indianapolis. Being able to

access geographically nearest children's hospitals and their care coordination services provide a great benefit to the children, their families and Medicaid programs.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

CMS is exploring how the establishment of partnerships between child- and youth-focused health care and health-related social services providers might be structured and operate to integrate services.

Additionally, CMS understands that varying eligibility criteria and program requirements can be challenging for children, youth, families and providers to manage, resulting in both service gaps and implementation challenges, such as different case managers or navigators for each program. We are interested in innovative approaches to integrate child and youth services within these partnerships by lowering barriers to identifying, enrolling, and maintaining coverage.

QUESTIONS

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?
 - a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

Lurie Children's response: Our 'high-touch' model of care coordination is necessary and effective because of the complex array of challenges any family might face, especially a family with a child with medical complexity. A child with medical complexity living in Chicago could receive special education services supplied by the Chicago Public Schools, require a change to their housing through the US Department of Housing and Urban Development, require child protective services from the Illinois Department of Children and Family Services and have an interaction with the Cook County Department of Juvenile Justice – at four different levels of government and four different agencies. All of these agencies and levels of government have their own rules, accountabilities, and goals; they often present a dizzying maze to parents advocating for their children. Our care coordinators successfully navigate this very wide array of systems on behalf of the families who have entrusted their children's care to us.

Furthermore, as our patients reach young adulthood, the difficulties mount. It is not unusual for parents of the children we care for to seek guardianship and SSI benefits for their children, and for the young adults to transition to care providers who serve adults but are unaccustomed to the needs of adults with congenital and other complex medical conditions originating in childhood, and to adults without full capacity to advocate for themselves in an adult world. Having the ability to extend the care coordination function through early adulthood (through age 24) would give this unique group of families a much smoother transition and help reduce the likelihood of preventable inpatient stays or placement in long-term care facilities.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

- a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?
- b. What potential exists for increased partnership for provision of home and community-based services?

Lurie Children's response: The LCHPCC model navigates access to the community-based providers and social service providers, such as:

- Community mental health services
- Early Intervention services
- Community-based rehabilitation services
- Pharmacies, durable medical equipment suppliers
- Special education programs in schools
- Child welfare services
- Housing services
- After school programs
- Day programs for children for whom school isn't possible
- Respite services for parents and other caregivers)
- Almost Home Kids, a transitional inpatient provider that allows parents to receive coaching and support as they prepare to bring their child home to stay,
- Home remodeling services, and other such services for families with the most severely medically complex children.
- Illinois Medicaid does not pay for community-based palliative care; LCHPCC partners with two such organizations in Chicago.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and healthrelated social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

Lurie Children's response: When LCHPCC was operating as a CCE, it created shared savings arrangements with 88 community organizations who were willing to partner with us to improve services for children with medical complexity. Without the shared savings leverage (which we no longer have as we are now operate as a subcontractor to Medicaid MCOs), care coordinators must navigate the care integration separately for each patient. Further complicating integration is that each MCO has relationships with different service providers (typically driven by the needs of adult enrollees), so that it is much more difficult to develop integrated systems – and the person-to-person trust among staff members of the collaborating organizations within these systems – to support these children. Thus, one

of the roles our care coordinators have assumed is navigating the MCO prior-authorization requirements for services that are customarily required by children with medical complexity.

Assuming that the financial incentives could become aligned, the next phase of integration would be to expand information flow among service providers. One straightforward option would be to allow social service providers (such as child welfare, special education programs and Early Intervention) to have access to the Health Information Exchange, from which they are currently restricted. This would not provide information back to the subspecialists from community-based service providers, but would at least facilitate the outward flow of information from the healthcare system to providers whose services to children would be informed and improved with such information. Similarly, legal restrictions prevent the flow of information from child welfare agencies, the courts, and schools to health and social service providers. Though well-intentioned, the legal framework that governs the privacy of information held by many agencies serving youth often prevents optimal service delivery for affected children.

In order for a provider-driven care coordination entity to take on these legal restrictions independently, it would need to create an exhaustive portfolio of Memoranda of Understanding with each organization and then build an information system to support the flow of information. This would be a costly and uncertain path, and is unlikely to be scalable beyond feasibility tests and pilots without statewide reforms and federal support.

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

Lurie Children's response: In our experience, identifying children with medical complexity is problematic. After considering several alternatives, we believe the best tool to identify children retrospectively is the 3M Clinical Risk Group software, which utilizes a two-year look back at claims data (six months for infants) and searches diagnoses, procedures, pharmaceutical use, and inpatient stays to classify adults and children as having medically complex conditions. Scores on the CRG software range from 0 (healthy, no reason to expect high medical costs) to 9 (terminal and catastrophic conditions). Furthermore, focusing on children, a group of researchers split CRG 5 into a 5a group (two body systems affected, not expected to dominate development) and a 5b group (two body systems affected; expected to dominate the child's development).

We conclude that children who fall into the 5b-9 categories are medically complex. They comprise about 6% of the age 0-18 Medicaid/CHIP population in Illinois, and their utilization is responsible for 40% of the costs. Based on our experience with care coordination, savings are driven by better management of children in the 5b and 6 categories. These groups include children who have chronic conditions affecting two body systems and that are expected to dominate their developmental outcomes. There are very few children in CRG 7 (children with conditions affecting three or more body systems); CRG 8 children are in active chemotherapy; CRG 9 children have devastating illnesses and often need long-term supportive care. In contrast, children in CRG 5b and CRG 6 categories appear to have the highest number of preventable hospital admissions. For example, a child in this group might have asthma and a mental health condition that makes compliance with asthma medication unreliable. Our high touch model helps these children avoid both asthma and mental health hospitalizations by supporting their management of their mental health condition.

In addition to needing a system to identify children retrospectively, pediatrics requires a prospective identification system to identify children who are born with congenital conditions (not always recognized at birth) and who experience trauma. There are multiple systems in place that would allow these children to be enrolled prospectively in appropriate care coordination. Possible approaches include:

- Adverse Pregnancy Outcomes Reporting System (APORS). APORS is a public health system that collects data through neonatal intensive care units, usually within 48 hours of birth. APORS identifies children who are known at birth to have a congenital condition, to be very low birth weight, or to have suffered trauma in delivery. If they survive the neonatal period, a very high percentage of these individuals will have some level of medical complexity in childhood.
- Enrollment in Early Intervention. Early Intervention is a federally-funded program that identifies children with having developmental delays and provides therapeutic services for these children. Collaboration between states' Medicaid programs and the Early Intervention programs could offer a means to transition children into richer care coordination before the child has enough claims experience to meet the medically complex standard with the CRG process.
- Clinical screening devices would offer clinicians a means to identify a medically complex child and refer him or her to care coordination prospectively. Clinical screeners would be most effective in identifying children whose delays and health concerns are not obvious at birth (such as autism) or who experience a severe injury that results in the need for complex medical services. The screeners could be implemented in outpatient, emergency department, and inpatient settings.
- Children in the first year of life are the most likely of any age group to require hospital-level care. While this high frequency of hospitalization reflects infants' inherent vulnerability to acute illnesses, children with emerging medical complexity may also require hospital-level services more frequently than their peers. It would be possible to implement a strategy wherein all children hospitalized in the first year of life (after the neonatal period) would be evaluated for medical complexity and referred for care coordination accordingly.

5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

Lurie Children's response: When children's hospitals are enabled to provide comprehensive, patient-tailored, family-centered care coordination under a shared savings model with community-based and social service agencies, the services are aligned in favor of the children who need the most intense support. This results in reductions in the total cost of care, largely through avoiding preventable hospitalizations, and in the realignment of payments from Medicaid/CHIP that allow 'the money to follow the child.' Under this model, the community-based and social service organizations are motivated to provide the low-volume services these children need because, under arrangements with the children's hospital which supplies most of their volume, they can leverage economies of scale and can sustain their commitment to serve this population.

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

Lurie Children's response: The Systemic Barriers listed above (please see Section I, question 1) create significant obstacles to the integration of services for children with medical complexity. We believe the best solution to these problems is to center care coordination in children's hospitals, where economies of scale and efficiencies of expertise can be achieved, and to pay hospitals and other providers under a shared savings arrangement so that social service providers and community-based providers have an incentive to serve these children in a sustainable way that is optimally aligned with the needs of children with medical complexity and their families.

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

Lurie Children's response: We do not believe that MCOs provide a means of overcoming the Systemic Barriers we have outlined. Few Medicaid MCOs have enough children with medical complexity to overcome the economies of scale and to sustain the highly specialized services these children benefit from.

Furthermore, as a tertiary and quaternary care provider serving many children with medical complexity, we find that MCOs are not typically incentivized to provide care coordination for these families. Rather, MCOs typically focus their energies on adults with complexity whose care can be better 'stream lined' because of higher volume than children with complex needs, and on the vast majority of children who are generally well and whose needs are best served through preventive services delivered in the primary care setting. Further, we find that we must advocate sometimes quite intensively with MCOs for our patients to gain access to community-based and social services that they need and that will help prevent an inpatient admission.

While some MCOs are more supportive than others of efforts to address the needs of children with medical complexity, we think there are many challenges to the MCO model for children with medical complexity. Indeed, we think the incentives are misaligned and do not address the Systemic Barriers we highlighted at the outset.

8. What role do models of care such as ACOs play in the pediatric environment?
- Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?
 - How are pediatric ACOs the same or different from adult-focused ACOs?
 - What opportunities do pediatric ACOs have for integration with community and health services systems?
 - Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

Lurie Children's response: Based on our experience, we believe Care Coordination Entities (CCEs) based at children's hospitals that share savings with community-based and social service providers offer great

potential for improving care, reducing costs and improving health outcomes for children with medical complexity. They offer the ability to address each of the Systemic Barriers to care.

With more experience across the country, CCEs could eventually develop into risk-bearing ACOs. Children with medical complexity would benefit from a federal system that provides grants to local children's hospitals in partnership with their state Medicaid agencies to experiment with different shared savings models in an effort to integrate the care and align incentives to providers delivering services to them. This granting system could follow a model parallel to SAMHSA's Children's Mental Health Initiative, which requires applicants to partner with their state Medicaid agency in proposing and carrying out Systems of Care. In some states, these partnerships seeded by SAMHSA have effectively reorganized mental health services for children, adolescents and young adults throughout the state, and have incentivized all providers to work in collaboration to improve services, reduce costs and provide better outcomes. Maryland, Georgia and Arizona are a few excellent examples.

The principal differences for pediatric ACOs versus adult-focused ACOs relate to the relative importance of inpatient versus ambulatory encounters. In our analyses of models of ACOs based on age groups, using the Medical Expenditure Panel Survey to employ population-level perspectives on ACO risk-bearing, we examined patterns of expenditures that would be expected for an ACO serving children alone (0-17 years old) versus an ACO serving seniors (65+ years old) alone (i.e., the most common form of ACOs currently). We found that, whereas an ACO focused on seniors would be expected to have 34% of expenditures in the hospital inpatient setting and 21% in the outpatient setting, an ACO focused on children would be expected to have only 25% of expenditures for hospitalizations and 25% in the outpatient arena. Another key component of expenditures for both age groups was "other services" (e.g., pharmaceuticals, mental health, physical therapy, durable medical equipment), which was 38% in the pediatric ACO model and 36% in the senior ACO model.

Importantly, when we examined the same patterns of expenditures for children who screened positive as a child "with special health care needs" using a widely validated screening instrument, their expenditures were 26% in the inpatient setting and 21% in outpatient locations, with 43% of spending related to "other services". This analysis underscores the importance of care coordination for children with medical complexity and integrating care provided by community-based and social service organizations.

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?
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Lurie Children's response: We support the notion of pediatric ACOs with a special emphasis on children with medical complexity, but only after a period of trial and model refinement. This will assure a higher degree of success for any proposed risk-bearing model.

Children's hospitals and organizations serving medically complex children have a strong commitment to Medicaid and CHIP populations. As a result of reimbursements from public programs that are often at or below the costs of providing care, these organizations tend to have narrow operating margins. Most organizations involved in the care of children with medical complexity are not in a financial position to bear the full risk of a significant transformational endeavor alone, especially without the full support of their state Medicaid agency. Grant funding that covered the cost of staff and resources to invest in system transformation would help advance such changes more quickly.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

CMS recognizes that accessing the optimal combination of child and youth services to meet each child's unique needs presents a significant challenge for vulnerable children and youth in need of services, as well as for their families. In the draft model concept, we seek to improve coordination and alignment across programs and systems by supporting the establishment of robust health care and health-related social service provider partnerships to improve health, wellness, and total cost of care with the potential for sharing in cost savings for successful performance. We are interested in input on innovative financial arrangements that combine or coordinate funding in an effort to integrate and streamline care for highneed and vulnerable children and adhere to current Medicaid and CHIP program integrity requirements. Since the Innovation Center seeks to test models that, when successful, can be scaled and spread, we seek comments on how current Medicaid and CHIP authorities and programs might be used to support reproducible state-based models to improve care for children and youth.

QUESTIONS

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?
 - a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?
 - b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

Lurie Children's response: Children and adolescents with medical complexity would benefit greatly from a system of care delivery that was more integrated and that employed a better aligned payment method.

We believe the best tool to identify children retrospectively is the 3M Clinical Risk Group software, which conducts a two-year look back at claims data (six months for infants) and searches diagnoses, procedures, pharmaceutical use, and inpatient stays to classify adults and children as having medically complex conditions. Scores on the CRG software range from 0 (healthy, no reason to expect high medical costs) to 9 (terminal and catastrophic conditions). Furthermore, focusing on children, a group of researchers split CRG 5 into a 5a group (two body systems affected, not expected to dominate development) and a 5b group (two body systems affected; expected to dominate the child's development).

We hold that children who fall into the 5b-9 categories are medically complex. They comprise about 6% of the age 0-18 Medicaid/CHIP population in Illinois, and their utilization is responsible for 40% of the costs. Based on our experience with care coordination, savings are driven by better management of children in the 5b and 6 categories. These groups include children who have chronic conditions affecting two body systems and that are expected to dominate their developmental outcomes. There are very few children in CRG 7 (children with conditions affecting three or more body systems); CRG 8 children are in active chemotherapy; CRG 9 children have devastating illnesses and often need long-term

supportive care. In contrast, children in CRG 5b and CRG 6 categories appear to have the highest number of preventable hospital admissions.

2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?
- a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.
 - b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?
 - c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.
 - d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

Lurie Children's response: In LCHPCC was originally established under a shared savings model with Illinois's Medicaid agency, HFS. It operated under this model for one year before the contract was canceled by the state after a newly-elected administration changed the pathway towards managed care for Medicaid. We did not reach the stage of receiving savings payments from the state. What follows here is a brief description of the shared savings model we had negotiated with 88 community partners and the State of Illinois under the previous state administration.

Figure 1 below represents the shared savings approach that we negotiated with our partners. Each provider agreed to receive a portion of the savings 'pool' based on the total billed services to that provider type. If a provider met quality standards, they would receive their portion of the pool based on the number of services provided. Providers who served more children in our CCE and met the quality targets they agreed to meet would receive a portion of the shared savings.

Figure 2 demonstrates how the shared savings pool would have been distributed using the example of primary care providers. Providers had to first meet cost-savings targets. If they met those, then they would be assessed to determine if they met quality targets. If both of these targets were met, the provider would receive a portion of the shared savings pool.

These models are only for demonstration purposes. What is very important is that Lurie Children's was able to negotiate these shared savings methods with 88 community providers. Thus, while we cannot guarantee that they would have worked as planned, the hard work of gaining buy-in and willingness to realign incentives was accomplished. That suggests that there are many willing partners to join in such endeavors with other children's hospitals as well.

Figure 1





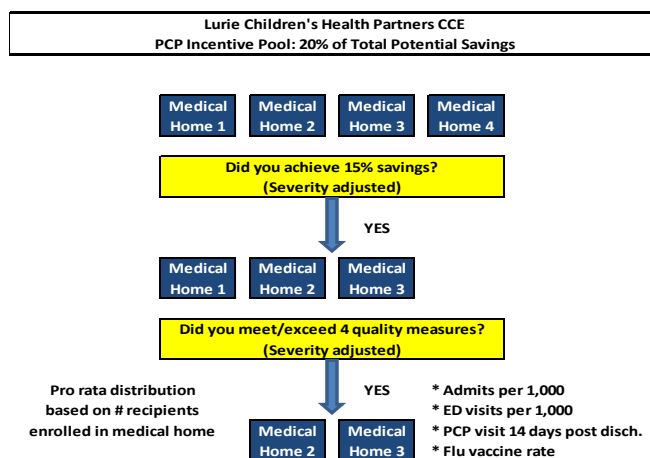
Lurie Children's Health Partners: CCE Pool Available for Distribution to Collaborators					
Each pool filled based on %, then on quality measures, then pro rata distribution based on # services billed					
	PCPs (2.7%)	Access to PCPs Patient/Family Satisfaction		Therapies (2.9%)	Utilization Reductions Patient/Family Satisfaction
	MD Specialists (6.4%)	Access to Specialists Patient/Family Satisfaction		Med Supplies/Equip (2.1%)	Patient/Family Satisfaction Pro rata distrib to all CCE Collaborators
	Other Physicians (2.2%)	Access to Specialists Patient/Family Satisfaction		Home Health (2.9%)	Patient/Family Satisfaction Pro rata distrib to all CCE Collaborators
	Mental Health (17.0%)	Access to MH Providers Follow up after MH hospitalization		Pharmacy (18.1%)	Utilization Reductions Med rec, compliance, follow up
	Hospitals (41.3%)	IP + ED utilization reductions Patient/Family Satisfaction		Transportation (0.9%)	Patient/Family Satisfaction Pro rata distrib to all CCE Collaborators
	LTC/Rehab (3.3%)	Utilization Reductions Patient/Family Satisfaction		Miscellaneous (0.2%)	Patient/Family Satisfaction Pro rata distrib to all CCE Collaborators

Figure 2



3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?
 - a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.
 - b. What factors are essential to the success of this alignment?
 - c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

Lurie Children's response: The Systemic Barriers we identified above indicate the current misalignment of incentives. Because of economies of scale, funding pathways do not reward service providers who are willing to serve low-incident conditions. Bringing many of these children together into one plan

through children's hospitals, which already serve them, we believe, is the only way to incentivize providers to focus on their needs in a way that improves care, reduces costs and improves outcomes.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

Lurie Children's response: As stated above, we believe the most promising model is a CCE with shared savings. With experience and refinement of this model, children's hospitals could develop risk-bearing ACOs in conjunction with community-based service providers. This model would be most similar to the "total accountable care organization" model described by others.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?
- a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?
 - b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?
 - c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

Lurie Children's response: Some areas that we currently face issues with because they are not covered by Illinois Medicaid include (this list is not exhaustive):

- Physician participation in special education and 504 plan consultations at schools
- Home nursing
- Housing supports, including home rehab work to accommodate medical equipment
- Telemedicine
- Joint pediatric subspecialist/primary care physician appointments
- Remote monitoring (via traditional medical equipment or wearable devices)
- Transport to access children's hospitals across state lines

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

Lurie Children's response: Because all services in Illinois are ultimately funded by Medicaid/CHIP, we had planned to use claims data to compute the costs that would determine if there were shared savings. We believe a severity-adjusted model could be developed to assure that providers coordinating the care for the most complex children were not put at a disadvantage. In Illinois, we negotiated conducting

severity adjustment using the CRG method for severity adjustment and by excluding aggregate expenses over \$80,000 annually for any child. Because we did not implement the shared savings portion of our contract (it was canceled under the newly elected administration before we met this milestone), we cannot speak to whether this strategy was effective.

SECTION IV: PEDIATRIC MEASURES

CMS has worked with stakeholders to develop a core set of child health care quality measures that can be used to assess the quality of health care provided to children enrolled in Medicaid and CHIP. States and tribes can use the child core set of measures to monitor and improve the quality of health care provided to Medicaid and CHIP enrollees; however, CMS notes that state and tribal reporting on the core set is voluntary. CMS is interested in learning from and, where appropriate, building upon its work on pediatric quality measures indicative of health outcomes. In particular, we are interested in short-to-medium term measures associated with both short- and long-term cost reductions and improved quality to both Medicaid and other public sector programs as healthy children become healthy adults. In addition, CMS is interested in learning how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health.

QUESTIONS

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term health and well-being.

Lurie Children's response:

Measure Name	Definition	HEDIS (Y/N)	Data Source
Influenza Immunization Rate	The percentage of recipients 6 months and older who received at least one influenza immunization during the measurement year	Y	Claims
Childhood Lead Screening	The percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday	Y	Claims
Dental Treatment Services	The percentage of recipients ages 1 to 20 that received dental treatment services	N (CMS)	Claims
Preventive Dental Services	The percentage of recipients ages 1 to 20 that received preventative dental services	N (CMS)	Claims
Well-Child Visits in the First 15 Months of Life	The percentage of children that turned 15 months old during the measurement year and had the following number of well-child visits with a primary care practitioner during their first 15 months of life: no visits; 1 visit; 2 visits; 3 visits; 4 visits; 5 visits; 6 or more visits	Y	Claims
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	The percentage of children ages 3 to 6 that had one or more well-child visits with a primary care practitioner during the measurement year	Y	Claims

Measure Name	Definition	HEDIS (Y/N)	Data Source
Adolescent Well-Care Visits	The percentage of adolescents ages 12 to 21 that had at least one comprehensive well-care visit with a primary care practitioner or an obstetric/gynecologic practitioner during the measurement year	Y	Claims
Developmental Screening in the First Three Years of Life	The percentage of children screened for risk of developmental, behavioral and social delays using a standardized screening tool in the 12 months preceding their first, second or third birthday	N (Oregon Health Sciences University)	Claims
Vision Screening	The percentage of children ages 3 to 6 who had an objective vision screen	N	Claims
Follow-up After Hospitalization for Mental Illness	Two rates reported: The percentage of discharges for children ages 6 to 20 that were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner within 7 days of discharge and percentage within 30 days of discharge	Y	Claims
Ambulatory Care Follow-up with a Provider within 14 Days of Emergency Department (ED) Visit	Percentage of patients with an ambulatory visit with a practitioner within 14 days of discharge from the Emergency Department	N	Claims
Ambulatory Care Follow-up with a Provider within 14 Days of Inpatient Discharge	Percentage of patients with an ambulatory visit with a practitioner within 14 days of an inpatient admission	N	Claims

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

Lurie Children's response: Please see the table above (Section IV, 1).

SECTION V: OTHER COMMENTS

1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

Lurie Children's response: As mentioned above (Section II, question 3), one of the most significant barriers to effectively coordinating care for children with medical complexity has to do with serving Medicaid/CHIP children across state lines. State boundaries often make access to the closest or preferred pediatric subspecialists impossible for children.

Given the reality of the Systemic Barriers indicated at the outset, families of children with medical complexity do not have widely-available service options. It takes more family effort to access needed services and often the systems are working against families. Any successful system set up to serve these children must focus its primary efforts on reducing these barriers and aligning incentives so that all providers and all payers are rowing in the same direction, and doing this in a truly child-centered, family-driven way – improving services, improving outcomes and reducing overall costs.

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

Lurie Children's response: After pediatric ACOs are adequately enabled and financially sustainable, we recommend adding to this model maternity and prenatal care. As a result of the fact that many conditions that trigger medical complexity are rooted in inter-generational processes, we believe there will be great value in engaging mothers in supportive care coordination before their children are born, perhaps before conception. This will benefit not only the mother, who will be more empowered and capable of providing good care to her child, it will also reduce the risk of conditions that surface during pregnancy and in the perinatal period. We look forward to piloting such innovations and building APMs to provide preventive solutions to children's health and wellbeing.

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Ann & Robert H. Lurie Children's Hospital

I write to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28. Our program agrees with the CAPC letter and urges CMS to act on the recommendations.

Anthem, Inc.

Good Evening,

Attached are Anthem's comments in respond to CMS' RFI on Pediatric Alternative Payment Models.
Thank you for your consideration in advance.

Sincerely,



Anthem, Inc..pdf



Anthony Mader
Vice President, Public Policy
Anthem, Inc.

Submitted electronically to:

March 28, 2017

Seema Verma
Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services

RE: Center for Medicare and Medicaid Innovation Request for Information on Pediatric Alternative Payment Model Concepts

Dear Ms. Verma:

Anthem appreciates the opportunity to provide the Centers for Medicare & Medicaid Services (CMS) with feedback on concepts that may influence development of an alternative payment model to integrate health care and social services for pediatric populations in Medicaid and the Children's Health Insurance Program (CHIP).

Anthem is working to transform health care with trusted and caring solutions. Our health plan companies deliver quality products and services that give their members access to the care they need. With over 73 million people served by its affiliated companies, including approximately 40 million within its family of health plans, Anthem is one of the nation's leading health benefits companies. Anthem's Medicaid plans are located in 20 states nationwide and serve more than 6 million members, including 185,000 pregnant women and 3.8 million children. For more information about Anthem's family of companies, please visit www.antheminc.com/companies.

As CMS and our state partners advance payment and delivery system models that focus reimbursement on delivery of high quality and cost effective care, Anthem serves as an experienced partner in transforming health care from a fee-for-service or "pay-for-volume" system to one which focuses on value and quality. Anthem's health plans engage in alternative payments models across the many markets and health care programs in which we participate, including in commercial insurance, and the Medicare and Medicaid programs. Today, more than 50% of all payments to our plans' network providers are in value-based payment arrangements, supporting high quality care and better health outcomes.

antheminc.com

Anthem utilizes successful and innovative value-based payment approaches within our provider networks in order to enhance the quality of care and cost effectiveness of coverage for populations in Medicaid, including pregnant women and children. Anthem commends CMS' interest in identifying successful strategies to inform the development and testing of a future model to enhance integration of service delivery for pediatric populations in Medicaid and CHIP. The following sections contain feedback and recommendations based on our experience in the areas where CMS has requested input.

Section I: Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

CMS seeks insight on stakeholder experience participating in alternative payment models and descriptors of effective integrated care concepts or programs. Anthem's Provider Quality Incentive Program (PQIP) is our most mature primary care incentive program in our Medicaid plans. PQIP is a shared savings program deployed with our network primary care physicians (PCPs) that results in financial rewards for improving quality of care and preventive services delivered to Medicaid members, while reducing costs. Through PQIP, our plans align provider financial incentives with quality incentives as well as with those of our state partners. An analysis of 2014 outcomes data showed that PCPs who participate in our PQIP program nationally had higher year-over-year quality improvement rates compared to non-participating providers, with one Medicaid market showing an overall 9% favorable difference in quality performance. In addition, medical cost efficiency improved 1.7 % overall, with providers in one Medicaid market achieving a 14.7% year-over-year improvement in their full-year 2014 efficiency.

To best serve members, Anthem's Medicaid health plans combine fully integrated care coordination with a member-centric focus, which includes comprehensive case management. Our plans utilize interdisciplinary teams that help address each individual's needs, including those of pregnant women, infants and children. We are experienced in delivering integrated physical and behavioral health services, long-term services and supports (LTSS), and coordination of services that help address social determinates of health such as safe housing, nutritional services, educational assistance and employment supports.

In our experience, Anthem has learned that the following are key components to successful alternative payment model development:

- Provider Collaboration. Foundational to successful alternative payment models is full provider engagement in the promotion of overall patient-centered health care delivery and positive health outcomes. We work closely with providers early in the design and goal development phase of value-based payment arrangements to help establish shared goals for managing population health. Health plans help providers succeed under these arrangements by providing tools and other support. For example, Anthem's health plans often support data exchange and provide care management tools that maximize each provider's ability to participate and contribute to the broader alternative payment model goals.
- Alignment of Goals. Goals should be shared and aligned across all stakeholders including payers, providers, beneficiaries, CMS, states and social services providers to optimize the effectiveness of integrated service delivery. Alignment of goals also enables participating providers to meet clear quality benchmarks, achieve targeted financial incentives, and meet overall program goals. Aligning the proper incentives and goals leads to the delivery of better health to individuals and families.

- Broad Population Base. In order for an alternative payment model focused on the pediatric population to be successful, it must include the broader pediatric population - all infants and children, including foster youth - and not focus solely on particular high-needs or complex subpopulations. Models that only include high-cost and high-needs subpopulations inadvertently reduce the measurable population and make it difficult to measure performance and quality improvements because the population is too small and therefore performance results may be found inconclusive. Inclusion of a broader population in the alternative payment model not only supports accurate measurement but helps achieve critical mass among the enrolled population which in turn incentivizes providers to participate and invest resources in the model, focus on preventative and overall health goals, and achieve more meaningful financial incentives.

When considering a model focused on the pediatric population, we recommend CMS focus on promoting a state-wide initiative, rather than building a model focused exclusively on smaller subsets of the Medicaid and/or CHIP population. A statewide strategy would not only allow for an adequately-sized population for testing a new model, but would also include diverse subpopulations and geographies that CMS is interested in serving, including rural geographies. While we encourage CMS to include the broader pediatric population in the alternative payment model design, we also encourage construction of the model such that states, health plans and providers have flexibility to tailor approaches to meet the needs of various subpopulations.

- Explore Model Learnings. Anthem recommends that CMS incorporate opportunities for health plans to participate in new alternative payment models, utilizing the successful service coordination and integration strategies that make managed care programs a strong partner for states and CMS. In exploring various successful models, CMS should also consider the Accountable Health Communities (AHC) model as a framework. AHC integrates services that address health care needs and health-related social needs of beneficiaries using a community-wide approach, which combines the abilities of clinical health care providers, community-based organizations, state and local agencies and health plans.

Section II: Operation of Integrated Service Model

CMS describes the agency's interest in how to structure and operate an integrated service model that supports the partnerships between child-focused health care and social services providers. Anthem agrees with CMS' recognition that design and management of such a structure is challenging and therefore requires a thoughtful approach to implementation.

- Infrastructure. Critical to successful operation of high-quality integrated service models that deliver better care at lower costs is flexibility as well as adequate time and resourcing for infrastructure development. In our experience, providers often lack the financial stability to participate in alternative payment models due to the upfront financial and administrative resources necessary to participate. Anthem has been successful in models where we provide stable payment to providers for care coordination, allowing them to invest in the staff and technological resources necessary for managing prevention and chronic care needs of patients.

- Data and Technology Support. Providers continue to face challenges in accessing necessary data and information technology, impeding their ability to participate in value-based payment models and meaningfully contribute to overall model goals. In Anthem’s value-based payment arrangements, we have been most successful at helping providers reach population health goals through tools that help them identify and close care delivery and quality gaps of the individuals they serve – such as through reduction of emergency room usage among populations.

Section III: Integrated Pediatric Service Model Payment and Incentive Arrangements

CMS requests input on innovative financial arrangements that coordinate funding in an effort to integrate or streamline care for high-need and vulnerable children and promote adherence to program integrity efforts. One challenge prevalent in models seeking to integrate service delivery are financial siloes created by the existing separate and disparate funding streams aimed at the needs of a single population. Anthem offers the following recommendations related to the development of a financial structure of a pediatric alternative payment model.

- Contract Flexibility. An essential element of successful MCO-provider partnering in value-based payment arrangements is flexibility for MCOs to design contracts that fully engage and incent providers to participate and reach population health goals. For example, some providers may be able to accept more financial responsibility and risk than others. Anthem designs provider contracts utilizing flexible approaches so that we “meet providers where they are” in order to incentivize broad provider participation and reduce burdens associated with participation.
- Financing. Models that include all pediatric populations should begin as shared savings models with adequate time to mature before introducing shared risk in order to ensure provider participation at inception of the model. It is important to avoid aggressive savings targets implemented too early in the model which can lead to inadequate resourcing and disappointing results. Any savings targets should be thoughtfully developed and implemented with sufficient lead time, giving all entities adequate opportunity to prepare for and achieve targets. It is also important to properly risk adjust payment for any of the specialty and high-cost pediatric populations.

Section IV: Pediatric Measures

CMS describes the agency’s goal in identifying health care quality measures and measures that focus on health-related social needs for inclusion in its construction of the pediatric alternative payment model. Anthem is experienced in this area having supported programs with credible measures that can be tracked and that comprehensively assess performance.

When defining how to measure quality among providers, health plans, and other participating entities in a future model, we encourage CMS to take into consideration the variety of participating stakeholders across the spectrum of health care that are to be included in the model and consider how provider specialty, practice size and location, resources, and technological bandwidth and/or limitations will inform selection and appropriateness of measures. Each participating entity and provider is unique and measures must be inclusive of differences in capabilities. Moreover, there are relatively few standardized performance measures applicable to children and adolescents when compared with adults. The following are Anthem’s recommendations on appropriate quality and performance measurement approaches:

- Appropriate Measures and Measure Alignment. Anthem experiences success with value-based payment programs in a variety of practices, and we have learned that performance measures should align with value-based purchasing approaches and goals in order to optimize results. We consider service coordination, efficient utilization of services, financial viability, beneficiary access, smooth care transitions, and beneficiary safety to be just some of the many important goals of a sound quality measurement system.

In considering measures most relevant to children enrolled in Medicaid and CHIP and that can achieve both short-term but long-term goals, we wish to highlight that pediatric populations born pre-term or at low birth weight experience chronic health conditions into adulthood that may have been treated sooner had these individuals, as infants and younger children, been screened for abnormalities. As CMS and other entities consider measures that may be appropriate for a pediatric alternative payment model, it may be beneficial to explore incorporation of measures, such as blood glucose monitoring, kidney function, and blood pressure readings, that are often not applied in child quality measurement but that could assist in proactively identifying and treating possible chronic conditions (e.g., hypertension, type two diabetes, and ADHD) in order to promote better health outcomes in the long run.

Maternal health greatly impacts pediatric health. In order for a pediatric-focused model to be most successful in improving health outcomes of infants and children, it is critical that CMS continue to promote maternal health, including preconception and inter-conception access to services. In developing a quality strategy to apply to a pediatric model, we recommend that CMS consider the many medical and social factors impacting the health of new mothers, preconception, such as access to prenatal care, proper nutrition, adequate birth spacing, and safe housing,

In particular, we recommend that CMS and states focus on data-driven measures that measure outcomes and have objective clinical relevance rather than survey-based measures which can be subjective. Appropriate quality measurement is further supported by developing a deep understanding of providers' needs and choosing a core set of measures that are applicable to all participating providers and can be collected across various entities involved in contributing to the health of the population.

- Quality Strategy Design. We support CMS' interest in gathering early input on the types of quality measurement approaches critical to measuring the success of delivering quality care and producing positive health outcomes among the pediatric populations included in the alternative payment model. In addition to gathering stakeholder insights proactively, we encourage CMS to focus the bulk of its quality strategy construction and measure selection after the model is further along in development. The populations (e.g., children with behavioral health needs), entities (e.g., MCOs, school systems, and community-based organizations) and provider types involved as well as the type of data systems in place must all be accounted for in order to ensure that measures appropriately match the involved parties and so the correct quality and performance strategy is applied.
- Build on Existing Efforts. Anthem recommends that CMS build off existing efforts, as CMS indicates, within the agency and by external measure development and endorsement entities, such as the National Quality Forum (NQF). NQF has been funded by HHS to apply a consensus-

based process to identify available measures relevant to children enrolled in Medicaid and CHIP along with gaps in current measures that constitute a 'to-do' list for measure developers. CMS' own experience constructing and refining the Core Set of Measures for Children in Medicaid and CHIP can be instructive for the APM measure selection process.

Section V: Other Comments

As previously discussed, one of the largest barriers alternative payment models face is the inability for providers to meaningfully connect and share information in order to identify and fill gaps in care and address social determinants of health. This is due to technological and systems hurdles that complicate information sharing and achieving a holistic view of population health management, as well as the lack of knowledge regarding available state resources that could support provider partnerships. To help lessen the occurrence of provider fragmentation, we recommend the following:

- Provider Integration. One particular connection we find is critical and in need of greater support, is that between obstetricians, or similar providers serving pregnant women and/or pediatric populations, and providers of behavioral health services. Too often behavioral health providers are not readily available to meet the needs of pregnant women and new mothers within obstetric practices resulting in unmet behavioral health needs or delayed access to treatment. One way to address this gap is by including behavioral health specialists, or social workers who could help coordinate with behavioral health service providers, inside the obstetric practice. The same solution could be applied to other practices like pediatrics and primary care - collocating behavioral health service providers or social workers who can serve as an intermediary can help increase accessibility to needed behavioral health services.

Anthem appreciates this opportunity to provide input on this Request for Information regarding the development of an alternative payment model for pediatric populations. We are interested in continuing to work with CMS to ensure that value-based payment models continue to advance to meet the needs of Medicaid beneficiaries. If you have any questions or wish to discuss our comments further, please contact Amy Ingham at

Sincerely,



Anthony Mader
Vice President, Public Policy
Anthem, Inc.

Association of State and Territorial Health Officials

Hello,

Please find attached the Association of State and Territorial Health Officials response to CMMI's RFI for pediatric alternative payment models.

Thank you.



Association of State
and Territorial Health

Web: www.astho.org

March 28, 2017

The Honorable Patrick Conway
Acting Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services Attention: CMS
Submitted electronically at: <http://www.regulations.gov>

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Acting Administrator Conway:

The Association of State and Territorial Health Officials (ASTHO) appreciates the opportunity to submit comments regarding this Request for Information (RFI) on Pediatric Alternative Payment Model Concepts issued by the Center for Medicare and Medicaid Innovation (CMMI). This RFI was published by the Centers for Medicare & Medicaid Services (CMS) on February 27, 2017.

ASTHO is the national nonprofit organization representing the state and territorial public health agencies (S/THAs) of the United States, the U.S. Territories, and the District of Columbia. ASTHO's members, the chief health officials of S/THAs, are dedicated to formulating and influencing sound public health policy, and to assuring excellence in state-based public health practice. S/THAs play a critical part in improving population health in their state – they assess community needs, design, implement and evaluate programs that prevent or mitigate disease or injury, work to reduce health disparities, identify best practices, and evaluate impact, as well as convene and collaborate with stakeholders and communities. In addition, ASTHO's members have a range of responsibilities and relationships with their state Medicaid agency: ranging from statutory oversight, membership in an umbrella agency, or reporting separately to the Governor or other executive.¹ Thus, S/THAs have a unique role in payment and delivery reform efforts and activities that improve population health.

ASTHO and its members are appreciative of the opportunity to provide information and feedback on pediatric alternative payment model (APM) concepts. APMs are one of many ways in which the clinical care system, historically focused on treatment, can link with other service providers including public health and social service agencies and organizations to more directly and effectively incorporate prevention into care to improve health and lower costs. **Given S/THAs' leadership and expertise in population health and prevention, it is our hope that pediatric APM concepts incorporate population health approaches and incentives, expanding care and prevention activities beyond providers' offices, and draw upon state health agencies' experience in prevention and health improvement to improve children's health outcomes and reduce costs.**

As noted in the RFI, children need a number of beneficial or protective factors such as appropriate nutrition, quality education and social interactions, and healthy environments to thrive. Access to

¹ In five states, the state health official has statutory oversight of Medicaid (Kansas, Maryland, Montana, New York, and Utah); in 15 states, the state health agency and Medicaid are part of an umbrella agency, and in 31 states and DC, the state health agency and Medicaid report separately to the Governor or in DC, to the Mayor.

timely, high-quality healthcare is one such factor, but is not the sole determinant of health status. APMs represent a critical opportunity to improve access to and quality of healthcare while encouraging innovative use of funds to link children with social supports and services. These models broaden the understanding of what creates health to include factors beyond the provider's office, specifically those in the community and home, which state/territorial health agencies have been working to address through their history. For several years, ASTHO has been championing and supporting S/THAs as leaders in engaging partners to improve community health, including healthcare providers, social service agencies and organizations, and public health entities.

Through this work, ASTHO recognizes the importance of creating a family-centered pediatric APM that links families and children to appropriate community services, with incentives for collaboration and prevention efforts at both the individual and community levels. APMs, when appropriately designed, can foster the pooling of resources and sharing of risk and savings necessary to ensure healthy, thriving children. Children represent a unique opportunity to affect prevention at the earliest, most "upstream" points: many of the most burdensome pediatric conditions, such as asthma, mental health conditions, and dental health problems can be effectively managed or prevented by a combination of healthcare and community health interventions. ASTHO strongly supports APMs that include S/THAs in their delivery and incentive/financing structures to create meaningful partnerships between public health, social service entities, and healthcare providers to implement and coordinate programs to improve children's health.

Section 1: Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

States are interested in finding ways to integrate healthcare, public health, and social services, and in models that encourage joint projects and interventions. States are most active in this space through provision of public health services and as purchasers of Medicaid services. Some states are also involved in the healthcare delivery system through safety net providers, for example those affiliated with state universities. Delivery and payment transformation through innovative care and reimbursement models provide an opportunity for states to accomplish the goals of their Medicaid and public health programs, and programs to share savings across programs and state agencies can improve sustainability of non-Medicaid interventions that improve the health of Medicaid enrollees.

Including services beyond clinical care is critical to ensuring children's health and wellbeing. States have already begun this work, as in Massachusetts, for example. A partnership between the state Medicaid program and providers at the University of Massachusetts Medical School gave providers a bundled payment for children with asthma at risk of further episodes.² Those payments were able to fund home remediation goods and services, among others, to help reduce asthma triggers and improve care outcomes. These services included home visits from non-clinical providers such as community health workers. States have also leveraged community health workers (CHWs) in other maternal and child health (MCH) programs. CHWs are uniquely qualified to work with vulnerable and high-risk populations, including pregnant and postpartum women and their children and families, because they are trusted

² "UMass Medical School's Asthma Bundled Payment Pilot Featured in Brookings Institution Case Study," Commonwealth Medicine. University of Massachusetts Medical School, May 4, 2015, <https://commed.umassmed.edu/news/2015/05/01/umass-medical-school%25E2%2580%2599s-asthma-bundled-payment-pilot-featured-brookings-institution-c> (accessed 3/16/17).

members of the community.³ Specific approaches that promote child health are illustrated via state examples. For instance, in Arizona's southwestern border community of Yuma, CHWs make home visits to women who are pregnant or have children through two years of age, and who have a medical and social risk factor. The CHWs have bridged the gap between clients and doctors and medical facilities. Developing rapport with and acting as liaisons between families and healthcare providers bolster screening for infant and toddler developmental delays and behavioral and other risk factors, help individuals understand and adhere to provider recommendations, and support the enrollment, utilization, and navigation of healthcare. Other examples include Texas and Massachusetts, where CHWs have played important and varied roles in connecting individuals and families to needed healthcare services and resources in urban areas and in rural communities, providing a wide range of services to promote maternal and child health, which include home visits, community health education and counseling about the importance of preventive care for families, and cultural mediation between individuals, communities, and health and human service providers (system navigation).⁴

CMS should bear in mind that not all standards will be equally effective at accomplishing program goals across all states. Due to limitations in rural and underserved communities mentioned in the RFI, existing standards or models such as National Committee for Quality Assurance (NCQA) patient-centered medical homes (PCMH) designation may not be appropriate for all areas. Due to workforce limitations and limited resources, downside risk may hamper adoption. One option would be to create a time-limited introductory period in which the program only involves upside risk in these areas. Another option would be to help programs in these areas use innovative services such as telehealth by providing additional financial allowances in those cases. CMS may wish to consider limiting these programs to upside-risk only, at least initially. Community service capacity (for example, for home visiting, counseling/social work, day care or after school programs) may be more limited, and providers may not be able to establish as broad or as effective partnerships as in other areas. Health outcome and savings targets should take this into account.

Section 2: Operation of Integrated Service Model

Integration of clinical and other services is occurring in several states, primarily focused on adult populations, but also with notable examples focused on or including children and families. In 2015, CMS approved a Section 1115 Demonstration Waiver in Nevada to strengthen services for children and youth at risk of behavioral health diagnoses.⁵ The waiver program, Resources for Early Advancement Child Health, includes expanding its Medicaid plan to allow non-traditional providers, such as social services providers and school staff, to screen children for signs of trauma and refer those who may be at risk of a

³ "Utilizing Community Health Workers to Improve Access to Care for Maternal and Child Populations: Four State Approaches." ASTHO, February 2017.

⁴ "Statewide Training and Certification Program Strengthens the Community Health Worker/Promotor(a) Workforce in Texas." ASTHO February 2017.

⁵ "Nevada 1115 Demonstration Application," Division of Health Care Financing and Policy. Nevada Department of Health and Human Services, September 2015, <http://dhcfp.nv.gov/uploadedFiles/dhcfpnvgov/content/Pgms/CPT/Nevada1115Demonstrationapplicationfinal9-11-15.pdf> (accessed 3/16/17).

behavioral health diagnosis to treatment.⁶ Massachusetts' pediatric asthma bundled payment initiative, mentioned above, is another example of an APM being structured to encourage healthcare provider service integration with that of community service providers. Connecticut, in conjunction with its State Innovation Model work, is bolstering wrap-around care for children and families, focused on New Haven communities.⁷ Public health and social services can partner with clinical providers to coordinate community-based care with treatment plans with the goals of improving health outcomes and lowering costs. When considering necessary technological infrastructure, CMS should recognize states' and pediatric providers' ongoing challenges with interoperability and information exchange, and also be cognizant of the need to balance confidentiality with care coordination though evidence-based guidelines on information system structure and information sharing policies and processes.

Other examples of service integration within MCH include state home visiting programs which demonstrate the integration of state and local health agencies into coordinated state home visiting programs to promote family health and early childhood development, illustrate a comprehensive approach to family needs by integrating and coordinating MCH services and social and medical programs such as Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), Title X Family Planning, and services to children with special healthcare needs including early childhood systems activities, trauma-informed systems activities, and early learning agendas. This is a coordinated effort to assure health and developmental disparities are addressed by incorporating approaches that positively affect the social determinants of health and the development of changes to the environments in which families live. Public health programs and services work in cooperation with Medicaid and Early Periodic Screening, Diagnosis, and Treatment to leverage funding and resources to support home visiting and mental health services.⁸

States are also adopting a wide range of strategies to develop and support the sustainability of CHWs through defined roles and practices, training and certification to encourage sustainable funding, and integration with the public health and healthcare system. Arizona, Massachusetts, New Mexico and Texas, are examples of states which have developed state workforce strategies around CHWs.⁹

Opportunities for streamlining and aligning programs, as well as their eligibility criteria, exist across a range of services. For example, states can align Supplemental Nutrition Assistance Program (SNAP) and Medicaid applications to link applicants to either or both services simultaneously based on their eligibility.¹⁰ States can also streamline their Medicaid home and community based services to include

⁶ "Medicaid Transformation for Behavioral Health in Youth," Division of Health Care Financing and Policy. Nevada Department of Health and Human Services, August 2015, <http://dhcfp.nv.gov/uploadedFiles/dhcfpnvgov/content/Public/AdminSupport/MedicaidTransformationforBehavioralHealthinYouth.pdf> (accessed 3/16/17).

⁷ "Gov. Malloy: Connecticut Awarded \$9.7m to Integrate Health Care for High-Cost Medicaid Beneficiaries," State of Connecticut. June 17, 2014, <http://www.ct.gov/dss/cwp/view.asp?a=4125&q=546814> (accessed 3/16/17).

⁸ "State Home Visiting Programs - Position Statement," ASTHO. January 2015, <http://www.astho.org/Policy-and-Position-Statements/Position-Statement-on-State-Home-Visiting-Programs/>

⁹ "Utilizing Community Health Workers to Improve Access to Care for Maternal and Child Populations: Four State Approaches." ASTHO, February 2017.

¹⁰ "Opportunities for States to Coordinate Medicaid and SNAP Renewals," Jennifer Wagner and Alicia Hugulet. Center on Budget and Policy Priorities, February 6, 2016, <http://www.cbpp.org/research/health/opportunities-for-states-to-coordinate-medicaid-and-snap-renewals> (accessed 3/16/17).

linkages with a broader range of non-clinical supports, in part through waivers under Sections 1915(c) and 1915(i).¹¹ Specific to pediatric populations, streamlining and aligning Special Supplemental Nutrition Program for WIC programs with Medicaid presents the opportunity for improved health outcomes and cost savings across both programs.¹² Virginia's Children's Services Act is another example of how states can pool resources and savings across state programs, including Medicaid, to align programs to meet enrollees' needs.¹³

A single, streamlined application can help reduce churn and improve enrollment rates for those who are eligible. For example, receiving SNAP, Temporary Assistance for Needy Families, WIC, or Section 8 housing benefits all directly impact enrollees' health. To the extent that these can automatically allow an individual or family for Medicaid through a single, streamlined application process, continuity of coverage for both social services and Medicaid can be maintained. This can allow children to have a usual source of care, allowing those with higher needs or chronic conditions such as asthma to receive better case management and better outcomes. For this higher-need subpopulation of children, including children and youth with special health care needs (CYSHCN), streamlined eligibility and program requirements could particularly improve outcomes or reduce costs. As an example, New Jersey recognized a barrier to improving access to health insurance and quality healthcare for CYSHCN especially for immigrant children and children of color, is the lack of diverse representation on consumer advisory boards of the state's Medicaid managed care agencies. In response to this, the New Jersey Statewide Parent Advocacy Network and the Family Health Information Center began training parents and families to advocate on their own behalf, support and engage their communities, and break down the assumptions and anxieties that serve as a barrier to high quality care. This coordination brought a CYSHCN family perspective to improving healthcare programs and policies and ensuring healthcare systems include, listen to, and utilize the family perspective.¹⁴

Currently, reimbursement issues can arise when a patient with Medicaid visits multiple providers in a day or set period of time. To truly encourage team-based care and integration of services, the APM must sufficiently reimburse all involved providers, without encouraging increased volume of care. Moreover, providers consciously select panels of patients based on possible reimbursement (for example, when a provider is no longer accepting new Medicaid patients). Most providers currently see a mix of patients on fee-for-service (FFS) reimbursement bases, private insurance arrangements, managed care, APMs, and cash. If APM reimbursements are too small, providers may choose to instead spend more time treating patients with FFS reimbursement or private insurance. This can lead to a decrease in quality and

¹¹ "Streamlining Medicaid Home and Community-Based Services: Key Policy Questions," Mary Sowers, Henry Claypool, and MaryBeth Musumeci. Kaiser Family Foundation, March 11, 2016, <http://kff.org/report-section/streamlining-medicaid-home-and-community-based-services-key-policy-questions-issue-brief/> (accessed 3/16/17).

¹² "Modernizing and Streamlining WIC Eligibility Determination and Enrollment Processes," Zoe Neuberger. Center on Budget and Policy Priorities, January 6, 2017, <http://www.cbpp.org/research/modernizing-and-streamlining-wic-eligibility-determination-and-enrollment-processes> (accessed 3/16/17).

¹³ "Pooling and Braiding Funds for Health-Related Social Needs: Lessons from Virginia's Children's Services Act," Amy Clary and Trish Riley. National Academy for State Health Policy, June 2016, <http://www.nashp.org/wp-content/uploads/2016/06/CSA-Virginia-Brief-1.pdf> (accessed 3/16/17).

¹⁴ "National Center for Family Professional Partnerships." Family Voices, <http://www.fv-ncfpp.org/index.php/f2fhic/contact-f2fhic/?stateId=nj> (accessed 3/20/17).

access for Medicaid patients participating in the APM. APM reimbursements should be devised with awareness of the potential of crowd-out from other reimbursements.

Managed Care Organizations (MCOs) are experienced with payment reform in many states and allow a state to set broader parameters or guidance that MCOs can then adapt into specific requirements and reimbursement amounts for providers. This can save costs and effort on the part of state Medicaid agencies. In some cases, MCOs are familiar with other community partners and service providers, and see a clear financial incentive themselves from improved health and reduced service use for their enrollees. This can make them a natural partner for accountable care organization (ACO) initiatives. MCOs' other lines of business, including private insurance or Medicare managed care, can afford MCOs experience with ACOs and APMs in other contexts, increasing their effectiveness in Medicaid settings. However, structuring an MCO as an ACO may reduce states' opportunities to direct care and integration activities, as there would only be one risk-bearing entity contracted with the state. This single entity would operate effectively as both benefit administrator (within Medicaid parameters) and provider. APMs should account for how they distribute risk between care management entities and care providers with an eye towards accountability for quality and access for both, potentially separately.

ACOs are commonly understood to include changes to both the payment and delivery system. By making an initial change to reimbursement, tying per member per month or bundled payments, for example, to quality metrics, ACOs' payment structure affects the delivery of care. Some changes to care delivery seen in ACOs include improved care coordination through a single provider or case manager, improved follow-up care, and provision of services in the home or community, such as nurse home visits. Pediatric ACOs would serve a relatively lower-cost and healthier population, relative to adult ACOs, especially Medicare ACOs. Existing controls on cost and services may be more rigid for pediatric ACOs than those for adult MCOs.

Pediatric ACOs would have significant opportunities to integrate with the broad range of community resources and services designed for children and families. For example, childhood immunization clinics, often facilitated by state or local public health agencies, could coordinate with an ACO to make vaccine receipt more convenient for families than a doctor's office and communicate via electronic health records or state immunization registries. Schools and social services providing care for children can be an opportunity for mental health screening for children. States can leverage public health agencies expertise in environmental health and trained workforce to integrate home visiting programs for asthma and other chronic conditions with clinical care programs in ACOs and share savings from improved condition management. ACOs can also integrate with other social services to identify and provide mental and behavioral health services to children at risk of adverse childhood experiences.

Other models of care besides ACOs and MCOs include PCMHs as a model for care coordination. States have designed PCMHs as less-intensive care coordination models appropriate for use with a broader population of children enrolled in Medicaid, or for a more targeted subpopulation with greater needs. Pediatric health homes are another example of an APM applied to the pediatric population, specifically those children with more complex needs. Overall, the level of care coordination and the amount of any additional reimbursement should be scaled to the level of need of the population targeted.

Section 3: Integrated Pediatric Service Model Payment and Incentive Arrangements

There are several pediatric subpopulations enrolled in Medicaid or CHIP that could experience improved health outcomes or incur lower costs through APMs. CYSHCN living with one or more chronic condition could benefit from improved care management, care quality incentives, and linkages with social services and supports. These children are a small portion of Medicaid and CHIP enrollees, but account for a disproportionately large share of programs' costs. Improved care and prevention of complications and unnecessary emergency care utilization has the potential to yield improved quality of living and lower health care costs. Youth living in or transitioning out of foster care represent another high-risk, high-need group with the potential for improved outcomes and cost savings through not only care, but also social service coordination more broadly.

Other children with at least one chronic condition could benefit from APMs with interventions tailored to their level of need. For children with asthma, active medical management of their condition, sometimes involving multiple providers, paired with community interventions such as home visits and remediation and access to rescue inhalers in schools and other settings can easily prevent emergency department utilization and other poor health outcomes. Other conditions may require more active case management and more extensive linkages with community services, including public health services, but to the extent that Medicaid or CHIP APMs incentivize shared resources and activities, overall costs to the system from these children could decrease.

Because a large portion of health status is determined by factors beyond interactions with healthcare providers, APMs should encourage healthcare providers to collaborate with other non-health providers, public health stakeholders, and other social service organizations. Possible ways to encourage collaboration include structuring APMs to include financial incentives for both healthcare providers managing care and others providing services, such as a public health agency providing education and resources on proper nutrition or housing agency working to secure stable housing. Encouraging resource pooling and shared savings help distribute funding across all parties and ensures that savings are distributed across the system. Distribution of savings and incentive payments is critical for APM sustainability, as non-health providers will not be able to participate over the long term without financial returns.

There are also several considerations relating to the rollout and implementation of APMs. Providers may struggle with transitioning from FFS or per member per month payments with no quality metrics to an APM with rigorous quality measurement and both upside and downside risk. States can encourage providers to participate by beginning without risk for a set period, or initially only implementing upside risk. A gradual, phased implementation of downside risk, can help providers become familiar and comfortable with APMs. APM designs should also realize that quality improvements and cost reductions are finite, and sliding scales cannot be increased indefinitely. APMs may need to be modified for rural areas or other areas in which provider capacity may be limited. Bundled payments could also be effective in certain specific cases for pediatric populations, including follow-up from asthma hospitalizations. A number of APMs could be effective for social service providers, but for community health or behavioral health providers, parity of reimbursement with medical providers is critical.

States are currently working to align funding streams and financial incentives to encourage shared, coordinated services that address social and community factors in addition to individual clinical needs.

Examples include Coordinated Care Organizations in Oregon, innovative approaches to meeting Medicaid enrollees' housing needs in states such as Texas and Colorado, and initiatives to leverage public health and community care providers through programs such as maternal and child health and pediatric asthma home visiting. States also have policy levers to encourage further coordination in the future. For example, states could gather information on other funding sources of services by requiring reporting as a condition of participation in the APM. APMs could also be structured in such a way as to include an additional incentive payments to participants that demonstrably coordinate services with shared funding and rewards, such as provider referrals to and financial support of community fitness or nutrition programs for their patients. Non-clinical services that could improve health and lower costs in pediatric APMs include home visiting programs for both mothers and children, case and disease tracing, housing support services and related social supports, physical education and activities, and nutritional education programs.

Section 4: Other Comments

One critical success factor for effective partnerships to address the root causes of poor health and high healthcare spending through APMs is the integration of S/THAs in program activities and funding, including payments for services for APM enrollees and shared savings from improved outcomes. Crafting a care delivery and reimbursement model appropriate to the population is also critical. Most children only require limited care management, but they should be included in ACO pools with specific, lighter-touch delivery system changes and smaller incentives. This will ensure that they receive the benefits of the program and their presence will allow the ACO to expand and reduce its competition with other reimbursement systems.

In conclusion, we believe that S/THAs can and should play a larger role in health systems transformation and payment and delivery reform, given their expertise in evidence-based interventions, working with vulnerable communities, engaging non-traditional partners, and evaluating population-based outcomes. Should you have questions or comments or require additional information, please contact Christi Mackie, Senior Director, Maternal and Child Health at or Megan Miller, Senior Director, Health Integration at We look forward to continued collaboration and dialogue.

Sincerely,



Jay C. Butler, MD, CPE

President, Association of State and Territorial Health Officials

Chief Medical Officer and Director of Public Health, Alaska Department of Health and Social Services

cc:

Michael R. Fraser, PhD, CAE, FCPP

Executive Director, ASTHO

Baltimore County Public Schools

Any initiative addressing the health of children and youth need to seriously incorporate adequate services for mental health. There are many students with traumatic experiences and other environmental factors that appear to be negatively impacting children at younger ages. Children and youth are presenting with severe and extreme mental health issues of suicide/homicide ideations and self-injurious behaviors. There are never enough psychiatric services or beds to address the concerns of these children. We need to increase access to these services , enhance and improve them. Even community mental health services of staff trained to addressed these serious behaviors are limited. Structured short-termed mental health resources are non-existent as well as diagnostic evaluation facilities for children. Hope this is helpful in terms of comments.

Barnabas Health/VNA Hospice I

Is there a way we could expose the pediatricians to hospice and palliative care practice's so they would be more comfortable giving that option to families?

BAYADA Home Health Care

Please find attached comments submitted by BAYADA Home Health Care in response to your recent RFI for Pediatric Alternative Payment Model Concepts. We appreciate your interest in this important work and welcome the opportunity to discuss it with you further in greater detail.

Best regards,



BAYADA Home
Health Care.pdf



March 28, 2017

The Hon. Seema Verma, Administrator
Centers for Medicare & Medicaid Services

Re: Request for Information (RFI): Pediatric Alternative Payment Model Concepts

Dear Ms. Verma:

BAYADA Home Health Care is grateful for the opportunity to comment on this important RFI. By way of brief background, BAYADA is a trusted leader in providing clinical care and support services at home for children and adults of all ages. Founded in 1975, BAYADA has consistently worked to give people greater access to high-quality care that helps them live safely at home. Today, our dedicated team of skilled caregivers includes more than 18,000 home health care professionals serving their communities in 22 states from more than 300 offices.

Among our areas of particular focus is pediatric care, a BAYADA specialty practice that includes nursing, therapeutic, and assistive home health care services for children under the age of 18. These services are provided by highly-skilled nurses and home health aides who are experts in caring for children from newborns to adolescents, including those requiring complex, high-tech care. Indeed, the vast majority of the pediatric patients that BAYADA serves are those who require complex medical care (CMC) or complex chronic care (CCC). Unlike consumers of traditional home care services, these complex patients require intensive nursing care for multiple hours each day in order to be able to remain in their homes, rather than in hospitals or other costly institutional settings. It is on the basis of our experience in this vital field that we wish to offer the following responses for your consideration:

Section V – Other Comments. *As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.*

CMS' exploration of a new pediatric health care payment and service delivery model is very exciting for many reasons, not the least of which is the opportunity it presents to rethink and potentially transform Medicaid policy for complex pediatric care in ways that can achieve substantial improvement in clinical outcomes, patient support, and cost efficiency. Since the possibilities created by this exploration can be broader than the targeted questions that preceded Section V of this RFI, we wish to offer our comments in response to the above question.

Compassion. Excellence. Reliability.

In addressing this important question, we reflected not only on our extensive track record of serving pediatric patients with complex care needs but also on the performance we are proud to have documented in partnership with the Children's Hospital Association (CHA) as well as Harvard Medical School and Vanderbilt University. This research focused on a specialized approach to complex pediatric care that BAYADA has pioneered, which we call the "Home Intensive Care Unit" (or, HICU) model. A highly-coordinated model for providing quality home care to children and adolescents with complex medical needs, HICUs represent what we believe to be an optimal model for ensuring that medically-fragile children receive the high-quality care they need in the most clinically-effective and cost-efficient manner.

A core characteristic of the HICU model is a workforce of certified mentors and clinical professionals who receive intensive training in clinical assessment and care. We are so committed to advancing complex pediatric care that we established what we believe to be the nation's first Simulation Lab for complex pediatric home care, which enables us to deliver state-of-the-art training for nurses and family members alike. Similarly, we have established pediatric-specific clinical standards and protocols, specialized pediatric and disease-specific training, and a Nurse Residency Program.

Our HICU model also includes a Care Coordination and Transitional Care Program to optimize the successful discharge and transition to home of complex pediatric patients. Because the risk of rehospitalization is substantial during the first 30 days of a patient's transition from hospital to home, our focus is to deliver care coordination across the health care continuum and pair it with ongoing family teaching and intense oversight in order to prevent avoidable readmissions. To consistently achieve that outcome, the HICU model deploys a Transition Care Manager who develops a complete picture of the discharge before it happens and then focuses on achieving expedited hospital discharges. We also undertake a family follow-up call within 24 hours of discharge, 24/7 access to our team of clinicians and support staff, weekly Clinical Manager assessments throughout the first 30 days, equipment confirmation, instruction to the family on the care plan, and regular follow-up with physician appointments.

We respectfully submit that the findings of our Joint Data Initiative with the Children's Hospital Association, summarized below, demonstrates the value opportunity that CMS has the opportunity to realize for complex pediatric care across the U.S.:

- Length of Stay:
2.7 day reduction per admission for children with complex neuromuscular diagnoses.
- 15-Day Readmission Rate:
Reduction from 20.2% to 17.9% in children receiving skilled home care.
- 30-Day Readmission Rate:
Reduction from 26.2% to 23.4% in children receiving skilled home care.
- Total Hospital Days:
1.5 fewer days per admission.

After decades of service delivery, scientific and technological innovation, and extensive learning, we believe America needs and is ready for a new care delivery structure that can best meet the needs of pediatric patients with complex clinical needs. Specifically, we wish to urge CMS to consider the establishment of the HICU model for the Medicaid program's complex pediatric clients. As we envision this model, HICUs would be unique in the following ways:

- Credentialing. The HICU model would require the accreditation of home care agencies seeking to specialize in complex pediatric care. Although we have had positive discussions with CHAP about accreditation, it does not currently exist and would be of real benefit.
- Guidelines. Similarly, the HICU model would establish a specified and uniform set of guidelines for determining such key elements of home care as the type of services required, the number of hours needed, and the minimum skill set the care team must possess.
- Referral. The HICU model would establish a uniform process for assessing children's status and clinical needs so that those requiring complex services could be appropriately referred to HICUs for care. At present, such a uniform process does not exist.
- Staffing. Due to the high acuity level of CMC and CCC pediatric patients, HICUs would be staffed by nurses with training and qualifications equivalent to those serving hospital-based neonatal intensive care units (NICUs) and pediatric intensive care units (PICUs).
- Coding. In order to properly resource the highly-skilled professionals delivering HICU care, this model includes a new HICU billing code that reflects the higher-level training, care delivery, and oversight needed to enable complex pediatric cases to remain in the home.

Among the benefits we believe would be derived from the establishment of the HICU model are the following:

- Reduced Workforce Shortage. Today, America is experiencing a critical shortage of the highly-skilled nurses needed to serve complex pediatric patients in the home setting. A principal contributor to this problem is the significantly lower reimbursement and compensation available to home-based nurses, especially as compared to their NICU and PICU counterparts. As a result, we often see skilled nurses feeling financially compelled to leave their home care patients and seek employment in hospitals in order to attain higher pay and benefits. The HICU model would help to rectify this problem by achieving greater equivalence in the financial support provided to intensive care nurses, whether they serve in hospitals or the home.
- Reduced Home Placement Backlog. Due to the pressing nursing shortage that confronts specialized home care today, many pediatric patients are unable to transfer from hospital settings to their home. A recent Minnesota study provides a clear illustration of this problem: of the 52 complex pediatric clients examined who were suitable for home care, fully 50% of them were subjected to delayed discharge and therefore had to remain in the

March 28, 2017

hospital due to a lack of home care nurses. The study further calculated that the children who were awaiting home placement cost Minnesota \$5.5 million, or \$211,000 per hospitalized child.

- Improved Outcomes. A study published in the October 2016 edition of *Pediatrics* examined the relationship between home and hospital service utilization of complex pediatric patients. We were honored to participate in this study, which assessed the need for subsequent hospitalization of 2,783 children across 19 states who were discharged from a hospital and served in the home by BAYADA. The study's authors found that discharged patients served in the home experienced lower 30-day readmission rates and fewer days in the hospital – even 12 months after their initial discharge. As the authors stated in their conclusion, “Children discharged to HH [home health] care experienced less hospital use than children with similar characteristics who did not use HH care.” We are confident that the findings of this study can be replicated across the nation with the HICU model because of its power to make home placement more readily available.
- Lower Medicaid Costs. It is well-established that the cost of complex pediatric care varies greatly depending on the setting in which it is delivered. In general, serving a child with complex needs in the NICU and PICU settings costs approximately \$5,000 per day (including room, ancillary, and physician fees). By contrast, caring for that same child in the home costs approximately \$1,000 per day. Indeed, Children's Hospital Association has estimated that complex pediatric cases consume one-third of all healthcare funds devoted to children, of which 80% are due to hospitalization costs. Due to the current workforce shortage and home placement backlog, however, many children who could be served at home must instead remain in hospitals, causing Medicaid to bear substantial avoidable costs. Leveraging its specialized structure, referral process, and coding, however, the HICU model has the potential to address the workforce shortage and placement backlog, thereby making possible significant Medicaid savings.

* * * * *

In closing, we would like to thank you again for this opportunity to offer our perspective on Pediatric Alternative Payment Model Concepts. We hope the concept we have presented here is of value to your important work and would welcome the opportunity to discuss it with you and your team in greater detail.

Sincerely,



David J. Totaro
Chief Government Affairs Officer

Billings Area Indian Health Services

Good afternoon,

Attached are my responses to sections 1-3. I hope these are helpful.

Section I

1. The children and youth are broadly recognized as the future leaders of the tribes but their health and welfare is currently not given enough priority to foster healthy outcomes. Multiple caregivers often circulate through their lives and regular access to health care is sporadic. Chronic conditions are not given ongoing attention and holistic/preventative health is not prioritized. Consistency in healthy children is rare and frequently in those needing more intensive support it is also lacking leading to more severe acute exacerbations and intensive interventions. The problem is compounded by poverty, social isolation, family disruption, poor access to health care, frequent turnover in providers, and lack of transition of medical records.

Section II

1.a. Care continues to occur at multiple points within our communities. Tribal, State, IHS, Private Sector, other federally funded sources and realistically there remain gaps and silo's where unless the parent or caregiver communicates with us about the visit it is not integrated into the care record. There may be gaps of 3-6 months between when a child is seen at a referral and when the consult is received on other occasions. These gaps and lack of communication prevent comprehensive care from occurring.

2.a/b In order to care for children and youth all aspects of their health and wellbeing need to be considered including their education, development, diet, social and emotional health, home life, and what resources are available to them. With all of this taken into account comprehensive care should be an integrated partnership with all services provided to that child or youth.

3. Within the IHS we utilize the RPMS based Electronic Health Record to document all of our patients' data. There is not an MOU in place with the BIA at this time that I am aware of so any information exchange requires a specific ROI for that patient or Medical Record Release following the rules and regulations set by the ICWA. We honor HIPAA for all of our patients. Proposing a "super-document" which would follow our patients to each care point would require interagency collaboration and patient authorization in order to uphold the patient's right to privacy. In 2004 President Bush passed the EHR mandate and began the 10 year EHR initiative with hopes that all Americans would be able to carry their own medical records with them to each point of care. We certainly are not there yet but this is an opportunity to improve the care of our nation's most fragile population.

4. Unsure

5. Comprehensive care management encounter billing

6. Time, modern health care is focused around procedures. Redesigning it around prevention and care management is our new challenge.

7. The models proposed by PCP+ is a good foundation, we need to consider adding in more of the external disciplines and opportunities for other points of care and how to communicate between each care point. Will the primary care giver or the social service provider be the data “guardian?”

8. Unsure

9. State funded Craniofacial Anomaly Clinics are currently in place in MT that meet once yearly and provide multidisciplinary multispecialty care in rural settings to assess all of the individual children’s progress and needs. The team meets at the end of the clinic day to discuss each child and formulate a care plan for each child which is comprehensive, cost effective and covers all aspects from physical to educational to dietary to social needs. Realizing that every child has different needs it would be impractical to have every specialty available for every child, this type of model is however a form of care that displays how all of the required services can be brought together to formulate a comprehensive care plan in an effective manner.

Section III

1. The states of MT and WY are currently facing an epidemic of Drug use that is extending into pregnancy. As a result we are having an expanding number of infants born drug exposed who are growing up and beginning to show developmental and behavioral problems in head start and early school years. The schools are unequipped for the raising number of these children and the care givers are and resources are sparse. This target population desperately needs focused intervention. Ages Birth to 8.

2. I propose a two pronged model that would include yearly day long multidisciplinary teams to develop care plans for the individual children. The care plan would then follow the children throughout the year as well as having a “gatekeeper” who assures that both the providers and the family/caregiver are following through with the services and updating the care plan. The upside would be a complete evaluation and assessment with necessary follow-through. The potential obstacles would be arranging the time to coordinate all of the providers away from their primary practices for this type of multidisciplinary clinic and reimbursing for lost revenue.

3. In healthcare we are paid to do, not to talk. This is the reality of our current system. Care coordination and planning and preventative health leads to lost revenue. Acute care and short visits are profitable. This is not my personal view but a reality within the system. We need to incentivize our providers and our patients to be healthy.

Social services often function in crisis mode. Fixing/repairing what is broken. The ability to partner with healthcare and guide children through prevention and maintenance of a healthy environment and life may help with retention as their resources in our region are very low.

4. Donation of time and resources to provide the multidisciplinary consultation clinics. Home visits or follow up calls. Media and community outreach.

5. I am not immediately aware of any barriers nor do I think increasing or combining authorities would be problematic. One thing we have learned from the MT Statewide surveys of families of Children with Special Health Care Needs is that they appreciate outreach and follow up which tends to be lacking in our current system. Care navigators and assistance with travel have been a tremendous benefit when

available as well as people to explain in common terms what their provider just told them.

6. If the integrated care model were implemented properly the outcomes would show a reduction in cost quite quickly due to reduced Emergency Room utilization, Hospitalization and Urgent Care requirements. This could be measured by total expenditures by the client over a 6 and 12 month period.

Blue Cross and Blue Shield of Minnesota

Hello,

Please find attached Blue Cross and Blue Shield of Minnesota's comments related to the open CMS Request for Information on Pediatric Alternative Payment Model Concepts. We greatly appreciate your consideration.

Thank you,

Blue Cross and Blue Shield of Minnesota

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

Blue Cross anticipates Minnesota may be interested in this concept given the framework that's been created through our State Innovation Model grant as well as our existing IHP program. However, one significant challenge with the pediatric Medicaid population is ensuring a sustainable financial model. Provider entities that serve high-risk kids frequently do not desire to contract at the Medicaid rate and so cost structure and specialization of care can be problematic, particularly given existing downward pressure on Medicaid rates. Actuarially sound rates that incentivize coordination and prevention are critical.

Timely access to care can also be a challenge for the pediatric Medicaid population. For example, parents' daytime work schedules may not allow for either paid or unpaid time off to take a child to the doctor. This can lead to 1) underutilization of preventive services and/or 2) overutilization of emergency services. Both scenarios will ultimately drive up costs. Telemedicine is one potential solution, though it is important to ensure that low-income families have access to the technology resources required to take advantage of such services.

Health literacy is another challenge relevant to this population. Many patients' parents do not understand how to use their benefits, what is covered, or when they should take their children in for routine child wellness visits. In 2016, Blue Cross led a collaborative effort to develop the MN Action Plan to Improve Health Literacy. Our health literacy work is focused not just on improving a patient's ability to read, understand, and act on health information but also a provider's capacity to communicate clearly, educate about health, and empower their patients, and a system's capacity to be easily accessed, quickly navigated, and understood by all. Blue Cross recommends encouraging a strong health literacy framework through any pediatric APM approach.

Coordination with school districts can be another challenge for children with complex health conditions.

Confusion around who is obligated to pay for what services and supports (the district, the insurer, or state government) can lead to suboptimal coordination of care. This is one area where enhanced funding for coordination and/or technical assistance could be beneficial.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

CMS should consider telemedicine, in particular, as a necessary standard to serve children, youth, and their families in rural and underserved areas. As an example, rural Minnesota is facing a critical shortage of mental health providers. Like much of the state, all seven counties that comprise the northeastern region of Minnesota (known as the Arrowhead region due to its shape) have been designated as mental health professional shortage areas (MHPSAs). Rural residents often drive long distances to reach mental health practitioners or may have no access to services because of limited transportation options. While attracting providers to the region is a long-term goal, innovative solutions to improve access and address immediate needs are required now.

Under a joint powers agreement, Carlton, Cook, Lake, Koochiching and St. Louis counties – collectively as the Arrowhead Health Alliance – worked with state agencies to create the Arrowhead Telepresence Coalition (ATC). County commissioners comprise the joint powers board. It provides behavioral health care through remote diagnosis and treatment of patients using internet video and audio. Blue Cross had the privilege of funding the initial presence across the region.

Telepresence can reduce an eight-hour commitment to a one-hour commitment. From a regional standpoint (primary care, mental health, social services, public health, and MCOs), Telepresence has removed barriers to collaboration and allowed for opportunities that would otherwise not exist. In all, the ATC serves seven counties (including Aitkin and Itasca), three tribes, community-based mental health providers, crisis response providers, medical providers, jails and schools in collaboration with two state departments: the Minnesota Department of Human Services (DHS) and Minnesota IT.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?

a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

Some service integration is occurring in Minnesota, but we could certainly go further. For example, Blue Cross reimburses for and supports accredited family home visiting services, which in many cases can provide helpful referrals for wrap-around and/or health care needs. With support in part from Blue Cross, recent work was done to create statewide quality indicators for home visiting. Linkages between

child care providers, community supports, and healthcare are – unfortunately – not strong in most cases.

The big challenge in this area is that state and federal dollars are directed at specific programs. Partnership and coordination exist, but historically independent and non-coordinated funding streams reinforce a level of fragmentation. To overcome this barrier, a test model could support complete financial integration for a period of time without risk. Ultimately, infrastructure needs to be put in place to reinforce more of a money-follows-the-person approach.

A few more detailed Minnesota examples for which integration of programs has worked – or is showing promise – include:

1. Health care and hunger. Screening pediatric patients for food insecurity is becoming more common across the state, with an eye toward improving health outcomes. Most providers who have moved this forward are doing so on a shoestring budget. Having funding that would directly support getting food or financial assistance to families (perhaps via funding models that are not fee-for-service (FFS)) would make this easier.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?

However these models are developed, payment needs to be actuarially sound. If these measures are cost-cutting but don't afford sufficient payment for the population in question, they are not going to be sustainable and risk financial hardship to whatever organization advances this important work.

a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?

In general, mental and prenatal health as well as asthma present significant opportunity for cost savings.

b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

There is great opportunity in addressing premature births and high-risk babies.

2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

We recommend that CMS consider a revenue and expense program based on primary guided care utilizing prospective attribution to allow for the pediatricians to actively manage patient's care. The shared savings would be generated from per member per month revenue less all attributed medical expenses from the patients. The providers must meet a minimum quality threshold to receive any of the shared savings. The percentage of eligible shared savings would be based on the level of risk to which the provider group agrees.

c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

Rural communities have a challenge because of the limited size of the patient pool. In those cases, the provider would not take financial risk but a shared savings model would still provide them the opportunity to earn additional dollars by providing high-quality, evidence-based medicine.

d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

It is difficult to attribute members to specialists as they only manage a small portion of a patient's healthcare. That said, specialists can have a high episodic cost and so MCO partnership with providers to better manage that cost is important.

3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?

a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.

The state's IHP program and MCO's programs don't always align which can make it difficult for providers to manage both programs.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

It would be helpful if states, tribes, and providers co-developed programs that have common measurement periods and incentives to allow the providers to better manage patient care.

Booz Allen Hamilton

Good evening,

We have the following questions for clarification:

- Is it required that the respondent address all sections and/or all questions of the RFI, or any combination of questions within sections of the RFI?
- For Section IV: Is CMS specifically seeking outcome measures or are other measure types of interest?

We appreciate your assistance

Boston Medical Center, Department of Pediatrics

See attachment



Boston Medical
Center_Department

BMC Pediatrics has a long record of incubating, prototyping and launching programs that have proven effective in offering high impact, holistic and patient -centered interventions for populations that tend to come from high risk or underserved communities. For decades, we have piloted multidisciplinary, team based efforts to offer integrative and community-level problem solving to address the social determinants of health, that build from a core principle of extending the reach and impact formed with a household via the therapeutic alliances formed around the children in our families. The investment in these efforts over the years, including the HIV program, the Sickle Cell Disease Program, the Grow Program, the Comprehensive Care Program, the Catalyst program and more recently, efforts to transform the practice into an Autism Friendly site and enhanced patient centered medical home; our implementation of behavioral health integration; and the growth of the Center for Family Navigation and the Center for the Urban Child—all as a recognition of the value and impact they make.

A number of these programs have been based upon donated monies or grant supported efforts. Increasingly and appropriately, the department has worked to evaluate and measure the impacts of the programs at large in terms of the return on these investments and the value added in terms of overall patient outcomes, quality and cost. We submit some specific comments around programs we have applied innovative approaches to complex care, and to explore longer term, sustainable strategies to scale and spread these efforts.

The Collaborative Consultative Care Coordination (4C) Program supports the ongoing relationship of those pediatric patients with the most significant or severe medical complexity and psychosocial complexity by bringing together a multidisciplinary team consisting of a complex care pediatrician, nurse care coordinator, social worker, behavioral health and developmental specialist, dietician, and family navigator. Our program has aimed — and has demonstrated its ability— to reduce the costs and to enhance the quality of care and the outcomes of so called pediatric super utilizers of care.

Our program permits a high touch, patient centered approach that includes intensive patient navigation, skill building, health coaching and engagement for some of the most marginalized, medically fragile patients. Additionally, our CMMI funded program provides for these families a cloud-based care plan intended to serve as a salient medical summary for a medically complex child, in addition to ongoing communication and care management support for the patient, family and referring primary care provider.

Data to date suggest that 4C has been successful in reducing and total medical expenditure, hospital admissions, ER use for ambulatory care sensitive conditions, and household and care provider stress, based on patient care utilization patterns and payer claims data. Furthermore, provider feedback suggests that patients are triaged more efficiently and effectively when the care plan is presented.

BMC Pediatrics also participated in the MassHealth APM – Primary Care Payment Reform Initiative (PCPRI) from 2014 until Dec 2016. The program offered a shared savings/risk arrangement with quality incentives and supported our practice transformation to a patient-centered medical home with a focus on care coordination and behavioral health integration. As a result of this program the practice hired patient navigators who provide care coordination for high risk and vulnerable patients by connecting patients to specialty appointments, managing no-shows and engaging patients with community agencies — particularly early intervention resources. The navigators have improved both patient and provider satisfaction. The PCPRI program also allowed the practice to contract with a percent of child psychiatrist's time to support and expand the integrated behavioral health efforts. By participating in the PCPRI program – we were also granted access to extensive claims data for the patient

population. The claims data allowed us to analyze facility and service usage patterns for this patient population which has proven incredibly useful in evaluating leakage and expansion opportunity.

From a payment reform perspective, we make the following recommendations to deliver on the Triple Aim:

1. Realize promise of ACO movement and hold provider organizations accountable for quality and managing risk by setting capitation rates that account for patient acuity and social and economic barriers.
2. In a mixed payment system with both capitation and fee for service – create enhanced billing codes to capture revenue that reflects (and supports) upkeep and maintenance of care plans. As well as reimbursement mechanisms to address social determinants of health that will capture broader efforts of the care extender/care coordination team.
3. Develop mechanisms of funding and payment to support the mission critical efforts of behavioral health integration into primary care settings..

At present, for example, billing is limited to physician activity and a fraction of the overall nursing work, but does not necessarily/sufficiently compensate billable services by social workers or community health workers.

We advocate for improved mechanisms to stratify patient risk in real time and across geographies, and to reflect the management and metrics for social determinants of health in overall care performance measures for institutions serving particularly high risk populations. This will support high impact activities such as housing or food stabilization that reduces unnecessary utilization.

Updating payment mechanisms will allow for innovation and leveraging telemedicine capabilities (phone, video consults) currently being piloted by Dr. Laurie Douglass of BMC Child Neurology. The Telehealth Epilepsy Care Collaborative at Boston Medical Center will be studying the impact of Telehealth strategies on the health outcomes of children and youth with epilepsy who also are challenged by health disparities or travel barriers. Our collaboration links the Comprehensive Epilepsy Care Center at BMC to patients and providers at Community Health Centers throughout Massachusetts. In the ramp up phase, we have surveyed our population and learned that approximately 90% of our population, regardless of SES have access to a device (phone, tablet, or laptop) with internet access and make video calls (Skype or Facetime). We have also learned that patients who live close to the medical center struggle to commute to BMC for many reasons: 1. Cost of transportation either by car or public transit, 2. Missing school or work, 3. Health status of the patient or caregiver. Patients and caregivers who live in the Greater Boston area are very excited to have some of their epilepsy center visits by a secure video call (i.e. telemedicine) as are those who live more remotely, such as Brockton, Fall River, and New Bedford. We have also learned that conducting video calls (telemedicine) directly into the health centers is a burden on these centers and in turn, we plan to conduct video calls directly into patient's homes. The TECC program has begun to create comprehensive care plans on a secure web-platform that will be managed by the patient/caregiver and allow health care, school and community providers to communicate thereby overcoming the lack of a universal electronic medical record. When the funding for TECC ends in the summer of 2019, it will be important that insurers recognize the value of telemedicine and telehealth in improving health outcomes and care access. At present, the reimbursement for telehealth is limited, and often narrowly focused on distance rather than need. TECC aims to show that these technologies can be cost-effective in reducing the burden of illness for children and youth with epilepsy and for children who need frequent evaluation for post-

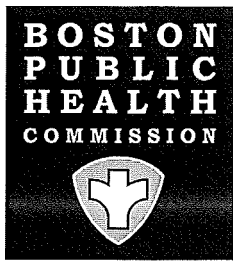
concussion, as well as for families who because of SE disadvantage cannot lose work or leave siblings home alone for extended time periods. Telehealth also has the potential to allow for home visits with enabled/protected smartphones or tablets in community based settings, minimizing transportation concerns and reaching and caring for populations with cultural, language or transportation access issues.

Boston Public Health Commission

Please find attached a submission in response to the RFI request seeking input on improving pediatric care.



Boston Public Health
Commission.pdf



Building a Healthy Boston

March 31, 2017

Amy Bassano
Acting Director
Center for Medicare and Medicaid Innovation
United States Centers for Medicare & Medicaid Services

Dear Acting Director Bassano,

Attached is the submission from the Boston Public Health Commission to the Request for Information on Pediatric Alternative Payment Model Concepts. If you need additional information, please contact Heather Gasper, Director of Intergovernmental Relations at

Thank you,

A handwritten signature in black ink, appearing to read "Monica Valdes Lupi". The signature is fluid and cursive, with a long horizontal stroke at the end.

Monica Valdes Lupi
Executive Director
Boston Public Health Commission

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Section I questions:

1. *What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.*

As the public health leadership for the largest city in Massachusetts and the oldest public health agency in the United States, the Boston Public Health Commission (BPHC) has a deep interest in a child and youth-focused delivery model that combines and coordinates health care, mental health care and health related services.

Boston data indicate that issues in these domains have profound impact on the health of children and youth in our city. In a city-specific replication of the National Survey of Children's Health, Boston parents reported widespread exposure to adverse experiences among Boston children, including exposure to financial strife within the family, which affected nearly one third of children 0-18, and neighborhood violence, which affected over fifteen percent. Widespread financial strife may reflect income inequality in the city: among families raising children, over 48% of Latino families and 34% of Black families report incomes below \$25,000; among White families only 6% have incomes below \$25,000. The impact of social determinants and associated family stress may explain the prevalence of emotional, behavioral and developmental issues affecting children in Boston. Parents reported challenges in these domains affecting a large proportion of children, with Latino children most commonly affected in nearly every diagnostic category. It is also striking that Latino and Black families were more likely than White to report that their child's primary care doctor did not do all he or she could have to care for the child.¹

Anecdotally, we hear from families, even families of children with complex medical needs or needs that involve multiple domains, that the major gaps lie not in access to specialized medical care (except in the cases of neurology and psychiatry, where demand does exceed supply) but in access to the coordination and support required to manage care and assure access to services and benefits required to assure optimal outcomes for children and youth.

It is in this context that we respond to the questions that follow.

2. *Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in*

¹ Health of Boston's Children: Parent and Caregiver Perspectives, Boston Public Health Commission Research and Evaluation Office, Boston, MA, 2013. Downloaded at <http://www.bphc.org/whatwedo/childrens-health/boston-child-health-study/Pages/Boston-Child-Health-Study.aspx>

the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

BPHC has spearheaded multiple projects to expand capacity of the pediatric medical home beyond the limits of Medicaid mandatory benefits. These include projects providing home based services for children with asthma, primary and preventive mental health services for young children (using both System of Care and Linking Actions for Unmet Needs in Children’s Health (LAUNCH) funds from the Substance Abuse and Mental Health Services Administration), and most recently, trauma prevention and intervention services for children and families affected by neighborhood violence but not necessarily diagnosed with PTSD or any other category of mental illness. In each case, services were integrated into the medical home with the intent of serving all children who presented with targeted needs, rather than serving a pre-defined population of children.

While trauma services have not been in place long enough for outcomes to be evident, evaluation data for both asthma care and early childhood mental health are positive. For asthma, the key outcome is reduction in ER visits. For the Early Childhood Mental Health Partnership key outcomes are reductions in child behavior problems and reduced parent stress and depression. At least a year of implementation has proven necessary to assure full and effective program operations.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

BPHC operates in an urban setting. Nonetheless, our experience with well-trained, population-focused community health workers (in each of the project areas noted above) suggests the potential of community health workers to serve as physician extenders in rural communities where specialized care is limited.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

QUESTIONS

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and healthrelated social services agencies)?

a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children’s Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal program?

It is hard to estimate the extent of service integration occurring statewide given the patchwork nature of current efforts. It is likely; however, that integration of social services is more common than integration of mental health

care due to the greater cost and complexity of providing the latter and the tight labor market for licensed pediatric mental health clinicians.

Different health care sites and systems have adopted different approaches to social service needs of their patients' families. Notable among these are Medical-Legal Partnership, Health Leads, and HealthSteps. Some larger sites have implemented their own, in house, or payer-funded case management services, some available to all patients and some available to patients with particular conditions (for example, children with mental health needs, HIV/AIDs or asthma). The Massachusetts Title V program has embedded its care coordinators in selected medical home sites, targeting case management to children and youth with special health care needs. Many of these programs have operated as pilots, depending on grant or other short-term funding; few are entirely secure as a result.

BPHC's joint Early Childhood Mental Health Partnership with the state is probably the most widely implemented approach to mental health integration for very young children in Massachusetts but here again; there is a patchwork of programs with similar goals across the state piloting a variety of overlapping approaches to care. For older children, mental health services may be provided by behavioral health units within health care systems, stand-alone Community Service Agencies (CSAs) for children with SEDs, or inpatient care at hospitals across the state. Integration with pediatrics varies from site to site and program to program. The state's Patient-Centered Medical Home initiative did not result in any significant expansion of experiments in this area. We ascribe that to the emphasis on measurable cost-savings within that program. Such requirements invariably place child-focused and preventive programs at a disadvantage, incentivizing programs that work with high risk adults, for whom case management may result in reductions in ER and hospitalization cost. The programs that do exist, ours and others, reflect the aims of child serving public officials, providers and parents, rather than any policy that has systematically promoted integration.

The partners engaged in integrative efforts also vary site-to-site. BPHC programs have strong relationships with Healthy Start, Early Intervention, WIC and many community based organizations. For older children, our key relationship is with the Boston Public Schools, which are home to many of our programs. We work closely with the Boston Housing Authority on a range of programs to prevent or address homelessness and promote integrated models of housing and social support, including one such program targeted specifically to pregnant women and families with newborns. These programs receive referrals from but operate outside of the health care system.

BPHC has its own home visiting program and receives some Maternal and Child Health Bureau (MCHB) funding from the state for a pilot, newborn home visiting program; we have sought to link this program to pediatric primary care by providing a copy of the home visit report face sheet to the child's pediatrician (with parent consent).

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

- a. Which health-related social service providers have been or should be included in a child and youth-focused integrated service delivery model?*
- b. What potential exists for increased partnership for provision of home and community-based services?*

Massachusetts requires behavioral screening for children as a condition of Medicaid reimbursement for well child visits. Typically, a positive screen serves as the starting point for services supported by the BPHC-state Early Childhood Mental Health Partnership, although clinician judgement or parent concerns not reflected in screening results are also acceptable pathways. The pediatrician provides a “warm hand-off,” personally introducing the family to the Early Childhood Mental Health Partnership team whenever possible. Either member of the team may be on the receiving end of that initial contact depending on scheduling. If time permits, the team can start the enrollment process at that point. From there, the team carries out the needs assessment process mentioned earlier, works with the family to develop a care plan, and then sees the family at home visits, at the clinic or in a community setting. At parent request, the team may visit the child at an early care and education or school program or accompany the parent to an appointment or meeting with another agency. Interventions include a mix of individual coaching on parenting and on problem solving in relation to family issues or social needs, parenting or parent child groups, brief behavioral health interventions using a number of evidence-based practices on which staff have been trained, or supported referral to more intense or extended behavioral health services. Site teams also provide behavioral health consultation and training to the pediatric clinicians at their sites.

This model proved highly successful in the first round of funding: children showed significant reductions in behavioral symptomatology both in comparison to their own baseline scores on standard screening instruments and in comparison to a group of children from a nonparticipating health center serving children with equivalent needs. Parents of children at intervention sites also showed significant reductions in levels of depression and parenting as measured over 18 months.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

Our experience is that practice change to achieve population health advances requires leadership beyond the practice level. We believe this is an appropriate role for public health entities in a re-shaped, integrative pediatric system. Strategies we have found effective to promote change include:

- Clear, well-defined and fully discussed contractual requirements when funds for enhanced services come from a local government or state sources;
- Use of learning communities to promote cross-site fertilization around opportunities and strategies to facilitate change;
- Bidirectional leadership, giving sites opportunities to shape programming based on experience;
- Heavy emphasis on parent voice and parent leadership, which may take the form of parent advisory groups, parent consultant roles. We have had very positive experience engaging parents/caregivers directly in service delivery as “family partners,” assisting licensed clinicians in delivery of care in primary care sites;
- Expert technical assistance, helping site staff via reflective supervision and support;
- Extensive cross training of partners in integrated care, both in specific aspects of care delivery and in the process of collaboration.

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

In 2012, an article in the Journal of the American Medical Association noted that behavioral health had surpassed physical health in prevalence of pediatric diagnoses. Yet the basic practice of pediatrics has not changed. Pediatricians are still sent into practice with inadequate preparation to address the family issues that lie at the root of behavioral health problems for many children and with such tight parameters around visit duration that they cannot realistically deal with social or relational issues in anything more than cursory fashion. Meanwhile, discussion of integration generally focuses on providing earlier or better services to children with diagnosed or diagnosable mental health conditions based on narrow and largely inappropriate adult diagnostic categories.

Current models of integrative care around the country, including BPHC's Early Childhood Mental Health Partnership model, offer evidence that a flexible model, which enables pediatric care to incorporate a wide range of social and mental health interventions based on child or family functional need rather than diagnosis, is the way of out of a current structure that requires children to pass a diagnostic threshold to be eligible for care. In other words, instead of changing eligibility requirements so that programs match each other, we should be thinking about requirements so that programs match the needs of children and families.

One systemic step that would move us in this direction would be a shift to the use of the Diagnostic Classification Birth to Five system for care of children in the youngest age groups.

5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

See response to Question 4, above.

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

As noted previously, key objectives of system reform should include:

- Full integration of social and mental health capacity into the pediatric medical home to promote access for families of young children and permit intervention before problems intensify
- Flexibility on the part of integrated systems to deal with children and families across a continuum of need and to allocate time beyond the typical visit schedule to families with significant needs;
- Built-in expertise around dyadic care and infant mental health – lacking even in many pediatric mental health provider agencies at present;
- Optimal use of the strengths and skills of specially trained community health workers to enhance service quality and to reduce cost;

- Ongoing leadership and support for change.

Barriers to achievement of these objectives are:

- A payment system that limits access to mental health care in terms of eligibility and nature of care provided, specifically discouraging care of young children and dyadic (or better still, family) care;
- Lack of reimbursement for community health workers in any but the narrowest diagnosis-focused arrangements (via waivers and other specialized programs);
- Lack of training on infant mental health for both pediatric and mental health clinicians;
- Lack of integration between mental health services and social case management programs;
- Lack of financing for system-wide change leadership (e.g. learning collaboratives, specialized consultation, training)
- Use of adult diagnostic categories for child mental health.

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

See answer to Question 9, below.

8. What role do models of care such as ACOs play in the pediatric environment?

- a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?*
- b. How are pediatric ACOs the same or different from adult-focused ACOs?*
- c. What opportunities do pediatric ACOs have for integration with community and health services systems?*
- d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?*

See answer to Question 9, below.

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

The system objectives listed above could be addressed most easily in an MCO environment, which provides flexibility around the use of capitation. A gatekeeper model that provides adequate support for Case

Management, more flexibility about mental health billing, and support for practice transformation as described in response to II.3, above, could also achieve those objectives. The key here is not specific fiscal and delivery arrangements but recognition of the long-term cost effectiveness of investment in pediatric transformation.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

QUESTIONS

1. *What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?*
 - a. *Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?*
 - b. *What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?*

In the short-term it would be very difficult to save (within the health care system) on services for very young children given that most of their cost goes to NICU care and other intensive interventions for children born at risk. (We would note that investment in families and alleviation of family stress might save costs in these areas for later children due to reduction in preterm birth and low birthweight, but that is conjectural. BPHC's MYCHILD/LAUNCH implementation did show savings to MassHealth for MYCHILD enrollees of \$164 per member per month as compared to a propensity score-matched group of children in the MassHealth caseload, but that was for the narrow group of infants and toddlers who met System of Care eligibility criteria

In the longer term, reductions in child behavioral symptoms and parent depression and stress are likely to produce savings in health, mental health, education, SPED and child welfare services. Based on this, we believe system integration should be designed to intervene upstream, benefitting infants and toddlers and their families, as well as older children and youth.

2. *How could health care providers be encouraged to provide collaborative services with health related social service providers for a designated pediatric population's health and social needs?*
 - a. *What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.*
 - b. *What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?*
 - c. *Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to*

account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

The recommendations contained in Baillit Health's report on Value Based Payment in Children's Health are consistent with our experience concerning the impact of payment models in pediatrics. Baillit argues for a pediatric-specific model reflecting four attributes of child health:

- Most children generate little medical expense.
- Children with high medical needs are a heterogeneous population.
- Present and future health status is largely defined by factors not under the control of clinicians.
- Many Medicaid providers are not prepared for value-based payment.²

The report recommends a capitated model supplemented by a care coordination payment and a performance incentive bonus. This model aligns with our experience concerning barriers to effective integration.

3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?

a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.

b. What factors are essential to the success of this alignment? c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

Funding streams are not well aligned to meet the needs of children. Disconnects occur most sharply between Medicaid and Special Education, Medicaid and private insurers for children with needs complex enough to justify dual coverage, and Medicaid and WIC. In each of these instances, disconnects have placed families at the center of arguments over who bears the cost for school-based interventions, durable medical equipment and other items requiring prior approval, and health-related food substitutes or supplements. As long as cost is a major disincentive to service in each of these systems, such battles are likely. Some form of pooled funding and central decision-making at the state level could be a means of resolving conflicts across these systems when a child's need is clear, but responsibility for payment is not.

In terms of more typical children, the key disconnects encountered by children served in our ECMH programs lie between education and health care, including, in this case, mental health care. Two particular barriers that get

² Baillit Health, (July 2016) *Value-Based Payment Models for Medicaid Child Health Services: Report to the Schuyler Center for Analysis and Advocacy and the United Hospital Fund*. New York: United Hospital Fund.
<https://www.uhfnyc.org/assets/1503>

in the way of alignment are (1) the unique focus of education systems on children, while health care has increasingly recognized the importance of family-centered strategies and outcomes that involve improved health and mental health among all family members and (2) the time required for clinician involvement in the IEP process. While the former calls primarily for changes in the education mindset, the latter can be addressed through greater flexibility in the health care system. Here the use of physician extenders could go a long way to better connect systems, assure that families get the guidance and support needed to achieve education goals for their children, and educate pediatric clinicians about the IEP process and the nature and extent of services children in their caseload receive in school and the ways those services may be related to health issues.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

Grant, community benefit, Massachusetts Payment in Lieu of Taxes (PILOT) and other short-term funding streams are wonderful ways to incentivize and test innovation. They rarely permit (and never assure) the translation of knowledge to practice through ongoing implementation and improvement of effective methods. Over reliance on these methods promotes a culture that tends towards fads; the need to do something new overrides the need to spread something effective.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?

a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?

c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

The Health Home model seems particularly well suited to achieve the objectives proposed for pediatric system reform above. It permits investment in the kind of case management carried out by the ECMH team to good effect, allows for flexibility in eligibility, and facilitates dyadic care and family-centered approaches generally. Given the importance of flexibility highlighted previously, we would encourage the application of this model on a practice-wide basis, with referral of children who meet Title V criteria for special health care needs (including children "at risk") to practice-based family support and behavioral health care.

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

CMS would need to both finance and lead evaluation research to assess savings of effective systems reform since, as Bailit and others so clearly demonstrate, large-scale, long term, multispectral, longitudinal tracking is

optimal to show the full range of potential outcomes of more effective early intervention for children. That said, family, provider and public health input on research design would be critical to avert approaches that overburden service systems and drive away already-stressed families.

SECTION IV: PEDIATRIC MEASURES

QUESTIONS

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

Public health data systems, including the National Survey of Child Health, include relevant variables concerning child well-being, family expense and family hardship.

SECTION V: OTHER COMMENTS

1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

The discussion of pediatric integration offers an opportunity to translate knowledge to practice in the nation's largest public health program for children and families. Lessons about what works, in terms of reduced barriers to access, improved quality of care for all children, including those who are very young, and their families, and improved system-wide attention to prevention, should inform the direction that is pursued as a result of this conversation.

California WIC Association

Background: In California, the WIC program, funded 100% by USDA, is managed through the CA Dept. of Public Health, which contracts to 83 local health departments, FQHCs, or social service non-profit organizations to provide WIC services in local communities. Over the last decade, local WIC agencies, have been establishing business agreements, through their parent organization, local health departments, FQHCs, or social service non-profit organizations, to allow WIC staff to clock out of their WIC job (100% USDA funded) and clock in/contract to a local FQHC or health plan (Medicaid funded). Staff are essentially working in two part time jobs. These health care providers are providing nutrition and lactation support for mothers, infants and children. This valuable workforce, besides being nutrition and lactation experts, are also highly skilled with multiple languages, are of diverse ethnicities and come from the communities they serve. They bridge care for patients who might be seen in the local WIC agency, and also the local health center. This braiding of two federal funding streams, but from very different departments, USDA and HHS, provides increased capacity for health centers to provide high quality care and also be more integrated into the large infrastructure of the WIC program and community. WIC, a very successful program, now in its 45th year, could integrated with, not just provide referrals to, health care, with the result of enhanced care for children and their families. Additionally WIC clinics also already collaborate with a number of other services vital to mothers and their children, another benefit for health centers. Finally, some modernizations are needed in WIC, especially in use of technology, this is an area where health care could inform WIC improvements and integrated care could tap joint use of technology. More details are provided in these issue briefs: Opportunities for Nutrition and Lactation Interventions Under Health Care Reform and Breastfeeding Support Community Clinics and the Affordable Care Act Requirements and Foreground to Horizon: Opportunities for WIC's Next Half Century and MyWIC: Updating WIC for a New Generation.

We know that in some states this is also practiced, but we do not know the extent. In CA, our health center system, is very interested in addressing social determinants of health and the Triple Aim. So the concept of braided care and funding streams with WIC has been of growing interest to FQHCs.

2. Breastfeeding education and support has been the most established practice in this model. Some health centers have focused on prenatal and postpartum nutrition education and support for women, including gestational diabetes. And some efforts to provide nutrition care for pediatrics, particularly related to obesity, have been made.

WIC agencies, while required to provide nutrition and breastfeeding education and support have gone beyond this in many ways including: partnering with oral health providers to include oral health screening, varnishes, and referrals in WIC clinics (Medicaid funding); early literacy education with improved school readiness outcomes (tobacco tax grant funded); co-locate with Head Start, public health services, libraries and other community organizations; host farmers' markets in their parking lots; and some are testing 'case managers' or family service navigators to assist with more complex family needs.

3. WIC has a large infrastructure of clinics across the nation. As an example, here in CA, WIC provides services in the most remote of areas. Business agreements between WIC agencies and health centers could expand care to families in urban, rural and remote areas. One needed area of expansion for WIC is improved use of technology to allow families the option to receive some care via telemedicine, an area where health centers have more experience. Business agreements between local WIC agencies and

health centers, as described above, could strengthen care to families in rural, remote and underserved areas.

Campaign for Trauma-Informed Policy and Practice

See attachments



Campaign for
Trauma-Informed Po



**To: Center for Medicare and Medicaid Innovation
Request for Information on Pediatric Alternative Payment Model Concepts**

**From: David L. Shern, Ph.D
Co-chair of the Science Committee**

We are pleased to have the opportunity to respond to the CMMI Request for Information on Pediatric Alternative Payment Model (APM) Concepts. The Campaign for Trauma-Informed Policy and Practice (CTIPP) is a newly formed national organization, supported by individuals and organizations who are committed to creating a resilient, trauma-informed society where all individuals and families have the opportunity and the supports necessary to thrive. It was formed, in part, because of our recognition that the long-term deleterious effects of adverse childhood experiences are rapidly increasing nationally and that there is a need for an organization to link the various individual and organizational efforts.

CTIPP embraces a public health framework, addressing the social determinants of health and supporting the integration of promotion, prevention, resilience-building and healing activities. We recognize the importance of using an intergenerational, lifespan approach. As such, we enthusiastically endorse the rationale for the APM and realize the critical role of health care financing systems in promoting the public health. The explicit recognition in the RFI that the exposure to adversity in childhood, without effective compensatory mechanisms, undermines healthy development and significantly contributes to the development of chronic illnesses that are the principal drivers of health care costs and undermine the overall productivity and wellbeing of our population. Developing financing mechanisms that will incentivize health and other human service providers to better recognize and appropriately respond to these threats to health will have dramatic, long-term effects. We applaud your efforts to explore these issues. Below are some specific suggestions from CTIPP, in response to selected questions in the RFI.

III.1.a. Universal prevention interventions that have demonstrated long-term benefits for overall health and wellbeing should be available to all children. Kids should be screened for exposure to adverse circumstances which place them at higher risk for the development of a range of health problems. Children with complex health conditions, such as severe emotional disturbance, and their families, should be provided with wrap-around services to assure that their health, social service and educational needs are met.

III.1.b. Children of all ages should be included. However, given the critical importance of early, including prenatal, exposure to toxic stress and trauma, special attention should be directed toward interventions for very young children.

III.2.a. A basic premise of our response involves cognizance of the long-term savings from costs avoided by effective, universal programming to reduce adversity and increase resilience. Apportioning these costs across human service sectors, and over time, will be a major challenge of an alternative payment model. If longitudinal data are available in a given jurisdiction to estimate long-term savings, these historical data should be considered. Since we anticipate that these data will rarely be available, we propose using information available from the Washington State Institute of Public Policy (WSIPP) or from similar, objective econometric methodologies regarding the distribution of costs and benefits across human service sectors. WSIPP's estimates are associated with specific interventions that may be proposed as part of a comprehensive strategy. Prospective incentive payments to fund prevention and comprehensive service interventions should reflect the anticipated savings.

III.2.b. Given the anticipated costs that will be accrued by varying sub-groups of children, depending upon their clinical status and needs, risk adjustment should reflect actuarially sound estimates of anticipated costs to be avoided by sub-group.

III.2.c. Accommodating these methods to the large variety of provider organizations and provider contexts that represent widely varying market conditions is clearly a challenge. We suggest using the information from WSIPP as a beginning estimate of the distribution across sectors and to require that sites begin to actively collect data that may be used to develop site specific cost/savings estimates that could be used in subsequent iterations to adjust payment methods.

III.3.a. Currently, very few jurisdictions are attempting to align funding mechanisms across the various human service sectors, although these sectors often have similar long-term objectives. Eligibility and service array difference complicate the coordination of services as does the lack of consensus outcome measures. The measurement strategies that will be required for multi-sector participation will provide motivation to address these issues, and to develop a common set of metrics for shared outcome objectives. Additionally, understanding the developmental cascades that are involved in determining long term differences in health status will allow identification of near-term objectives (e.g., school readiness) that are associated with longer-term outcomes (e.g., employment and a livable wage). Given available evidence regarding the long-term negative consequences of early life adversity, interventions that are designed to reduce exposure to adversity (e.g., Nurse Family Partnership), and that have long-term benefits for children (e.g., reduced substance involvement and internalizing disorders at age 12ⁱⁱ), and that will ultimately result in net cost savings (\$1.61 returned for each dollar invested)ⁱⁱⁱ are prime candidates for inclusion in the APMs.

III.5 Inclusion of screening (of both children and their parents) to identify risk factors and implementation of evidence based intervention strategies to ameliorate risk and build resilience should be available for all children and families that are involved in these demonstrations. In order to realize the greatest benefit to population health over the intermediate to long-term, universal preventive interventions hold the greatest promise. There are several well researched intervention programs that are available and that can be adopted following local needs assessment and coalition building efforts to impact both short and longer term health and wellbeing. The Triple P program is an instructive example, since it combines both a universal intervention as well as 4 graded interventions that are available in response to the needs of children and families who are served.^{iv} This intervention has been shown to reduce levels of child maltreatment, out of home placement, emergency room presentations and other outcomes which involve improved health status and reductions in overall costs to the human service system.

III.5.a Level's 2 to 5 of Triple P, as an example, are currently available in Washington state and are reimbursed by Medicaid. A key feature of the Washington example involves prescription of parental interventions when the Medicaid enrollee is the child.

IV.1 It is important to develop a measurement battery that both reflects the current health status of beneficiaries and their families, the risk and protective factors in their environment that are amenable to change following intervention. Since many of the outcomes that are anticipated from this more comprehensive approach will occur over the life span, it is important to have intermediate measures that are known to predict long-term benefits. For example, school readiness is a variable that has been shown to have long-term impacts on several life time outcomes, and one that is amenable to change. Outcomes from school readiness interventions have been shown to affect a wide range of adult outcomes involving criminal justice, educational, occupational and health related areas. While a detailed presentation of the available measures is beyond the scope of this response, applicants for demonstrations involving APM's should present a theoretical framework and set of measures that have been shown to or that hold great promise for effecting long-term health and wellbeing.

It is instructive that Health Share Oregon, a coordinated care organization operating under the authority of a Medicaid waiver, has implemented a set of measures and interventions that are designed to reduce exposure to adversity and increase resilience.^v From an extensive analysis of the life histories of individuals who had the highest healthcare costs, they documented exposure to adverse life events that began in early childhood. Based on these analyses and cognizant of the literature, Health Share began a multi-pronged program to address the sources of adversity including support to reduce unplanned pregnancy, screening children for developmental progress with appropriate interventions when needed and a focus on children known to be at high risk (e.g. foster care placements). They are using Kindergarten readiness as one of their near-term outcome measures owing to its relationship to long term health outcomes.

As evidenced by the issuance of this RFI, it is becoming increasingly apparent that if we are to improve health, we must address the social determinants of health and wellbeing. Relying largely or exclusively on medical treatment will not be sufficient to effectively preserve and promote health. We applaud these efforts and will support them enthusiastically in whatever ways CMMI might find helpful

ⁱ <http://ctipp.org/Our-Mission-Statement>

ⁱⁱ <http://www.blueprintsprograms.com/factsheet/nurse-family-partnership>

ⁱⁱⁱ <http://www.wsipp.wa.gov/BenefitCost?programSearch=nurse+family+partnership>

^{iv} <http://www.blueprintsprograms.com/factsheet/triple-p-system>

^v <https://www.nasmhpd.org/sites/default/files/Trauma%20Webinar%202-15%20v2.pdf>

Canajoharie Capital LLC

Improving Pediatric Care

1. Publish a list of Pediatricians offices where individuals can donate books for children.
2. Keep all advice to parents simple.
3. Come up with some catchy logos for parents to encourage singing and speaking with infants from birth. Many parents do not realize importance of connecting neural pathways early in life. If parents do not have vocabulary to communicate to children we need videos and music.
4. Look for locations within communities to support. The Salvation Army has community centers that might participate. Use libraries with volunteers to read to children and develop programs with the elderly to read to children. There are many resources available to supplement programs.

Everyone loves to support children!!

Carroll County Health Department

Good Afternoon,

Please accept the attached information as response to the RFI for information on Pediatric Alternative Payment Model Concepts. Thank you for the opportunity to provide information on this very important topic.

Respectfully.



Carroll County
Health Department.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

There is significant interest among states to develop a child and youth-focused health delivery model that combines physical, behavioral, and social services. States and communities are interested in developing a collaborative, team-based approach with a continuum of care that can meet the needs of children and youth, including the 0-5 population, from mild to intense, in an effort to improve health outcomes, manage costs, and ensure quality care.

As Medicaid behavioral health care is increasingly organized within a capitated managed care arrangement, states are trying to determine the most appropriate manner to serve children and youth from 0-21 using a system that is developmentally appropriate and has demonstrated positive outcomes. States are keenly interested in moving away from acute care such as residential treatment, inpatient hospitalization, and group homes, both to reduce cost and to promote positive outcomes that generalize to the communities that children ultimately must live and thrive within.

Children with behavioral health needs served by Medicaid require an array of services to support their health and well-being, but the current system often does not meet their needs, resulting in missed opportunities to improve outcomes. To better understand the patterns of service use and costs for these children, the Center for Health Care Strategies analyzed behavioral health care use and expense for children in Medicaid in all 50 states. Key findings from the analysis reveal that:

- Children using behavioral health care represented under 10 percent of the overall Medicaid child population, but an estimated 38 percent of total spending for children in Medicaid;
- Children in foster care and those on SSI/disability together represented one-third of the Medicaid child population using behavioral health care, but 56 percent of total behavioral health service costs; and
- Almost 50 percent of children in Medicaid who were prescribed psychotropic medications received no identifiable accompanying behavioral health treatment.

These findings point to significant opportunities for quality improvement in the organization, delivery, and financing of care for children with behavioral health needs in Medicaid. For

complete study findings, access the full report, *Faces of Medicaid: Examining Children's Behavioral Health Service Utilization and Expenditures*, at www.chcs.org.

State policymakers and other key stakeholders can use the findings to inform quality improvement efforts in children's behavioral health systems, such as:

- Expanding access to developmentally appropriate and effective behavioral health care, particularly therapeutic interventions with an existing or emerging evidence base, and home- and community-based services;
- Investing in care coordination models that facilitate delivery of needed supports and services for vulnerable populations; and
- Ensuring collaboration across child-serving systems to increase care coordination and improve oversight and monitoring of psychotropic medication use.

There is also strong and growing interest at the state level for a youth-focused care delivery model that supports youth and young adults of transitions age (late adolescence to early 20s). The transition age population is uniquely vulnerable to first episode psychosis and other serious mental illnesses, and has traditionally fallen through the cracks between the child- and adult-serving health and social services systems ([McGorry, 2011](#)). For youth and young adults with mental illness, an integrated mental health system that treats transition-age youth across the natural course of development and includes seamless partnership between health and social service sectors is necessary to mitigate the consequences of untreated and undertreated mental illness. Indicative of states' interest in serving this population is that in 2017, 32 state Title V Maternal and Child Health Block Grant Program agencies chose *Increase the percentage of adolescents with and without special health care needs who receive services necessary to make transitions to adult care* as a national performance measure ([McManus, 2017](#)). However, despite expansions in eligibility and recognition, many young people of transition age continue to experience a number of barriers to receiving adequate care, including those related to cultural, linguistic, and developmental appropriateness of services; variable eligibility criteria by age; disconnected and uncoordinated models for service provision; and a dearth of linkages between physical and mental health care.

Challenges/Barriers:

- Provider and network adequacy: Significant behavioral health workforce shortages persist, especially among child-serving providers who are able to offer culturally and linguistically competent, family-centered care.
- Administrative burden: Providers face significant administrative burden in contracting with MCOs.
- Payment/rate setting: States do not consistently support evidence-based practices (EBPs) by aligning reimbursement with service delivery (e.g., paying a higher rate for providers

who adhere to EBPs). Combination of service rules and/or other regulations prohibit or limit same-day behavioral and physical health services.

- Embedding family voice at the system and service-delivery level. For example, funding for family and peer support is uneven across states and agencies within states. Youth Peer can be effectively integrated into the system of care to complement primary care and other social services. However, inability to directly bill for peer support in a number of states poses a major barrier to more widespread implementation.
- Legal: Social and other service systems have legal mandates governing the care of children such as that when children enter foster care, they must receive health and behavioral health screens within certain expedited timeframes. For court-involved children, judges often play a role in determining care; and special education plans specify the services a child will receive. Based on the experience of intensive care coordination models using high quality Wraparound, it is the coordination among these systems, as well as among behavioral health providers, which consumes care coordinators time, rather than the interface with primary care.
- Financing for first episode psychosis: Supported employment, case management are not typically covered by private insurance. Medicaid coverage can be difficult for supported employment, depending on the state environment. Training, team meetings, supervision, data collection, outreach, and program administration are not always billable services, or such services must be built into a case rate for services. Developing infrastructure requires initial, upfront investment not available in many states and/or to many providers ([Dixon et al, 2015](#)).

Range of Technical Assistance

- States and localities will need to develop and disseminate clinical and procedural training and orientation to a system that is family driven and youth guided, community-based, culturally and linguistically competent and evidence-informed.
- Providers and delivery systems will need ongoing coaching for specific skill development related to the care integration/coordination model.
- Providers and the delivery systems will need initial assistance to coordinate cross-agency supports and services, including data collection, database management, and data analysis.

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

As a Local Behavioral Health Authority within the state of Maryland I am aware of the following initiative that partner pediatric care and health-related social services:

- Maryland Behavioral Health Integration in Pediatric Primary Care (BHIPP) supports the efforts of primary care clinicians to assess and manage the mental health needs of their patients from infancy through the transition to young-adulthood through telephone consultation, training, workforce development and screening tool implementation (<http://www.mdbhipp.org/>). Within our local jurisdiction we were able to partner with a University to implant Masters level Social work students within Pediatric Primary Care settings. The role of the student is to increase access to mental health services, increase the use of routine screenings, and provide consultation to pediatric primary care providers throughout the state of Maryland. This is completed through some of the sample activities below:
 1. Well child visits- seeing all children/families attending well child visits and offering resources, information, and services. This visit can be completed while the child/family is waiting in the exam room for the provider, or the family can wait for the intern after the visit with the provider (based on provider preference).
 2. Well child visits- developmental screenings. The intern can provide specified screenings at various well-child visits (PHQ-9, ASQ, M-CHAT, etc), and provide results to provider.
 3. Topic specific visits- if the provider identifies needed brief interventions or skills training (examples: boundaries, behavioral charting, communication, parenting, stress management, relaxation, etc), the intern could either see the child/family on that day, or schedule a time for the child/family to come back in. Show rates seem to be highest when paired with a provider visit on the same day.
 4. Follow-up- interns can schedule up to 6 visits with a child/family per episode, and can focus on ADHD behavioral techniques, parenting, mood concerns, anxiety, adjustments, grief, and significant resource coordination.
 5. Resources- interns can create resource drawers with information on local agencies, topic-specific resources and information from the internet, pamphlets on various parenting topics, etc. This information can then be used by the provider/nurses at any time it is relevant.
 6. Resource listings- interns can create listings identified by practice as being useful/needed. These listings can be for the office, or to be handed out to families as a resource for them.
 7. Shot anxiety reduction- interns can go in and focus on relaxation while they are waiting for a nurse to come in for immunizations.
 8. Provision of groups- parenting, behavior management, attachment/bonding, support, topic specific education groups
 9. Resource coordination- phone calls to agencies to provide service updates on academics, mental health treatment, medications, multi-disciplinary involvement, etc

10. Attending multi-disciplinary meetings on a family for the provider to gain information on the agencies and services a family is receiving, increase networking and coordination of care
11. Obtaining additional resources for office, mini-grant writing for socio-emotional development resources
12. Anything else the provider identifies as a need within their office or for their patients and families

This service is not currently billable under the confines of the Maryland Medicaid approved codes/sites but if billable, could expand the role of social service providers in primary healthcare settings.

Outcomes:

- Increased in communication with children, youth and families regarding screening and development.
- Increased access to brief intervention for children, youth and families in immediate need
- Decreased stigma surrounding behavioral health
- Increased knowledge and awareness of behavioral health by the PCP.

Program Integrity:

- Formal agreements between the local agency and the University which included provisions for clinical supervision to be provided through the University to the student intern.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?

a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

As the LBHA the Carroll County Health Department Bureau of Prevention, Wellness and Recovery has used community partnerships to a valuable tool. In doing so, the agency works with other community stakeholders to form these partnerships. This has been impactful as the method builds upon the history of positive relationships and shared success; as well as shared visions and complementary missions, acknowledging and understanding the individual barriers to progress and taking the time to develop shared strategies. In our community, this has allowed us to continue with valuable coordinated partnerships that address access to services, workforce development, and expansion of the local system of care.

In December of 2012 11 local professionals (representing the local hospital, including behavioral health, inpatient pediatrics, and maternal health; the LMB, CCHD (LBHA & Nursing), CCPS, an outpatient pediatrician, and the Local Department of Social Services) participates in a Leadership Institute. During this Institute, they developed the County's first early childhood strategic plan. At that time the team developed the vision and foundational beliefs found below. Currently the team has representatives from the local hospital, including behavioral health, inpatient pediatrics, and maternal health; the Local Management Board, Local Behavioral Health Authority (Chair of the Committee), Carroll County Health Department Nursing Bureau, Carroll County Public Schools (CCPS) nursing and early intervention services, outpatient pediatrician, the local DSS, early childhood behavioral health provider, family navigation and support, Early Head Start and Head Start, The Judy Center, and the local Family Center. Over the last four years this team has continued to grow and use the original plan as a guide. In April 2016, the existing Leadership Team came together with state partners, including DHMH, to develop a revised strategic plan that continues to align with local need and state priorities. Annually, the Children's SMART Leadership Team signs a Charter document that outlines the responsibilities of each agency, reaffirming the commitment to the early childhood system.

SMART stands for Screening, decision Making, Assessment, Referral and Treatment. It is a systematic approach to identifying children who are at risk for experiencing developmental and/or behavioral and social/emotional problems and ensuring their access to appropriate intervention and treatment. This system intends to build on existing strengths and services, while avoiding duplication of services. The guiding philosophy of this community effort is that all providers will respect the work and assessment findings of other providers, so that we will avoid unnecessary costs, and delayed access to treatment.

Vision

Carroll County Children's SMART Leadership Team believes in and respects the value and potential of our community's children. Our vision is that all children will thrive within their family and community.

We will achieve our vision through:

- o Approaching the child and the home environment as a unit;
- o Screening all children for developmental and behavioral health risk;
- o Creating a coordinated system of care that will ensure referral and appropriate treatment for all children at risk;
- o Collaborating and communicating among all prenatal and child-serving agencies and providers;
- o Providing education and professional development for all treating professionals in our community.

Foundational beliefs

Carroll County Children's SMART Leadership Team agrees:

- o A child with developmental and/or behavioral and social emotional problems has improved outcomes with early identification and intervention.
- o All children should have local access to appropriate treatment.

- o Quality health and human services are effective if they are family driven and child centered.
- o The health of our community depends on our ability to work together across organizational and system boundaries.

The Children's SMART Leadership Team guides the decisions related to the early childhood system of care development and has representatives across organizational and system boundaries.

Research indicates that early identification of children in need and connection to appropriate services improves long term outcomes (Dreyer, 2011). Additionally, there is evidence that offering families comprehensive services, including meeting parental needs, improves outcomes for children (Kilmer, Cook & Munsell, 2010). Moreover, findings suggest that county systems working together is economically beneficial (Karolyn, Kilburn, & Cannon, 2005) and improves family outcomes. Lastly, based on evidence that offering integrated community services through a localized collaborative model best serves families (Epps & Jackson, 2000) SMART is designed to address multiple family needs in one location.

Various community partners repeatedly identified children not selected for intervention through the existing county systems, including those with substance exposure, higher functioning special needs, delays below the threshold for early intervention, and later emerging needs. SMART enacted a system of community partnerships to meet this need, knowing the health of the county depends upon the ability to work together across organizational and system boundaries. Collaborators include the Health Department, School System/Early Intervention, Home Visiting, Early Childhood Mental Health providers, and other community early childhood and family providers.

Furthermore, Children's SMART Clinic goes beyond simply identifying needs. Family navigators assist families with resources (e.g. housing, food, clothing, entitlements) and linkage services (eg. case management/parent mental health referrals). Families are followed and a connection with services is facilitated.

Currently the services provided under this initiative are not billable as much of the coordinated work does not align with older, less effective payment models nor are the established medical criteria developed for the early childhood population therefore excluding billing options for providers.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?
 - a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social,

emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?

b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

Children born substance exposed should be a specific high-risk population that receives targeted interventions. Current intervention programming is not equipped with staff that has the expertise to appropriately identify or respond to the needs of this population. As a result of the opioid epidemic there are increased numbers of children being born with exposure to both prescribed and illegal substances, all of which have known indications on brain development.

In order to achieve greater cost savings over longer periods of time services should be targeted to the 0-8 population as effective early intervention and prevention efforts will decrease the need for costly and less effective interventions later in life.

Providers should also be instructed on the use of Screening, Brief Intervention and referral to Treatment (SBIRT) activities. Within the state of Maryland SBIRT is billable by primary healthcare providers although many do not universally implement screening within their practice beyond early childhood measures. Moreover when screening is completed, healthcare professionals report feeling ill-equipped to discuss concerns with the youth or parent. This is another missed opportunity for early identification and referral to interventions.

Center for Adoption Support and Education

See attachment for RFI response



Center for
Adoption Support a

March 28, 2017

Honorable Seema Verma
Administrator
Centers for Medicare and Medicaid Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Administrator Verma:

I appreciate that the Centers for Medicare & Medicaid Services (CMS) is seeking input on a draft pediatric care model concept. My comments will focus on the need for increased access among children in foster care, and children adopted from foster care, to adoption competent mental health services. I believe that there are great opportunities for Medicaid to better serve these children and families.

The Center for Adoption Support and Education (C.A.S.E.) was created in May 1998, to provide pre and post-adoption counseling and educational services to families, educators, child welfare staff, and mental health providers in Maryland, Northern Virginia, and Washington, D.C. In addition, C.A.S.E. is a national resource for families and professionals through its training, publications, and consultations. We were also selected to collaborate with the Administration for Children and Families (ACF) in the development of its National Adoption Competency Mental Health Training Initiative. From this experience, C.A.S.E. has a unique perspective on how the mental health care system can and should better address the mental health needs of children in foster care and children who are adopted from the foster care system.

The Need for Quality Mental Health Services for Children and Youth in Foster Care

There is a high level of awareness of the need to improve access to, and quality of, mental health services provided to children in foster care and adopted from foster care, as well as adopted children more broadly. As Chief Executive Officer of C.A.S.E., I was pleased to present on August 29–30, 2012 to the participants of the Substance Abuse and Mental Health Services Administration (SAMHSA) during a discussion about the science, policy, and practice related to the behavioral health challenges of children who have been adopted and their families. The interagency planning committee for the meeting included representatives from the Administration for Children and Families (ACF); Centers for Disease Control and Prevention (CDC); National Institute on Alcohol Abuse and Alcoholism (NIAAA); National Institute on Drug Abuse (NIDA);

National Institute of Mental Health (NIMH); National Institute of Child Health and Human Development (NICHD); and SAMHSA.¹

We discussed creating a national task force for strategic planning related to adoption services, and collaboration of Medicaid and child welfare to support adoption competent training for mental health providers. It was also suggested to pursue a meeting between SAMHSA, HHS and CMS and states to examine state by state policy implications with the intended goal to develop better coordination of funding and services that could be available and accessible to adoptive families. It was further suggested to develop an in-depth policy report on possible improvements to Medicaid and access to post-adopt services, including how to address low Medicaid reimbursement rates for trained adoption competent therapists. C.A.S.E. is looking forward to participating in the development and implementation of the suggested strategies that emerged from that conference, which could include a potential collaboration with CMML.

The TAC (Training for Adoption Competency)

To address the significant needs of adoptive and foster families, C.A.S.E. has already developed the standardized, manualized Training for Adoption Competency (TAC), an evidence-informed, intensive, post-graduate training program for clinicians. With the support of major national foundations – the Freddie Mac Foundation, the Dave Thomas Foundation for Adoption, the W.W. Kellogg Foundation, and the Annie E. Casey Foundation – C.A.S.E. developed the 72-hour training and case consultation program for licensed mental health professionals in order to expand community capacity to provide adoption competent clinical services. The TAC is currently being implemented in 17 sites across the country (see attached list), including 9 of the national Wendy's Wonderful Kids (WWK) sites. There is a sound and growing body of evidence that the TAC is a high quality, effectively-delivered, training that increases knowledge and changes clinical practices in ways associated with adoption competency.

Prior to developing the TAC, C.A.S.E. convened nationally recognized experts – adoption practitioners, researchers, advocates, policy makers, and adoptive parents – to identify the core knowledge, skills and values competencies that mental health practitioners need to serve members of the adoption kinship network. This National Advisory Board helped develop a definition of an adoption competent mental health professional using an expert-consensus process (see text box).

¹ See <https://www.samhsa.gov/sites/default/files/children-2015-domestic-international-adoption-strategies.pdf>

Definition of an Adoption Competent Mental Health Professional

An adoption competent mental health professional has:

- The requisite professional education and professional licensure;
- A family-based, strengths-based, and evidence-based approach to working with adoptive families and birth families;
- A developmental and systemic approach to understanding and working with adoptive and birth families;
- Knowledge, clinical skills and experience in treating individuals with a history of abuse, neglect and/or trauma; and
- Knowledge, skills and experience in working with adoptive families and birth families.

An adoption competent mental health professional understands the nature of adoption as a form of family formation and the different types of adoption; the clinical issues that are associated with separation and loss and attachment; the common developmental challenges in the experience of adoption; and the characteristics and skills that make adoptive families successful.

An adoption competent mental health professional is culturally competent with respect to the racial and cultural heritage of children and families.

An adoption competent mental health professional is skilled in using a range of therapies to effectively engage birth, kinship, and adoptive families toward the mutual goal of helping individuals to heal, empowering parents to assume parental entitlement and authority, and assisting adoptive families to strengthen or develop and practice parenting skills that support healthy family relationships.

An adoption competent mental health professional is skilled in advocating with other service systems on behalf of birth and adoptive families.

Using this definition of an adoption competent mental health professional and 18 consensus-defined adoption competencies, C.A.S.E. developed the TAC to train clinicians in adoption-specific issues and interventions and build community capacity across the United States to provide adoption competent mental health services.

C.A.S.E. also has charted new territory in examining the feasibility of a national certification program for adoption competent clinicians. Recognizing that consumers often rely on objective external assessments regarding the credentials of mental health professionals whom they consult (through licensing, board certification or other means), C.A.S.E. has undertaken a broad-based feasibility study regarding such a national certification, consulting with stakeholders across the country. Currently, C.A.S.E. is developing a business plan to guide the implementation of a national credential specifically for adoption competent mental health professionals.

The National Adoption Competency Mental Health Training Initiative

As mentioned above, C.A.S.E. was recently selected by ACF to collaborate on the National Adoption Competency Mental Health Training Initiative. Together with our partners, we are developing state-of-the-art, evidence-informed, adoption competency web-based curriculums for child welfare and mental health professionals, building upon C.A.S.E.'s nine year national initiative, the TAC (Training for Adoption Competency) program which is currently being implemented in 17 states. It is the goal of this project to work collaboratively with all States, Tribes and Territories to infuse enhanced adoption competence into the provision of mental health interventions. Yet, access to trained mental health professionals will also require innovative solutions from the principle payer of medical services for children in foster care and adopted from foster care, namely Medicaid.²

The Needs of Adoptive Families for Quality Mental Health Services

Adoptive families often report that outpatient services and, in some cases, inpatient services are not appropriate for children with foster care and adoption histories. An untrained therapist, for example, may use behavior modification techniques that do not address the underlying trauma and attachment challenges that a child is experiencing and can exacerbate a child's mental health problems. We see this situation as a direct service provider routinely. Adoptive and foster families often come to us after seeing multiple therapists who are not adoption competent, making our job more difficult as we address both the core issues of the underlying trauma and the impact of behavior modification and other techniques utilized by earlier therapists that further added to the underlying problems.

Adoptive parents consistently report that their greatest post-adoption support need is mental health services provided by someone who knows adoption. The lack of post-adoption mental health services in general, and the lack of access to adoption competent mental health services in particular, are significant barriers to recruiting adoptive families for children from the foster care system. In a national survey of 485 individuals conducted by C.A.S.E., only 25 percent of adoptive families reported that the mental health professional they saw was adoption competent. The majority of respondents did not know whether assistance in accessing or paying for mental health services was available in their state, and only about 25 percent could confirm the availability of such assistance. Further, only 19 percent reported insurance subsidies adequate to address their children's mental health needs. Many respondents reported that the number of Medicaid mental health providers is quite limited, and they were of the opinion that the majority of those who are available are not adoption competent. A great majority (81 percent) reported

² See <http://adoptionsupport.org/adoption-competency-initiatives/national-training-initiative-nti/>

that if they had a choice, they would choose a therapist who has earned a certificate as an adoption competent therapist.

It is an unfortunate reality that children and youth in foster care, when they are able to receive mental health services, typically receive it from the least qualified professionals due to the low reimbursement rates typical of Medicaid programs. Mental health professionals often begin their careers in publicly-funded community mental health centers that accept Medicaid – where most children in foster care and children who are adopted from foster care are seen. There are significant costs associated with the limited access to quality adoption competent mental health care -- both financially and emotionally. Studies suggest that lack of appropriate mental health services contribute to higher rates of adoption disruption and dissolution for families adopting from foster care, as well as interactions with the juvenile justice system. [insert citation]

The Lack of Quality Mental Health Services for Dually-Involved Youth – Trauma and Justice

C.A.S.E. supports work to promote trauma-informed approaches to behavioral health. We recognize that, for foster and adopted children and families, there are evidence-informed approaches specific to this population that are also trauma-informed, including the Training for Adoption Competency. As policymakers seek to increase the number of trauma-specific services and trainings, we strongly urge the inclusion of trainings that will build the adoption competency of its programs and workforce.

The impact of limited quality mental health services for children and youth in foster care – whether their permanency plan is reunification with parents, guardianships with relatives, or adoption – extends broadly. Studies confirm that the lack of quality mental health services impacts the outcomes for young people dually involved in the foster care and juvenile justice systems. The Brookings Institute Center on Children and Families reported:

Although children in long-term foster care represent only a small fraction of the total child population of the United States, they represent a much bigger portion of the young people who go on to create serious disciplinary problems in schools, drop out of high school, become unemployed and homeless, bear children as unmarried teenagers, abuse drugs and alcohol, and commit crimes. A recent study of a Midwest sample of young adults aged twenty-three or twenty-four who had aged out of foster care found that they had extremely high rates of arrest and incarceration. 81 percent of the long-term foster care males had been arrested at some point, and 59 percent had been convicted of at least one crime. This compares with 17 percent of all young men in the U.S. who had been arrested, and 10 percent who had been convicted of a crime. Likewise, 57 percent of the long-term foster care females had been arrested and 28 percent had been convicted of a crime. The comparative figures for all female young adults in the U.S. are 4 percent and 2 percent, respectively.

*Former foster youth are over-represented among inmates of state and federal prisons. In 2004 there were almost 190,000 inmates of state and federal prisons in the U.S. who had a history of foster care during their childhood or adolescence. These foster care alumni represented nearly 15 percent of the inmates of state prisons and almost 8 percent of the inmates of federal prisons. The cost of incarcerating former foster youth was approximately \$5.1 billion per year.*³

A study in Los Angeles County found that a quarter of youth formerly in foster care and two-thirds of dually-involved youth have a jail stay in early adulthood. The average cumulative cost of jail stays over four years ranged from \$18,430 for a youth formerly in care to \$33,946 for a dually-involved youth. The study also found that dually-involved youth were more likely than youth in care with no juvenile justice involvement to experience serious challenges including serious mental health problems, more than double the rates of those who were in foster care only.⁴ Washington State found that about one-third of the youth in the state's juvenile justice system either were or had been in the foster care system.⁵

Psychotropic Drug Use

Specific to foster care, in December, 2012, the Government Accountability Office issued a report on *Children's Mental Health: Concerns Remain About Appropriate Services for Children in Medicaid and Foster Care*. They reported that an annual average of 6.2 percent of noninstitutionalized children in Medicaid nationwide and 4.8 percent of privately insured children took one or more psychotropic medications. They also reported that 18 percent of foster children were taking psychotropic medications at the time they were surveyed, and 30 percent of foster children who may have needed mental health services did not receive them in the previous 12 months. The GAO's letter to Members of Congress stated, "Children in foster care, most of whom are eligible for Medicaid, are an especially vulnerable population because often they have been subjected to traumatic experiences involving abuse or neglect and they may suffer from generally required to cover services to screen children for mental health problems and to provide treatment for any identified conditions, we previously reported that it can be difficult for physicians to find mental health specialists to whom they can refer children in Medicaid."

³ Zill, N. (2011). *Adoption from foster care: Aiding children while saving money*. Retrieved September 10, 2013 from http://www.brookings.edu/~media/research/files/reports/2011/5/adoption%20foster%20care%20zill/05_adoption_foster_care_zill.pdf

⁴ Conrad N. Hilton Foundation. (2011). Hilton Foundation funds groundbreaking study on outcomes among youth in both foster care and juvenile justice systems. Retrieved September 10, 2013 from <http://www.hiltonfoundation.org/foster-care-and-juvenile-justice>

⁵ Center for Children and Youth Justice. (2012). Facts about child welfare and juvenile justice in Washington State. Retrieved September 10, 2013 from <http://www.ccyj.org/uploads/publications/Issues%20fact%20sheet-rev.pdf>

While we strongly support appropriate access to medications, we also believe that this report underscores an inherent and fundamental challenge in our Medicaid system around access to adoption competent mental health services.

Medicaid Challenges Impacting Children and Youth in Foster Care

As you know, children and youth in foster care and adopted from foster care face a number of challenges with Medicaid system:

- Many foster, adoptive and kinship families do not know what resources exist to help them identify and access quality mental health services in their states.
- When they access affordable mental health services, foster, adoptive and kinship families have no assurance that these services are adoption competent. They generally are given little or no choice in providers.
- There is currently no process for identifying clinicians with special adoption competent expertise, such as through a national certification or central registry of clinicians who have obtained adoption competency training.
- Medicaid clinical services are an “optional” not mandatory Medicaid service, meaning that States can choose to cover (or not) the services of psychologists, clinical social workers, outpatient mental health services, and substance abuse clinical services. As states are facing budget shortfalls, there is concern that states may opt to eliminate any optional services that they are currently covering.
- EPSDT is unevenly implemented across states, resulting in wide variances in terms of coverage of mental health services for children, particularly with respect to the delivery of treatment services following diagnosis and assessment. As one example, in California, access to EPSDT mental health services is inequitable for eligible youth across the state. Despite the alarming prevalence of treatable mental health problems among youth in foster care, only 60% of California children who enter foster care receive the medically necessary mental health services to which they are entitled. Treatment rates range from 6% in some counties to 30% in others, and from 7% to 19% among the state’s largest counties.⁶

One study by the National Institute of Mental Health found that nearly half (47.9 percent) of youth in foster care were determined to have clinically significant emotional or behavioral problems. Researchers at Casey Family Programs estimate that between one-half and three-fourths of children entering foster care exhibit behavioral or social competency problems that warrant mental health services.⁷ These children often find permanent families through adoption (ranging between 51,000 and 57,000 children each year). According to some reports, the

⁶ Alliance for Children’s Rights. (2012). *Safeguard children’s rights: Require adequate funding and accountability for EPSDT realignment*. Retrieved September 10, 2013 from http://www.youthlaw.org/fileadmin/ncyl/youthlaw/publications/yln/2012/02/EPSDT-Realign-RevV21-FINAL_1_.pdf

⁷ Landsverk, J. A., Burns, B. J., Stambaugh, L. F. & Rolls Reutz, J. A. (2006). Mental health care for children and adolescents in foster care: Review of research literature. *Casey Family Programs*. 9-30.

percentage of adopted children in residential treatment centers is reported to be between 30 and 40 percent and is even higher in centers specializing in attachment disorder treatment and developmental trauma treatment. Adoptive families are 2 to 5 times more likely to utilize outpatient mental health services, and 4 to 7 times more likely to seek care for their children in residential treatment centers.⁸

In a most recent report, clinical program directors from 59 residential treatment facilities responded to an online survey addressing the representation of adopted youth currently being served by their organization, the extent to which adoption issues are incorporated into clinical intake and treatment processes, and the training needs of clinical staff related to adoption. Results indicated that adopted youth are disproportionately represented in these programs. Although constituting slightly more than 2% of the U.S. child population, 25–30% of youth currently enrolled in these programs were adopted. The report concluded that to meet the needs of adopted youth in care, clinical and administrative staff of residential treatment programs need to become adoption clinically competent.⁹

Recommendations

I applaud your efforts to integrate health care and health-related social services to deliver family-centered care. I would further urge CMMI to play an active role in this work by promoting activities within states that address the clearly articulated barriers described above to accessing adoption competent mental health services, and by the GAO in reference to access to access to mental health services at all. Therefore, we suggest the following:

1. Effectiveness of adoption competent clinicians: We urge consideration of a pilot or demonstration project in a specified number of states/counties to enroll a target number of adoption competent clinicians (defined as successful graduates of nationally recognized adoption competent post graduate training programs that include a clinical case consultation component) as EPSDT clinical providers. Using random assignment of children, CMMI could evaluate the mental health outcomes for children in foster care with adoption goals who are served by these adoption competent clinicians through EPSDT and those who are not.
2. Effectiveness of clinical screening and testing tools by adoption competent clinicians: We urge consideration of a pilot/demonstration project in a certain number of states/counties testing the use of identified valid and reliable clinical screening and testing tools for designated conditions present in children in foster care, including those with adoption goals (such as attachment disorders, PTSD, developmental trauma) in conjunction with adoption competent clinical interventions by adoption competent

⁸ Smith, S. L. (2014, March). Keeping the promise: The case for adoption support and preservation. Donaldson Adoption Institute. Retrieved February 24, 2016, from <http://adoptioninstitute.org/publications/keeping-the-promise-the-case-for-adoption-support-and-preservation/>

⁹ See <http://dx.doi.org/10.1080/0886571X.2016.1175993>

- clinicians. The primary focus would be on a) children in foster care being prepared for adoption; and b) children adopted from foster care receiving adoption assistance/Medicaid coverage.
3. Impact of adoption competent treatment team on psychotropic drug use: We urge consideration of a pilot or demonstration project in a certain number of states/counties in which selected children in foster care with an adoption goal (experimental group) are assigned a treatment team consisting of a psychiatrist and an adoption competent clinician who coordinate clinical care for the child. CMMI would assess the impact on the usage levels of psychotropic medications as compared to children in foster care who do not have this treatment team (comparison group).

In general, C.A.S.E. recommends a stronger research focus on the impact of integrated care models on achieving positive mental health outcomes for children in foster care and children and youth adopted from the foster care system. Studies indicate that continuous mental health treatment is beneficial for children with histories of maltreatment and foster care.¹⁰ Medicaid managed care organizations (MCO's) with adequate networks of adoption competent mental health professionals, could demonstrate more positive outcomes for foster youth. Therefore, we suggest reforms that will enhance the positive outcomes for children and youth in foster care and those adopted from foster care, the majority of whom are Medicaid eligible.

I look forward to working with CMMI in the development of a pilot or demonstration that focused on improving access to, and quality of, the mental health services provided to children in foster care. Innovative strategies to improve the lives of our most vulnerable children should not be delayed – CMMI has the authority to begin the work of promoting innovative solutions in Medicaid that will improve the well-being of children in foster care and adopted from foster care by addressing barriers to adoption competent mental health services. C.A.S.E. has already begun the process of developing the adoption competent workforce needed to test effectiveness through its Training for Adoption Competency (TAC), through its direct services in Maryland, Virginia, and Washington, DC, and through its existing partnership with ACF on the National Adoption Competency Mental Health Training Initiative. We look forward to working with CMMI on the development of incentives to ensure that Medicaid plans appropriately refer children in foster care to adoption competent clinicians.

Thank you for this opportunity to comment.

Sincerely,



Debbie Riley, LCMFT, CEO
Center for Adoption Support and Education

¹⁰ Child Welfare Information Gateway. (2012). *Mental health*. Retrieved September 10, 2013 from <https://www.childwelfare.gov/systemwide/mentalhealth/>

TAC Sites

Catholic Community Services of Southern Arizona

Catawba County Department of Social Services, Hickory, NC

Children's Home Society of North Carolina

Commonwealth Catholic Charities, Richmond, VA

Foster & Adoptive Care Coalition, MO

Four Oaks, Cedar Rapids, IA

Georgia Division of Family and Children's Services

Lilliput Children's Services, CA

Lutheran Family Services of Nebraska, NE

Right Turn, NE

Lutheran Family Services of Virginia, Richmond, VA

Massachusetts Adoption Resource Exchange (MARE), Boston, MA

Mississippi Children's Home Services, Jackson, MS

Montgomery County Job and Family Services and the Alcohol, Drug Addiction and Mental Health Services (ADAMHAS) Board, OH

The Villages of Indiana

University of Connecticut School of Social Work, West Hartford, CT

University of Minnesota, Center for Advanced Studies in Child Welfare

University of Wisconsin – Milwaukee, Helen Bader School of Social Work

Center for Applied Research Solutions

To Whom It May Concern:

Please find comments submitted by the Center for Applied Research Solutions in response to the RFI on Pediatric Alternative Payment Model Concepts.

We appreciate this opportunity to inform CMS' development of the new health care service delivery model supporting children and youth.

Sincerely,



Center for Applied
Research Solutions.

RE: RFI on Pediatric Alternative Payment Model Concepts

Requesting Agency: Centers for Medicare & Medicaid Services (CMS)

To Whom It May Concern:

Please accept the following comments on behalf of the Center for Applied Research Solutions (CARS) in response to the CMS RFI on Pediatric Alternative Payment Model Concepts. CARS is a California-based 501(c)(3) nonprofit technical assistance (TA) provider. CARS leads national and state TA centers for mental health prevention, substance abuse prevention, and addressing mental health disparities.

A particular focus for CARS' work is promoting the mental health and wellness of children, youth, and young adults. Through initiatives that focus on these populations, we provide TA to a wide array of state and local mental health departments; tribes and tribal organizations; education agencies; parent and youth advocacy organizations; direct service providers; and other health and social services stakeholders. The work of these youth-serving entities demonstrates **a critical need and strong support for an alternative payment model to provide integrated behavioral and mental health and social services**. These RFI comments document efforts currently underway at the state, tribal, and local level to support the needs of youth with or at risk for mental health challenges, including discussion of funding challenges and opportunities.

Section I

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services?

There is strong and growing interest at the state and tribal level for a youth-focused care delivery model that supports youth and young adults of transitions age (late adolescence to early 20s). The transition age population is uniquely vulnerable to first episode psychosis and other serious mental illnesses, and has traditionally fallen through the cracks between the child- and adult-serving health and social services systems ([McGorry, 2011](#)). For youth and young adults with mental illness, **an integrated mental health system that treats transition-age youth across the natural course of development and includes seamless partnership between health and social service sectors is necessary to mitigate the consequences of untreated and undertreated mental illness**. Indicative of states' interest in serving this population is that in 2017, 32 state Title V Maternal and Child Health Block Grant Program agencies chose "Increase the percentage of adolescents with and without special health care needs who receive services necessary to make transitions to adult care" as a national performance measure ([McManus, 2017](#))

However, despite expanding recognition of their needs, many transition-age youth continue to experience a number of barriers to receiving adequate care, including those related to: cultural, linguistic, and developmental appropriateness of services; variable eligibility criteria by age; disconnected and uncoordinated models for service provision; and a dearth of linkages between physical and mental health care. Funding for peer support is a major area of need: Youth Peer Support is an evidence-based practice to support the transition to adulthood for young people with or at risk for mental illness, and can be effectively integrated into the system of care to complement primary care and other social services. However, inability to directly bill for peer support poses a major barrier to more widespread implementation.

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)?

Given the special developmental needs of the transition-age youth population, health and social service providers have sought innovative approaches to identify and refer youth with prodromal signs and symptoms of psychosis; to encourage early help-seeking; and to eliminate barriers to access and desirability of early intervention supports. Peer-to-peer supports—a heterogeneous set of strategies meant to provide social support before, during, and after treatment—have emerged as a complement to evidence-based psychosocial interventions (e.g., TIP, RENEW, PIER). Most states have included peer support as a covered service within their specialty mental health plans; however, in many cases, such support has to be tied to a discreet mental health goal, which creates barriers to supporting transition-age youth. In addition, counties may struggle to include peer support in their systems of care due to the limitations of existing service-coded positions ([CASRA, 2014](#)).

States are using Healthy Transitions and other funding to explore **financing mechanisms to implement and sustain youth peer services including Medicaid**, grant funds, and block grant dollars. Healthy Transitions is a SAMHSA-funded initiative launched in 2014 to improve access to treatment and support services for youth and young adults ages 16-25 that either have, or are at risk of developing, a serious mental health condition. The 17 state and tribal Healthy Transitions grantees, and their local laboratories, build upon the systems of care approach to engage transition-age youth and young adults in service planning, program development, and lived-experience advocacy across the child- and adult-serving systems.

Specific ways that Healthy Transitions grantees have funded peer support include:

- In 2014, Oklahoma updated its billing code for peer recovery support specialists (PRSS), expanding the age eligibility criteria for peer support services payment to ages 16-25. As there is no national training curriculum established for youth peer support, the state Healthy Transitions Youth Coordinator collaborated with other peer coordinators to develop a supplemental training curriculum for peer support.

Peers from the Oklahoma Healthy Transitions sites were the first participants to be trained in the new curriculum. The curriculum will later be offered to PRSS in the rest of the state.

- Maryland Healthy Transitions is working closely with the University of Maryland's Evidence-Based Practice Center and the University of Massachusetts in the development and implementation of a tailored, multi-component, and value-based service delivery model tied to fidelity for transition-age youth and young adults. The service delivery model includes a fulltime Outreach and Education Worker in each local learning lab to provide community education around early signs of serious mental illness and support linkages to services and supports as needed.
- Connecticut STRONG, the state's Healthy Transitions program, collaborated with Advocacy Unlimited to offer an 80-hour Peer Specialist Certification course to young adults to help cultivate the Peer Support workforce. The first class had 14 young adult graduates. CT STRONG supports a statewide, peer-run leadership group that informs budget and program decision-making regarding health and social services for transition-age youth.

Section II

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?

Individuals who are 16-25 years old are particularly vulnerable to developing a mental illness or substance use disorder, and are at a relatively high risk of suicide. Healthy Transitions builds upon systems of care values and principles, tasking grantees with implementing infrastructure between the state and local levels that promotes cross-systems collaboration for youth-driven, family-guided, home- and community-based supports. Reflecting the variability in implementation readiness, states continue to need support with the conceptual understanding and visioning of models for partnering and connecting systems and services. In addition, support is needed to manage services, funding, and teams across state and local levels. Examples of service integration activities currently underway at Healthy Transitions sites include:

- Kentucky TAYLRD works closely with the KY Partners for Youth Transition (KPYT) and the State Interagency Council (SIAC) to strengthen partnerships between agencies and encourage youth involvement at the state-level. The state hosted the first TAYLRD conference for young people, family members, and service providers in Year 2. This conference attracted individuals across agencies and fields including juvenile justice, education, the court system, child welfare, and behavioral health. Over 200 attendees participated in workshops geared towards improving outcomes for young people.
- Rhode Island partners closely with SAMHSA-funded State Youth Treatment Planning grant team, a substance use disorder treatment initiative, to map state level funding that supports mental health, substance use disorder, and

co-occurring disorder services. This multi-initiative effort includes coordination by the Policy Director of the RI Governor's Children Cabinet for development of joint finance plans guiding effective and sustainable systems.

- Utah Healthy Transitions is exploring the development of an Office of Youth-in-Transition at the Department of Human Services to further institutionalize services for youth of transition age across state department divisions. Infrastructure to support coordination and collaboration has also included investigation of the use of Medicaid funding to sustain the program beyond federal funding.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

b. What potential exists for increased partnership for provision of home and community-based services?

For transition-age youth, the positive effects of mental health-related interventions are maximized when young people remain in their natural and familiar settings (e.g., schools, homes, neighborhoods). Community-based service systems strive to avoid unnecessary stress for young people with mental health concerns and to retain their critical bonds with important others, such as family members, friends, and school personnel. Mental health researchers have recorded gains in developing and demonstrating the effectiveness of various home- and community-based interventions, including reductions in disruptive behavior and emotional distress; attenuation of risk factors associated with drug and alcohol use; and increases in adaptive, pro-social behaviors ([Garland, 2013](#)). Intensive care coordination with service models tied to fidelity includes: assessment and service planning; accessing and arranging services; coordinating multiple services; access to crisis services; assisting with meeting basic needs; youth and family advocacy; and progress monitoring.

- The Pennsylvania Healthy Transitions grant community has created a Bridging the Gaps (BTG) Committee to integrate services for young adults of transition age. BTG is looking at key transition challenges and how they could better coordinate care and enhance collaboration to try and problem solve the identified challenges. The committee includes state agencies, programs addressing first episode, and the provider community.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers?

To support transition-age youth across primary care, mental health, and social services agencies, Healthy Transitions emphasizes the codifying of partnerships between traditionally siloed child- and adult-serving systems. State and tribal grantees are

establishing MOUs; training programs; streamlined eligibility for private or state-funding insurance policies; data-sharing agreements, dashboards, and databases; and other infrastructure to build partnerships that function more seamlessly for youth healthcare recipients.

- *Data sharing:* In Oklahoma, as in several other Healthy Transitions states, a data-sharing MOU is in place between the Department of Human Services, the Health Care Authority, the Department of Corrections, and the Office of Juvenile Affairs. Massachusetts YouForward worked with the UMass Medical School evaluation team to create a database in REDcap that tracks Individual Program Plans (IPPs) and local evaluation data to improve information-sharing across partners.
- *Contracts and Agreements:* New Mexico Healthy Transitions has established MOUs with multiple organizations and enacted several state policy changes to improve infrastructure for mental health systems. New Mexico also developed “Collaboration Guidelines” (CG) as an informal, non-binding guidance document shared between collaborative partners. It provides written documentation of the shared goals, objectives, and the scope of the relation between the partners.

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished?

Parity protection legislation has allowed more transition-age youth access to affordable mental health services ([Beronio, 2010](#)). However, challenges persist for connecting eligible youth to appropriate services. Challenges include coordinating state policy with local efforts to reduce barriers to care, including eligibility hurdles; identifying enrollment barriers that represent health disparities, including linguistic issues; and referral and access gaps between services and systems, such as a dearth of providers who are trained to meet the specific mental health needs of youth and young adults. States are continuing to build capacity to align program and eligibility requirements in a developmentally appropriate, culturally and linguistically competent manner to meet the needs of transition-age youth.

- Through Healthy Transitions, the New York State Psychiatric Institute's Center of Excellence for Cultural Competence and its Division of Gender, Sexuality and Health are partnering with the NY Association of Psychiatric Rehabilitation and Youth Power! to develop a peer specialist training module for OnTrackNY programs. The grant community and local partners have been advocating for less burdensome implementation of a new Medicaid regulation that requires all mental health clients to meet with their assigned care manager before being able to access any mental health services. Young adults 21 and older who meet criteria for OnTrackNY are eligible for an enriched benefit package called Health and Recovery Plans (HARPs).
- Wisconsin's Healthy Transitions team is actively working under a Comprehensive Community Service (CCS) Model which is a system of community-based, Medicaid- certified psychosocial rehabilitation programs. Each local CCS

program is required to have a Coordination Committee that reviews all policies, practice efforts, and program monitoring. Each committee is required to engage youth and families as key stakeholders. At state level, they are actively developing a Youth and Young Adult Advisory Committee to advise on state level policy and practice implications.

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<http://www.gottransition.org/resourceGet.cfm?id=431>

Center for Autism and Related Disorders

See attachment for comments.



Center for Autism
and Related Disorders



April 3, 2017

Centers for Medicare and Medicaid Services
Department of Health and Human Services

Re: Response to Center for Medicare and Medicaid Innovation Request for Information on Pediatric Alternative Payment Model Concepts

To whom it may concern:

The Center for Autism and Related Disorders (CARD) submits these comments in response to the above-referenced Request for Information. CARD is the world's largest organization treating autism spectrum disorder (ASD) using the principles of applied behavior analysis (ABA) and the nation's third largest non-governmental organization contributing to autism research. With over 125 locations, CARD provides services throughout the United States and at international locations in Africa, Asia, and the Middle East, employing a workforce of over 2,000 dedicated professionals.

CARD commends CMS for its effort to ensure that services for Medicaid's child and adolescent population are effective and reflect and facilitate best practices. The need for better integration of general medical and specialty care, particularly behavioral health treatment, is well-documented.¹ For pediatric services funded through Medicaid's Early and Periodic Screening, Diagnostic and Treatment (EPSDT) services, it is critical to consider the cost-effectiveness of such services across the lifespan. All too often, *innovation* is a euphemism for a model that incentivizes the rationing of care, rather than maximizing cost-effectiveness across the lifespan through effective, patient-centered care. CARD is hopeful that CMMI's focus on innovation will encourage legitimate innovation that prioritizes the values of patients and their families, which has been demonstrated to coincide with cost-effectiveness. That is, the services valued by the patient are routinely those services that are most cost-effective to taxpayers².

Given the complexity of the pediatric patient population, we agree that CMMI should increase stakeholder involvement to best understand the individual needs, preferences, and care choices of the pediatric population to align new payment models with care that is valued by patients and their families value. Autism treatment is a great example of medically necessary treatment that benefits from increased patient and family participation throughout the model development process to improve the impact of value-based payment models by yielding demonstrations that put patient safety, care needs, and preferences first. Therefore, we strongly support the development of a stakeholder engagement infrastructure within CMMI, so its emerging models meet patient-centeredness criteria as called for by its statute.³ For example, we believe that a Patient Advisory Panel including families and child advocates would ensure its pediatric models are truly patient-centered. We would also like for CMMI to follow a consistent process to seek input from patients and caregivers both early in the development of new demonstrations and

¹ Economic Impact of Integrated Medical-Behavioral Healthcare. Milliman, Inc., 2014;

² Ganz, M. (2007) The Lifetime Distribution of the Incremental Societal Costs of Autism, *Arch Pediatric Adolescent Medicine*, 161: 343-349.

³ Sec. 1115A. [42 U.S.C. 1315a]. Social Security Laws. Center for Medicare and Medicaid Innovation Established. Available at: https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm. Accessed on October 21, 2016.

throughout the implementation and evaluation process. We are very pleased that CMMI is seeking input through this RFI, and look forward to this being a continued dialogue during the development of new models of care and payment. With improved transparency of model designs and evaluation results, our community can assist the agency in determining what works, what does not work, and how to improve models in the future as partners with a shared interest in achieving better health outcomes for children.⁴

CARD's mission includes a social justice initiative to provide culturally and linguistically appropriate services across all demographics. As such, CARD contracts with both public and private funding sources, including commercial insurers, Medicaid, Medicaid managed care organizations, TRICARE, and public school districts. On July 7, 2014, CMS published an informational bulletin clarifying that autism treatment is a benefit under Early and Periodic Screening, Diagnostic, and Testing (EPSDT)⁵. CARD echoes the comments of Mental Health America in urging CMS to consider the significantly improved health trajectories of the children who receive the medically necessary treatment they require early in life. Some states, such as California and Oregon, responded promptly to the CMS bulletin and began covering autism treatment for their Medicaid population under 21 years of age within a few months of the bulletin's publication. In those states, we anticipate large savings to taxpayers as children who may have required services across their lifespan are mainstreamed in public education with little or no support and grow up to become productive, taxpaying citizens. In other states, such as Texas and New York, which have refused to comply with the CMS bulletin, the outlook for children who are deprived of evidence-based autism treatment early in childhood is not as bright, and the anticipated cost across the lifespan of a child with autism who is deprived of medically necessary treatment is more than 15 times the cost of providing medically necessary treatment in a timely manner.

Thank you, in advance, for the time you will invest in the consideration of these comments. Should you have any questions or concerns, please do not hesitate to contact me via email at

Respectfully submitted,



Julie Kornack
Director of Public Policy

⁴ See http://www.pipcpatients.org/uploads/1/2/9/0/12902828/pipc_cmml_white_paper_-_a_roadmap_to_increased_patient_engagement_at_cmml.pdf

⁵ Center for Medicaid and CHIP Services. Informational Bulletin, Clarification of Medicaid Coverage of Services to Children with Autism, July 7, 2014 (hereinafter "CMS Informational Bulletin"), available at <http://www.medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-07-07-14.pdf>.

Center for Consumer Engagement in Health Innovation

Dear Dr. Conway,

We appreciate the opportunity to provide feedback on the Request for Information (RFI) on Pediatric Alternative Payment Model Concepts.

Community Catalyst is a national non-profit advocacy organization dedicated to quality affordable health care for all. Since 1998, Community Catalyst has been working to build the consumer and community leadership required to transform the American health system. The Center for Consumer Engagement in Health Innovation focuses on health system transformation and bringing the consumer experience to the forefront of health. The Center works directly with consumer advocates to increase the skills and power they have to establish an effective voice at all levels of the health care system. We collaborate with innovative health plans, hospitals and providers to incorporate the consumer experience into the design of their systems of care. We work with state and federal policymakers to spur change that makes the health system more responsive to consumers, particularly those that are most vulnerable.

We welcome CMS's effort to make a deeper financial investment in pilots for innovative approaches to children's health. This is an area of tremendous importance as care provided early on can change the trajectory of a child's life. Medicaid and the Children's Health Insurance Program (CHIP) cover more than 45 million children. Kids are not little adults; since they are constantly growing and changing, so are their physical and behavioral health care needs. Therefore, it is important to design care models that focus on the specific needs of children and youth, rather than relying on systems designed for adults. It is further necessary to ensure that models take into account the impact of multigenerational health needs and not address children in isolation.

Any pediatric integrated care system must prioritize and reward prevention. The majority of children's health care is prevention-oriented – yet its return on investment is long-term and difficult to measure. As noted in the RFI, outcomes are more likely to be determined by a child's environment and access to health-adjacent services such as healthy housing, food access and robust education. A final consideration is that children's developmental needs change across the lifecycle and may require different systems approaches with different metrics and cost-savings approaches. Any innovation or systems approach must not consider a child in isolation but rather take into consideration a multitude of factors that influence a child's health opportunity. Only through high-level coordination across social service sectors and seamless local-level implementation can children be assured the greatest opportunity to develop into strong, productive adults.



Center for
Consumer Engagem



April 7, 2017

Patrick Conway, MD, MSc
Deputy Administrator for Innovation and Quality and Chief Medical Officer
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Submitted electronically to:

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Conway,

We appreciate the opportunity to provide feedback on the Request for Information (RFI) on Pediatric Alternative Payment Model Concepts.

Community Catalyst is a national non-profit advocacy organization dedicated to quality affordable health care for all. Since 1998, Community Catalyst has been working to build the consumer and community leadership required to transform the American health system. The Center for Consumer Engagement in Health Innovation focuses on health system transformation and bringing the consumer experience to the forefront of health. The Center works directly with consumer advocates to increase the skills and power they have to establish an effective voice at all levels of the health care system. We collaborate with innovative health plans, hospitals and providers to incorporate the consumer experience into the design of their systems of care. We work with state and federal policymakers to spur change that makes the health system more responsive to consumers, particularly those that are most vulnerable.

We welcome CMS's effort to make a deeper financial investment in pilots for innovative approaches to children's health. This is an area of tremendous importance as care provided early on can change the trajectory of a child's life. Medicaid and the Children's Health Insurance Program (CHIP) cover more than 45 million children. Kids are not little adults; since they are constantly growing and changing, so are their physical and behavioral health care needs. Therefore, it is important to design care models that focus on the specific needs of children and youth, rather than relying on systems designed for adults. It is further necessary to ensure that models take into account the impact of multigenerational health needs and not address children in isolation.

Any pediatric integrated care system must prioritize and reward prevention. The majority of children's health care is prevention-oriented – yet its return on investment is long-term and difficult to measure. As noted in the RFI, outcomes are more likely to be determined by a child's environment and access to health-adjacent services such as healthy housing, food access and robust education. A final consideration is that children's developmental needs change across the lifecourse and may require different systems approaches with different metrics and cost-savings approaches. Any innovation or systems approach must not consider a child in isolation but rather take into consideration a multitude of factors that influence a child's health opportunity. Only through high-level coordination across social service sectors and

seamless local-level implementation can children be assured the greatest opportunity to develop into strong, productive adults.

General Comments

Ensure Comprehensive Coverage Through Medicaid

We urge CMS to work to ensure that Medicaid financing meets the needs of children, families and state budgets. Medicaid is a multi-generational program set up to protect our most vulnerable consumers at any stage in their lives. [Studies show](#) that children who have access to continuous health services lead healthier, more productive lives over the long term.¹ Medicaid and the Children's Health Insurance Program (CHIP) provide health insurance coverage to millions of children and maintaining this coverage is a vital first step in advancing any innovative payment and care delivery models for children. Under the current Medicaid program, children have special protections to make sure they have access to the health care they need. These protections include no cost-sharing and access to comprehensive benefits, including Early Periodic Screening, Diagnosis and Treatment (EPSDT), which provides the full range of services children need to help them develop and grow. Any successful innovations, including innovations to pediatric care, rely on a strong Medicaid program, so ensuring the continued state-federal partnership is a necessary first step in improving outcomes and lowering costs. Alongside Medicaid, the Children's Health Insurance Program (CHIP) plays an important role in securing coverage for children in families where coverage is just out of reach. CHIP also directs resources to outreach and enrollment and to pediatric quality research and implementation. Together, Medicaid and CHIP serve as the backbone of care innovation for children.

Pediatric alternative payment models (APM) should meet key principles to ensure that children have access to high quality care and health opportunity at a lower cost. Below we outline principles for pediatric APM approaches to innovation:

Principles for Pediatric Alternative Payment Models

1. Include A Two (Or More) Generation Approach

We urge CMS to consider developing pediatric payment and delivery system reform models that address the needs of two or more generations so that these models best address the needs of children and their families. Studies show that toxic stress and adverse childhood experiences have lifelong effects including increased risk for cardiovascular disease, various forms of cancer and depression.² Ultimately, exposure to high levels of stress reduces a child's ability to build resilience – or the ability to overcome hardship. Building resilience is not unique to children, but it is particularly important for children to thrive and become healthy adults. Although the causal relationship between economic hardship and adversity is not fully understood, there is a strong relationship. Poor children are more likely to experience adversity than higher income children. There is also a distinct relationship between race and ethnicity and adversity. Black and Hispanic children are more likely to experience adversity than their white peers, and these disparities persist at the highest income levels.³

Given the significant impact of adversity on the healthy development and long-term health outcomes of both parents and children, good science and common sense would dictate that any pediatric payment and service delivery models should aim to have positive impacts on both parent and child. Despite the

¹ Chester, Alisa and Alker, Joan. (2015). Medicaid at 50: A Look at the Long-Term Benefits of Childhood Medicaid. Georgetown Center for Children and Families. Retrieved from http://ccf.georgetown.edu/wp-content/uploads/2015/08/Medicaid-at-50_final.pdf.

² Shonkoff, JP. et al. (2012). The Lifelong Effects of Early Childhood Adversity and Toxic Stress. American Academy of Pediatrics. Retrieved from <http://pediatrics.aappublications.org/content/129/1/e232.full>.

³ Slopen, N. et al. (2016). Racial disparities in child adversity in the U.S.: Interactions with Family Immigration History and Income. American Journal of Preventive Medicine. Retrieved from http://scholar.harvard.edu/files/davidrwilliams/files/child_adversity.pdf

challenges of adversity, and resulting toxic stress, research indicates that interventions, such as those that promote a supportive, responsive relationship between parent and child, can reverse the damaging effects of toxic stress. For example, some counties in Washington state incorporated the Filming Interactions to Nurture Development (FIND) program, a video coaching program that helps support positive interaction between caregivers and parents, into their home- visiting programs. Evaluations found that participation was associated with positive outcomes including reductions in parenting stress, increased father involvement, and improvement in child behavior problems.⁴

Interventions that help adults build caregiver skills, relieve economic stress by focusing on job training and financial literacy, and support the health and nutritional needs of pregnant women have the ability to improve children's health outcomes.⁵ However, there are several barriers to implementing multi-generational interventions through a pediatric alternative payment model. Parents and other adult caregivers often receive health care from different providers than the children they care for and in some cases are covered by different insurers. In implementing new pediatric alternative payment models, we encourage CMS to think about strategies for aligning with programs and models that also reach caregivers. For example, CMS could find ways to incorporate pediatric practices into existing models, such as the Comprehensive Primary Care Plus (CPC+) model, or explore ways to share "joint accountability" with adult primary care providers on certain targeted adult health measures.

2. Ensure Alternative Payment Models Are Tailored the Unique Needs of Children

By and large, children are healthy, low-cost consumers. For most children and their families, health care is simply prevention; children follow a schedule of well-visits from birth into adolescence with few bumps in the road. Yet for children who do have health challenges, the journey can be complex involving multiple diagnoses, providers and coordination challenges. For example, children who face adversity are more likely to confront mental health challenges and chronic conditions like asthma. Children facing complex medical conditions such as cystic fibrosis or sickle cell have a range of ongoing needs that require pediatric appropriate case management. Due to the heterogeneity of children with special health care need, approaches to bringing down cost while increasing quality must be designed with these challenges in mind. In this effort, CMS should prioritize **risk adjustment** to protect children with special health care needs from cherry picking and **provider compensation designs** to ensure that payment incentives are aligned with chronic care needs and long terms goals including important preventive care such as vaccine administration.

We urge CMS to implement pediatric alternative payment models with these unique circumstances in mind. The goal of these models should be to improve care for children, particularly those with special health care needs, so it is important that payment structures are not designed in a way that would disincentivize providers from enrolling higher risk kids, increase out of pocket costs for families, or prevent children from accessing specialty providers they need to help them manage complex health conditions. Specifically, we ask CMS to consider recommendations advanced by the AAP on ACOs including⁶ the need for a pediatric risk-adjustment methodology for special needs children and adequate reimbursement for additional effort required to care for this subpopulation. For example, children with special health care needs require intense care coordination and case management by pediatric-trained case management providers that are able to address the needs of both parent and child. Compensation systems must also recognize and adequately pay for other special elements of pediatric care, such as the administration of vaccines. Successful models include Rhode Island PCMH Kids Initiative that provides supplemental payments to practices that are working to transform into patient-centered medical homes.

⁴Center on the Developing Child at Harvard University (2016). Filming Interactions to Nurture Development. Retrieved from: <http://developingchild.harvard.edu/innovation-application/innovation-in-action/find/>

⁵Center on the Developing Child at Harvard University. (2016). Best Practices to Breakthrough Impacts: A Science-Based Approach to Building a More Promising Future for Young Children and Families. Retrieved from <http://www.developingchild.harvard.edu>.

⁶Accountable Care Organizations (ACOs) and Pediatrician: Evaluation and Engagement. American Academy of Pediatrics. Available at: www.aap.org/enus/professional-resources/practice-support/Pages/Accountable-Care-Organizationsand-Pediatricians-Evaluation-and-Engagement.aspx

Payments are intended to build capacity in practices to coordinate care, reporting metrics and reduce emergency room visits. In Arkansas, Medicaid provides some episodic based payments for attention-deficit/hyperactive disorder (ADHD), asthma and other disorders. These approaches accommodate for pediatric specific challenges.⁷ We also ask that CMS consider including dental services within alternative payment models to promote innovations aimed at the prevention of oral disease⁸, which has had promising results in Oregon.⁹

Pediatric Alternative Payment Models must also recognize that unique position of pediatric providers. As mentioned previously, many pediatric providers are dealing with populations that are, by and large, quite healthy. These providers are unlikely to achieve significant cost savings in the short term or see significant improvements in traditional measures of health outcomes. We hope CMS will use this opportunity to test new models that amplify the importance of pediatric providers in emphasizing prevention and community linkages to address the social determinants of health. We suggest that CMS look at lessons learned from trying to incorporate other primary care providers into alternative payment models, such as the CPC+ model. For example, CMS could consider implementing bonus payments or care coordination fees rather than two-sided risk models.

Finally, we note that some of the savings from these models could be longer-term and lie outside of what is traditionally counted as a health care expenditure. Therefore, assessment of the scope of savings should look both longer and broader to detect improvements.

3. Ensure Robust Child and Family Engagement

Strong consumer engagement mechanisms are necessary for successful payment and delivery reforms. Increasing evidence points to the importance of consumer empowerment and engagement as a means of quality improvement and cost savings.¹⁰ Consumer and patient voices provide a vital perspective for ensuring new delivery models are patient-centered, culturally competent, and meet the specific needs of the community. This is particularly important in the case of pediatric alternative payment models, where integrating caregivers and family members and making linkages to community resources and other social services will be key to a successful model. As CMS considers next steps for advancing state based multi-payer reforms, we urge CMS to make consumer engagement at all levels an integral piece of pediatric alternative payment models.

We ask that CMS make consumer engagement a required element of any pediatric alternative payment models it develops. Engagement needs to be more than simply informing consumers or hosting focus groups. Children and their families should be engaged collaboratively to design important aspects of the delivery of care at the clinical, health care organizations, and state and federal policy-making levels. For example, in Massachusetts, Family Voices, a grassroots organization that advocates for children with special health care needs, was funded to provide family engagement support on the Massachusetts' Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Grant. This

⁷ Bailit Health. (2016). Value-Based Payment Models for Medicaid Child Health Services. Report to the Schuyler Center for Analysis and Advocacy and the United Hospital Fund. Retrieved from: <https://www.uhfnyc.org/assets/1503>

⁸ Vujcic, Nasseh (2013) Accountable Care Organizations Present Key Opportunities for the Dental Profession. Retrieved from: file:///C:/Users/hhendrickson/Downloads/HPIBrief_0413_2.pdf

⁹ Oregon's Health Authority (2017) Oregon's Health System Transformation: CCO Metrics 2016 Mid-Year Report. Retrieved from: http://www.oregon.gov/oha/Metrics/Documents/2016_Mid-Year_Report.pdf

¹⁰ See, e.g., Ahn S, Basu R, Smith ML, Jiang L, Lorig K, Whitlaw N, Ory MG. The impact of chronic disease self management programs: healthcare savings through a community-based intervention. BMC Public Health. 2013; 13:1141; Carman KL, Dardess P, Maurer M, Sofaer S, Adam K, Bechtel C, Sweeney J. Patient and family engagement: a framework for understanding the elements and developing interventions and policies. Health Aff. 2013; 32(2): 223-231. Greene J, Hibbard JH, Sacks R, Overton V, Parrotta CD. When patient activation levels change, health outcomes and costs change, too. Health Aff. 2015; 34(3): 431-437.

work included creating a family engagement guide and a tool kit to help pediatric practices form Patient and Family Advisory Councils (PFACs).¹¹

We also encourage CMS to look at examples of how other health system transformation efforts, such as the dual eligible demonstration projects, have utilized consumer engagement. For example, Massachusetts established a statewide stakeholder Implementation Council with a requirement for 51 percent consumer and consumer advocate membership for its One Care demonstration for dually eligible individuals with disabilities, and built advocacy into its care model, such as through the inclusion of an independent long-term services and supports coordinator from community-based organizations.¹²

This engagement won't be successful without sufficient resources. Dedicated funding and training for consumer engagement activities is absolutely necessary for ensuring pediatric alternative payment models are patient-centered and designed to meet the health needs of the diverse populations these efforts will impact. Community Catalyst regularly speaks with consumer health advocates in 40 states across the country. These advocates are in direct contact with consumers in their state and, accordingly, are able to provide an accurate perspective on the issues consumers face in accessing health care on a daily basis. We've repeatedly heard from our advocates that one of the largest barriers they face to effective consumer engagement is a lack of resources.¹³ The Massachusetts Implementation Council mentioned earlier is successful in part because of the associated resources provided. The state provides trainings and physical accommodations, as needed, to council members, pays stipends to consumer members for attending meetings and doing preparatory work, and provides reimbursement for travel expenses.¹⁴

4. Addresses Health Equity

Health disparities exist when certain populations and demographic groups suffer from illnesses or morbidities at rates disproportionately larger than the general population. Health care disparities, on the other hand, occur when certain groups have disproportionately poor access to affordable care, including a lack of insurance or the means to afford insurance or care, as well as poor access to providers (e.g. no local hospital) or transportation. These two forms of disparities are intrinsically linked and often align to create populations that have both poor health and less access to care that is affordable and of high quality. It is worth noting that health disparities exist in both medical and dental care.¹⁵

A pediatric alternative payment model that successfully begins to address health equity and influence the social determinants of health will require several components. We urge CMS to improve data collection and metrics on disparities. In order to effectively address health and care disparities, stakeholders must have reliable, evidence-based and consistent metrics for evaluating disparities and measuring progress towards greater equality. Data should be collected by gender, race, ethnicity, sexual orientation, gender identify, preferred languages and disability status. We further encourage CMS to consider incorporating socioeconomic risk adjustments in payment reform, ensuring that all providers are culturally competent, reallocating resources to address social determinants of health, and promoting a more diverse workforce by integrating trusted community-based providers such as Community Health Workers. We encourage CMS to look to existing models that aim to address the social determinants of health for vulnerable

¹¹ Ananad, Shikah. (2015). NICHQ's CHIPRA Massachusetts Medical Home Initiative. Engaging Patients.Org. Retrieved from: <http://www.engagingpatients.org/?jqstories=nichqs-chipra-massachusetts-medical-home-initiative>

¹² Massachusetts Executive Office of Health and Human Services. Frequently Asked Questions about the Implementation Council. Retrieved from: <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/state-fed-comm/implementation-council-faq.pdf>

¹³ Wiitala, K, Metzger, M, and Hwang, A. (2016). Consumer Engagement in Medicaid Accountable Care Organizations: A Review of Practices in Six States. Community Catalyst. Retrieved from:

<http://www.communitycatalyst.org/resources/publications/document/ConsumerEngagementMedicaidACOs.pdf?1474915709>

¹⁴ Dembner, A and Regan, C. (2013). A Seat at the Table: Consumer Engagement Strategies Essential to the Success of State Dual Eligible Demonstration Projects. Community Catalyst. Retrieved from: <http://www.communitycatalyst.org/doc-store/publications/a-seat-at-the-table-duals-consumer-engagement.pdf>

¹⁵ Centers for Disease Congtrol. (n.d.). Retrieved April 6, 2017, from https://www.cdc.gov/oralhealth/oral_health_disparities/

children and children with special health care needs. For example the Collaborative Care Coordination and Consultative Model for Complex Kids (4c) program in Massachusetts provides children with complex medical conditions with a team of providers, including a nurse care coordinator and social worker, and a comprehensive care plan.

5. Streamlines Eligibility & Enrollment in Medicaid and Social Services

A successful pediatric alternative payment model will require that patients have uninterrupted access to Medicaid coverage and seamless enrollment processes for other programs and social services that can improve their health. Well-coordinated care that improves health outcomes and lowers costs is far easier to provide when children aren't churning on and off of programs or constantly going through eligibility determinations for various services that are integral to their care plan. Research shows that people who churn on and off different sources of health coverage are less likely to have regular sources of care and more likely to experience treatment delays.¹⁶

We urge CMS not to impede eligibility and enrollment in Medicaid for low-income children and families. We are concerned by proposals to eliminate presumptive eligibility for parents; require burdensome steps for immigrant families to enroll in Medicaid; require states to redetermine eligibility for the expansion population every 6 months; and lower mandatory eligibility for kids to 100% FPL. Measures such as these make it harder for low-income children and families to enroll in coverage, increase churn, and fragment families across different coverage options. This goes against CMS's goal of aligning eligibility and enrollment and ensuring kids and families have seamless access to well-coordinated care.

We also urge CMS to work with other state and federal agencies to identify opportunities to streamline eligibility and enrollment between Medicaid and other social services, for example, combining program applications, using electronic data to auto-enroll individuals across programs, streamlining definitions and eligibility requirements, and aligning the timing of renewals or instituting automatic renewals. We also encourage CMS to explore policies that reduce churn in program, for example reducing reporting requirements and lengthening certification periods.

6. Uses Pediatric-Specific Quality Measures

Pediatric quality research has lagged behind quality improvement efforts for adults. Over the past decade, key investments in pediatric quality measurement have led to improvements across states but more work is needed. As such, Medicaid and CHIP investments will continue to play an important role in advancing the pediatric quality measurement field. As CMS considers designing opportunities for states to innovate and advance pediatric integrated care, CMS should look to the CHIPRA quality work to inform how alternative payment models integrate and leverage pediatric quality measures to improve systems and health outcomes for children. In addition, CMS should review emerging pediatric Accountable Care Organizations' (ACO) key lessons in implementing and using pediatric quality measures.

Quality measures should draw upon multiple domains over the lifecourse of a child and should be diverse, capturing quality across structure, process and outcome. To date, the Child Core Set (CCS) focuses heavily on process measures and does not comprehensively capture health outcomes.¹⁷ The Child Core Set should be reevaluated and revised regularly to build out the pediatric set and CMS should continue to add measures from the Pediatric Quality Measures Program (PQMP) that can help develop a comprehensive approach to pediatric quality measurement. Of note, the CHIPRA funded work (6 projects underway) expires September 2017. This funding should be extended in order to sustain and advance the pediatric quality measurement work.

¹⁶ Cardwell, Anita. (2016). Revisiting Churn: An Early Understanding of State-Level Health Coverage Transitions Under the ACA National Academy for State Health Policy. Retrieved from: <http://nashp.org/wp-content/uploads/2016/08/Churn-Brief.pdf>.

¹⁷ National Quality Forum. (2016). Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP. Retrieved from: http://www.qualityforum.org/Publications/2015/08/Strengthening_the_Core_Set_of_Healthcare_Quality_Measures_for_Children_Enrolled_in_Medicaid,_2015.aspx

Three important themes emerge as CMS contemplates alternative payment model concepts for children and quality measurement:

Pediatric quality measurement work should continue to be a priority for CMS:

- Medicaid/CHIP leads pediatric quality measurement and plays an important role in developing and institutionalizing pediatric measures to improve health outcomes and reduce health disparities. Current Medicaid/CHIP metrics are an important starting point to ensure that pediatric integrated models of care support children with special health care needs. CMS should continue to invest and leverage state work to inform measurement development, revision and inclusion in the Child Core Set. Further, this work should inform and serve as a foundation for any alternative payment model.
- Despite progress, high priority gaps exist. As summarized in the National Quality Forum (NQF), metrics are needed for key areas of pediatric health and development. These include but are not limited to: pediatric care coordination for home and community based services; social services connections; cross-sector measures around accountability for education and criminal justice systems; access to trauma-informed care; exposure to Adverse Child Events (ACEs); out of pocket costs; patient reported outcomes; and duration of health insurance over a 12-month period.¹⁸
- Medicaid/CHIP programs in states are working to identify measures that align with the long-term needs of children and their well-being:
 - Any measurement approach should include short-term, intermediate and long-term goals that are monitored by Medicaid and made available to the public and to researchers.
 - Measures should ensure that children with special health care needs receive high quality care and are not harmed by incentives to reduce costs.
 - All data should stratify by race and ethnicity in order to more comprehensively understand how policies, programs and interventions affect populations.
- As CMS contemplates APM and/or invests in accelerator programs and other innovation programs as a pathway to increasing the quality of care for consumers at a lower cost, they should require grantees and programs to address the impact of quality measurement on pediatric populations. This is important to ensure that adult measures are not inappropriately being used to chart success for pediatric populations. The distinction is also important as we track and monitor alignment of the measures across the Child and Adult Core Sets, especially for high-impact conditions like reproductive and behavioral health—here a two-generation approach becomes increasingly relevant as we work to ensure long term health outcomes for children as they grow into adults.

Pediatric quality measurement should be actionable and advance health outcomes for disproportionately affected populations:

- CMS should work to include more family-focused metrics that capture patient experience, allowing providers to respond to these measures to improve care delivery. This is a gap at both the national and state levels—as recent as this week, researchers published findings in *Pediatrics* highlighting the need for continued monitoring of institutions’ engagement of families in the care process particularly around preventing mistakes and reporting concerns.¹⁹
- As noted by the American Academy of Pediatrics (AAP), the current set of measures relies on administrative data and/or calls for abstracted data from chart review.²⁰ This work is time

¹⁸ National Quality Forum. (2016). Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP. Retrieved from: http://www.qualityforum.org/Publications/2015/08/Strengthening_the_Core_Set_of_Healthcare_Quality_Measures_for_Children_Enrolled_in_Medicaid,_2015.aspx

¹⁹ Toomey, Sarah L., et. al. (2017). Variation in Family Experience of Pediatric Inpatient Care As Measured by Child HCAHPS. American Academy of Pediatrics. Retrieved from: <http://pediatrics.aappublications.org/content/early/2017/03/20/peds.2016-3372>

²⁰ Adirim, Terry, et.al. A New Era in Quality Measurement: The Development and Application

consuming and requires resources and support to build out the electronic systems and processes needed to yield actionable results for providers and hold stakeholders accountable. CMS should identify resources and opportunities for states to more deeply engage and invest in institutions and providers to implement this work.

- An overlooked challenge of metric development and implementation is data collection and public reporting. States and providers need additional capacity to collect data on patient experience (including adolescent and parent feedback), family coordination and community linkages (stratified by race and ethnicity). Quality reporting is also important. We suggest that CMS create incentives for public reporting so that quality measurements are playing their intended role of advancing policies and practices that improve care at all levels.
- In an effort to improve health outcomes, CMS must commit to supporting alignment efforts both within its own cross-agency work but also through incentives to state partners to align at the state, institution and practice levels. As highlighted by the NQF, alignment could be defined as leveraging the same measure across multiple programs, populations or age groups.²¹ Providers and institutions are often reporting to multiple sources for different programs and insurance products. Incentives to align across Maternal and Child Health Services Block Grant, for example, is one ripe area of opportunity for harmonization.
- Finally, these alignment efforts must be flexible enough to ensure that quality metrics are appropriate for the specific populations served.

Pediatric quality measurement should reflect social determinants of health:

- As highlighted by a Bailit Health analysis, stakeholders engaged in advancing value-based approaches to pediatric care agree that quality measurement is an important part of any payment strategy and broadly should include preventive care including screening, mental health access to care and immunizations.²² While new approaches to care need “ramp up” time, CMS should not silo the CCS work from innovation work. Rather, CSS should be the foundation of any quality work and build on the evidence that currently exists.
- A number of early adopters of pediatric focused Accountable Care Organizations (ACOs) exist and provide lessons in pediatric quality measurement that should be leveraged for APMs. Some recent findings²³ highlight the importance of:
 - Pediatric-specific measures that are more focused on health outcomes.
 - Inclusion of metrics – and a conceptual “rethinking” of social determinants of health. Cited metrics included school readiness at age 5; literacy at age 8 and school graduation. We would add other metrics that have cross-sector relevance including social/emotional health and chronic absenteeism.
 - New thinking is required on how we define and measure value in pediatric care. Recent feedback on emerging ACOs is that there needs to be deeper engagement and investment in alignment across sectors with a focus on long-term outcomes and a manageable number of metrics that all are driving us toward a common understanding of pediatric value.

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(<http://pediatrics.aappublications.org/content/pediatrics/early/2016/12/22/peds.2016-3442.full.pdf>)

²¹ National Quality Forum. (2016). Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP. Retrieved from:

http://www.qualityforum.org/Publications/2015/08/Strengthening_the_Core_Set_of_Healthcare_Quality_Measures_for_Children_Enrolled_in_Medicaid_2015.aspx

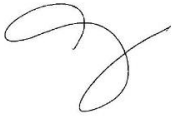
²² Bailit Health. (2016). Value-Based Payment Models for Medicaid Child Health Services. Report to the Schuyler Center for Analysis and Advocacy and the United Hospital Fund. Retrieved from:

<https://www.uhfnyc.org/assets/1503>

²³ Perrin JM, Zimmerman E, Hertz A, et al. Pediatric Accountable Care Organizations: Insight From Early Adopters. *Pediatrics*. 2017; 139(2):e20161840

Thank you for the opportunity to comment on this important provision. Please do not hesitate to contact Ann Hwang at and Eva Marie Stahl at should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to be 'Ann Hwang', written in a cursive style.

Ann Hwang, MD
Director, Center for Consumer Engagement in Health Innovation

A handwritten signature in black ink, appearing to be 'Eva Marie Stahl', written in a cursive style.

Eva Marie Stahl, Ph.D.
Project Director, Children's Health, Community Catalyst

Center for Health Care Strategies

On behalf of the Center for Health Care Strategies, please see our comments attached. Thank you for this opportunity to provide feedback.

Sincerely,



Center for Health
Care Strategies.pdf

Memorandum

To: Centers for Medicare and Medicaid Services

From: Tricia McGinnis, Rachael Matulis, Alexandra Maul, Jessica Lipper, and June Glover

Subject: Comments on the Request for Information Seeking Input on Improving Pediatric Care

Date: March 28, 2017

Thank you for the opportunity to provide comments on the recent Request for Information (RFI) from the Centers for Medicare and Medicaid (CMS) seeking input on improving pediatric care.

Below, we include comments to specific questions. We are happy to provide more information as needed.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

1. Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

- Prevention and Early Intervention of Substance Use: as part of EPSDT, CMS could consider incorporating the screening for substance use using a proven tool, such as CRAFFT, into well-visits for youth ages 13 through 21 and ensuring providers are trained to address a positive screen, or that referral pathways (e.g., to a community-based service provider or behavioral health provider) are in place should the youth require a more intensive intervention.
- Recent discussions with states and health plans seeking to identify innovative strategies designed to support high-risk, low-income families have indicated a number of opportunities to improve care for pediatric beneficiaries. CMS could consider the following topics of interest/technical assistance needs to support an effective model and prompt cross-sector efforts for this population:
 - Facilitate community and social services linkages to medical practices: identify how to link community-based resources to medical practices to address upstream prevention.
 - Test innovative high-risk family-centered clinical models and interventions: build out new care models and better understand what the health and social services systems need to do differently to support high-risk families.
 - Emphasize two-generation approaches: recognize family relationships and treat the children and parents as a unit.
 - Identify and share information around basic metrics: identify assessment tools and share information around metrics to determine common measurements that should be tracked.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

- “Premium slide” is a potential challenge faced by payers in better integration of health care and social services (i.e., as investment in cost-effective health-related services reduces utilization of Medicaid plan services [on which MCO capitated rates are based] MCO rates may decline over time). If this occurs, there may be neither funding nor incentive for MCOs or providers to continue investing in such cost-effective health-related services. Premium adjustments that account for the efficiency and quality of services delivered could be an effective approach that rewards innovation under a flexible, health-plan and provider-driven approach.

8a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?

- ACOs are commonly understood to represent the care delivery model, with the specific payment arrangement (e.g., shared savings, capitation, etc.) being one aspect of the overall model.

8d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not at all?

- Given the large number of Medicaid pediatric patients served under managed care, there is a real opportunity here to engage those payers in this model (and incentivize them to do so). To mirror the current varied landscape of the Medicaid ACO programs operating in 10 states, CMS might likewise be flexible in its requirements as to whether MCOs are part of an ACO, the ACO itself, or not involved at all. CMS could potentially offer up a series of operating definitions/options under which a pediatric ACO could operate, so that CMS can track programmatic approaches and outcomes for further study on what approaches work best as programs evolve and more data is available.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?

- Marginalized, adolescent populations such as those who identify as LGBT; are involved in the juvenile justice system; and have been in foster care are at increased risk for behavioral health issues, particularly substance use disorders, and can benefit from an integrated health care and health-related social service model. Mount Sinai Adolescent Health Center in New York City is one successful example of an integrated model for adolescent health services.

2a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate “ramp-up” periods relative to the payment models.

- To attract wide state interest and provider participation, CMS could consider making a range of alternative payment model (APM) arrangements available, similar to the approach taken for MACRA Advanced APMs, where interested providers have a range of models to choose from. Several children’s hospital systems currently participate in Medicaid ACO programs, including in Minnesota, Ohio, and Massachusetts. These programs start with upside only shared savings and gradually transition to risk bearing arrangements. These models also require a minimum number of patients. Such broad based approaches have worked, but may only appeal to a few large pediatric focused providers with sophisticated risk-bearing capabilities. Bundled or partial capitation arrangements might also be of interest to the providers targeted for this RFI. Additionally, CMS could apply a “glide path” approach that enables providers to assume greater financial responsibility over time, as they develop the care management, data analytics, and financial management capabilities necessary to participate in such models.

- If using a shared savings payment approach, CMS could think about ways to incentivize pediatric hospitals that are already efficient, high-quality providers to become ACOs (e.g., cost-of-care benchmarks could incorporate both regional spending and historical spending, as CMS is now doing for the Medicare Shared Savings Program ACOs).

2b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

- CMS could consider incorporating social determinants of health factors (such as including homelessness and neighborhood stress scores) into its risk-adjustment model to help avoid adverse selection pressures, as Massachusetts is doing for its ACO programs.

3a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.

- One significant challenge with APMs is that they reward near term (1-2 year) ROI. However, many promising pediatric interventions (particularly those that move upstream) create a longer term ROI that yield health and budgetary benefits much further down the line.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?

- CMS could explore ways to go beyond the payment models to support the integration of health-related services. CMS can utilize the approaches that states like Oregon and Massachusetts are using to fund health-related social services, prioritizing the coverage of services that are not sufficiently covered via other programs targeted to meet the health related social needs of pediatric populations, and that have a strong evidence base of theory of change for improving care and lowering costs. Taking a "fee for service" approach to funding such services could be appropriate, particularly in initial phases or for models like shared savings/risk that do not provide the upfront funding needed to reimburse for health-related social services.

SECTION IV: PEDIATRIC MEASURES

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

- Not a measure per se, but CMS could consider that oftentimes patient-reported data on overall health and well-being (such as those captured in tools like the SF-12 or SF-36) put additional burden on patients by asking them to complete the same form multiple times in order to track progress/outcomes over time.
- CMS could consider incorporating measures of health-related social needs, such as kindergarten readiness and school absenteeism. Additionally, measures that consider family involvement could be considered, such as family involvement in care; parent depression; and parent substance use.

SECTION V: OTHER COMMENTS

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

- One factor for consideration is services and transitions of care for “transition-aged youth” (i.e., those age 16 -24 transitioning to adulthood). As an example, challenges can arise for youth with behavioral health issues that have received multiple levels of “high-touch” behavioral health care in earlier years (such as BHRS, wrap-around, etc.) and many of those services phase out once an individual turns 18 or 21, leaving a gap in care.
- Overall, we are glad to see CMS exploring cross-sector strategies for family-centered, integrated services for all children, particularly at-risk, low-income children and families. The background section within the RFI reflects an understanding of the need to address social determinants of health across the lifespan and recognizes the short- and long-term impact of adverse childhood experiences (ACEs). CMS could also consider including trauma-informed care as part of a pediatric care model concept to reduce the lasting effects that ACEs can have on health, behaviors, and life potential.

Center to Advance Palliative Care

To Whom It May Concern,

The Center to Advance Palliative Care (CAPC) is pleased to submit the attached comments in response to CMS's request for information on approaches to improve the quality and reduce the cost of care for children and youth enrolled in Medicaid and CHIP. These comments have been endorsed by 20 organizations that are committed to improving quality of life for seriously ill infants and children. Please do not hesitate to contact me should you have any questions on this submission.

Kind regards.



Center to Advance
Palliative Care.pdf



March 28, 2017

Centers for Medicare & Medicaid Services
US Department of Health and Human Services
Washington, D.C. 20201

Via Electronic Submission:

Re: Pediatric Alternative Payment Model Concepts

To Whom It May Concern:

Thank you for the opportunity to submit comments on designing a Pediatric Alternative Payment Model that will improve quality and reduce cost of care for children and youth enrolled in Medicaid and the Children's Health Insurance Program (CHIP). As the RFI notes,

"The aim of this model is to facilitate strategies for timely and appropriate delivery of family-centered, community-based, linguistically and culturally appropriate, cost-effective, and integrated services to all children and youth covered by Medicaid and CHIP with an emphasis on those with or at-risk for developmental, social, emotional, or behavioral health challenges, intellectual or physical developmental delays or disabilities, and/or those with complex and/or chronic health conditions (also known as "high-need, high-risk beneficiaries")." (emphasis added)

On behalf of the signatories below, the Center to Advance Palliative Care applauds CMS for taking specific steps that have the potential to improve quality care and wellbeing for high-need, high-risk pediatric populations. As such, our comments focus on seriously ill infants and children covered by Medicaid and CHIP who, together with their families, are coping with complex and potentially life-limiting conditions. These patients require access to pediatric palliative care to support their quality of life and ensure appropriate, family-centered care.

Background on CAPC and Pediatric Palliative Care (PPC)

The Center to Advance Palliative Care (CAPC) is a national organization dedicated to ensuring that all persons with serious illness have access to quality palliative care, regardless of diagnosis, setting of treatment, age, or state of the disease. Palliative care is an interdisciplinary, team-based model, which includes a physician, nurse, social worker, chaplain, and other healthcare professionals. It is focused on providing relief from the symptoms and stresses of serious illness, with the goal of improving quality of life for both the patient and the family.

Pediatric palliative care (PPC) is appropriate for infants and children with a wide range of complex conditions, and should be available regardless of prognosis – even when cure remains a strong possibility. PPC relieves suffering across multiple realms; improves the child's quality and enjoyment of life while helping families adapt and function during the illness and through bereavement; facilitates informed and value-based decision-making in the best interest of the child by patients, families, and health care professionals; and assists with ongoing coordination of care and communication among clinicians and across various sites of care.

The American Academy of Pediatrics recommends initiation of PPC at diagnosis and its integration throughout the illness course for all children confronting complex medical conditions.ⁱ This recommendation and the mounting evidence of quality and value (described in detail below) has led several states to enact Medicaid waivers covering pediatric hospice services concurrent with curative treatment without time limitations as a means of expanding access to earlier PPC (commonly called “concurrent care”).

Currently, there are more than 400,000 pediatric patients and families estimated to be living with life-threatening or serious health conditions in the US.ⁱⁱ Approximately 27 percent of children living with complex medical conditions have conditions that affect their activities usually, always or a great deal,ⁱⁱⁱ and an estimated 8,600 children with complex medical conditions are eligible for and would benefit from palliative care on any given day.^{iv}

Pediatric Palliative Care Ensures Value

Studies on the impact of PPC confirm that its delivery improves both quality of life and clinical outcomes while simultaneously reducing unnecessary – and often unwanted – Emergency Department (ED) visits and hospitalizations. PPC delivers significant quality improvements, as revealed in a study by the Dana-Farber Cancer Institute and the Boston Children’s Hospital which showed:^v

- Reduction in reported pain from 66% to 47%
- Reduction in dyspnea from 58% to 37%
- A trend toward reduced anxiety, from 58% to 39%

PPC has a similarly strong impact on parents. Parents of children with serious complex medical conditions at a hospital in Seattle reported significant improvements in health-related quality of life from baseline to post-PPC interventions.^{vi}

By reducing symptoms and stresses, PPC helps support caring for children in their communities and at home as they often prefer, giving families relief and alternatives to 911 calls, ED visits, and unwanted hospitalizations, and consequently results in substantial cost avoidance. A statewide concurrent care program for children in California achieved the following:^{vii}

- A nearly 50% reduction in the average number of inpatient days per month, from 4.2 to 2.3
- A significant drop in average hospital length of stay from 16.7 days to 6.5 days (more than a 60% reduction)
- A strong trend in reducing 30-day readmission rates, from 45% of admissions to 37%
- Net savings – after deducting program costs – of \$3,331 per enrollee per month.

These results are consistent with quality improvements and utilization reductions found for adult palliative care services; however, the impact of PPC is multiplied due to the positive effect on parents and other family members. Consider that as many as 17 million adults are caregivers for a seriously ill child.^{viii} In a significant number of cases, these parents will face decades’ long course of care supporting the affected child, as well as the rest of their family. Therefore, bolstering parents is vital not only to ensuring the best care of their children (including healthy siblings), but also to minimizing the secondary impacts on health status, employment, and income.

Lessons from Providers and Medicaid Managed Care to Inform Model Concept

CAPC convenes palliative care providers, as well as payers, from across the United States to identify best practices and disseminate those through tools, training and technical assistance. CAPC shares these lessons for CMS' consideration:

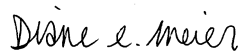
- Infants and children with serious illness who are eligible for hospice must be able to access hospice services concurrent with any disease-directed care, as is currently allowable under Section 2302 of the Affordable Care Act, aka "the concurrent care for children requirement." Alternative payment models must accommodate concurrent hospice care and treatment for those who are eligible. The experience in this model can also be used in fashioning other pediatric alternative payment models.
- Pediatricians and key pediatric specialists should be incentivized to get additional training in core palliative care skills, including assessment and treatment of pain and other symptoms, and communication (especially skills in clarifying values and goals, and conveying illness expectations along with the full range of treatment options).
- Infants and children with serious, complex medical conditions should be proactively identified for formal assessment of symptom burden, caregiver burden, and other concerns. This can be done through EHR triggers and claims algorithms.
- Moderate- and high-need families should have prompt access to PPC specialists. PPC teams must be available in pediatric practices and clinics as well as in hospital settings.
- An effective way to ensure access is to make pediatric hospice services available to all families facing serious, complex medical conditions, and to allow such services to be provided concurrent with curative treatment and regardless of prognosis.
- Pediatric performance measures should incorporate evaluation of access to and utilization of PPC services in some manner. Rates of PPC utilization for the target population would be an effective performance measure, as well as rates of ED utilization among infants and children with serious, complex medical conditions.
- PPC teams should be paid via alternative payment arrangements such as fixed case rates (PMPM), rather than fee-for-service, due to the significant time commitments, unbillable team members, and need for 24/7 coverage. Within the context of a pediatric alternative payment model, services for infants and children with serious complex medical conditions should be priced at a level high enough to enable co-management by a PPC team.

Conclusion

We encourage CMS to ensure access to pediatric palliative care in the pediatric alternative payment model. As described, this can be done through mandatory model requirements and/or inclusion of quality measures around access to PPC, along with sufficient payment for the target population to support co-management by a PPC team.

Thank you again for the opportunity to submit these comments. Please do not hesitate to contact myself or Stacie Sinclair, Senior Policy Manager at if we can provide any additional detail or assistance.

Sincerely,



Diane E. Meier, MD, FACP, FAAHPM

Director

Center to Advance Palliative Care

* * * * *

This letter is endorsed by the leaders and organizations below:

Patricia F. Appelhans, JD

Chief Executive Officer

Association of Professional Chaplains

Edo Banach, JD

President and CEO

National Hospice and Palliative Care Organization

Janet Bull, MD HMDC MBA FAAHPM

President

American Academy of Hospice and Palliative Medicine

Jody Chrastek, DNP CHPN

Co-Chair

Pediatric Palliative Care Coalition of Minnesota

Devon Dabbs

Vice President, Pediatric Programming and Education

Coalition for Compassionate Care of California

Chris Feudtner, MD PhD MPH

Attending Physician and Director of Pediatric Palliative Care Research

The Children's Hospital of Philadelphia

Professor of Pediatrics, Medical Ethics and Health Policy

The Perelman School of Medicine at the University of Pennsylvania

Sarah Friebert, MD

Director, Haslinger Division of Pediatric Palliative Care

Interim Director, Center for Health Services Research and Innovation

Akron Children's Hospital

Professor of Pediatrics, Northeast Ohio Medical University

Richard Goldstein, MD

Senior Physician

Division of Pediatric Palliative Care, Department of Psychosocial Oncology and Palliative Care
Dana-Farber Cancer Institute and Children's Hospital Boston

Naomi Goloff, MD

Pediatric Hospice Medical Director, Fairview Homecare and Hospice

Program Director, Pain and Advanced/Complex Care Team (PACCT), University of Minnesota
Masonic Children's Hospital

Assistant Professor, Department of Pediatrics, University of Minnesota

George Handzo, BCC CSSBB

Director, Health Services Research & Quality

HealthCare Chaplaincy Network

Betsy Hawley

Executive Director

Pediatric Palliative Care Coalition

Rebecca Kirch

Executive Vice President for HealthCare Quality and Value

National Patient Advocate Foundation

Blyth Taylor Lord

Executive Director

Courageous Parents Network

Amy Melnick, MPA

Executive Director

National Coalition for Hospice and Palliative Care

R. Sean Morrison, MD

Director

National Palliative Care Research Center

Kathleen Ruccione

President

Association of Pediatric Hematology/Oncology Nurses

Gary L. Stein, JD MSW

Professor, Vice Chair, Social Work Hospice & Palliative Care Network

Wurzweiler School of Social Work, Yeshiva University

Sally Welsh, MSN RN NEA-BC
Chief Executive Officer
Hospice and Palliative Nurses Association

Conrad Williams, MD FAAP
Medical Director, Palliative Care Program
Assistant Professor, Department of Pediatrics
Medical University of South Carolina

Joanne Wolfe, MD MPH
Director, Pediatric Palliative Care
Boston Children's Hospital and
Division Chief, Pediatric Palliative Care Service
Department of Psychosocial Oncology and Palliative Care
Dana-Farber Cancer Institute

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- ⁱ R.M. Nelson, J. Botkin, E.D. Kodish, et al. Palliative care for children, *Pediatrics*, 106 (2000), pp. 351-358.
- ⁱⁱ Xu J, Murphy SL, Kochanek KD, Bastian BA. Centers for Disease Control and Prevention. Deaths: Final Data for 2013 (64) 2 (February 16, 2016)
- ⁱⁱⁱ US Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The National Survey of Children with Special Health Care Needs Chartbook 2009-2010. Rockville, Maryland: US Department of Health and Human Services.
- ^{iv} National Hospice and Palliative Care Organization. ChiPPS White Paper: A call for change: recommendations to improve the care of children living with life-threatening conditions. October 2001
- ^v Wolfe, J, Hammel, JF, Edwards, KE, et al. Easing of suffering in children with cancer at the end of life: Is care changing? *Journal of Clinical Oncology* 2008, 26(10), 1717-1723.
- ^{vi} Hays, RM, Valentine, J, Haynes, G, et al., The Seattle Pediatric Palliative Care Project: Effects on family satisfaction and health-related quality of life, *Journal of Palliative Medicine* 2006 9(3), 716-728
- ^{vii} Gans D, Hadler MW, Chen X, et al. Cost Analysis and Policy Implications of a Pediatric Palliative Care Program. *Journal of Palliative Care and Symptom Management*, 2016; 52(3)
- ^{viii} Kuhlthau K, Kahn R, Hill KS, Gnanasekaran S, Ettner SL. The wellbeing of parental caregivers of children with activity limitations. *Maternal and Child Health* 2010;14(2):155-63.

Centers for Disease Control and Prevention

Here are some comments from Christa Singleton with the Office of the Associate Director of Policy at the Centers for Disease Control and Prevention.

Here are some comments identified from reviewing documents this week:

Would it be possible to specifically include asthma healthy home programs, childhood obesity prevention and treatment, and state environmental control programs to this list:

[Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs]

For this grouping:

8. What role do models of care such as ACOs play in the pediatric environment? a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?

b. How are pediatric ACOs the same or different from adult-focused ACOs?

c. What opportunities do pediatric ACOs have for integration with community and health services systems? Can they consider being more specific to state "integration with state and local public health, community based health and social services systems"

d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population? Suggest they call out and include PCMHs in that listing as that payment model is more prevalent in pediatric care compared to ACOs and there could be some learning there?

Under:

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model? a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?

c. How could the Health Home model be further adapted to better meet the needs of a pediatric

population? Are there particular “bundles” of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services? Suggest they specifically include the definition of a pediatric population in the covered or eligible population for Medicaid Health Homes. Right now the program definition doesn’t appear to call out pediatrics so the assumption may be being made that this is only for adults with 2 or more chronic conditions

Lastly, on page 6:

What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? Suggest they include/specify “what additional health and cost measures...” Then also say “

We are interested in process and outcome health care and cost measures as well as measures reflecting overall health and well-being.

Please advise if questions – thanks for the opportunity to review.

Cerner Corporation

To whom it may concern,

Attached are our comments on the Pediatric Alternative Payment Model. Thank you.



Cerner
Corporation.pdf

March 28, 2017

Cerner Corporation

Centers for Medicare and Medicaid Services
U.S. Department of Health and Human Services

Dear Sir or Madam,

Cerner Corporation, a leading supplier of electronic health record, clinical and revenue cycle information systems, and EHR vendor for a large contingent of US based hospitals, critical access hospitals, and eligible clinicians appreciates the opportunity to submit comments on certain focus areas of the *Request for Information regarding CMS Pediatric Alternative Payment Model Opportunities*. We offer comments on the following provisions.

Initially we would like to recognize the transformation that CMS is making to the payment model for Eligible Clinicians (EC) through the related rulemaking and alternative payment model programs like the pediatric Alternative Payment Model (APM) discussed below. We hope to work together with CMS and with our pediatric clients to make sure we consider our role as the key Health Information Technology (HIT) partner to our clients in supporting the delivery of care that will be impacted by these changes in the Innovation Model programs. Given our HIT's role in being the system of record for supporting the creation and association of key care providing relationships to the patient and their medical record through clinical workflow automation, our focus of this response is intended to address the concerns we find the most relevance for in our role from those listed by CMS in the Request for Information (RFI) letter seeking public comment about the creation of a pediatric APM.

Integrated Pediatric Health Care and Health-related Social Service Delivery Model

The RFI indicates plans by CMS to expand the APM programs into the pediatric model of care in order to integrate the care provided with the social service delivery model. In response to the initial question posed in the RFI under the "Integrated Pediatric Health Care and Health-related Social Service Delivery Model" section, we would expect to see a high level of interest for a care-delivery model that integrates the health related social services into the current health care model used by pediatricians. We often see that it is the ongoing access to care and the coordination of care provided beyond the pediatric clinic a child needs that can provide barriers to the child progressing towards overall better health outcomes. One example is for children with complex medical conditions. Often these children are provided very specialized, highly acute care in both clinic and hospital settings, however when the patient departs the

care facility, it is difficult for the patient and their family to understand what resources are available to them out in the community to help them manage or improve their conditions. Because of this, they fall into a cycle of admission to the care facility, stabilization or improvement, discharge from care facility back into the community, condition becomes unstable or worsens, and then they have to be re-admitted to the care facility.

Implementing documentation standards that are aligned with the Medicare programs would be the ideal approach for a pediatric APM. Under MACRA, Congress required the use of CEHRT for those eligible clinicians who participate in an Advanced APM. Since pediatrics is mainly covered by Medicaid we understand the lack of control that Medicare would have in directing use of CEHRT for providers, but we recommend any considerations that can be made in aligning standards across the continuum of care.

Next, we want to address the third question in this section. CMS requested feedback on “What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?” For this area we recommend connections be made with telehealth centers. Beneficiaries and their families are sometimes asked to travel long distances for follow-ups, consults, or other visits that can be done safely within the telehealth guidelines. We recommend CMS incentivize the connection to these rural health communities through telehealth platforms. We also recommend use of certified patient portals that can help generate connection to patient education, support patient contributions to their own health records for patient generated health information and secure messaging functionality. This functionality will allow providers to connect with the beneficiary outside of the clinic setting, and can reduce confusion in the care plan by offering secure messaging capabilities.

Operation of Integrated Service Model

The second section of the RFI centered on how the establishment of partnerships between the child and youth focused health care and social services providers can be structured to effectively operate and integrate services. We provide some suggestions on “What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?”

In regards to the development of the EMR, we recommend using the same standards that are being used in the certification guidelines from the Office of the National Coordinator (ONC). We also recommend that the updates be tied directly to the certification edition that is required in the Merit-based Incentive Payment System (MIPS) and Meaningful Use (MU) programs. We note that APMs are able to determine their timeline and certification requirements independent of these two programs, but these two programs are heavily driven by the timing of the publication of new editions of certification criteria. These programs are the focal point for healthcare organizations to make sure they are on the appropriate edition of certification that supports their participation in all of the programs that require use of certified HIT, and would be the ideal program to tie certification requirements to for purpose of the development of pediatric APMs as they require sharing of specific data elements in transitions of

care that would be well established in the information sharing practices of providers. Clinicians will need to make the social service providers aware of potential information like medication allergies, or medications that the child may need to take. This information is standardized and included in the certification requirements for generating a Summary of Care when a provider transitions the patient to another setting of care. We are not suggesting that the full Summary of Care document be transmitted to the social service provider, but instead suggesting that when requiring the transfer of electronic medical record information between providers that this program be aligned to the same standards as are required in the current use of CEHRT for the given calendar year. This APM program should use existing infrastructure that is already in place in other areas of the health care system, instead of imposing different requirements than are already identified as certification requirements for the EHR that the EHR might not be able to effectively support in a consistent manner.

Pediatric Measures

Section IV of the RFI poses questions on the pediatric measures that would be appropriate for the beneficiaries in the APM. We respond to the first question “What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.”

Beneficiaries in the pediatric space transition over to adult primary care providers (PCPs) when they turn 18 years of age. We recommend creating a measure that uses the same standards as required for the ONC EHR Certification program to develop a transition of care plan in order to have a complete hand-off of the patient’s records to their next setting of care. CMS measures the beneficiary transition summary of care through the MU program, and the MIPS program. Many pediatricians are not included in these programs as they do not meet the Medicare billing requirements to participate. That creates a potential disconnect between the levels of care provided between pediatricians and adult primary care providers. CMS should work to create a measure that compiles beneficiary information (patient education provided, care plan information, problems, medications, medication allergies, etc) starting at age 14, and when the patient turns 18 also would include measure of the transition of this information to the adult PCP that would be taking up the responsibility for the beneficiary based on whom the beneficiary indicates to be their adult PCP. Note we do not recommend penalizing the pediatrician if the beneficiary does not provide any primary care provider information.

In addition to the transition of the beneficiary to the next level of care, we also recommend looking into creating some improvement activities that the pediatricians can perform similar in nature to those defined for MIPS. Having a behavioral health care manager on staff, or connecting beneficiary necessary health information with the programs designed to care for the beneficiary when they are not in the pediatrician’s care. We recommend the APM measure the beneficiaries who have received a basic behavioral health screening to determine if there are problems that need to be addressed by a licensed professional.

Cerner Corporation hopes these comments will be of value to CMS in considering possible update to the 2016 MPFS NPRM. We are happy to help clarify any of the comments should CMS wish to pursue any such conversations with us during the period of public comment review.

Sincerely,

John Travis
Vice President and Compliance Strategist
Cerner Corporation

ChangeLab Solutions

Hello,

Is there any chance that the due date for these comments will be extended past 3/28/2017? We are thinking about co-authoring comments with some pediatric providers but I do not think we can prepare the comments by 3/28.

Sincerely,

Children's Dental Health Project

See attachment.



Children's Dental
Health Project.pdf

TO: Centers for Medicare & Medicaid Services

FROM: Children's Dental Health Project

DATE: April 4, 2017

RE: Request for Information on Pediatric Alternative Payment Model Concepts

The Children's Dental Health Project (CDHP) appreciates the opportunity to provide input on the development of pediatric alternative payment model concepts. As the independent organization dedicated to achieving oral health for all children, CDHP has long been an advocate for a more patient-centered approach to oral health care delivery in Medicaid and the Children's Health Insurance Program (CHIP) as well as appropriate payment for such services beyond the traditional fee-for-service model.

Moreover, CDHP believes that oral health care should not be the sole responsibility of dental providers; rather it should be incorporated not only into primary care, but also relevant social services. This is especially important for low-income patients with complex needs such as physical or developmental disabilities and chronic health conditions. In fact, even basic oral health screenings and routine dental care can pose significant challenges for these patients as well as traditional providers.

We applaud CMS for considering how to integrate Medicaid and CHIP services for children into broader clinical and social services settings. To that end, we encourage CMS to prioritize oral health across such care delivery initiatives and accompanying payment models while considering the following informational items:

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

- Few states have taken a comprehensive approach to coordinate oral health services with other health-related social services but multiple states have considered how oral health might be integrated into larger Medicaid reform efforts like New York's Delivery System Reform Incentive Payment Program (DSRIP), Accountable Care Organizations in Massachusetts and Oregon, as well as State Innovation Model grant programs such as Connecticut. Unfortunately, because the dental care delivery system remains largely separate, even in Medicaid programs, states have struggled to truly integrate oral health services into these initiatives, often stumbling on the identification of useful outcomes measures or the integration of health information technology (HIT) systems.
- There are, however, some local examples worth noting. One such model is the WIC Dental Days program which has integrated oral health education, screenings, preventive

services, care coordination, and referral into WIC clinics in Northern California.¹ However, the program is not able to bill Medicaid for all services provided. Another example is the use of MySmileBuddy, an iPad based application for motivational interviewing, oral health risk assessment, and goal setting by community health workers in New York City, funded by the Centers for Medicare and Medicaid Innovation (CMMI).^{2,3} In addition, the Health Resources and Services Administration has indicated that Maternal, Infant, and Early Childhood Home Visiting Programs have integrated some form of oral health services in numerous states but we have been unable to collect additional information from the agency.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

- Of primary concern when attempting to integrate oral health services across providers, programs, and agencies, is that of shared aims. Often, measures of success differ considerably even within a given disease or area of health. This is certainly true at the federal level but this dynamic may be amplified at the state or local level. For example, each state utilizes one of several national models for Home Visiting programs but may be incorporating additional curricula as they see fit.
- The integration of electronic health records or lack thereof may be a challenge for the delivery and tracking of certain oral health services as dental records tend not to be interoperable with medical records. This may also pose a challenge for the purposes of care coordination. Still, services such as oral health risk assessments, fluoride varnish, self-management goal setting, and oral health education can be fairly easily integrated into a variety of settings.
- Tele-medicine approaches for oral health care delivery have great potential for cost savings by relying on allied health professionals in community-based settings rather than more expensive dental providers in brick-and-mortar clinics. The primary example of this approach is well-documented by the Virtual Dental Home project administered through the University of the Pacific School of Dentistry.⁴

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

- With regard to oral health, children with special health care needs certainly represent a high-risk population that would be well-served by an integrated services approach. In addition, while not all Medicaid enrolled children are at high risk for tooth decay, those

¹ Learning for Action. First 5 Sonoma County Program Evaluation Report: Women, Infants, and Children (WIC) Dental Days Program. January 2014. Available at <http://first5sonomacounty.org/WorkArea/DownloadAsset.aspx?id=2147514506>.

² Center for Medicare and Medicaid Services, Health Care Innovation Awards Round Two: New York. The Trustees of Columbia University in the City of New York. Demonstrating the Value of Technology-assisted Non-surgical Care Management in Young Children. Available at <https://innovation.cms.gov/initiatives/Health-Care-Innovation-Awards-Round-Two/New-York.html>.

³ Custodio-Lumsend CL, Wolf RL, Contento IR et al. Validation of an early childhood caries risk assessment tool in a low-income Hispanic population. J Public Health Dent 2016;76:136-42

⁴ 367 Glassman PH, Harrington M, Namakian M. Report of the Virtual Dental Home Demonstration. https://comm.ncsl.org/productfiles/83403465/Glassman_Paper_Virtual_Dental.pdf. Published June 14, 2016.

that are should receive intensive preventive and disease management services aimed at mitigating risk factors that would otherwise lead to extensive decay and potentially expensive treatment under general anesthesia. The use of established caries risk assessment tools such as those endorsed by the American Dental Association, American Academy for Pediatric Dentistry, and the American Academy of Pediatrics should be incorporated into any endeavor that aims to serve children at high risk for oral disease.

SECTION IV: PEDIATRIC MEASURES

- The Dental Quality Alliance has developed an initial set of pediatric measures for use by Medicaid programs, some of which incorporate risk level. These measures would be most appropriate for use by dental and primary care providers.
- In addition to established clinical measures, CMS should consider the development and implementation of a measure of caries experience (i.e., percentage of enrolled children who have or have had tooth decay). Such a measure is outlined in the CMS eCQI Resource Center (CMS75v4) but does not appear to have been fully developed yet.
- CDHP also recommends establishing a measure that would describe caries risk for the Medicaid population. By utilizing existing CDT codes for caries risk assessment, such a measure could be constructed and incorporated into existing measure sets.

CDHP would be happy to provide additional information and expertise with regard to oral health as CMS pursues these efforts to integrate care delivery for the most vulnerable populations. Please do not hesitate to contact Senior Policy Analyst Colin Reusch with questions at

Children's Health System of Texas

Please see attached RFI Response from Children's Health System of Texas regarding pediatric alternative payment model concept as requested.

Thank you.



Children's Health
System of Texas.pdf

March 27, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attention:

**Re: Request for Information on Pediatric Alternative Payment Model
Concepts**

Dear Dr. Billioux,

Children's Health System of Texas (Children's Health) thanks the Center for Medicare and Medicaid Innovation (Innovation Center) for the opportunity to comment on a Request for Information (RFI) for a pediatric alternative payment model concept.

Children's Health is the leading pediatric health care system in north Texas and the region's only academically affiliated (UT Southwestern Medical Center) healthcare organization dedicated exclusively to the comprehensive care of children. With more than 1,100 physicians and dentists and 7,000 employees, Children's Health includes 616 licensed beds across its flagship hospital, Children's Medical Center Dallas, as well as Children's Medical Center Plano and Our Children's House regional specialty rehabilitation hospital. The system also includes multiple specialty centers, Children's Health Pediatric Group primary care practices, virtual health, a licensed Medicaid HMO, a 350-member physician clinically integrated network, and the Children's Medical Center Research Institute at UT Southwestern.

Children's Health cares for nearly 280,000 children annually through more than 920,000 unique visits and more than 167,000 emergency room visits. Children's Health's market share is approximately 59 percent in its local area, and it is the only pediatric safety-net hospital in the region. Its payer mix is 33 percent Commercial, 63 percent Medicaid and 4 percent Other.

As a pediatric health system, we have particular interest in ensuring that all children have the opportunity to grow up healthy and contribute productively to our community as the leaders and citizens of tomorrow. We recognize that the clinical care that we provide within the walls of our health system is but one factor influencing the health of the children and families that we serve. Helping to promote health in the places where children live, learn, play and worship is a critical priority for Children's Health. Toward that end, we are strongly encouraged by the Innovation Center's exploration of the development of a new pediatric health care payment and service delivery model that would drive towards integration of health care and health-related social services.

Before responding to the specific questions posed in the RFI, Children's Health urges consideration of the following guiding principles as CMMI explores development of a pediatric model.

Guiding Principles for a Pediatric Model

1. Improving child health necessitates two-generation approaches that focus on the family—from addressing basic needs (housing, food, etc.) to strengthening parenting competencies and amplifying family agency in health and well-being decision-making and action planning. This includes an intentional focus on patient and family engagement.
2. There is no wrong door for improving child and family health and well-being; all community partners and members have a role to play, focusing on the social determinants of health in addition to the medical determinants.
3. Optimizing child health goes beyond health care. It means attending to the whole child's health, development and well-being and engaging the sectors where children spend time to develop shared goals and partnerships that result in meaningful collaboration (e.g., school systems and faith based organizations).
4. Emphasizing (but not limiting to) a focus on the early years provides the opportunity to improve health across the life course. Young children are particularly sensitive to social determinants.ⁱ
5. Onerous requirements and rigidity stifle innovation; initiatives designed to improve pediatric health and reduce costs should foster conditions for local innovation, allow flexibility, while requiring rigorous measurement and reporting.
6. Older adults are a costlier, sicker population than children, and therefore achieving short-term wins and cost savings is a more reasonable proposition for that population. Models designed to improve child health necessitate a longer Return on Investment (ROI) timeframe.
7. To create sustainable change at the community level (including medical and social service organizations), both public and private funds are necessary to catalyze key stakeholders and create shared ownership as well as accountability for pediatric health and well-being.

Responses to Selected Questions

Section I. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)?

Based on our experiences, we can attest to the importance of integrating health care and health-related social services. As a foundational element, we believe that the concept of a medical home is critical. The medical home provides a core foundation that can serve as a hub for connections to other services. To determine which services a child and family need, we support a screening strategy for children and families in the context of a comprehensive approach to early detection, referral and linkage to programs and services. We recommend that a pediatric model embrace approaches such as *Help Me Grow*, that place early detection activities for vulnerable children within the context of a comprehensive, integrated process of developmental promotion, early detection, referral and linkage to intervention. As part of a two-generation approach, we also recommend inclusion of maternal depression screening.

In general, it is important to align with sectors that impact children, including child care, schools and community-based organizations. Referral to basic services that address underlying social determinants of health (e.g. housing, transportation, food security, employment) is also necessary.

Below are more specific aligned services that participants under a potential pediatric model should have the opportunity to address through partnerships, with the caveat that no participant should be required to integrate with each of these but should have the flexibility to do so. This is not an exhaustive list.

Mental/behavioral health:

The Adverse Childhood Events study highlights the long-term health impact of exposure to adverse childhood experiences (ACEs).ⁱⁱ ACEs have been linked to risky health behaviors, chronic health conditions, low life potential, and early death.ⁱⁱⁱ Toxic stress - extreme and repetitive stress due to physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and household dysfunction - can disrupt and damage neural development in children.ⁱⁱ Children who are exposed to toxic stress are at higher risk for long-term physical, mental, and behavioral health disorders in adulthood.^{iv}

A study conducted in 2015 underscores the return on investment (ROI) of high quality early ACEs interventions. The study found that for every dollar invested in ACEs interventions, there is a \$6 return on investment. Early interventions identified include: parent education and coaching, home visitation, quality early childhood care and education, and pre-kindergarten programs. The total economic lifetime benefits identified include: increased lifetime net earnings, tax revenues, and public system savings, and reduction in health care utility, mortality, and costs.^v

Other ACE interventions conducted at the pediatric primary care setting show favorable outcomes. A systematic review conducted in 2015 found that implementing screening programs, training clinicians to recognize and discuss psycho/social issues with patients and their families, and providing providers with community resources can improve outcomes.^{vi} Additionally, interventions conducted at family-centered medical homes can play an effective role in building resilience (the process by which a child addresses a traumatic event through utilizing a variety of positive factors that can help the child return to a healthy emotional state^{vii}) among children with ACEs.^{viii} **We recommend an intentional focus on addressing toxic stress and ACEs.**

Support for parents regarding building parenting skills and competencies and connecting them to health care services.

Parents play a crucial role in the upbringing of their children, impacting their well-being and long-term health trajectory. Fostering strong, positive relationships between parents and children during the early years of child development can increase a child's physical and emotional health, helping them to become successful adults that can contribute and integrate successfully into society.^{ix, x, xi} **We recommend promotion of evidence-based parenting programs.** What follows are examples of effective programs to build the skills of parents, which create a positive context for healthy childhood development:

Home visiting programs are widely used interventions to help support parents during the stages of prenatal, infant and early childhood. The model focuses on improving long-term child health outcomes by improving parent-child relationship and parenting approaches. Trained professionals help parents to address problems such as poor birth outcomes, maltreatment, and lack of school readiness. Outcomes from home visiting programs show improvements in positive parenting, use of community resources, and lower health care utilization (e.g. less visits to the Emergency Department for children).^{xii} Research shows that home visiting programs can yield returns on investment ranging \$1.75 to \$5.70 for every dollar spent.^{xiii}

The Nurse-Family Partnership (NFP) is a home visiting program focusing on improving prenatal health and outcomes through improving diet and nutrition, child health and development, and families' economic self-sufficiency and/or maternal life-course development for first-time, low-income mothers. The program consists of one-on-one visits between trained registered nurses and mothers, beginning at pregnancy and concluding when the child turns two. Studies of the program have shown statistically significant improvements in prenatal health, fewer childhood injuries, and higher rates of maternal employment.^{xii}

Another approach includes co-managed well care provided through evidence-based programs such as Healthy Steps for Young Children. Healthy Steps was a clinical trial incorporating developmental specialists and enhanced developmental services into pediatric care for a child's first three years. The trial enrolled 5,565 children at birth and followed them for 5.5 years. Among key results are the following: families that had received Healthy Steps services were more satisfied with care and more likely to receive needed anticipatory guidance. They reported reduced odds of using severe discipline and had greater odds of reporting a clinical or borderline concern regarding their child's behavior.^{xiv}

The Triple P-Positive Parenting Program, is a population health, evidence-based system of interventions that is designed to enhance parental knowledge, skills, and confidence to prevent, treat, and address behavioral, emotional, and developmental problems in children from birth until 16 years old.^{xv} The US Triple P Trial shows a reduction in hospitalization from child abuse injuries, out of home replacements, and child abuse cases in counties with Triple P programs.^{xvi} Washington State successfully obtained Medicaid reimbursement for two pilot programs using the Triple P approach for mental health services.^{xvii}

Early literacy promotion— screening, referral and intervention in community

Low literacy is estimated to add up to \$236 billion to the country's health care and related costs each year.^{xviii} People who read at lower levels are up to three times more likely to have an adverse medical outcome as people who read at higher levels.^{xix} Researchers also found that, among non-pregnant adult patients on Medicaid, those with a reading level at or below 3rd grade had Medicaid charges over 3.5 times greater than those with higher reading skills.^{xx}

In the United States, only about a third of students score as 'proficient' readers.^{xxi} The developmental trajectory for reading is set early: a child who is behind in reading at the end of 1st grade has only a 12 percent chance of reading at grade level by 4th grade,^{xxii} which places him at much higher risk of high school dropout.^{xxiii} Early preventive strategies with preschoolers have been proven effective by Nemours researchers and others.^{xxiv, xxv, xxvi, xxvii, xxviii, xxix} **Consistent with the American Academy of Pediatrics' (AAP) policy statement, "Literacy Promotion: An Essential Component of Primary Care Pediatric Practice" ^{xxx}, we recommend universal reading readiness screening at age 4, for which several tools are available, followed by tailored levels of anticipatory guidance and targeted early intervention.** Increased efforts to produce competent readers, as a health imperative, could reduce health care and related costs for individuals across the lifespan.

Nutrition education and promotion of breastfeeding

Babies who are breastfed have lower risks of ear and gastrointestinal infections, diabetes and obesity, and mothers who breastfeed have lower risks of breast and ovarian cancers. Researchers found that children who were breastfed for more than 6 months have a 42 percent reduction in obesity risk compared to children who were never breastfed. Moreover, breastfeeding lowers health care costs significantly. Researchers have estimated that \$2.2 billion in yearly medical costs could be saved if breastfeeding recommendations were met.^{xxxi, xxxii, xxxiii} **We recommend nutrition education and promotion of breastfeeding for new mothers.**

Healthy Homes

The *Green and Healthy Homes Initiatives (GHHI)* is dedicated to breaking the link between unhealthy housing and unhealthy children. GHHI replaces stand-alone housing intervention programs with an integrated, whole-house approach that produces sustainable green, healthy and safe homes.^{xxxiv} Since 2000, GHHI has conducted *Healthy Homes* housing interventions for over 1,700 homes of asthma diagnosed patients in Baltimore City to reduce the incidence of asthma and to stop avoidable visits to the emergency room and hospital through strategic housing interventions to reduce asthma triggers and educate families on how to improve asthma management. The program significantly reduces asthma-related healthcare utilization with a reduction in hospitalizations by 65.5 percent and emergency room

visits by 27.7 percent post-intervention. ^{xxxv} A systematic review conducted by the CDC's Community Prevention Services Task Force on home-based multi-trigger, multi-component environmental interventions for asthma management indicates a median decrease of 0.57 acute healthcare visits per year and substantial return on investment of \$5.3 to \$14.0 for each dollar invested. ^{xxxvi, xxxvii}

In order to incentivize partnerships among health care and aligned social services agencies and partners, we recommend that CMS consider the following:

Recommendations:

- CMS should clarify and test out Medicaid case management or other incentives to do care coordination, referral and service navigation among clinical and non-medical services, using formal contracts between parties to clarify expectations and roles.
- CMS should work with other agencies and programs (e.g. child welfare, the Women, Infants and Children Program, MCHB's Title V program) to encourage blending and braiding of administrative and financial resources across sectors and programs and allow flexibility in the use of grant dollars from non-CMS programs to test new solutions. State agencies should be expressly permitted to blend or integrate funding streams with aligned goals and explore public-private partnerships and should explore ways to improve coordination among programs from different sectors (potentially through Section 1115 waivers).
- CMS should test approaches to incentivize health care providers to formally work with aligned community partners to first investigate what is happening with groups of patients in the community (e.g. investing in analytics to investigate what is a local trigger of asthma in a particular hotspot) and second, take collaborative action accordingly.
- CMS should allow for testing of new approaches to improving provision of services, based on direct input from and formal involvement of patients and families (e.g. testing what would be the most effective approach to encourage new mothers to engage in healthy behaviors like breastfeeding); testing effective approaches to managing acute asthma and/or weight management.

Section II. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

Recommendation: We recommend that a pediatric model linking health care providers with health-related social service providers should 1) include some type of backbone structure, such as a coalition, community leadership team, or integrator, to work across key community stakeholders to create alignment regarding the goals, metrics, governance, sustainability (including financial sustainability), learning systems, and other key aspects of the partnership; 2) include robust community engagement through formal contracts; and 3) include a process for identifying community needs, assets and gaps. Below we have highlighted a few models to shed light on how some successful partnerships have operated.

Nemours Health System

As part of the Innovation Center's HCIA Round 1, Nemours was awarded \$3.7 million to work with community partners in Delaware to better integrate clinical care with community-based prevention for children with asthma, including Medicaid beneficiaries. The target population comprised children with asthma receiving care in a family centered medical home at each of three Nemours primary care sites in Delaware, care that included targeted clinical interventions for the more than 800 children enrolled in asthma registries. This nested model included 42,000 children in six identified, associated communities

who could be impacted by broader, community-based systems and changes in policy.

The model included collaboration with housing agencies, public health, Early Care and Education providers, schools and other community partners such as the DE chapter of the American Lung Association. To operate the model, Nemours employed navigators (described below) to work at the individual level and community health liaisons to work at a systems level to identify and mitigate issues within the community, such as reducing bus idling, which exacerbates asthma, and reducing asthma triggers in public housing and in child care. The work of the community liaisons, which included collaborating with community partners through the establishment of community leadership teams and community asthma action plans, was critical to improving population health within the context of community needs that go far beyond the walls of the health system. Preliminary findings from the independent evaluator indicated a significant reduction in total cost of care (-\$533 per child per quarter) for children in Nemours' program relative to the comparison group.^{xxxviii}

Nationwide Children's Hospital

Nationwide Children's Hospital (NCH) has a model that also includes strong collaboration with health-related social services providers. NCH also co-owns a pediatric ACO called Partners for Kids (PFK) and carries full financial risk for about 330,000 children in the Medicaid program. PFK implements an upstream population health strategy using predominantly Medicaid funding to partner with existing community services to protect and improve the health and wellness of Columbus' children, particularly those in the South Side neighborhood. A network of partners and activists – jointly led by Reverend John Edgar of Community Development for All People, Erika Clark-Jones from the Columbus Mayor's Office and members of NCH's staff – have committed various levels of funding and support for a suite of initiatives to develop the South Side neighborhood adjacent to the hospital by providing housing support, community development resources, workforce development, early care and education, wellness resources and many other services (see appendix for a comprehensive list of services and activities). A cost analysis found that from 2008-2013, PFK's per member per month costs were consistently lower than other Ohio Medicaid MCOs as well as the state's Medicaid fee-for-service program.^{xxxix} During this time period, PMPM costs for PFK grew at a rate of \$2.40 per year; managed care plans grew at a rate of \$6.47 per year, and FFS Medicaid grew at a rate of \$16.15 per year.^{xl}

Children's Health System of Texas (Children's Health)

Children's Health System of Texas' population health initiatives focus on addressing the social systems and the support systems that impact families in the neighborhood. Children's Health engages in four primary initiatives: 1) the Health and Wellness Alliance for Children (HWAC); 2) Charting the Course (part of HWAC), which focuses on addressing obesity through partnerships with the Dallas Chamber of Commerce and United Way; 3) Working in Neighborhoods Strategically, a place-based initiative with many partner organizations, targeted to two zip codes in Dallas that includes distinct focal areas chosen by each neighborhood, ranging from housing to safety; and 4) Pediatric Promise, a partnership among providers, hospitals and federally qualified health centers to provide services to vulnerable children in Dallas. Each initiative is data driven, with data regarding health care utilization, housing, school attendance/graduate rates, etc. driving the focal areas. Children's Health also mapped the resources for each initiative in the community, and data is shared among multi-sector coalition partners.

The Health and Wellness Alliance for Children (HWAC), created by Children's Health, is a coalition of more than 90 cross-sector community organizations, spanning health, education, government, business organizations, nonprofits and the faith community – that are focused on improving the health and well-being of children in Dallas County.^{xli} HWAC uses a collective impact model to utilize a common agenda, shared measurement, mutually reinforcing activities, continuous communication and the strong and coordinated support of a backbone organization (Children's Health) to create large-scale and positive change in children's health in the region. The Health and Wellness Alliance coalesced around childhood asthma with a focused series of interventions and successfully reduced asthma ED visits by 50% over 4

years. Of note while Children's Health provides the backbone staff, it does not own or control the coalition's agenda, which is shaped by data from the community regarding needs.

Other Models for Consideration

In addition to the pediatric models described above, two other broader models that might have relevance to this RFI include Washington's Accountable Communities for Health and Oregon's Community Care Organizations, both of which provide formal structures under which a broad set of partners collaborate.

Washington's Accountable Communities for Health

Fueled by federal, state, and community funding, Washington State has been working for years to enact delivery system transformation. Washington State's Innovation Plan, Healthier Washington, serves as the framework for health system transformation within the state and has been supported by a State Innovation Model (SIM) award from the Innovation Center. Healthier Washington is a multi-payer, integrated care model designed to improve individual and population health throughout Washington. Healthier Washington takes a bottom-up approach, allowing regional community health needs to influence which services are delivered and how. Central to Washington State's delivery system transformation effort are the nine Accountable Communities of Health (ACHs) across the state.^{xlii} ACHs serve as integrators through which regional activities and statewide plans are aligned to address the social determinants of health, provide high-value health care, and improve population health in their geographies. To receive official designation by the state, each ACH had to develop a Regional Health Needs Inventory and establish a region-specific improvement plan. Through the inventory process, the ACHs have been able to identify priority areas specific to their region (e.g., social determinants of health, physical-behavioral health integration, care coordination), and therefore design improvement initiatives that can be implemented locally to address those priority areas. With support from the Health Care Authority the identified health improvement initiatives within each region can then be implemented.

Oregon's Coordinated Care Organizations

Oregon established Coordinated Care Organizations (CCOs) for its Medicaid population through a Section 1115 waiver in 2012. CCOs are community-level entities that finance health care and are governed through a partnership of: (1) providers; (2) payers that assume risk for Medicaid enrollees; and (3) community-based organizations. Each CCO is required to have a Memorandum of Understanding with its local public health authority and establish a Community Advisory Council that brings together stakeholders to assess community needs and develop plans to address those needs. Currently, 16 CCOs provide services to more than one million Medicaid beneficiaries across the state. The CCOs' primary functions are to: integrate and coordinate physical, behavioral and oral health care; reward outcomes rather than volume in the payment system; align incentives across medical care and long-term care services and supports; and partner with community public health systems to improve health.^{xliii} The CCOs are paid a global budget based on a per member per month capitated amount that grows at a fixed rate to cover the physical, mental and dental care needs of Medicaid patients in their region. The state withholds a percentage of its CCO payments and places the funding in an incentive pool. Performance on specified metrics, such as developmental screening and enrolling patients in medical homes, developed by Oregon's Metrics and Scoring Committee, determines what the CCOs can earn back.^{xliv} In 2016, the Metrics and Scoring Committee established a population health measure to reduce tobacco prevalence, and the committee is exploring additional population health measures. Oregon's model encourages CCOs to focus on prevention, chronic illness management and person-centered care.^{xlv} For example, the CCOs can use non-traditional workers (e.g., community health workers) to better coordinate care by connecting Medicaid beneficiaries to social services like the Supplemental Nutrition Assistance Program when appropriate.^{xlvi} The CCOs also can provide certain non-medical services (called "flexible" services in Oregon) such as housing supports to better meet the needs of their population. Through this flexibility, for example, CCOs are paying for air conditioners as a way to prevent unnecessary hospitalizations or emergency department (ED) visits. The Coordinated Care model has resulted in improvements in a number of areas such as reductions in ED visits and

increased access to primary care for children and adolescents.^{xlvii}

Which health related social service providers have been or should be included in a child-and youth-focused integrated service delivery model?

Based on Children’s Health experiences and the experiences of other health systems we have profiled and collaborated with, we recommend that a pediatric model needs to be very flexible with regard to the types of providers that participate in the delivery of clinical care and aligned health-related social services to ensure that children and families receive the right services in right time in right venue by the right provider (including clinical, community and home-based settings and otherwise qualified providers). Examples of providers that model participants should have the flexibility to choose from include:

- At the core is a **clinical team** consisting of physicians, nurses, social workers, psychologists and other behavioral health professionals, and care coordinators. Providers focusing on prevention/promotion of healthy behaviors should also be included in models focusing on prevention and/or the early years (e.g. nutrition educators, lactation consultants, etc.).
- **Navigators** work at the individual level to connect children and families to social and legal services. They should include but not be limited to social workers, care coordinators, nurses, Community Health workers and/or Promotoras. They would connect children and families with community partners who can assist families with securing housing, food, transportation, employment, child care, Medical Legal Aid, etc. Also included within this category are home visitors who provide assessments, education and other services in the home environment.
- **Integrators** or other types of structured collaborations among multi-sector community partners are a critical foundational element to supporting partners in collectively addressing social factors impacting health. Integrators^{xlviii}/anchor institutions/ backbone organizations,^{xlix,l} serve as conveners that bring partners together to work towards common goals. They can map community resources and assets to assist the navigators in identifying available resources and to identify gaps that need to be filled. They may perform geocoding and data analytics functions to assess what broader conditions/hot-spotting could be impacting the health of patients. They could also serve as a formal backbone organization that blends and braids funding. A variety of entities could serve the integrator role, including but not limited to health systems, local government/public health, nonprofits, etc.
- **Family peers** serve a critical and indispensable role as mentors, trust agents and support systems for one another. Family engagement in interventions with other families cannot be emphasized too much – Children’s Health has experienced remarkable results from families working together in structured environments.
- **Child-Serving Sectors, especially Early Care and Education and Schools** are particularly important providers to engage given their direct role in caring for and educating children. For example, Head Start provides a strong opportunity for parent engagement. One study found that Medicaid costs for a child's trip to an emergency room or clinic can be reduced annually by at least \$198 per family when Head Start parents are provided with easy-to-understand health-care guidance. This also translated to a dramatic drop in the number of lost days at work (43 percent) and at school (41 percent).^{li}

Section II. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

Several health systems across the country (e.g. Cincinnati Children's, Children's Hospital of Wisconsin) have made major progress in linking clinical and social services data into an integrated record or system. Each proprietary model looks slightly different, but much can be learned from beacons in the field. Additionally, the federal government's investment in the eLTSS program out of ONC may provide some of the technical specifications requested in this section. For example, the eLTSS team has worked on contracts and agreements, data capture standards and many other elements. A pilot of this program was completed in 2016. Further, connecting to regional or statewide health exchanges, like the Delaware Health Information Exchange, has been a critical element for data sharing. However, more work must be done to not only allow, but also encourage cross-sector data sharing as well as cross-state, cross-sector consent agreements.

Nemours Health System has invested in an integrated health record which includes clinical data, behavioral health data and social work information; all providers have the same complete record, with necessary consent for data sharing. In addition, Nemours partners with local schools to provide access to students' clinical records on-site in the school nurses' office, with parent consent.

An interesting multi-sector initiative is a Milwaukee program called DataShare. It is an integrated data system with source data from the Department of Justice, public health, health systems, schools, criminal records, court records, and other sources, which are linked at the level of the individual and geocoded across nearly 1 million addresses. Colorado has a health exchange program that links similar data sources. In Dallas, the Information Exchange Portal provides an electronic platform that enables health systems, community service providers, and social services agencies to securely share medical and social information through a shared portal. All data sharing is patient-authorized and shared via a two-way exchange platform to facilitate care transitions and coordinate care more effectively to address both clinical and social needs. This system provides historically absent information to health providers, and subsequently to social services providers as well. Also in Dallas, Parkland Hospital hosts the Parkland Center for Clinical Innovation (PCCI) and Pieces Technology, Inc. who worked together to design and license Pieces Tech, a cloud-based software platform that provides end-to-end monitoring, prediction, documentation and discovery software for health systems and community based organizations.

Recommendation: We strongly recommend that CMMI include as part of an alternative pediatric model an investment in scaling integrated health and social/community services data sharing mechanisms, such as those in Dallas, Milwaukee and other places referenced above. Children, especially the most vulnerable served by multiple health and social service agencies, and those who care for them, would benefit greatly from a multi-sector integrated data sharing system which includes all relevant information necessary to provide the best service to our nation's children. This approach would also contribute to decreasing unnecessary or preventable healthcare utilization and share accountability for the health and wellbeing of our children among the many dedicated partners who serve them.

Additionally, we recommend that CMMI include the role of trained care navigators and/or integrators that shepherd the flow of cross-sector information and interpret information for families and communities.

Section II. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

There are a number of obstacles to service integration. An obvious barrier is the lack of integrated data systems. As addressed above, CMS could assist with scaling promising models and could also provide additional clarity regarding what is allowable under FERPA and HIPPA with regard to data sharing. A more basic gap exists in some communities – where health care providers are not even aware of the types of services available in the community to which they could be referring and connecting patients. Ensuring robust community engagement and promoting community asset mapping and needs assessment would help address this barrier.

Another obstacle that many communities face relates to complications that arise from uncoordinated funding sources. In order to accomplish goals, they leverage a variety of categorical funding sources – each with its own reporting requirements and metrics. CMS could work with sister agencies at HHS to test innovative approaches that allow the blending and braiding of funding from different federal, state and private entities – with an ultimate goal of creating a unified set of goals, metrics and reporting requirements to test impact of a combined set of interventions within a state or community. This would necessitate permitting some funding to support an integrator/backbone staff (as described above) to do the financial management and coordination.

A final barrier particularly in the pediatric space is that true impact of preventive interventions is often not realized for many years to come and can often manifest in avoided costs and better outcomes for individuals. While it is important to show progress along the way, for a pediatric model, CMS should include a medium-term and long-term period for the Return on Investment and should track savings in the health care sector and other sectors (such as juvenile justice, education, etc.) and should account for cost savings for the family-child dyad, as opposed to just the child.

Section III: What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

CMS should be flexible and allow states and communities to test different approaches and target different populations as part of a pediatric model.

Some communities may wish to target a specific segment of the pediatric population and one or two related sectors (e.g. medically complex children or children in the foster care system). They should be allowed to do so. **However, a pediatric model test should not focus solely on high-cost users.** It is critical that it focus more broadly on testing approaches to optimize health for the entire population, including approaches that seek to prevent vulnerable children from becoming high-cost adults. We believe that there is great potential for improved outcomes and/or savings associated with targeting vulnerable children at risk for adverse developmental, behavioral, and medical problems but not yet manifesting delays, diseases, or disorders. We base this belief on research documenting the efficacy and availability of such interventions.^{lii}

Recommendation: Therefore, we strongly urge that CMS test a variety of approaches, such as: 1) specific high cost/complex populations; 2) vulnerable, at-risk children, and 3) accountable health community approaches that include pediatric risk stratification approaches to improve the health of all children in a geographic region (improving health for high-cost populations, reducing risk factors and addressing needs for medium/at risk populations, and optimizing health and wellbeing for healthy children). Additionally, we urge that approaches include a focus on not just the child but also the family.

Regarding the age-range for a pediatric model, we recommend that a pediatric model include pre-natal to age 18. In special circumstances, we recommend that CMS allow flexibility to go up to age 21 or 26 if a case is made (e.g. for patients with rare diseases in which there are not many adult providers who are trained to deal with the condition).

Section 3: How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

- **What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.**
- **Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.**

Recommendation: With regard to a pediatric payment model, we urge CMS to be flexible and not overly prescriptive. We also recommend that CMS identify best practices and remove barriers to health systems accessing cost data in real time.

States, communities and providers need latitude to experiment with pediatric incentive models because there is limited experience in the pediatric field with value-based models. Different delivery models will require different incentives – for example, targeted models that are focused specifically on special populations (e.g. children with medical complexity) may not be best suited to the same payment model as a delivery model that tests an approach to improving health of a geographic population. Finally, as incentives are tested to align with value-based models, there will need to be a focus on practice transformation and culture change, which takes time.

Below are few examples of payment models CMMI might consider allowing providers, states and communities to test:

- Allow providers to start with upside only risk to get experience (e.g. for three years) and then to transition over time to upside and downside risk; consider allowing providers to test a risk-adjusted capitation rate with reliable measures of severity to adjust for variation in risk, including both social risk and clinical utilization.
- Allow testing of a model that includes prospective payments and a reward for reducing risk factors for future health conditions that will not appear in the short-term, perhaps as part of a delivery model structured as an Accountable Community for Health for Children and Families. While this would be an innovative approach, it is supported by research. For example, according to the CDC, experiences, both positive and negative, have a tremendous impact on future violence victimization and perpetration, and lifelong health and opportunity.^{liii} For example, clinical models that respond to factors addressed in the ACE study^{liv, lv} could be incentivized.

- Allow testing of a blended alternative payment model that contains
 - a pediatric Comprehensive Primary Care Plus model (including enhanced base payments to allow for universal anticipatory guidance on parent-child behavioral health promotion;
 - risk-adjustment that includes predicted life-course costs based on risk and protective factors (e.g. Safe Environment for Every Kid (SEEK) Parent Screening Questionnaire score; and value-based incentives for dimensional improvements in children's healthy cognitive, affective, and behavioral development);
 - an Alternative Quality Contract/bundled payment-type model for specialized needs; and
 - an Accountable Community for Health for Children and Families model.
- Allow for pooling/combining of resources by issuing a joint pediatric model test that includes resources and additional flexibility from more than one agency and allows states, communities and providers to blend and braid categorical funding streams at the local or state level.
- Explore redefining the Medical Loss Ratio (percent of premiums spent on medical claims) as the Health Loss Ratio that is inclusive of social spending.

SECTION IV. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

A pediatric model should include core metrics and optional metrics. States/communities should be encouraged to select a manageable number of metrics that are meaningful to their specific focus and intended outcomes. **The metrics utilized will vary, depending on the nature of the intervention and delivery model.** For example, while all model participants should track measures of health care utilization, models that include a focus on prevention may include utilization metrics tracking the health of a pregnant mother and baby that would likely not be appropriate for all delivery models. The metrics included below are examples from which model participants could select. This is not an exhaustive list.

Measures of *health care utilization* should be tracked. Depending on the intended outcome of the model, these could include hospital admissions, Emergency Department visits, hospital readmissions, number of prenatal and postpartum health care visits, number of well child visits, number of primary care visits, use of preventive services such as screenings and immunizations, etc.

Another important category is *fulfilled referrals to health-related social services* (e.g. number of fulfilled referrals to community resources such as food, employment, housing; community-based parenting programs) and fulfilled referrals to services to address needs after completion of developmental screenings. These categories would ensure that children and families are actually being connected with the appropriate community-based providers to address their health and developmental needs.

Health care costs to Medicaid and CHIP should be tracked. CMS should make every attempt to work with State Medicaid agencies to encourage data sharing with model participants to ensure that health care costs can be tracked. Awardees should also have the option (if feasible) of calculating savings to other sectors and to private payers to provide a more holistic view of the impact of the model.


A final category of *outcomes measures* should include short-term, medium-term and long-term metrics and should address the health of the child, the family and the pregnant mother to track health before and during pregnancy and enhance outcomes for the child in the future. Examples of options for outcomes measures (to be selected by model participants include, based on the nature of the model) include the following:

- Prematurity rates, birth weight, infant mortality, immunization rates, scores on validated screeners and questionnaires or assessments (e.g. SEEK, Ages and Stages, PEDS, and Strengths and Difficulties, Strengthening Families Five Protective Factors Assessment), breastfeeding rates for new mothers, decreasing stress, trauma, drug usage in teenage women, tobacco usage in the home, increased use of safe sleep techniques; weight; identifying screening and treating toxic stress; proportion of children ready for kindergarten, kindergarten attendance/school days missed, reading level by grade 3, proportion of adolescents that use alcohol or tobacco or that develop mental health conditions, rates of maternal depression, length of time in custody for adolescents, rates of food insecurity for families; rates of housing insecurity/homelessness for families.
- Some of the metrics above would require data-sharing across sectors. We encourage CMS to: 1) allow model participants to have enough time upfront to determine how they can work across sectors to share the necessary information needed to track a cross-sector metric (e.g. in the case of school readiness – what mechanisms would allow for data sharing with health care providers); and 2) be flexible and allow model participants to select another metric if they cannot secure appropriate data to track progress on a metric they originally selected.

Conclusion

Once again, Children's Health commends the Innovation Center for the opportunity to comment on this proposed rule. Please continue to keep us in mind if we can be of further assistance as this work moves forward.

Sincerely,



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Children's HealthWatch

Please accept the attached comments for your consideration. Thank you!



Children's
HealthWatch.pdf

Richard Sheward
Senior Policy Analyst, State Policy
Children's HealthWatch

March 28, 2017

The Centers for Medicare & Medicaid Services (CMS)
RE: Center for Medicare and Medicaid Innovation Request for Information on Pediatric
Alternative Payment Model Concepts

Comments submitted electronically to:

To whom it may concern,

On behalf of Children's HealthWatch, please accept our input on the design of a draft model concept focused on improving the health of children and youth covered by Medicaid and CHIP through state-driven integration of health care and health-related social service with shared accountability and cost savings. As pediatricians, public health researchers, and child health and policy experts, we write to comment on strategies for timely and appropriate delivery of family-centered, community-based, linguistically and culturally appropriate, cost-effective, and integrated services to all children and youth covered by Medicaid and CHIP with an emphasis on those with greatest risk for developmental, social, emotional, or behavioral health challenges, intellectual or physical developmental delays or disabilities, and/or those with complex and/or chronic health conditions (also known as "high-need, high-risk beneficiaries"). In our comment below, we have provided information and answers to the questions that we felt we could best contribute our evidence and experience towards.

Children's HealthWatch¹ is a nonpartisan network of pediatricians, public health researchers, and policy and child health experts committed to improving children's health in America. Every day, in urban hospitals across the country, we collect data on children ages zero to four, many of whom are from families experiencing economic hardship. We analyze and release our findings to academics, legislators, and the public to inform public policies and practices that can give all children equal opportunities for healthy, successful lives.

Section I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Question 1:

What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those

with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

We understand that there is a high level of interest among states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services. States and tribes understand that household material hardships, which include food insecurity, unstable housing, and inability to afford home heating or cooling, may have direct physiologic effects on children. Research from Children's HealthWatch shows that these hardships (food, housing, and energy insecurity) are robust predictors of adverse outcomes for health and development of children 4 to 36 months of age, and public programs can decrease or mitigate their impact on children.^{2,3}

Following passage of the Affordable Care Act (ACA), at least 40 states have integrated the eligibility and intake process for Supplemental Nutrition Assistance Program (SNAP) with Medicaid, allowing families to file a single application and attend a single interview for multiple programs.⁴ Given these ongoing efforts to connect health care with other social service programs, Children's HealthWatch investigated how different combinations of public assistance programs (SNAP; Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and housing subsidies) influenced families' housing security.⁵ While the study found families receiving only housing subsidies were 39 percent more likely to be housing secure than those receiving neither housing nor nutrition subsidies, it was the receipt of SNAP and WIC benefits combined with housing subsidies that had the strongest protective effect. Families receiving all three benefits were 72 percent more likely to be housing secure than those receiving just a housing subsidy.

While research points to the importance and value in combining and coordinating health care and health-related social services, we also understand that a fair amount of ongoing partnership and coordination and technical assistance needs to take place among the various entities (health care, public administration, community partners, etc.) in order to successfully achieve horizontal integration.

Children's HealthWatch leads the The Hunger Vital Sign™ Community of Practice, which works to facilitate conversations and collective action among a wide-range of stakeholders interested in addressing food insecurity through a health care lens. The group seeks to identify research on the connections between food insecurity and health; promote the use of the Hunger Vital Sign™ to screen for food insecurity; and champion effective interventions to address food insecurity both at the practice and policy level. The group includes physicians, public health researchers, anti-hunger agencies, health care professionals, and policy experts. Based on our experience managing this community of practice, we've come to directly experience the intense interest, fast-paced innovation, and efforts among states and health care systems within states to combine and coordinate health care and health-related social services.

Question 2:

Boston Medical Center

Arkansas Children's Research Institute
[Dornsife School of Public Health, Drexel University](#)

Hennepin County Medical Center
[University of Maryland School of Med.](#)

Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

Connections with food and housing benefits are critical for health care providers to make if they are to truly care for the whole child and get the best health care outcomes. At Children's HealthWatch we talk about public assistance programs (SNAP, WIC, housing subsidies) as a vaccine – helping to protect children's health now and in the future and also providing wider community benefits.⁶

Not only has it been found that SNAP improves birth outcomes for our nation's children,⁷ but SNAP helps keep kids healthy. SNAP significantly decreases families' and children's food insecurity. Compared to young children in families that were likely eligible but not receiving SNAP, young children in families receiving SNAP were less likely to be underweight or at risk for developmental delays.⁸ It makes sense – when you give families access to resources to purchase food, children do not go hungry and are healthier. Hunger is a form of “toxic stress” and has lifelong consequences for children. Toxic stress is a term utilized by neuroscientists and child development specialists to describe acute stress that does not let up. This hardship can become so severe that not only is a child's brain at risk for having truncated development, but also a child's immune system and organ function can also be negatively affected.⁹ SNAP helps buffer families and kids from this stress. When a family receives SNAP they are less likely to be faced with impossible trade-offs between paying for healthcare costs and paying for other basic needs, like food, housing, heating and electricity.¹⁰

Scholarly research from Children's HealthWatch also provides evidence on the association between housing insecurity and the health of very young children. After adjusting for covariates, we found that multiple moves (2 or more) within one year—a form of housing insecurity—is associated with poor health, lower weight (a sign of undernutrition), and developmental risk among young children.¹¹ Researchers from Children's HealthWatch also examined the relationship between a second housing insecurity related indicator and child/maternal health outcomes: “During the last 12 months, was there a time when you were not able to pay the mortgage or rent on time?” Among households with young children, we found being behind on mortgage or rent payments is associated with adverse maternal (higher odds of fair or poor health, positive depression screen) and child health outcomes (higher odds of lifetime hospitalizations, fair or poor child health, and risk for developmental delay) as well as experiencing other hardships, like food insecurity – likely a consequence of tradeoffs between paying rent or paying for other basic needs.¹² Decades of scientific research demonstrates the harmful effects of homelessness (i.e., living in a shelter, motel, temporary or transitional living situation, scattered site housing, or no steady place to sleep at night) experienced during early childhood on young children's growth and development. Research by Children's HealthWatch demonstrated that infants whose mothers' experienced homelessness prenatally had

significantly increased odds of low birth weight compared to infants of mothers consistently housed and to infants whose families experienced postnatal homelessness only.¹³ The negative effects of housing insecurity are not confined to children and their caregivers – a large body of literature has also identified multiple adverse health correlates of housing insecurity in youth, adults, and vulnerable populations (e.g., domestic violence victims).^{14 15, 16}

Therefore, affordable and stable housing plays a critical role in supporting the health and wellbeing of children. Research shows public investment in housing—including housing for homeless families and rental assistance for food-insecure families—improves the health outcomes of vulnerable infants and young children and lowers health care spending.¹⁷ Knowing the difference stable housing makes for pediatric and family health, health care systems across the US have worked to integrate affordable housing into their services and care provision. Nationwide Children's, Cincinnati Children's Hospital and others – have invested in improving housing conditions and providing affordable housing for their patients and neighbors.

Section II: OPERATION OF INTEGRATED SERVICE MODEL

Question 1:

To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?

As CMS understands that varying eligibility criteria and program requirements can be challenging for children, youth, families and providers to manage, resulting in both service gaps and implementation challenges, such as different case managers or navigators for each program, any new *child* and youth-focused care delivery model that combines and coordinates health care and health-related social services would need to deliberately include enhanced coordination and collaboration among multiple state agencies. For example, permitting low income families to file for both Medicaid/CHIP and SNAP benefits simultaneously is key. A common application would reduce administrative red tape for families and improve the health of young children.

Many families eligible for one public assistance benefit are often eligible for others as well. Using Massachusetts as an example, a comparison of SNAP and MassHealth data by the Mass Law Reform Institute suggests a “SNAP Gap” of roughly 600,000 very low-income MassHealth recipients eligible for SNAP but not enrolled. This is due, in part, to difficulties navigating multiple government agencies. Families often submit duplicate documentation to access a disjointed patchwork of programs. Massachusetts could seize the opportunity and offer families a common application portal to address the challenge of service integration.

Question 2:

Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

Housing Prescriptions as Health Care is an innovative project led by Children's HealthWatch at Boston Medical Center studying the effects of an pioneering intervention that combines services across the health, housing, social and legal service sectors in order to improve housing stability and child health outcomes among participants. The housing intervention developed for this study specifically addresses issues including families who are both high utilizers of health care and paying more than 50 percent of income on rent or utilities, moving frequently, experiencing homelessness, but are not eligible for shelter through the Department of Housing and Community Development's Emergency Assistance program, or were unable to pay rent on time in the past year. This research explores how coordinated and comprehensive housing services offered through intensive case management improves housing stability and health outcomes for families of young children.

The overall goal of this program is to design and stock a "housing pharmacy" of new therapies and combinations of therapies developed through a collaborative of partners across the health, housing, social and legal professional service sectors. Uniquely, the diagnostic and triage process for these innovative therapies will be first piloted in the healthcare setting at Boston Medical Center to address housing instability and prevent homelessness among young children and their caregivers as a treatment to improve child health.

The population for Housing Prescriptions as Health Care pilot study will include families experiencing severe housing insecurity, who have at least one child ages 0-4 years. Children's HealthWatch data collected from 2010-2014 at Boston Medical Center, where the sample for this project will be recruited, found 32% of families were behind on rent in the past year and 7% of families moved more than twice in the past year. Previous research by Children's HealthWatch links multiple moves with increased risks of fair or poor child health and developmental delay. Families who are behind on rent are also at risk of fair or poor health, developmental delays, and are below average in length/height, a marker for under-nutrition. Given the significant associations between housing insecurity and child health outcomes, this project is tailored to address challenges faced by families who are severely housing insecure and who are classified as high health care utilizers by industry standards (defined as ≥ 3 emergency department visits in one year).

Though this is a new program, it builds on the wealth of experience of our project partners, including:

- Boston Housing Authority
- Project Hope
- Nuestra Comunidad Development Corporation
- Medical-Legal Partnership | Boston

The integration of a range of housing, social and legal services and resources to address housing insecurity will rely on these experienced partners, who are more than simply a referral network. They are organizations with decades of experience in offering housing, social and legal services to address housing insecurity and creating new innovations in these sectors. Each partner will be instrumental in both offering services and creating new strategies to reduce housing insecurity.

This research study design for this pilot study is a randomized control trial whereby eligible families are randomly assigned to the intervention group or the control group. Those in the “Housing Prescriptions” group will be referred to a case manager and receive a combination at least three of the six services offered through the program. Families in the “Resource List” group will receive the current standard of care, which is a packet of outreach resources with information on housing and housing supports.

Patient families who participate in the Children’s HealthWatch survey in the Pediatric Emergency Department or who are referred by family navigators at Boston Medical Center or case managers with Boston Medical Center HealthNet Plan will be screened by Children’s HealthWatch research staff at Boston Medical Center. Families in the Housing Prescriptions group are referred to a Care Coordinator at Project Hope, who will then further assess housing issues and develop a housing plan with the family. Partners will tailor an array of interventions to families’ needs. Services will be provided through intervention sites: Project Hope, a community organization with housing and case management expertise, will offer housing stabilization case management and a problem-solving education approach; Nuestra Comunidad, a community development corporation, will offer benefit maximization and financial counseling; Medical-Legal Partnership | Boston will offer deep expertise in addressing health-harming legal needs; and the Boston Housing Authority will offer permanent affordable housing to families identified by the triage process as eligible. All of these partners will meet on a regular basis to review cases and collaborate to support each family’s needs. Children’s HealthWatch will track families in both the intervention and control group over time to measure child and caregiver health outcomes and family hardships.

While this is obviously an RCT, we hope that the findings will be positive and that the lessons in partnerships and cross-sector collaborations will be able to be scaled up into a broader intervention.

Question 3:

What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

We are aware of efforts among EMR providers, specifically Epic and OCHIN, to integrate social determinants of health screening tools in the EMR for health care providers to use as a means of identifying patients in need of referrals to health-related social service providers.

Section III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

Question 2:

How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population’s health and social needs?

We know that food insecurity – inadequate access to enough food for all household members to lead an active, healthy life - exacts a heavy toll on our nation. We see it in the overwhelming evidence of food insecurity's relationship with poor physical and mental health for children and adults and worse academic performance from early childhood through high school and even college.^{18, 19, 20, 21} It affects every demographic and we know its costs are not just to our health but also to our collective wallet. Recent research demonstrated that the health-related costs of food insecurity were estimated to be \$160.07 Billion in 2014 alone.²² Moreover, Children's HealthWatch built on this work and we found that the estimated child health care and education costs associated with food insecurity just among families with young children were more than \$1.2 Billion in 2015 dollars.²³ These are staggering costs for our society to bear – and they are preventable. Understanding the health related costs of food insecurity, health care providers could be encouraged to provide collaborative services with health-related social service providers by being reimbursed or receive incentive payments for demonstrating a reduction in these costs as a result of addressing their patients' food insecurity.

For additional information, please contact Richard Sheward, Senior Policy Analyst or State Policy at Children's HealthWatch

Sincerely,

Megan Sandel MD, MPH
Principal Investigator
Boston, MA

Richard Sheward, MPP
Senior Policy Analyst – State Policy
Boston, MA

The children' Health Watch research group

¹ More information about Children's HealthWatch available at: www.childrenshealthwatch.org

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Children's Hospital & Medical Center

Dear Sir or Madam:

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Children's Hospital Association

Good Afternoon,

Thank you for opportunity to submit a response to CMS' request for information on pediatric alternative payment models. The Children's Hospital Association's response is attached and is based on the experience of our member children's hospitals and our organization. We focus our comments on several key aspects of the request that we believe are important to the evolution of care systems for our nation's children, particularly those that integrate health care and health related social services with shared accountability and savings.

We also include examples of the barriers organizations have faced when attempting to integrate services particularly addressing regulation, funding and data sharing obstacles. Please let us know if there is any other information we can provide—or other ways we can be helpful.

We look forward to working with you to explore promising innovations for the health of America's children.



Children's Hospital
Association.pdf

**Centers for Medicare and Medicaid Innovation: Request for
Information on Pediatric Alternative Payment Model
Concepts**

Comments Submitted By: Children's Hospital Association (CHA)

March 27, 2017

March 27, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

Based on our work with more than 220 member children's hospitals across the country, the Children's Hospital Association (CHA) appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models. We focus our comments on several key aspects of the request that we believe are important to the evolution of care systems for our nation's children, particularly those that integrate health care and health related social services with shared accountability and savings.

Our comments focus on systems-centered, child- and family-focused solutions for care. From healthy children in need of preventive care for optimal physical and mental development to those with complex conditions requiring specialized medical homes, all children benefit from a child and family-centric perspective driving the design of future systems of care.

Networks must be organized to address the health (physical and mental) and the housing, school, legal and transportation needs of children that impact their health and access to care. Organizations will need to be strong conveners to serve as integrators of care focused on child development throughout childhood. Network innovation must be explored not only through state solutions, but also through public and private partnerships.

Overall, we believe a system of care for children must:

- Be child-(and family-) driven and supported by an infrastructure aligned around the child's development with metrics designed specifically for kids.
- Integrate physical and mental health to address the complete health needs of children
- Be delivered via an integrated network of care that is home- and community-based with access to specialized services as needed.

CHA's response reflects the experience of our member children's hospitals and our organization. We focus on the experience and recommendations of pediatric ACOs, pediatric health plans and children's hospital leadership who have developed relationships with social service organizations in their communities. We also include examples of the barriers organizations have faced when attempting to integrate services particularly addressing regulation, funding and data sharing obstacles.

Based on these experiences, we offer the following points on the specific payment model and network attributes for integrating pediatric health care and health-related social services with shared accountability and savings.

Alternative Payment Models

- Clarify regulatory issues to enable flexibility in service provision and enable more widespread data sharing. Organizations currently face significant hurdles when integrating needed social services due to differing regulatory interpretations with respect to allowable services and information sharing.

- Develop a payment mechanism (e.g., PMPM care management fee) for a centralized care coordination function and funding for emergency social services for high need populations. This will serve to stabilize the revenue stream and provide readily available support more reliably for families (e.g., Health Home model).
- Provide payment incentives for primary care and rural practices to keep children close to home.
- With experience, move to capitation for an actuarial sufficiently sized population that:
 - Includes payment for physical and mental health care
 - Incorporates social services into the medical cost (e.g., Oregon model)
 - Includes a socio-economic risk adjustment factor (e.g., Massachusetts model)
 - Ensures patient attribution is prospective
 - Establishes credible risk adjustment and outlier protection for children with complex conditions
 - Calculates the return on investment over the long-term (10+ years)

Integrated Networks

Unlike adult solutions, regional competition in pediatric care can be counterproductive. Pediatric populations are smaller and disease incident rates are lower than their adult counterparts, resulting in the concentration of specialized services across geographic regions. Thus, the size of the pediatric population and availability of specialized pediatric resources must be considered with respect to network structure. Networks must:

- Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations.
- Be able to meet the needs across a geographic region.
- Provide comprehensive pediatric specialty care.
- Be able to integrate high risk children in other sectors.
- Have large scale EMR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.
- Have a centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.

We look forward to working with you to explore promising innovations for the health of America's children as well as needed public policy changes that can facilitate their spread. If you have any questions on our comments, please contact Alex Rothenburger at

Sincerely,



Mark Wietecha
President and CEO

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Currently, the integration of social services into pediatric health care delivery models occurs informally among children's hospitals and community providers. Effective models are needed particularly for the integration of mental health and behavioral health services. 'Child health' encapsulates physical and mental health, yet today's system does not adequately facilitate the integration for the well-being of the child. In particular, the cost associated with mental health is relatively high for children with complex medical conditions (fourth highest cost after inpatient care, home health and prescriptions services representing approximately 5% of spend for children with complex conditions). Providers are uncertain as to options for leveraging resources when separate programs administer mental health vs. physical health.

Of particular note will be the cultural change required not only on the part of providers, but also on the part of federal and state agencies in sharing decision-making across an integrated network of care. Experience through the CARE Award, funded by CMMI, revealed the significant cultural changes required even within a system of care to accommodate new care delivery models and payment models. The addition of external agencies outside the sphere of health care will likely pose an even greater call for leadership and incentives that encourage the necessary changes for participation in a new model.

Q3: What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities, such as tribal reservations, have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

A3: For rural populations, CMS should consider incentives, like enhanced match rates or other flexibility options, for state Medicaid programs to adopt as well as:

- Payment or incentives for telemedicine infrastructure
- Payment parity for services provided through telemedicine
- Payment Incentives for rural practice beyond the Rural Health Clinics (RHC) and Federally Qualified Health Center (FQHC) models
- Payment structures that could cover the use of lay outreach workers for high risk populations (e.g., newborns, chronic disease, etc.)
- Substance abuse treatment programs
- Consideration for rural community adoption in the development of quality metrics in pay-for-performance models

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

Children's hospitals' financially integrated models usually take the form of accountable health organizations, capitated networks and pediatric managed care organizations. Separate from financial integration, children's health systems integrate as partners with schools and other community health care providers. Children's hospitals often integrate informally with social service agencies. The operation of an integrated model is important to consider given the multiple social and behavioral services across multiple clinical providers along with health services required to optimally serve small numbers of children with high social and/or medical needs.

Experience to date signifies that integrated operations:

- Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations
- Are able to meet the needs across a geographic region
- Provide comprehensive pediatric specialty care
- Are able to integrate high risk children in other sectors
- Require large scale EMR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities
- Have developed centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors

Q1: To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g., State Medicaid agencies and health-related social services agencies)?

a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

A1: A range of partnerships currently exist between children's hospitals and social service providers and other community-based organizations. Within that range, there are few examples of where service integration is occurring.

A 2015 survey of the Children's Hospital Association (CHA) membership collected general information about existing partnership by sector and by perceived depth of relationship. Respondents were asked to characterize partnerships as "formal", "informal" or "nonexistent" according to their own interpretation. These data provide a helpful backdrop to where partnerships are occurring most naturally and frequently between children's hospitals and allied community organizations:

- Partnership with providers and payers – this category includes the most formal partnerships with >50% of respondents naming other hospitals/health systems, private payers and Medicaid plans. Slightly fewer than 50% indicate formal partnerships with state Medicaid, FQHCs, health centers and clinics. Outlier formal partnerships are being struck with retail clinics (e.g., Walgreens).
- Partnership with education – The 2016 Children's Hospitals Annual Benchmark Report indicates 78 respondents provide school nursing or school health services as the most common mechanism of partnership with education (example follows in narrative).

- Partnerships with state and local government - partnerships are most often informal with housing, urban development, transportation and safety agencies. The exception being formal partnerships with public health (48%).
- Partnerships with community organizations – informal partnerships dominate in the community sector. The formality increases with the capacity of the community-based organization (e.g., United Way).

As noted, the education sector is a high-priority partner for children's hospitals. Many hospitals employ the school nurses in either one or multiple school districts. Typically, funding for the administration, training and staffing costs are shared expenses of the hospital and the school district. Some hospitals, such as Dell Children's Medical Center of Central Texas in Austin and Franciscan Children's in Brighton, Massachusetts, contract for either specific services or a limited duration within school nursing or school-based health systems. The employed relationship brings the benefit of an integrated EMR and sophisticated condition management within the school setting as well as wellness visits and immunizations.

Franciscan's Child Wellness Initiative (CWI) provides school-based mental health counseling, combined with outreach, education, and prevention. The program's interdisciplinary staff provides individualized care that involves families, teachers, pediatricians, and other significant caregivers. The partnership spans six areas schools and the district pays on average, \$75/per child for the service. Franciscan Children's offers the CWI at its own long-term care hospital setting. The organization is unique in that it provides special education, therapeutic and health care services via an on-site day school as well as comprehensive child care for children < 6 years old.

Q2: Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

A2: A recent survey of 42 children's hospitals reported on the provision of home visiting services. Some hospital-sponsored home visiting programs provide health management support at home for specific populations such as NICU grads or chronic asthma patients. Many others provide comprehensive support for high-risk mothers before and after delivery through existing national programs funded by MICHV, such as HIPPPY), Nurse-Family Partnership, Bright Futures or Every Child Succeeds.

That same survey indicates 35 children's hospitals provide foster care services.

Children's Hospital of Wisconsin (CHW) serves 3,000 of 7,000 total children in the state in the Care for Kids program, a medical management program for children available the moment they enter the foster care system. Previously foster care was a county-run service which had poor connectivity to the state Department of Health Services (DHS) and therefore no clear idea of cost. It is a PMPM arrangement where CHW will be held harmless for three years. At the end of each year, accounts are reconciled where any excess money is paid to the state or, in the case of a loss; CHW will be compensated by the state to break even. In this six county pilot, the hospital is working to secure a sustainable margin (2-4%) with the intention of expanding statewide in 2018. In 2020, CHW intends to strike a similar arrangement for the pediatric Supplemental Security Income (SSI) population.

Children's hospitals extend their reach outside of the campus to engage children and families where they live, work and play in community. Typically these models of health service outreach are a deployed asset of the children's hospital/system and not the asset of a community organization. For example, 49 children's hospitals operate mobile health services that provide preventive screenings, immunizations, dental services and health education. Such vehicles engage at schools and recreation centers. In some cases, such as in southern California, they target specific high-risk populations like homeless teens.

Q3: What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

A3: To support the development of the necessary prior to infrastructure building, integration of services across Medicaid enrolled providers and health-related social service providers will likely require clarification of HIPAA regulations. Sharing information in a meaningful way to better coordinate care in pediatrics usually involves small numbers of children and families and often in a non-electronic format. Sharing information is hampered by differing interpretations of what is allowable.

For an electronic exchange of information related to social services, electronic structures for a standard core set of elements relevant to care management for the pediatric population will be required.

Q5: Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

A5: When considering future models, priority should be placed on partnerships that enable work across geographies. Potential exists for increased utilization of telemedicine, telepsychology and other efforts that build virtual capacities connecting pediatric specialty care with allied health and community providers in rural settings and health care centers.

Advocate Children's Hospital in Oak Lawn, Illinois, is piloting a chronic care initiative with 60 children seen in their south campus location. Each of these families have been given an iPad and Wi-Fi hotspot so that the families can more easily interface with their care providers about ongoing or routine health concerns. The pilot has seen significant reduction in unnecessary emergency department (ED) utilization and increase in family satisfaction. However, none of this telehealth support is currently reimbursed. Advocate Children's has extensive and in-depth relationships in Chicago-based schools where the number one request by schools to the hospital is to assist with mental health support for students. Due to specialty shortages, it is not feasible to deploy pediatric psychologists to the schools. A virtual solution would be ideal, but telepsychology services are not reimbursed.

Another community-engaged approach by children's hospitals is co-located services. The most frequent example of co-location is in child advocacy centers. Space, resources, data and case management are shared between the clinical care, law enforcement and prosecutorial entities involved in child protection cases.

Similarly, the family justice model expands beyond co-location of child protection entities to include family support services. For example, the Children's Hospital of Wisconsin engaged in joint financing and governance with community domestic violence agencies to establish the Sojourner Center. The state of Wisconsin was spending >\$600 million in domestic violence, intimate partner violence (IPV) and child protection services. It is attracted to how a collaborative model can reduce costs and improve outcomes for high-risk populations. The co-location model includes coordinated case management for mothers and their children including mental health services, law enforcement, Sensible Accounting to Value Energy Act (SAVE), etc.

Q6: What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

A6: Obstacles include: lack of payment or risk adjusted payments for social determinants of health, differing eligibility requirements, restrictions (real or perceived) on data sharing, competing measures of success, and regulatory limitations for innovative solutions. Investment in a centralized coordinating function may decrease duplication of services and care coordination functions, and increase information sharing.

Additional obstacles to integration include:

- IT incompatibility or restrictions on sharing data on common beneficiaries across programs to effectively manage interventions and/or evaluate outcomes of these interventions
- Specific barriers to data sharing such as FERPA, HIPAA and mental/behavioral health data restrictions
- Differing measures, despite aligned goals
- Mismatch in cultures typical to health care and social sectors
- Capacities, expertise and infrastructure needed for successful service and payment integration, such as braided financing
- Wide variations in interpretation of what is allowable
- Having to demonstrate ROI over a shorter time period; dynamic scoring with a ROI
- Competing goals, agendas and measures of success across service sectors with overlapping beneficiaries

Additional obstacles not specific to integration with social service providers further complicate the evolution of service and payment models for population health include:

- An appreciation for the unique aspects of the pediatric and maternal population within broader populations
- Gaps in data management and analytic capabilities
- Payment for social determinants of health
- Unclear patient attribution year over year
- Cultural transformation for large systems of care
- Sustainable funding with decreasing rates once savings are recognized

Example of overcoming obstacles:

Education in Action: School Attendance Data Sharing: a partnership of Children's National Health System and the Washington, D.C., school system. Academic achievement is closely linked to long term health, economic and social outcomes. In the D.C. 2015-2016 academic year, 16% of students in D.C. public schools were chronically absent (missed more than 10 days of school that year). Parents can consent to share their child's school attendance data with their pediatrician. The Chesapeake Regional Information System for our Patients (CRISP) houses the data and pushes it out to practices on a biweekly basis. The goal is to develop a school-friendly health system -- in which schools are aware of resources to support students, avoid duplication of services, educate pediatricians about academic corollaries to health and share data.

Q8: What role do models of care such as ACOs play in the pediatric environment? A) Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both? B) How are pediatric ACOs the same or different from adult-focused ACOs? C) What opportunities do pediatric ACOs have for integration with community and health services systems? D) Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

A8: Pediatric ACOs are relatively new players in terms of managing the health care of populations. Few pediatric ACOs currently negotiate with states directly for payment.¹ The pediatric ACO develops the care model specific to its defined population. Care models regularly include care coordination within and across

care delivery sites and patient and family-centered medical homes.² Often the provider networks and system-based contracts are uniquely constructed to cater to the needs of the population.³ Many ACOs distribute some sort of incentive pay (savings) to providers based on the achievement of cost and quality goals. MCOs maintain the needed claims and related infrastructure for services such as claims processing and utilization review. Pediatric ACOs tend to provide case and care management.⁴

In a study of 12 children's hospital-based ACOs or ACO-like organizations, Makni, Rothenburger and Kelleher established that pediatric ACOs structure and function vary a great deal, but that there are common elements amongst all, as presented in the table below.

Table: Children's Hospital-based ACO Characteristics by Financial Structure

Table 2: ACO characteristics by financial structure

Pediatric ACO Characteristic	Presence of Characteristics by Financial Structure				Percent of Total Known [*]
	Tier 1 ACOs (d = 4)	Tier 2 ACOs (d = 1)	Tier 3 ACOs (d = 7)	Unable to Determine	
<i>Provider Incentive Program</i>	C	E	F, G, H, I, J, L	A, D, I	100%
<i>HEDIS-based Performance Measures</i>	B, C	E	F, G, H, J, K, L	D, I	90%
<i>Free-standing Children's Hospital</i>	A, B, D	**	F, G, H, I, J, K, L	**	83%
<i>Medicaid Payer Contracts</i>	B, C, D	E	F, G, H, I, J, K, L	**	83%
<i>Dedicated Case Management Resources</i>	B, C, D	E	F, G, H, K, L, M	A, I	80%
<i>Quality-based Payments to ACO and/or Providers</i>	B, C	E	G, J, K, L	D, I	70%
<i>Commercial Payer Contracts</i>	C	E	**	**	17%
<i>Affiliated with Adult Health System</i>	C	E	**	**	17%

Note. ^{*} Percent Calculation = ((Tier 1 + Tier 2 + Tier 3) / [12 – Unable to Determine]); ^{**} Indicates no organization in this financial category had the specified characteristic. Letter Key: A. Children's Hospital of Philadelphia; B. Children's Hospital and Clinics of Minnesota; C. University Hospitals Rainbow Babies and Children's Hospital; D. Children's Health Collaborative; E. Blank Children's Hospital; F. The Health Network by Cincinnati Children's Hospital; G. Partners for Kids; H. Children's Mercy Pediatric Care Network; I. Children's Hospital Los Angeles; J. Cook Children's Health Plan; K. Children's Community Health Plan; L. Texas Children's Health Plan.

Children's hospitals tend to own their ACO or cater to a child population that is attributed to an adult system's ACO. This is an important distinction because in the first arrangement the ACO or ACO-like organization offers child-centered care, whereas in the second the child is part of an adult-centered model.

In comparing pediatric ACOs to adult-focused ACOs:

- Pediatric ACOs generally have smaller populations and will need additional participation to create efficiencies for initial cost savings.
- Pediatric ACOs require longer term contracts for outcomes measurement. Thus, short term measures related to or proxies for longer term outcomes are needed for shorter contract windows.
- Pediatric ACOs find savings via efficiencies and coordinated care vs. efficiencies found through competition as in the adult markets.
- Pediatric ACOs must be able to prospectively versus retrospectively attribute their patients to the ACO. Christensen and Payne at Children's Hospitals and Clinics of Minnesota found reductions in inpatient use and cost of health care resources associated with longer attribution. However, the effect was the greatest on the first year of care.⁵ Thus patient must be attributable to an ACO upon enrollment or initial utilization of services.

Pediatric ACOs have the opportunity to provide a framework for attribution which in turn impacts outcomes, resource use, and spending. ACOs can create partnerships for legal services⁶, housing, schools and juvenile

justice systems. To do this effectively, hospitals reported that “all agency, hospital and community players must be at the table to contractually determine the owners and partners of each piece of the effort.”⁷ Pediatric ACOs present the opportunity to act as a convener of care management functions across community and health service systems due to their infrastructure resources as compared to other providers.

Q9: What other models of care besides ACOs and MCOs could be useful to implement to improve quality and reduce the cost of care for the pediatric population?

A9: Of particular note is the critical need for integration of behavioral and physical health in care delivery. The specialized pediatric mental health workforce is inadequate to meet the national need; thus, a broader strategy is necessary. Following are two models of this type of integration:

- Massachusetts Child Psychiatry Access Project (MCPAP) is a strategy to boost the primary care capacity to effectively screen and manage common behavioral health needs and more appropriately refer to specialty psychiatrists, clinical and therapeutic resources. MCPAP utilizes collaborative care model (team care); measurement-based treatment; evidence-based and cost effective care. Regional teams, anchored by six children’s hospitals and funded via the Massachusetts Department of Mental Health offer consultation, training/education, resource referral and some face-to-face care to support primary care/family practitioners and their staff. The program costs \$3.5 million for 1.5 million kids and 57% of program costs are borne by commercial payers. The Massachusetts network formed a National Network of Child Psychiatry Programs with 32 children’s hospitals involved in state or regional networks. Approximately 24 million kids have access to this national CPAP program. State Innovation Models and payment reform models have been utilized in some states.
- Children’s National Health System utilizes a collective impact model to integrate behavioral and primary care delivery. 70% of Washington, D.C., area children are enrolled in Medicaid/CHIP and have a large degree of unmet mental health needs. With state public health funding and private philanthropy the infrastructure for a collaborative across disciplines, sectors and delivery sites was established. The collaborative works to undergird the capacity, systems, confidence and treatment strategies of primary care providers (PCPs) who see patients with behavioral health concerns. It partnered with state Medicaid agency to create a community resource guide for PCPs. D.C. Mental Health Access in Pediatrics has promoted screening in primary care; access to a helpline for primary care providers to talk to pediatric psychiatrists; those psychiatrists can offer medication, referral as an immediate support. The program helps with the attrition that happens when general pediatricians make referrals.

Additional recommendations for effective integration include:

- Inclusion of the child and family as partners in care across service sectors, both in the care of the individual child, as well as in the design of improvement of systems and processes that impact all families
- Decreased duplication of services across multiple providers/programs; more effective integration of interventions with beneficiaries common to more than one program/service
- Integrated metrics of success which reduce the burden of data collection on providers and better outcomes measures for evaluation of programmatic success
- Effective use of technology that allows for virtual care encounters, thus avoiding more costly “face-to-face encounters” while promoting shared visits between the beneficiary and multiple providers of services at the same time
- Integrated beneficiary records that can be shared across providers from multiple service sectors, thus promoting effective coordination of care interventions and decreasing competing and/or duplicative services for the same beneficiary

- Centralization or coordination of care management across multiple service sectors, thus avoiding the scenario of the child having multiple care coordinators
Cultural transformation will need to occur across all sites – moving from a fee-for-service mindset to an integrated care with family driven goals requires changes across all levels of the organization and particularly with leadership in setting the direction

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

Integrated pediatric service model payments do not yet to incorporate social service providers. Both payers and providers are hesitant to pilot risk models even for medical services due to the inexperience with risk models. Incentive arrangements for social services will require actuarial consideration of number of children needing varied services from varied providers across a community before determining if feasible. Only with experience and sufficiently sized population, can shared savings be considered.

Some initial thoughts on integrated alternative payment models and incentive arrangements include:

1. As a first step, clarify regulatory issues to enable flexibility in service provision and enable more widespread data sharing. Organizations currently face significant hurdles when integrating needed social services due to differing regulation or regulatory interpretations with respect to allowable services and information sharing.
2. Develop a payment mechanism (e.g., a PMPM care management fee) for a centralized care coordination function and funding for emergency social services for high need populations. This will serve to stabilize the revenue stream and provide readily available support more reliably for families (e.g., Health Home model).
3. Provide payment incentives for primary care and rural practices to keep children close to home.
4. With experience, move to capitation for an actuarial sufficiently sized population.
 - a. Incorporate social services into the medical cost (e.g., Oregon model)
 - b. Include a socio-economic risk adjustment factor (e.g., Massachusetts model)
 - c. Ensure patient attribution is prospective
 - d. Establish credible risk adjustment and outlier protection particularly for children with complex conditions
 - e. Calculate the return on investment over the long-term (10+ years) to account for lifespan benefits of pediatric health and wellness interventions

Q1: What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

A1: Those children requiring services from multiple providers including mental/behavioral health services are likely to benefit the greatest from integrated services. States, providers and consumers should collaboratively identify the beneficiary populations given the construct of existing programs. It is also important for select

populations, such as children with complex medical conditions (CMC), to cover services through the age of 25 to facilitate transitions to adulthood. The pediatric health plan, Health Services for Children with Special Needs, in Washington, D.C., covers children up to age 26.

Medicaid and CHIP beneficiary populations/participants that offer the greatest opportunity for generating savings and/or improving outcomes from integrated health care and health-related social services systems include:

- Children with complex medical conditions as their medical issues are often intertwined with social complexity. This is a high cost, high need population where intensive care management and integration with social services can reduce hospital days and ED visits which will significantly lower the total cost of care. Complex care clinic physicians report the integration of behavioral and mental health services with physical health services should be a priority for these children. Mental health represents a significant unmanaged aspect of care. In some states is not calculated in the total spend under Medicaid. The literature reports the subcategory of children with complex medical conditions who are technology dependent potentially provide an opportunity for generating savings and improving outcomes given their high hospitalization rates for technology malfunction.
- Children at social risk. This includes those experiencing poverty and exposure to childhood adverse events as well as immigrant and minority children. Interventions for these children particularly those ages 0 to 5 years can greatly reduce downstream medical and social costs and ensure increased productivity
- Youth with medical complexity who are transitioning to adulthood. Early intervention starting at 12 can help youth develop autonomy in medical care and encourage effective self-management of the medical condition. Strong linkages with providers and community organizations who care for physically and cognitively impaired adults can reduce patient costs through reduced hospital days and home care services as well as lower social costs

Children from conception to 25 years old should be considered due to the importance of starting preventive services during pregnancy to prevent later morbidities.

Q2: How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs? a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models. b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures? c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients. d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

A2: Flexibility in spending will allow providers to customize services according to patient needs. With flexibility, providers and states can explore and develop opportunities to align with existing programs and community resources. A centralized coordinating function is likely necessary to address the multitude of needs for specific populations across multiple medical specialties, primary care and social service providers. Both risk and responsibility need to move closer to the provider who is most familiar with the patient and family.

In terms of a payment model, full capitation arrangements enable the greatest flexibility to providing needed services as determined cooperatively by the family and provider. While the potentially the ideal payment model, the experience and infrastructure required in managing a capitated payment does not yet exist and therefore intermediate steps such as a PMPM payment for a centralized care coordinating function will be necessary before moving to capitation or full shared savings. In addition, the size of the attributable populations must be large enough to actuarially account for potential volatility in the utilization and spend for both upside and downside risk arrangements. Other notes on payment models and incentive arrangements:

- The population must be large enough to drive ample savings to encourage provider participation and reward optimal outcomes.
- To achieve savings in this population, providers must foster proactive family relationships with their care manager.
- Savings are likely achievable with specific subsets of high risk, high need populations.
- Regulatory barriers to the provision of services and incentives to families must be addressed to allow maximum flexibility within any payment model.
- Lessons learned from the state of Oregon encourage inclusion of social service expenditures in rate setting adjustments to account for their costs. This avoids avoid penalizing organizations for reducing total spend and more accurately represents the return for investing resources in social services.⁸
- CMS must consider payment models that encourage support of the primary care physician to keep even the most complex children closer to home and enable more cost efficient care.
- State health homes provide an option for specialized populations. State health homes often include mental health and care coordination functions. In addition, the Comprehensive Primary Care Plus (CPC+) program piloted with adults from the Innovation Center may build upon this as a payment option for specialized pediatric populations.
- One additional consideration is a PMPM payment for a centralized care coordinating function such as the Care Management Entity for complex mental health patients utilized in some states.
- Massachusetts incorporated social services indicators into risk adjustment which was found useful in detecting pockets where the standard risk adjustment tool under-predicted the population.⁹
- The provision of social services must be tracked so that studies can be performed on the effectiveness of these services on medical costs. No standardized data tracking system is in place to capture these services
- Considerations for “ramp-up” periods include upside only shared savings or shadow shared savings or PMPM care management fees until actuarially sufficient sized populations are achieved.

Ten children’s hospital sites in collaboration with their primary care partners are focused on improving care and reducing costs for children with complex conditions as part of a Health Care Innovation Award. Children in the Award represent a significant spend due to the fragility of their medical conditions. This population often exhibits variable spending. An individual patient can pose an unexpected result when not accounted for properly. Unpredicted spending has a greater impact in models with smaller populations. The Award experience found that for children with complex medical conditions, payment models should serve to foster dynamic care teams (the team includes the family) to readily share information among primary care, specialists and community providers. A care manager may serve as a central point for information sharing. In addition, Award hospitals noted payer concerns regarding provider capability to take on risk associated with high cost populations. Payers state that complicated models are a challenge for payers to administer. Payers do want to include nationally recognized quality metrics. Payers have two relevant objectives: they seek recognition for quality care and they seek to attract patients. Alternative payment models should support these objectives.

Overall lessons learned from risk contracting within the Award:

- Alternative payment structures need to be simple and stable
- Payments to primary care providers needs to be ample
- Payments need to reward specific performers with greater incentives and provide a minimum for all within the network

SECTION IV: PEDIATRIC MEASURES

Q1: What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

A1: Consensus on pediatric measures for use in alternative payment models has yet to be achieved for the industry. The Child Medicaid Core set is an example of a pediatric core set of measures, and the developing AHIP/CMS Pediatric Core set. However, both these measure sets fall in the context of Category 3 or 4 APMs. This is primarily because the sets have not been scrutinized and selected within the APM context, or if they have, have lacked identifying or pointing to critical principles or assumptions that would guide users of the core set. However, there are recent bodies of work from national organizations such as the National Academies of Health and the Health Care Payment and Learning & Action Network (HCP-LAN), and industry-led work, such as the Pediatric Measures for Accountable Care (PMAC) committee that we can turn to and inform abiding principles, assumptions, and finally, a candidate list of measures.

The role of performance measurement is foundational to APMs. APMs ask systems and/or providers to accept accountability for costs, the quality of care and the outcomes. APMs, through their design and payment models, seek to incentivize improvements in these by sharing risk or rewarding high or improved performance. The selection of the performance measures, thus, can serve not only to assess, but also to drive improvement by motivating systems and individuals to improve the health and well-being of the population. Thus, it is critical that the measures align with the goals of the APM and how value is defined. Further, there will be a need for cascading, or shorter-term measures that inform the directional contribution to overarching measures so that providers can take appropriate action toward those goals. The design and functionality of the APM's measurement system is critical to success, and it is sensitive to the design of the payment model.

The “system” of measurement must adequately incentivize/reward the providers of care, and must account for the motivations of children and their families’, providers and payers. Other key aspects or components of any measurement system used by an APM include:

- **Innovation and Refinement:** Not only the selection and use of measures that matter to children and their families; but also continued innovation and refinement of measures must persist. This is to address any shortfalls in existing measures as well as keep pace with system, medical innovations and consumer needs.
- **Improve Organization:** We believe that we should learn from our mistakes. Not only do we have fragmentation in how we deliver care, but many measures that are developed and implemented have not been centralized in any way. Thus, we support having in place an organized process to oversee and accelerate the development, testing and use of new, high priority measures. We would stipulate that this governing structure must be informed by the relevant experts and stakeholders. An example of a current structure that could be leveraged is the Pediatric Quality Measurement Program (PQMP) led by the Agency for Healthcare Research and Quality in partnership with CMS.

- **Data and Reporting Infrastructures:** Still today, the data and reporting infrastructures needed for meaningful measurement are not sufficiently in place. These reporting infrastructures also need to be bidirectional and give information back to providers so that they can take action, and not just take it from them.
- **Measurement System Innovation:** Similar to the need to innovate and refine measures, the measurement systems must also evolve. Not only should the measurement systems allow for innovation in general, but they must also allow for local innovations so that local differences in the needs of their children can be addressed to drive improvement. Measurement systems must allow for local innovation so that population differences, needs, etc. can be addressed to drive improvement.
- **Incentives:** Measurement systems must create meaningful incentives to deliver high-quality care, achieve favorable health outcomes, improve patient care experiences and manage the total cost of care. This includes the incentives needed to improve data infrastructures, measurement systems, sharing of data, as well as changing or improving the care we deliver to drive improvement in child health and well-being.
- **Motivation:** Once measures are identified, the performance targets must motivate stakeholders. While we often focus on the motivations of the providers, APMs demand that we also consider how to motivate children and their families' behaviors to drive improvement. Motivating children and families, for example, may be approached by incentivizing clinicians to deliver care and to act as agents of change, or by incentivizing other trusted leaders/allies in the community that can motivate behavioral changes among children and families. These motivations, thus, are not limited to those within the continuum of care, but encompass other influencers of child health and well-being.
- **Long-Term Goals:** As the RFI queries, there is a need to consider the long-term performance targets, and that they should enable long-term planning and commitment to improvement. While, as the candidate core set of measures indicates, there are measures that, we hope, will motivate long-term planning (e.g., 3rd grade reading, or high school graduation), other long-term performance targets could include adult targets. Rather than add those here, we point to those similarly identified for adult populations, and suggest that the measures selected do support improvements in adult health and well-being.
- **Short-term and Actionable:** We believe that in order to support pediatric health providers and systems in contributing to improvements in overall health and well-being of children, that they will also need measures known to, or believed to, contribute to these improvements. We anticipate that community providers (i.e., those outside of the health systems), and even families, may similarly need more immediate information that is actionable for them.

Q2: Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

A2: Currently, there are some population performance measures that indicate good health and well-being among children (as identified by the PMAC). Some of these currently are collected for surveillance use; however, it is not yet known how well they could inform those within an APM. For example, they may not be adequately collected, e.g., for all states/counties, or with enough regularity for immediate implementation. However, these measures have not been tested for use in an APM adequately, or at all. While there is a lack of

understanding on how well these measures would incentivize and motivate improvements in child health and well-being, it provides a starting point, which to date, there is none. At the same time, it is important to take heed of the caution expressed in the recent NAM publication *Metrics That Matter for Population Health Action: Workshop Summary*. Specifically, those top-down national approaches in selecting measures limit the engagement, and hence, buy-in of the communities. This may interfere with the desired motivations to drive improvement. Further, many of these indicators are not intended to motivate actions that lead to the desired change.

Similarly, while there are currently some health care measures that assess health and well-being, many are either collected for particular purposes, and are not collected in a manner that would support broader population measurement (e.g., by individual health plans or Medicaid agencies).

Other important challenges to consider include:

- Most children are healthy and generate few medical encounters or medical expense.
- Children with special needs/medical complexity who do have high medical needs are a medically heterogeneous population (compared to complex adults), and may require different medical and social interventions. This is a challenge not only for the science of measurement (e.g., small numbers), but also for evidence-based guidelines that inform measurement.
- All children require varying types of medical emphasis, depending on their point in life. This compounds the heterogeneity issue that challenges measure science.
- Measures that motivate change and incentivize improvement must address mental health and substance abuse.
- Accounting for social determinants of health is critical. Children, and their health outcomes, are both sensitive and vulnerable to factors outside of the health system traditional control. Measures should seek to appropriately share accountability so that the motivation and ability to address these are supported.

In this response, we limit our list of measures to those that are candidates for population level reporting. These candidate measures were identified in early 2017 by the PMAC; the set requires further vetting and testing (as noted previously). Further, as expressed in the measurement system principles, local innovation and measurement is critical to move the dial on these broader quality goals. Thus, while we aspire to an agreed upon “North Star” set of measures, the community needs in a population and stakeholder motivations must be accounted for in the development of well-functioning, complete measurement systems. The PMAC used the NAM Vital Signs framework, and thus the table presents them in alignment with the domains used in that body of work. Potential sources for some of these measures include the CDC Vital Signs, the Kids Count Data Center. Other sources for the data needed to calculate the measures include AHRQ’s *Healthcare Cost and Utilization Project* (H-CUP) data, health plan and system data, and measure results reported to NCQA.

Table: Candidate Measures for Population Level Reporting

Domain	Candidate Available Measure	Potential Measure or Data Source
Healthy People	Infant mortality (0-1 yrs.)	National Vital Statistics
	Violence and injury mortality (2-18 yrs.)	CDC’s WISQARS™ (Web-based Injury Statistics Query and Reporting System)
	Prevalence of Healthy Weight	CDC Division of Nutrition, Physical Activity and Obesity’s Data, Trends and Maps
	Teen tobacco use rate	CDC: Youth and Tobacco Use
		Kids Count

	Teen pregnancy rate	CDC; Kids Count
	Kindergarten readiness	Potential sources: Department of Education; National Household Education Surveys Program (NHES--however, last collected in 2012);
	3rd grade reading	
	HS graduation rate	U.S. Department of Education
Care Quality	Immunizations at all ages (0-18 yrs.)	CDC and other. Other: NCQA HEDIS (measure results submitted by MCOs to NCQA)
	Ambulatory-sensitive hospitalization and ED visit rates	ED Visits: HCUP-AHRQ and NCQA HEDIS; Ambulatory sensitive hospitalizations have been calculated using Kids' Inpatient Database and there are specified measures--both public and proprietary in nature.
	All Harm Index (available: SPS Harm Index (inpatient))	Yes, but for hospitals only, and not all hospitals. Important to note that some payers are stating that no harm is a business competency, and not a measurement concept for payment.
	Days of Hospital Stay/ 1000 Members	Data to calculate these are collected in system transactional data and H-CUP
	Patient experience with care (Clinician Group CAHPS--CG-CAHPS--and/or Child Hospital CAHPS --C-HCAHPS)	There are many tools, mainly surveys, currently being used to assess patient experience. For example, CG-CAHPS.
Care Cost	Out-of-pocket spending relative to income	This information is collected or known by payers; however, it is fragmented.
	Total cost of health care	Transactional and claims data. An example of an existing Total Cost of Care measure is the Health Partners (CITE). It is not known if the risk adjustment is sufficient for pediatrics.
Engaged People	TBD	

The market for pediatric APM and the measures used in these models is unique because the chronic illnesses and co-morbidities that children experience are different from the adult population^{10,11}; thus identifying measures or developing measurement systems that can account for these may be a key component of an APM success. These challenges are compounded by the need for physician engagement and training—avoiding burn-out—data collection and measurements, and legal governance. Arguably, the intense resource pressures on the providers and clinicians to be at risk for value, but to also collect, produce, and implement the measurement systems is high. This risks competing for the resources (time and money) necessary to deliver the high-value care for children we all want. In 2016, the CHA surveyed member hospitals about various accountability programs and their measures meant to represent the quality of care. Children's hospitals are currently engaged in many programs. Respondents (n=82 hospitals) reported participating in, on average, over six different public reporting and value-based purchasing programs. And, similar to other

similar surveys conducted among ambulatory practices, over 97% reported the burden on resources to produce measures for these programs in Much More or More Effort than three years ago.¹²

SUMMARY

In summary, the Children's Hospital Association appreciates the opportunity to respond to this request for information on pediatric alternative payment models. We continue to work with members to support the evolution of care systems for children. In addition to our comments in this RFI, we might suggest a framework to consider for a community integrated health system. In a 2014 Health Affairs article, Neal Halfon presented the 3.0 Transformation Network. This framework focuses on socioeconomic and developmental correlations to health over the lifespan and may serve as well as a guide for work in this field moving forward.

Table: US Health System Transformation¹³

Health system characteristic	Era 1.0: sick care system	Era 2.0: coordinated health care system	Era 3.0: community-integrated health system
Objective	Acute care and infectious disease	Patient-centered care; coordinating episodes of care across levels of care and managing chronic conditions	Population and community health outcomes; optimizing the health of populations over the life span and across generations
Organization of services	Independent health care providers; hospital, clinics, primary care providers, and specialists operate separately	Systems of health care, such as accountable care organizations and medical homes; teams of health care providers accept collective responsibility for quality outcomes and overall cost of care	Community-integrated health system; integrated health care networks partner with public health and community organizations to both reduce community health risk factors and provide coordinated illness care
Care process	Little coordination between inpatient and outpatient medical care; dominated by an acute care treatment model	Coordinated care to better manage medical risk at each level (primary, secondary, and tertiary) of the health care delivery system	Integrated health, psychosocial services, and wellness care designed to optimize and maintain health and well-being across the life course
Payment methodology	Fee-for-service; rewards volume of services	Value-based payments; health care providers rewarded for better patient outcomes, better patient experience of care, and lower total cost of care	Recognize value with long-term time horizons and capture multisector financial impacts outside of health care cost; sustainable financing alternatives such as population based global budgets; single budget for a broad scope of health care services, combined with incentives
Health information technology	Separate paper medical records exist but are not connected	Electronic health care information exchanges connect various provider networks	Health and medical information follows the person; there is connectivity between the health and human service systems; and actors have access to real-time data on quality, costs, and outcomes for individuals and populations
Quality of care	Large variations in quality and low transparency	Consistent quality; using standard quality outcomes and improvement processes through collaborative learning	High and continuously improving quality through a learning health system
Population health improvement	Not addressed	Focused on health of patients/clients only	Focused on health outcomes for geographically defined population, including upstream socioeconomic and

			developmental correlates of health
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¹ http://jamanetwork.com/data/Journals/PEDS/934898/POI150080supp1_prod.pdf

² <https://medicalhomeinfo.aap.org/national-state-initiatives/at-a-glancetable/Documents/NASHP%20At%20a%20glance%20state%20table%20FINAL.pdf>

³ <http://www.partnersforkids.org/wp-content/uploads/2016/05/Makni-Survey-of-12-CH-based-ACOs-3-10-15.pdf>

⁴ Survey data from Children's Hospital Association Accountable Care Organizations Study, 2014

⁵ http://jamanetwork.com/data/Journals/PEDS/934898/POI150080supp1_prod.pdf

⁶ <http://jamanetwork.com/journals/jamapediatrics/fullarticle/2476186>

⁷ Exchange with hospitals and other organizations on 3/13 – conference call to gather info, hosted by Nemours

⁸ <https://www.oregon.gov/oha/OHPB/docs/Health%20Related%20Services%20Amendment%20Concept%20Paper.pdf>

⁹ <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/1610-umass-modeling-sdh-summary-report.pdf>

¹⁰ <http://revcycleintelligence.com/news/value-based-incentives-enrich-accountable-care-organizations>

¹¹ <https://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/AAPMedicaidPedACOs.pdf>

¹² Survey data from Children's Hospital Association Accountability Program and Quality Measure Survey, 2016

¹³ <http://content.healthaffairs.org/content/33/11/2003.abstract>

Children's Hospital Los Angeles

Dear Dr. Billioux:

As the largest pediatric teaching hospital in California, Children's Hospital Los Angeles (CHLA) is a key provider of health care services for children and adolescents throughout Los Angeles, the region, and beyond. Located in central Los Angeles, CHLA is a 356 bed tertiary care hospital, with 106 critical care beds, and more than 16,000 patient admissions annually. In addition, there are 512,359 Outpatient Clinic visits annually and 80,000 Emergency Department visits annually. Based on our long history as a provider of pediatric health care, CHLA appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models. Our comments focus on several key aspects of the request that we regard as essential to strong systems of care for children, including those that integrate health care and related social services with shared accountability and savings.

Central to our comments is our emphasis on child and family centered care. We serve children from culturally and linguistically diverse and underrepresented communities and provide primary and preventive care as well as serve those children with special medical needs and chronic conditions. Poverty, uneven access to needed services, and fragmented systems of services are all factors which impact communities CHLA serves. All children and families would benefit from appropriately integrated systems of care to maximize physical, social and behavioral development.

Particularly in dense, underserved urban environments, the health and well-being of children and adolescents is also tied to appropriate housing, nutrition, access to services, education, transportation, and safe communities. Therefore, an Integrated Pediatric Health Care and Health Related Social Service Delivery Model would present an exceptional opportunity to combine and coordinate appropriate care and services for children.

Networks must be organized appropriately to address the health and social needs of geographic and condition specific populations of children. There are numerous challenges to this network formation, particularly related to discrete systems which serve children. To appropriately integrate services needed to promote optimal child development, would require significant systems changes to service delivery across organizations, particularly those involving public-private partnerships, CHLA has long standing experience in providing innovative programs related to access to care, injury prevention, and adolescent care, working in conjunction with education systems, social service organizations, faith-based organizations and others across city, county and state entities. Such programs as our Adolescent Teen Pregnancy Program, Promotora Program, Obesity Prevention, and Child Passenger Safety Programs have all demonstrated exceptional outcomes for specific populations, but face challenges working across organizations. Service delivery models will need to be well organized to integrate care focused on child development across the age continuum. Network innovation must be explored not only through state solutions, but also through public and private partnerships.

Children with special medical, developmental, complex or chronic health care needs are best served by integrated care delivery models. CHLA cares for thousands of children enrolled in the California Children's Services Program. Often, there are challenges in obtaining needed community based services for these children to enable them to live most productively in their homes. These children and adolescents face extraordinary challenges across the age and developmental spectrum and require extensive medical management and care coordination. At present, barriers exist related to durable

medical equipment, in-home nursing support and appropriate reimbursement and access. Families would be best supported through integrated care delivery to allow them to provide care for children in their homes and communities. Unnecessary hospital readmissions would be avoided and costs reduced if necessary services were integrated appropriately.

Barrier reduction to services is a key component of an integrated delivery model, specifically focused on regulations, shared funding, data systems and access.

Overall, we believe a system of care for children must:

- Be child and family-centered and supported by an infrastructure aligned around the child's development with metrics designed specifically for children.
- Integrate physical and mental health to address the complete health needs of children.
- Be delivered via an integrated network of care that is home and community-based with access to specialized services as needed.

Based on CHLA's experience in caring for diverse populations of children and adolescents, we offer the following points on the payment model and network attributes for integrating pediatric health care and health-related social services with shared accountability and savings.

Alternative Payment Models

- Clarify regulatory issues to enable flexibility in enrollment, service provision and data sharing. Organizations currently face significant barriers integrating needed social services due to differing regulatory interpretations at the city, county, state levels, as well as with other non-profit organizations, with respect to allowable services and information sharing.
- Develop appropriate payment mechanisms for a centralized care coordination function and funding for specific social services for high need populations.
- Provide payment incentives for primary care and chronic conditions at the provider level.
- Ensure appropriate alignment of payment across health care providers and health related social service providers.
- Develop resource utilization risk-adjustment in care delivery models that accounts for medical complexity and psycho-social complexity.
- Develop grant and investment opportunities to bring behavioral health resources to primary care and sub-specialty care practice. Technical assistance for developing reimbursement models, assuring coverage for behavioral health services in a medical setting, and development of clinical skill sets for practicing in multi-disciplinary styles in the medical home would be of use.
- Create payment models that drive capacity and capabilities for care coordination across medical and behavioral services. Such payment models should be well-suited for pediatric primary care for patients with less complex needs and pediatric sub-specialty care for patients with more complex needs.

Integrated Networks

CHLA provides extensive specialized pediatric resources in its geographic regions. Integrated delivery models must have these type or resources at the core of network structure to address the needs of the

pediatric population. Networks must:

- Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations.
- Be able to meet the needs across a wide geographic region.
- Provide comprehensive pediatric specialty care.
- Be able to integrate services for children across all sectors and systems.
- Have large scale Electronic Health Record capacity, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.
- Have a centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.
- Develop strong pediatric quality care metrics to appropriately measure outcomes of integrated service delivery.

Children's Hospital Los Angeles looks forward to working together across many sectors on developing innovations in the delivery care that will improve the health of children and adolescents. Thank you for this opportunity to provide input to the Pediatric Alternative Payment Model Request for Information.

Sincerely,

Children's Hospital of Oakland

Dear Sir or Madam:

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted

Children's Hospital of Orange County

Hello,

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Thank you.

Respectfully submitted,

Children's Hospital of Philadelphia

To Whom it may Concern,

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Children's Hospital of Philadelphia

The Children's Hospital of Philadelphia is pleased to submit the attached letter re: RFI on Pediatric Alternative Payment Model Concepts.



Children's Hospital
of Philadelphia.pdf

Madeline Bell

President and Chief Executive Officer

April 7, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attention:

RE: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

Children's Hospital of Philadelphia (CHOP) appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models. CHOP supports the response that was provided by the Children's Hospital Association, and offers select additional comments focused on the unique needs of pediatrics, particularly with respect to subspecialty care. As a health network, we provide care to 480,000 children and adolescents annually across our hospital, specialty, primary care, and home care services. Among those are 250,000 children and adolescents in 31 primary care practices spread across Delaware Valley in Southeastern Pennsylvania and South Jersey. We are therefore uniquely positioned to comment on alternative payment models, given the scope of our health network and experience with early value-based contracting in pediatrics.

Alternative Payment Models

One of the largest challenges of including pediatric providers in value-based payment arrangements is that unlike adult specialty care, which is distributed widely across the country, pediatric specialty care providers are much fewer and concentrated principally around childrens' hospitals and their networks. This has led to a centralization of very select providers to care for children with complex medical illnesses. In fact, many community hospitals and providers no longer feel comfortable caring for this growing sector of children, particularly as innovations in pediatric care have enhanced the survivability of what were traditionally fatal illnesses. At the same time, many of the value-based approaches, particularly narrow networks that tier pediatric subspecialty providers at childrens' hospitals out-of-network, have most harmed children by over-restricting needed subspecialist services.

When children are medically complex, they also have very heterogeneous problems, (e.g. congenital anomalies, inborn errors of metabolism, complications of prematurity, and congenital heart disease) rather than the frequent and common co-morbidities in adults (like diabetes and congestive heart failure.) The care coordination that children need is highly tailored to their unique needs. Many of these children have multiple complex congenital conditions and may require visits to multiple specialists and frequent hospitalizations and surgeries. Families providing for their care face unique



**Children's Hospital
of Philadelphia**

challenges, often having to transport medical equipment (wheelchairs, ventilators, feeding machines) and require significant care coordination to insure that services are provided in tandem and with an urgency that can help prevent crises that might lead to hospitalizations. As a result, they are best managed with involvement of nurse-based care coordination, yet value-based models have not yet emerged to reliably finance these services. Much of this coordination is done over the phone or through home visits to the children's homes. Telemedicine does offer some ability for innovation in this area, but again the reimbursement mechanisms to support that work have not been well-developed.

Aside from the complex medical issues that children have is the recognition that payment for healthcare services alone is likely to be inadequate in managing utilization of healthcare resources for children, many of whom have complex social needs. With the majority of children now in the Medicaid or CHIP programs across the country, and with many families unable to afford dependent coverage through their employers, the social risks to children are rising. We are confronting more and more challenges, like maternal depression, parental substance abuse, unemployment, housing insecurity, and food insecurity, that are having downstream effects on children's health that cannot be ignored.

The financing model for children must therefore support multi-disciplinary teams (nurses and social workers) that both highly manage their care, as well as connect them to social service providers who can assist the family in the community or within the school systems when they have needs. This is particularly important for children with complex medical illness, who often have intellectual disabilities and need for nursing assistance in school systems.

We also need enhanced payments to pediatric medical homes that would permit both screening for a child's mental health needs, as well as their parents, mental health and psychosocial needs. Enhanced medical home payments would permit better integration between pediatric providers and community service, mental health or school providers that will be critical to improving children's health and reducing their health risks over their lifecourse. Rewarding practices that achieve this integration with the enhanced payments that will support their interdisciplinary teams would recognize the more holistic responsibility that pediatric providers share for a child's development.

We are hopeful that the information you receive supports the development of innovative approaches to financial arrangements, which are reflective of the unique needs of vulnerable children and youth. If you have any questions on our response, please contact Elaine Gallagher, Vice President Administration, CHOPPA at 267-426-6811 or by email at elaine.gallagher@choppa.org

Sincerely,



Madeline Bell

Children's Hospitals and Clinics of Minnesota

See attachment.



Children's
Hospitals and Clinic

April 7, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

As a system that has always supported and engaged in alternative payment and delivery models, Children's Hospitals and Clinics of Minnesota (Children's Minnesota) is pleased to see CMS' interest in exploring alternative pediatric models. We were Minnesota's first adopter of the medical home model and one of the first participants in the Integrated Health Partnership demonstration with Minnesota's Medical Assistance (Medicaid) program. Based on this experience and other efforts in our marketplace, our comments are focused primarily on the key principles we believe are important for successful models.

We also want to call attention to the comprehensive feedback offered by the Children's Hospital Association in its March 27 submission. CHA's submission provides important insight from their perspective of representing the broad spectrum and geographic reach of our nation's children's hospitals. While each of us offer unique perspective and will have points of differentiation, we echo the recommendations outlined in their submission.

From Children's Minnesota perspective, we believe that developing more integrated care models and associated payment models is critical to providing comprehensive, more responsive care at greater value to the children and families we serve. We fully endorse the move toward greater integration among health care, social services, government and the private sector. We all know that these various entities have a significant impact on the health and well being of children and families. Yet, we also know that those services are not only difficult for families to navigate but are not easily integrated from a business standpoint.

As CMS considers its approach to alternative models in pediatrics, we encourage the following:

- Understand and be responsive to how children and families navigate the various systems to create a truly family-centric approach;
- Address the regulatory and data privacy barriers to integration;
- Create incentives and legal mechanisms for the various sectors to align around a collective and shared responsibility model;
- Recognize the unique health and development trajectory of children and how that impacts measures and evaluation; and
- Build payment risk models that appropriately account for integration of mental health and social condition response.

Key Issues on Alternative Models

- Regulatory and data issues are a significant barrier even within the health care industry. In Minnesota, we are bound by even more restrictive data privacy laws than HIPAA. Navigating and alleviating regulatory and data restrictions will be an important consideration in creating a model that can bring cross-sector organizations that follow and understand those regulations differently to the table.
- Develop reliable data on the costs within social service agencies and design incentives to encourage social service agency participation in a manner that ensures continued support for those agencies while reducing redundancy and creating cost efficiency.
- As noted in CHA's submission, researchers at our institution validated an approach that establishes prospective attribution, or assignment. Assignment gets to the population, regardless of encounters, or lack thereof, with providers.
- Develop a capitated model with appropriate risk adjustment, PMPM payment, and outlier protection would allow the most flexibility for healthcare providers to work with other public agencies.
- Fund or enable reliable, risk adjusted, and transparent cost and performance benchmarks
- The assignment model needs to be risk adjusted to account for care delivered to all children, not just the very sick or those at high-risk for utilization. These models should include adjustments that account for outlier costs related to children with complex conditions.
- Provide payment incentives to primary care.
- Recognition that cost/outcomes of pediatric care often linked to prenatal and perinatal care.
- Within the larger model:
 - Include adequate payment for integration of mental and behavioral health with physical health
 - Reflect the additional costs of integration with social service supports
 - Provide risk adjustments for socio-economic factors
 - Understand a return on investment model consistent with pediatric health and development that inherently functions on a longer time horizon

In response to the specific sections for consideration in the RFI, again, our feedback is generally consistent with CHA's submission. However, we want to call attention to key points within each section:

Section I

Specific to serving rural and underserved communities (Q3):

- Enhanced support for telemedicine services

- Payment incentives for pediatric-specific rural practice including emergency care, primary care, critical specialty support, and social services; whether delivered directly or by telemedicine
- Flexible payment structures that can support other support roles, such as community health workers

Section II

Specific to challenges associated with operating with multiple state agencies/others (Q1):

Children's Minnesota has a number of informal partnerships with other agencies and community-based organizations. These range from more focused, communication coordination with a school that serves a notable number of our medically-complex patients to contractual relationships to support community health programming to referral relationships. The barriers to true business integration for programs such as Head Start, Healthy Start, and Home Visiting as well as others are inherent to the structure of these programs. Different enrollment processes, different agencies overseeing funding, information-sharing between services and reimbursement all pose notable logistical and cultural barriers to integration. These could be addressed through:

- A centralized care management and enrollment function that reduces duplication of services, appropriately triages needs across sectors and, most importantly, creates a better system for families.

Specific to partnership with social service providers (Q2 and Q6):

In our case, any partnership we pursue is supported through operational subsidy or philanthropic funds because these arrangements do not fit within our current payment models. In addition to the payment, other obstacles include:

- Lack of risk adjustment for social determinants support
- Capacity and incentive for social services agencies to shift models and engage in a health system-managed model
- IT compatibility and restrictions on data sharing; different regulations for different services (e.g. HIPAA and FERPA)
- Ability to generate outcomes in short time periods.

Section III

Specific to which Medicaid populations offer the greatest opportunity (Q1):

- Children with complex medical conditions, recognizing that those families also encounter significant social challenges.
- Children at risk based on social conditions. It is well understood that poverty and adverse childhood experiences have a significant impact on a child's health in the near and long term, particularly those impacted early in life. Efforts to reach those families/caregivers and children early are smart financial and health investments.

Specific to how to encourage health care providers to collaborate with social service providers (Q2):

- Provide greater transparency on social service related costs to appropriately account for them in a capitated model.
- Flexibility in a capitated arrangement is an important element of any integrated model to allow the providers to align and calibrate resources across sectors appropriately.
- Allow for risk adjustment to support social condition focused interventions.
- Appropriately account for the alignment of different models and cultures by allowing for a reasonable “ramp-up” period to avoid penalizing the provider or participants.

Section IV: Pediatric Measures

CHA provided an extensive overview of these considerations. We would emphasize:

- Understand pediatrics as a specialty of care for which adult measures and assumptions are often not applicable.
- Recognize the inherent longer time horizon for outcomes and goals related to children while still building in near-term indicators.
- Children with special needs are a heterogeneous population in terms of medical need and developmental stage.
- Children are more vulnerable to the social factors impacting their life and health.

Again, we appreciate and support CMS’ interest in exploring alternative models for pediatric care. We hope our comments, those provided by CHA and other pediatric providers across the country help to inform your next steps and look forward to future opportunities. As we navigate the challenges outlined in the RFI, we believe that these models will achieve the goals of better, more responsive care at lower cost.

Sincerely,

Trevor Sawallish
Chief Administrative Officer
Children’s Hospitals and Clinics of Minnesota

Children's Mercy – Kansas City | Children's Mercy Integrated Care Solutions

Dear Dr. Billioux:

Children's Mercy Integrated Care Solutions (CMICS) is an integrated pediatric network of providers which encompasses more than 750 pediatric specialists and 250 community based pediatricians in the greater Kansas City area. CMICS is a wholly owned subsidiary of Children's Mercy Hospital, a non-profit, free-standing children's hospital founded nearly 120 years ago. Children's Mercy's mission is to improve the health and well-being of children by providing comprehensive, family-centered health care and committing to the highest level of clinical and psychosocial care, and to research, academic and service excellence.

In 2012, Children's Mercy created CMICS as a means of developing an accountable population health strategy that involved changing both the care and payment delivery model for a significant portion of its at-risk population. CMICS, via its Pediatric Care Network (PCN), contracts with the two largest Medicaid managed care organizations (MCOs) in Missouri in order to take global capitation payments for approximately 100,000 kids enrolled in Medicaid and CHIP. The PCN has also been delegated key functions from the MCOs to manage the health and risk of this population which includes medical management, disease management, complex care management, and credentialing. PCN has evolved its care delivery model by working with its MCO partners and the State of Missouri's Medicaid program to develop and implement a Local Community Care Coordination Program (LCCCP). Key principles of the PCN's LCCCP include the following:

- Provide patient-centered care;
- Practice evidence-based medicine and clinical decision supports;
- Participate in continuous quality improvement and performance measurement;
- Coordinates care between all healthcare providers utilized by the patient;
- Engages patients and families to actively participate in decision-making and provide feedback; and
- Uses health information technology to support care delivery and efficiency improvement.

In response to the questions posed in Section II of the RFI, CMICS submits that the value of integrated networks and operations can provide the following benefits:

- Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations.
- Address the needs across a geographic region.
- Provide comprehensive pediatric specialty care.
- Integrate high risk children in other sectors.
- Require large scale EMR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.
- Provide centralized care management functions to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.

CMICS and Children's Mercy believes its innovative payment and care delivery model is one that

adequately aligns incentives between providers and payers and has steadily been advancing the goals of the Triple Aim. For your consideration, attached is CMICS' Local Community Care Coordination Program Guide.

CMICS has also reviewed the RFI response developed by the Children's Hospital Association (CHA). We support the comments and recommendations that CHA has submitted in terms of critical attributes to consider for pediatric alternative payment models and integrated networks. We would also support the need to explore and develop innovative transition of care models for medically complex pediatric patients moving into the adult healthcare delivery space.

We appreciate the opportunity to respond to this RFI and look forward to working with you to develop innovations for the improving the health of kids everywhere. If you have any questions on our comments, please contact Chad Moore or Dr. Doug Blowey.

Sincerely,



Children's Mercy –
Kansas City_Childrer

The Local Community Care Coordination Program Guide (LCCCP)



www.cmics.org

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OVERVIEW OF THE LCCCP PROGRAM

OVERVIEW OF THE LCCCP PROGRAM



Our Mission

The mission of Children's Mercy Pediatric Care Network is to improve the health and well-being of children through an integrated pediatric network in the greater Kansas City area that is **value-based, community-focused, patient-centric, and accountable for the quality and cost of care.**

Who We Are

Children's Mercy Pediatric Care Network (CMPCN) is an integrated pediatric network that coordinates the medical care of pediatric patients enrolled in various managed care organizations (MCOs). CMPCN is comprised of Children's Mercy Hospital and its employed physicians, community pediatricians and other health care providers in the Kansas City area. CMPCN contracts with MCOs to provide all medical services for one global fee.

CMPCN uses a team-based approach to reduce barriers, export resources and expertise from Children's Mercy Hospitals and Clinics, and support patient-centered medical homes for the providers in our network.

Ultimately we are focused on better alignment of the payment model and the care delivery model so that the focus can truly be on the **right care, at the right time, in the right setting.**

What We Do

Data-driven analytics and tools to drive informed decisions at the point of care

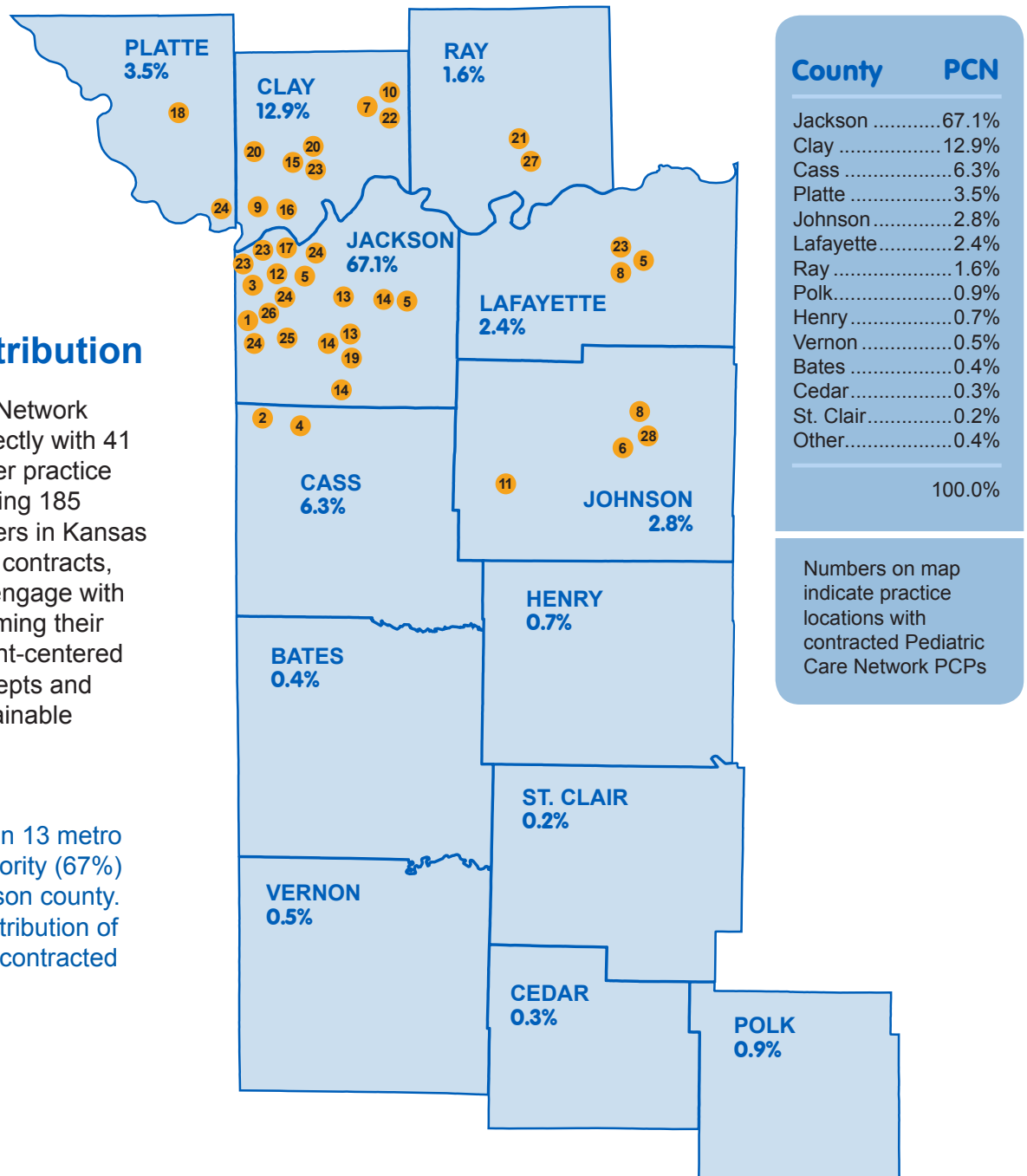
Advanced care coordination using multi-disciplinary care teams

Targeted interventions aimed at maximizing population health outcomes

Member and Provider Distribution

The Pediatric Care Network (PCN) contracts directly with 41 primary care provider practice locations, representing 185 primary care providers in Kansas City. Through those contracts, providers agree to engage with the PCN in transforming their practice using patient-centered medical home concepts and demonstrating sustainable outcomes.

PCN members live in 13 metro counties, with a majority (67%) living in urban Jackson county. See county map distribution of PCN members and contracted PCN locations.



PCN Network Providers -- Missouri

1. Baby and Child Associates (3,227)
2. Cass County Pediatrics and Adolescents (1,449)
3. Children's Mercy Hospitals and Clinics (10,031)
4. Christine Moore, DO (859)
5. Cockerell and McIntosh (7,722)
 - Blue Springs
 - Higginsville
 - Independence
6. Community Health Partners (219)
7. Excelsior Springs Pediatric Clinic (522)
8. Family Practice Associates (962)
 - Higginsville
 - Warrensburg
9. Fernando Fernandez, MD (2,468)
10. H. Andrew Pickett, M.D. (59)
11. Holden Family Care (104)
12. Hope Family Care (1,310)
13. Independence Pediatrics (5,248)
 - Lee's Summit Pediatrics
14. Lee's Summit Physicians Group (6,998)
 - Blue Springs Pediatrics
 - Raintree Pediatrics
15. Liberty Medical Center (407)
16. Meritas Health Pediatrics (2,711)
17. Neighborhood Family Care (1,341)
18. Platte County Pediatrics (277)
19. Preferred Pediatrics LLC (2,257)
20. Priority Care Pediatrics LLC (3,752)
 - Kansas City
 - Liberty
21. Richmond Family Clinic (267)
22. Robert Buzard, MD (458)
23. Samuel U Rodgers (5,606)
 - Clay County
 - Lafayette
 - Westside Clinic
24. Swope Health Center (4,613)
 - Swope Health Center - Independence
 - Swope Health Center - Riverside
 - Swope Health Center - Troost
25. Tenney Pediatric & Adolescent Medicine (3,905)
26. T.P. Children & Teens Care (969)
27. The Medical Center (670)
28. Whistlestop Pediatrics (613)

as of November 1, 2016



POPULATION HEALTH MANAGEMENT

Cross Continuum Data Integration-Combining Financial and Clinical Data

One of the solutions PCN practices have access to is Valence Health's Vision platform, a technology solution that integrates clinical and payer data in near real-time across the network. The Vision platform aggregates and standardizes data from disparate systems across the care continuum. The solution is able to combine data from physician practices, hospitals/health systems, laboratories, home care agencies, post-acute settings and payers. Of particular importance is the integration of payer data with clinical data. Payer data, inclusive of in-network and out-of-network claims, combined with clinical data provides a nearly comprehensive picture of an individual's care profile.



Valence Vision Platform - Cross Continuum Data Integration

The Valence Vision platform presents data from across the care continuum in a transparent, patient-centric solution, allowing practices to see all services performed at Children's Mercy and other PCN entities.

Graphic: Valence Health © 2015

Evidence-Based Registry and Outreach Functionality

PCN solutions provide advanced registry functionality, tailored to clinical care guidelines and measures important to PCN providers.

- Patient registry functionality to identify and manage clinical gaps of care, allowing for focused efforts to close gaps for HEDIS quality performance.
- Risk stratification to identify patients and families with highest cost and greatest need.
- Advanced query capabilities to target particular patient populations based on utilization history (e.g., high ED or observation utilizers, high IP admissions, etc.), diagnostic or service history, demographic information and care gaps.
- Access to a patient profile view containing a patient's comprehensive health history. The profile presents a summary of conditions, encounters and care gaps; a complete history of inpatient, ED and outpatient services; and lab tests and EMR information.
- Ability to export patient care summaries (e.g., inclusive of chronic conditions, known care gaps, etc.) to support internal workflows and provide intelligence at the point of care.
- Patient outreach capabilities to advise patients of overdue or upcoming services, allowing practices to extend services for children in need of care.
- Ability to facilitate referrals for centralized case management and care coordination services for the highest complexity patients.

The following screen shots highlight some of the population health functionality described on page 6.

Comprehensive Patient Profile Accessible in Valence Health Vision

The profile presents a summary of patient demographics, conditions, recent encounters (inpatient, outpatient, ED), medications, laboratory results, and care gaps.

Valence Vision's Comprehensive Patient Profile

Patient medication history

Detailed IP and ED encounter history

Detailed service history, inclusive of professional claims, facility claims, and EMR data (health maintenance, immunizations, vitals)

Comprehensive summary of patient's care profile

Lab services history with key lab results presented

Patient outreach and data export capabilities

Patient action list in alignment with CHN defined quality measures

Relationship with this Patient
Last Visit: 11/18/2011 Total Visits: 9

Condition Registry

CONDITION	DATE	
Heart failure congestive (CHF)	09/20/2010	X
Hypertension	09/23/2009	X

☐ Show Deleted Conditions

Recent Encounters

ENCOUNTER	DETAILS
Last Office Visit	03/31/2011
Last ER	07/24/2011
Last Inpatient	11/11/2011 - 11/18/2011

Action List

CARE ELEMENT	LAST SEEN	RECALL DATE	STATUS
CONDITION VISITS: OUTPATIENT			
Heart Failure Visit	03/31/2011	09/29/2011	Overdue
Hypertension Visit	03/31/2011	09/29/2011	Overdue
LAB TESTING			
BUN or Creatinine	11/16/2011	05/16/2012	Overdue
LDL	03/24/2009	03/23/2014	
Potassium	11/16/2011	05/16/2012	Overdue
OTHER IMMUNIZATIONS			
Pneumococcal Vaccine		06/14/2013	Overdue
PREVENTION/ONGOING MONITORING			
Selected Glucose or A1C	11/16/2011	11/15/2014	
OTHER QUALITY MEASURES			
MEASURE	SUBMEASURE	STATUS	
No records found.			

Centralized PCN Care Coordination and Communication

PCN Practices are able to use centralized reports to identify the highest risk and highest cost patients who may benefit from the PCN's care coordination services. The PCN portal allows practices to refer patients, access care coordination summaries, and perform bi-directional communication to understand the patient's current status, progress, goals, etc.

Patient Risk Score
Quickly assess the relative risk of your patients based on historical claims. Risk scores are relative to an average patient with a risk score of 1.0 (i.e. a patient with a 2.0 risk score is expected to be twice as costly/risky as patient with a score of 1.0).

Attributed Providers
Attribution is based on our preventive care and chronic disease management quality measures.

Recommended Care
List of patient's recommended care. Develop a plan to address your patient's gaps in care! Recommended care identifies preventive, chronic, and immunization gaps of care which supports our ability to demonstrate superior pediatric care for our patients and their families.



Vision

Valence Health

M **15** **4.2**
Gender Years Risk score

SMITH, JOHN
DOB: 06/23/2001

Patient contact info: 500 MAIN STREET, CHICAGO, IL 60654 | (888) 888-8888

PCP: FITZ, JENNIFER | Attributed providers: FITZ, JENNIFER; DAY, MICHAEL

Recommended care 5

- (Immunizations) Meningococcal due 08/07/2016
 - (Immunizations) TDaP due 08/07/2016
 - (Wellness) Nutrition Counseling due 08/07/2016
 - (Wellness) Provider Evaluation Adolescent due 09/21/2016 (last: 09/22/2015)
 - (Asthma Care) Provider Evaluation due 11/12/2016 (last: 05/16/2016)
- LEGEND:** Estimated due date is in the past | Estimated due date is within the next 90 days

Conditions 3

ADHD medication prescribed
Diabetes
Persistent asthma

Inpatient & ER visits 4

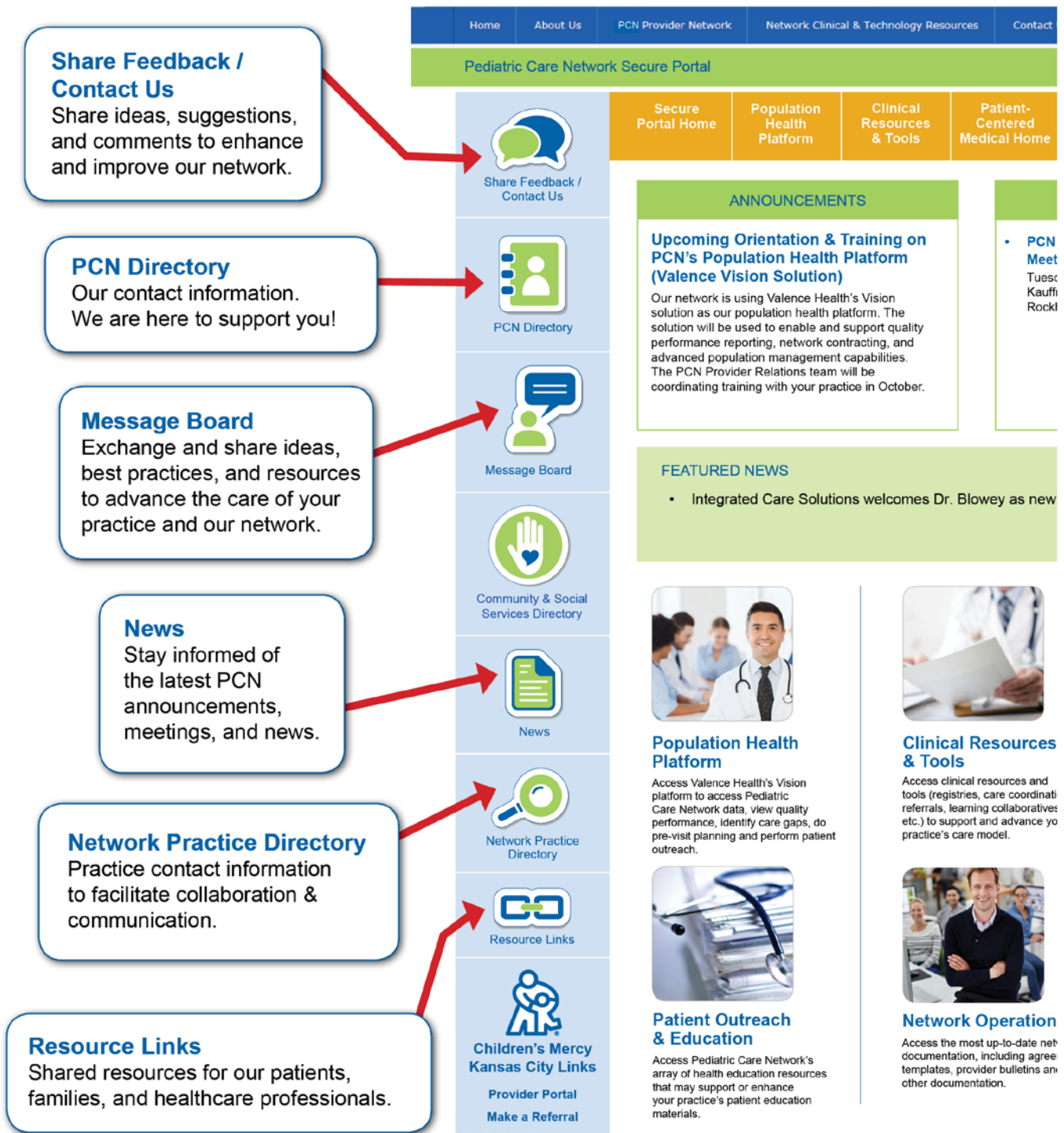
Date	Event	Primary diagnosis	Follow-up visit
06/01/2016	ED Visit	E10.649:TYPE 1 DIAB MEL WITH HYPOGLYCEMIA WITHOUT COMA	No follow up
06/01/2016	Inpatient Discharge	E10.649:TYPE 1 DIAB MEL WITH HYPOGLYCEMIA WITHOUT COMA	No follow up
05/12/2016	ED Visit	M79.642:PAIN IN LEFT HAND	05/16/2016
04/20/2016	ED Visit	J22:UNSPECIFIED ACUTE LOWER RESPIRATORY INFECTION	05/16/2016

LEGEND: Patient had no follow up office visit after IP or ER admit | Patient had follow up visit after IP or ER admit

Secure Portal to Access Information & Resources

The PCN portal promotes collaboration, engagement, and communication across the network, and it also serves as a central location to access information, resources and tools. Practices access the portal to obtain quality, cost and value-based scorecards and reports. Additional information includes education and support resources for patient-centered medical home initiatives, disease management, care coordination, clinical practice guidelines and other diagnostic tools, administrative forms and guides, and patient education materials.


PCN Practices are able to use centralized reports to identify high/moderate risk patients who may benefit from the practice's own care coordination services.



PCN Portal Registry Work Flow

PCN Practices are able to access patient registries to proactively identify and outreach to patients with particular clinical gaps in care (e.g. immunizations, well-child visits, asthma management, behavioral health, etc.). Practices can track outreach attempts to manage the process of engaging patients to improve HEDIS quality performance. The portal also facilitates referral to PCN care coordination services when appropriate.

Previous
Functionality
Now Available
in "Clinical
Resources &
Tools"



Menu
Home
PCP
Reports
Dashboard
Registry Forms
Compensation
Tracking Logs
Contact Us
Links
Calendar
Change Password
Log Out

Links

- Clinical Practice Guidelines & Resources
- Learning Collaboratives

Registry Forms

- Asthma/Diabetes Registries
- HEDIS Quality Registries
- High Risk Registries

Secure Portal Home	Population Health Platform	Clinical Resources & Tools	Patient-Centered Medical Home	Patient Education & Outreach	Network Operations	Report Center
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Clinical Resources & Tools

Source Data Information	Last Updated	Frequency	Most Recent Service Date
Children's Mercy ER Visits	8/28/2016	Weekly	8/28/2016
Payer Data Claims	7/27/2016	Weekly	7/20/2016

Information from PCN's Care Management Solution is updated in real-time. Payer member data is updated daily.

Refer to Care Coordination

Our Care Integration team is here to support you and your patient's medical home! Don't hesitate to refer patients who may benefit from additional care coordination services.

Clinical Practice Guidelines and Resources

Access clinical practice guidelines and resources for various pediatric conditions to help your practice stay informed and continue to deliver evidence-based care.

ADHD	Asthma	Cardiovascular Health	Depression
Diabetes / Weight Management	General Pediatric Care	Immunizations	Lead

Community & Social Service Organization Directory

Access our directory of community and social service organizations across the Kansas City metropolitan area. Enhancing relationships with community agencies can deliver benefits to patients by addressing their social and behavioral determinants of health.

Organization Alpha Quick Links: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Service Type Quick Links

Crisis & Emergency	Family & Social Supports	Food Instability
Health	Health Behaviors	Housing Instability & Utility Needs
Interpersonal Violence	Job & Education Support	Mental Health

Missouri County Quick Links: [Cass](#), [Clay](#), [Jackson](#), [Johnson](#), [Lafayette](#), [Platte](#), [Ray](#)
Kansas County Quick Links: [Johnson](#), [Leavenworth](#), [Wyandotte](#)

Advanced Search

Learning Collaborative Webinars

Learning Collaboratives are virtual webinars where our practices are able to collaborate through the sharing of best practices, expertise, ideas, and resources.

Registries

Access registries to identify and perform outreach to patients in need of preventive care or chronic disease management. High risk registries are available to identify and better manage patients that are frequently using ED/inpatient services or are enrolled in PCN case management.

- [Preventive Care Registry – Age 2 Immunizations \(Combo2: DTaP, IPV, MMR, Hib, Hep B, VZV\)](#)
- [Preventive Care Registry – Well Child Visits](#)
- [High Risk Registry – ED Frequent Flyer \(2+ ED visits in past 6 months\)](#)
- [High Risk Registry – Multiple Inpatient Admissions \(2+ admissions in past 6 months\)](#)
- [High Risk Registry – Members in Case Management](#)
- [Chronic Disease Management Registry – Asthma & Diabetes](#)
- [Chronic Disease Management Registry – At Risk Asthma & Diabetes](#)
- [Chronic Disease Management Registry – Weight Related \(At-Risk Pre-Diabetes\)](#)

PCN practices and providers are also supported with advanced financial and clinical analytics, an essential function of population health.

- Financial analytics to measure and track key health spend and utilization measures, evaluate practice variation and identify high cost areas for improvement. Capabilities include standard and customized reports similar to traditional payer analytics; includes reports on total cost of care (by

PCP, specialty, procedure, diagnosis, DRG, etc.), ED and inpatient utilization, 30-day all-cause readmissions, etc.

- Monthly comparative quality performance reports at the provider, practice and network level
- Ad hoc analysis to support practice-specific quality improvement initiatives. Both clinical and cost performance can be extracted pre- and post-intervention to evaluate a specific initiative's impact on quality, utilization, and/or cost performance.



Provider Practice Performance Profile

The Provider Practice Performance Profile is a quarterly report provided to the PCN practices by the assigned PCN care teams. The report allows provider practices to review quarterly cost, utilization, and key quality metrics that compare performance at the network, practice, and provider levels.

In order to drive value and deliver insightful and actionable information, the PCN performs a data analysis of trends and variation to identify potential opportunities to drive quality improvement initiatives, in collaboration with the provider practices.

Cost and Utilization Reports

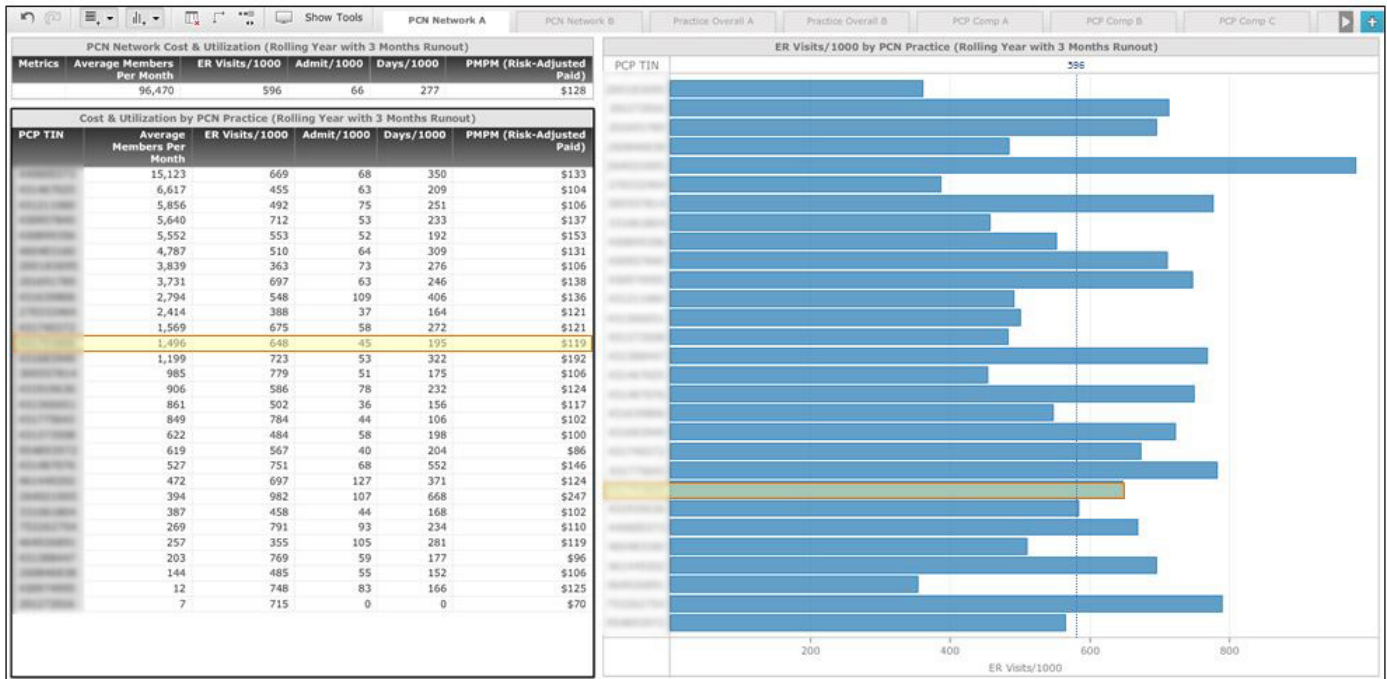
Network Overall Summary

Presents overall network performance as well as individual performance for each practice on key cost and utilization measures

PEDIATRIC CARE NETWORK COST & UTILIZATION REPORT PACKAGE – LARGE COUNTY, PENNSYLVANIA

Cost & Utilization Performance – Network and Practice-Comparison Report [Measurement Period: April 2015 to March 2016]

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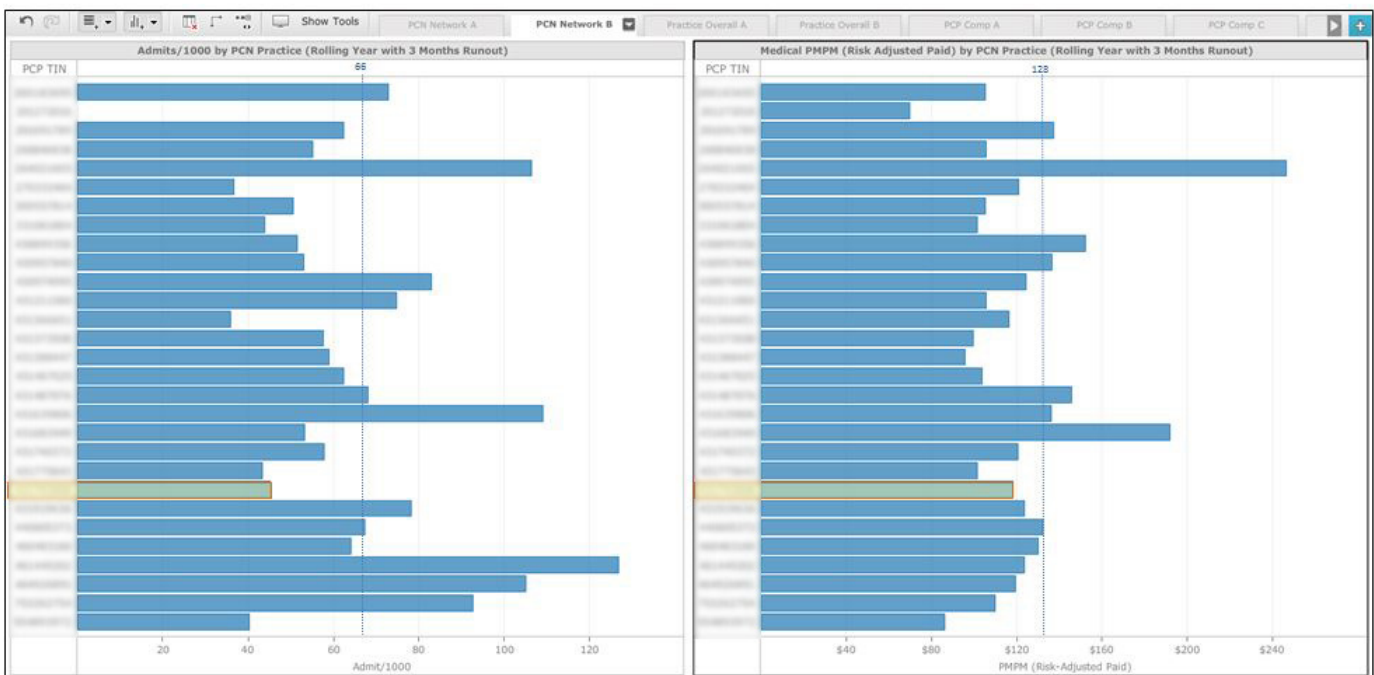


Pediatric Care Network Average

PEDIATRIC CARE NETWORK COST & UTILIZATION REPORT PACKAGE – LARGE COUNTY, PENNSYLVANIA

Cost & Utilization Performance – Network and Practice-Comparison Report [Measurement Period: April 2015 to March 2016]

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Pediatric Care Network Average

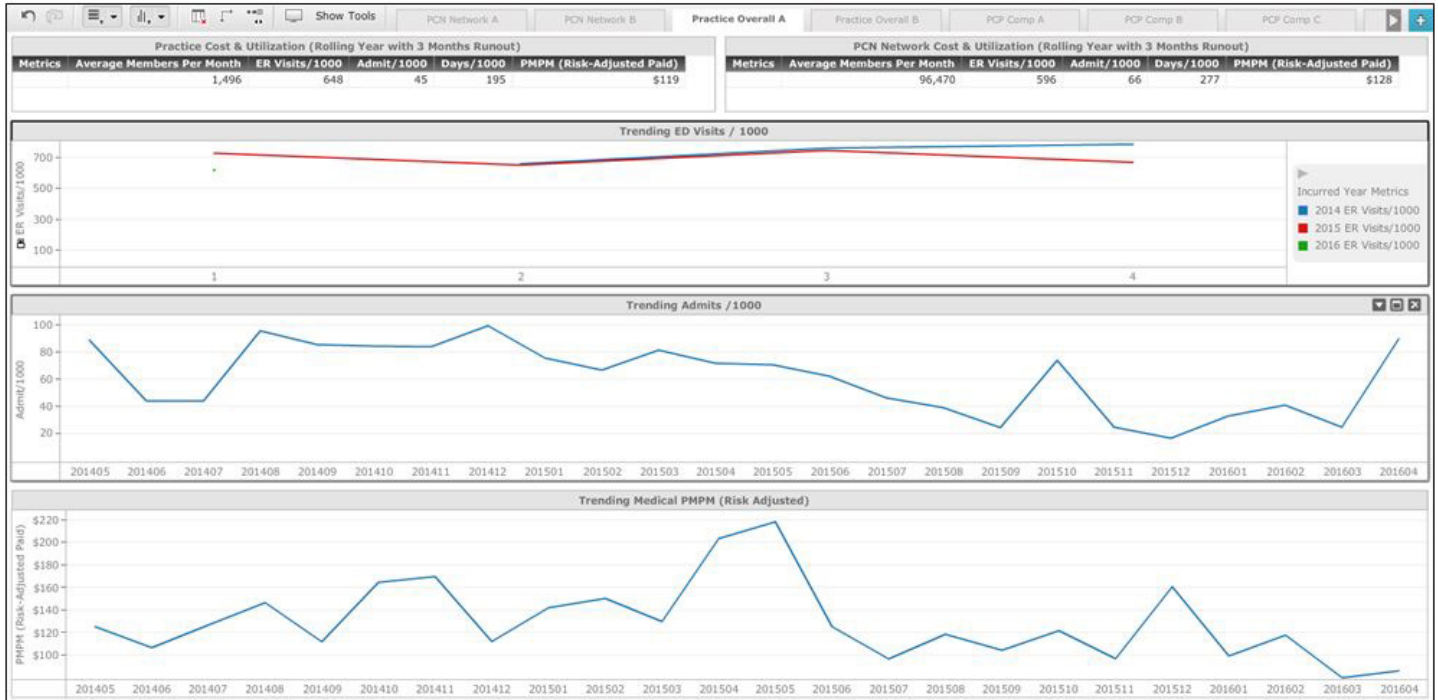
Practice Overall Summary

Presents individual performance for each practice, including trend performance, highest risk/cost patients, and most frequent ED utilizers

PEDIATRIC CARE NETWORK COST & UTILIZATION REPORT PACKAGE – [Redacted]

Cost & Utilization Performance – Practice Overall Report [Measurement Period: April 2015 to March 2016]

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PEDIATRIC CARE NETWORK COST & UTILIZATION REPORT PACKAGE – [Redacted]

Cost & Utilization Performance – Practice Overall Report [Measurement Period: April 2015 to March 2016]

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Highest Cost Patients (>=\$10,000 Total Paid in Previous 6 Months)					ED Frequent Flyers (3+ Visits in Previous 6 Months)					Multiple IP Admissions (2+ in Previous 6 Months)				
Member Name	Date of Birth	PCP Name	Paid (Medical)	Paid (Rx)	Paid (Total)	Member Name	Date of Birth	PCP Name	ER Visits	Member Name	Date of Birth	PCP Name	Admissions	
MEMBER NAME	11/11/2008	DR. J. J. J.	\$173,638	\$0	\$173,638	MEMBER NAME	11/11/2008	DR. J. J. J.	5	MEMBER NAME	11/11/2008	DR. J. J. J.	2	
MEMBER NAME	11/11/2008	DR. J. J. J.	\$67,069	\$15,594	\$82,663	MEMBER NAME	11/11/2008	DR. J. J. J.	4	MEMBER NAME	11/11/2008	DR. J. J. J.	2	
MEMBER NAME	11/11/2008	DR. J. J. J.	\$31,924	\$0	\$31,924	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$23,381	\$45	\$23,426	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$21,115	\$3,052	\$24,167	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$20,293	\$0	\$20,293	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$18,710	\$0	\$18,710	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$15,443	\$151	\$15,594	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$15,114	\$205	\$15,319	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$14,975	\$362	\$15,337	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$14,657	\$1,093	\$15,750	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$14,163	\$54	\$14,217	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$13,372	\$29,655	\$43,027	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$12,261	\$444	\$12,706	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$12,204	\$496	\$12,701	MEMBER NAME	11/11/2008	DR. J. J. J.	4					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$11,928	\$186	\$12,114	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$11,111	\$703	\$11,814	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$11,065	\$529	\$11,593	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$10,935	\$188	\$11,123	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$10,449	\$18	\$10,467	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$10,280	\$4,593	\$14,873	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$10,160	\$135	\$10,294	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$9,817	\$3,741	\$13,558	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$9,643	\$1,338	\$10,981	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$9,434	\$738	\$10,171	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$9,135	\$923	\$10,057	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$8,669	\$4,285	\$12,954	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$8,293	\$68,057	\$76,351	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$5,048	\$11,390	\$16,438	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$2,841	\$13,124	\$15,965	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$2,742	\$10,970	\$13,712	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$2,557	\$45,615	\$48,172	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$2,253	\$11,029	\$13,282	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$2,003	\$9,449	\$11,452	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$1,342	\$53,895	\$55,237	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$1,191	\$11,036	\$12,227	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$702	\$14,490	\$15,192	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$643	\$291,931	\$292,574	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$485	\$10,623	\$11,108	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$308	\$10,815	\$11,122	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$190	\$9,843	\$10,033	MEMBER NAME	11/11/2008	DR. J. J. J.	3					
MEMBER NAME	11/11/2008	DR. J. J. J.	\$172	\$10,121	\$10,293	MEMBER NAME	11/11/2008	DR. J. J. J.	3					

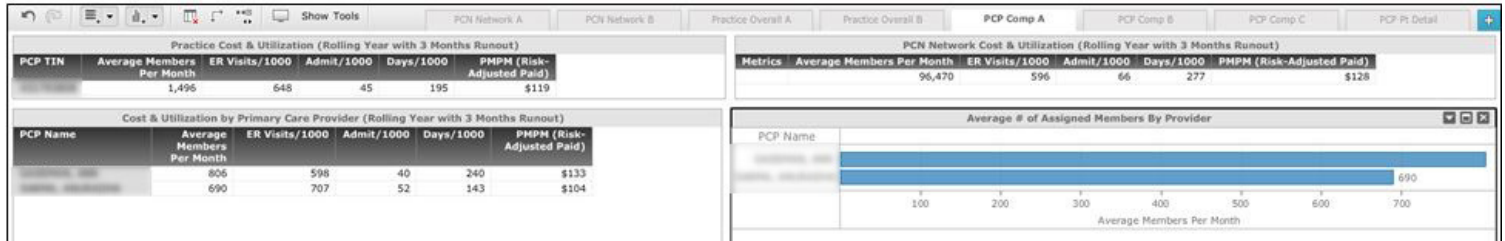
Practice PCP Comparison Report

Presents a comparison of provider and practice level data to overall network performance

PEDIATRIC CARE NETWORK COST & UTILIZATION REPORT PACKAGE – LARGE COUNTY PROVIDERS

Cost & Utilization Performance – Provider Comparison Report [Measurement Period: April 2015 to March 2016]

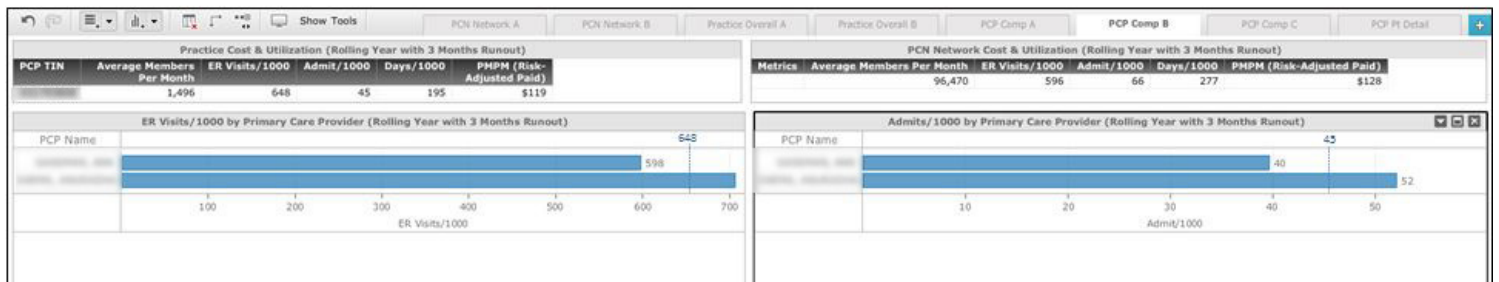
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PEDIATRIC CARE NETWORK COST & UTILIZATION REPORT PACKAGE – LARGE COUNTY PROVIDERS

Cost & Utilization Performance – Provider Comparison Report [Measurement Period: April 2015 to March 2016]

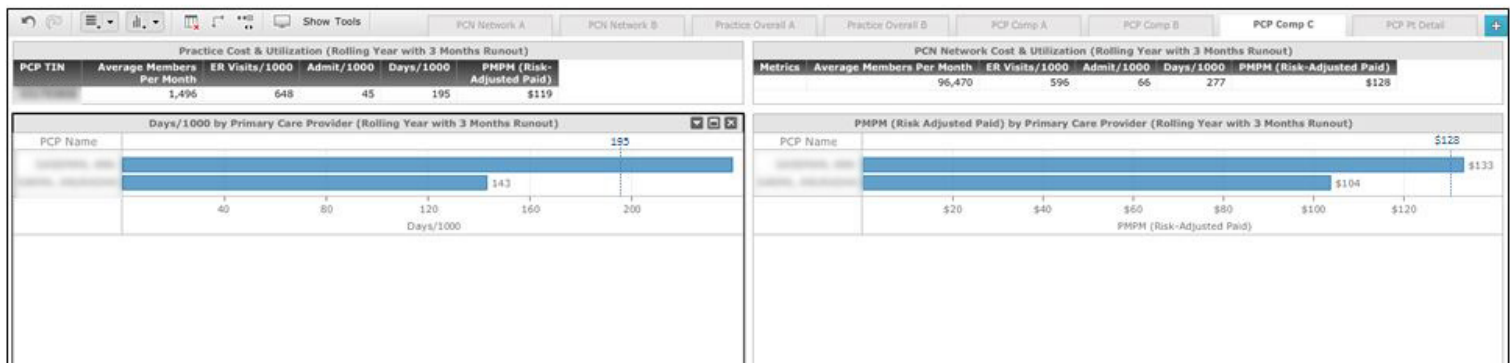
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PEDIATRIC CARE NETWORK COST & UTILIZATION REPORT PACKAGE – LARGE COUNTY PROVIDERS

Cost & Utilization Performance – Provider Comparison Report [Measurement Period: April 2015 to March 2016]

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Provider Patient Detail Report: See the accompanying Excel file for:

1. Highest Cost Patients (>=\$5,000 in last 6 months)
2. ED Frequent Flyers (3+ Visits in Previous 6 Months)
3. Multiple IP Admissions in Previous 6 Months

Quality Reports

Network Overall Summary

Presents overall network performance as well, as individual performance, for each practice on key HEDIS measures

PCN HEDIS Quality Report Package - Practice Level Report

HEDIS Measurement Period: 01/01/2016 - 12/31/2016 (Year to Date Performance)																																			
Provider & Practice Engagement Period: Q1 2017 (July 2016 - Sept 2016)																																			
Data Source: Valence Vision																																			
Run Date: 10/06/2016																																			
Measure	Your Practice	50th Perc	75th Perc	Network Overall	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
HEDIS Quality Performance Measures																																			
Asthma Management																																			
Medication management - 75% compliant	74.4%	24.2%	31.2%	24%	20%	52%	52%	15%	2%	9%	3%	15%	20%	14%	21%	25%	20%	40%	19%	20%	5%	11%	29%	26%	20%	20%	27%	27%	10%	22%	20%	10%	5%		
Immunizations - Childhood Age 2																																			
Combo-2 (Dtap, IPV, MMR, Hib, HepB, VZV)	51.7%	75.5%	79.4%	52%	4%	52%	70%	92%	23%	45%	67%	52%	60%	52%	62%	90%	20%	64%	22%	76%	20%	54%	22%	20%	64%	22%	20%	64%	22%	64%	22%	26%	64%	22%	
Well Child Visits - First 15 Months																																			
6 well visits before 15 months of age	60.0%	59.8%	66.2%	57%	72%	20%	57%	59%	76%	71%	70%	62%	65%	72%	90%	50%	59%	21%	92%	57%	65%	21%	92%	65%	21%	92%	65%	21%	92%	21%	92%	66%	21%	92%	
Well Child Visits - 3-6 Years																																			
At least one annual well exam in measurement year	67.9%	72.0%	70.5%	60%	70%	62%	71%	63%	73%	55%	92%	65%	65%	70%	76%	92%	54%	72%	60%	55%	54%	72%	60%	54%	72%	60%	54%	72%	60%	54%	72%	60%	54%		
Well Child Visits - 12-18 years																																			
At least one annual well exam in measurement year	50.0%	49.2%	60.0%	50%	45%	65%	50%	55%	27%	45%	52%	20%	42%	49%	55%	90%	29%	49%	52%	46%	55%	90%	60%	28%	25%	45%	55%	90%	41%	71%	42%	50%	46%		
# of Measures Exceeding HEDIS 50th Percentile																																			
	3	2	2	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1		
Early & Periodic Screening, Diag., and Treatment - 0-6 Years																																			
Expected screening in measurement year	77.0%		80.0%	65%	70%	60%	55%	67%	85%	66%	40%	35%	50%	55%	67%	77%	82%	65%	61%	51%	50%	71%	76%	76%	85%	66%	76%	45%	50%	40%	50%	51%	20%	82%	50%
PCN Provider & Practice Engagement Measures																																			
NCQA PCMH Recognition (Level 2, 3, or 4)					2.0	-	-	-	-	2.0	-	2.0	-	-	-	2.0	-	-	-	2.0	-	-	-	-	2.0	-	-	-	2.0	-	-	-	-		
Registry and Patient Outreach for 3 of 4 Conditions					-	1.0	1.0	1.0	1.0	-	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	1.0	1.0		
Patient Satisfaction Survey & Improvement Initiative					1.0	-	-	-	-	1.0	-	1.0	-	-	-	1.0	-	-	-	1.0	-	-	-	-	1.0	-	-	-	1.0	-	-	-	-		
Learning Collaborative Participation					-	1.0	1.0	1.0	1.0	-	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	-	1.0	1.0	1.0	1.0	1.0		
2 Continuous Quality Improvement Initiatives					1.0	1.0	-	1.0	-	1.0	-	1.0	1.0	1.0	1.0	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-		
Enhanced Access to Routine & Urgent Care Services					-	1.0	-	1.0	-	-	-	-	1.0	1.0	-	-	1.0	-	-	1.0	-	-	1.0	-	1.0	-	-	1.0	-	1.0	-	1.0	-		
Referral Tracking Process Implemented & Documented					1.0	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	1.0	1.0	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-		
Achieved Stage 1 Meaningful Use Objectives					-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	1.0	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-		
Established Process to Manage High Risk Patients					1.0	-	-	-	-	1.0	-	-	-	1.0	1.0	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	-		
Established Process to Manage Transitions					-	-	-	-	-	-	-	-	-	-	1.0	0.5	-	-	-	0.5	-	-	-	0.5	-	-	-	0.5	-	-	-	-	0.5		
Total Engagement Points	7.0	5.0	3.0	6.0	3.0	9.0	3.0	9.0	3.0	6.0	7.0	9.0	5.5	6.0	3.0	9.0	4.0	5.5	6.0	4.0	5.5	6.0	4.0	6.0	5.5	6.0	4.0	6.0	4.0	6.0	7.5				

Benchmark percentiles are based upon 2015 National HEDIS performance for Medicaid
 Performance exceeds HEDIS 75th Percentile, 7-10 Points Provider Engagement
 Performance is between HEDIS 50th & 75th Percentile, 5-6 Points Provider Engagement

PCN HEDIS Quality Compensation
 1 Measure Achieving 50th Percentile AND 1 Measure Achieving 75th Percentile = \$1.00 PMPM
 At Least 3 of 5 Measures Achieving 50th Percentile = \$1.50 PMPM
 Of 3 Measures Over 50th Percentile, 2 are at the 75th Percentile = \$2.00 PMPM

EPSTD Compensation
 EPSTD achievement above 80% for 0-6 years of age = \$1.00 PMPM

PCN Practice Engagement Compensation
 0-4 points = \$0.00 PMPM
 5-6 points = \$1.50 PMPM
 7-10 points = \$3.00 PMPM

To take action and drive improvement, practice's can immediately identify patient-level detail through the Valence Vision Solution accessed from the [PCN Secure Portal](#). If you need assistance or support, please contact your Provider Relations and/or Patient Centered Medical Home representative.

Practice Detail Report

Presents practice summary for the number of patients who have yet to be seen by the provider in order for the practice to meet the national benchmarks of either 50th or 75th percentile of HEDIS measures

PCN HEDIS Quality Report Package - Practice Detail Report

HEDIS Measurement Period: 01/01/2016 - 12/31/2016 (Year to Date Performance)							
Data Source: Valence Vision							
Run Date: 10/06/2016							
Measure	Num	Denom	Your Practice	50th Perc	Patients to 50th Perc	75th Perc	Patients to 75th Perc
Asthma Medication Management - 75% compliant	100	120	83.3%	24.2%		31.2%	
Immunizations Age 2: Combo-2 (Dtap, IPV, MMR, Hib, HepB, VZV)	17	321	5.3%	75.5%		79.4%	
Well Child Visit 15 Months Graduated Compliance	168	231	72.7%	59.8%		66.2%	
Well Child Visit Ages 12-18	663	817	81.2%	72.0%		78.5%	
Well Child Visits 3-6 Years	200	250	80.0%	49.2%		60.0%	
Early & Periodic Screening, Diag., and Treatment - 0-6 Years	606	804	75.4%			80.0%	

Benchmark percentiles are based upon 2015 National HEDIS performance for Medicaid

Performance exceeds HEDIS 75th Percentile
 Performance is between HEDIS 50th & 75th Percentile

PCN HEDIS Quality Compensation
 1 Measure Achieving 50th Percentile AND 1 Measure Achieving 75th Percentile = \$1.00 PMPM
 At Least 3 of 5 Measures Achieving 50th Percentile = \$1.50 PMPM
 Of 3 Measures Over 50th Percentile, 2 are at the 75th Percentile = \$2.00 PMPM

EPSTD Compensation
 EPSTD achievement above 80% for 0-6 years of age = \$1.00 PMPM

To take action and drive improvement, practice's can immediately identify patient-level detail through the Valence Vision Solution accessed from the [PCN Secure Portal](#). If you need assistance or support, please contact your Provider Relations and/or Patient Centered Medical Home representative.

Provider Level Report

Presents a comparison of provider and practice level data to overall network performance

PCN HEDIS Quality Report Package - Provider Level Report

HEDIS Measurement Period: 01/01/2016 - 12/31/2016 (Year to Date Performance)

Provider & Practice Engagement Period: Q1 2017 (July 2016 - Sept. 2016)

Data Source: Valence Vision

Run Date: 10/06/2016

Measure	Your Practice	50th Perc	75th Perc	Network Overall	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEDIS Quality Performance Measures																			
Asthma Management																			
Medication management - 75% compliant	34.4%	24.2%	31.2%	34%	20%	43%													
Immunizations - Childhood Age 2																			
Combo-2 (Dtap, IPV, MMR, Hib, HepB, VZV)	51.7%	75.5%	79.4%	52%	6%	51%													
Well Child Visits - First 15 Months																			
6 well visits before 15 months of age	60.0%	59.8%	66.2%	57%	73%	38%													
Well Child Visits - 3-5 Years																			
At least one annual well exam in measurement year	67.9%	72.0%	78.5%	68%	75%	63%													
Well Child Visits - 12-18 years																			
At least one annual well exam in measurement year	50.0%	49.2%	60.0%	50%	45%	65%													
# of Measures Exceeding HEDIS 50th Percentile					2	2													
Early & Periodic Screening, Diag., and Treatment - 0-6 Years																			
Expected screening in measurement year	78.0%		80.0%	75%	57%	75%													

Benchmark percentiles are based upon 2015 National HEDIS performance for Medicaid

Performance exceeds HEDIS 75th Percentile

Performance is between HEDIS 50th & 75th Percentile

PCN HEDIS Quality Compensation

1 Measure Achieving 50th Percentile AND 1 Measure Achieving 75th Percentile = \$1.00 PMPM

At Least 3 of 5 Measures Achieving 50th Percentile = \$1.50 PMPM

Of 3 Measures Over 50th Percentile, 2 are at the 75th Percentile = \$2.00 PMPM

EPSDT Compensation

EPSDT achievement above

80% for 0-6 years of age =

\$1.00 PMPM

To take action and drive improvement, practice's can immediately identify patient level detail through the Valence Vision Solution accessed from the [PCN Secure Portal](#). If you need assistance or support, please contact your Provider Relations and/or Patient Centered Medical Home representative.

Patient Outreach Priority List (Most Care Gaps)

Presents provider practice with a list of their patients, allowing the practice to prioritize outreach contacts according to the patient's number of gaps in care

Patient Outreach Priority List (Most Care Gaps)

HEDIS Measurement Period: 01/01/2016 - 12/31/2016 (Year to Date Performance)

Data Source: Valence Vision

Run Date: 10/06/2016

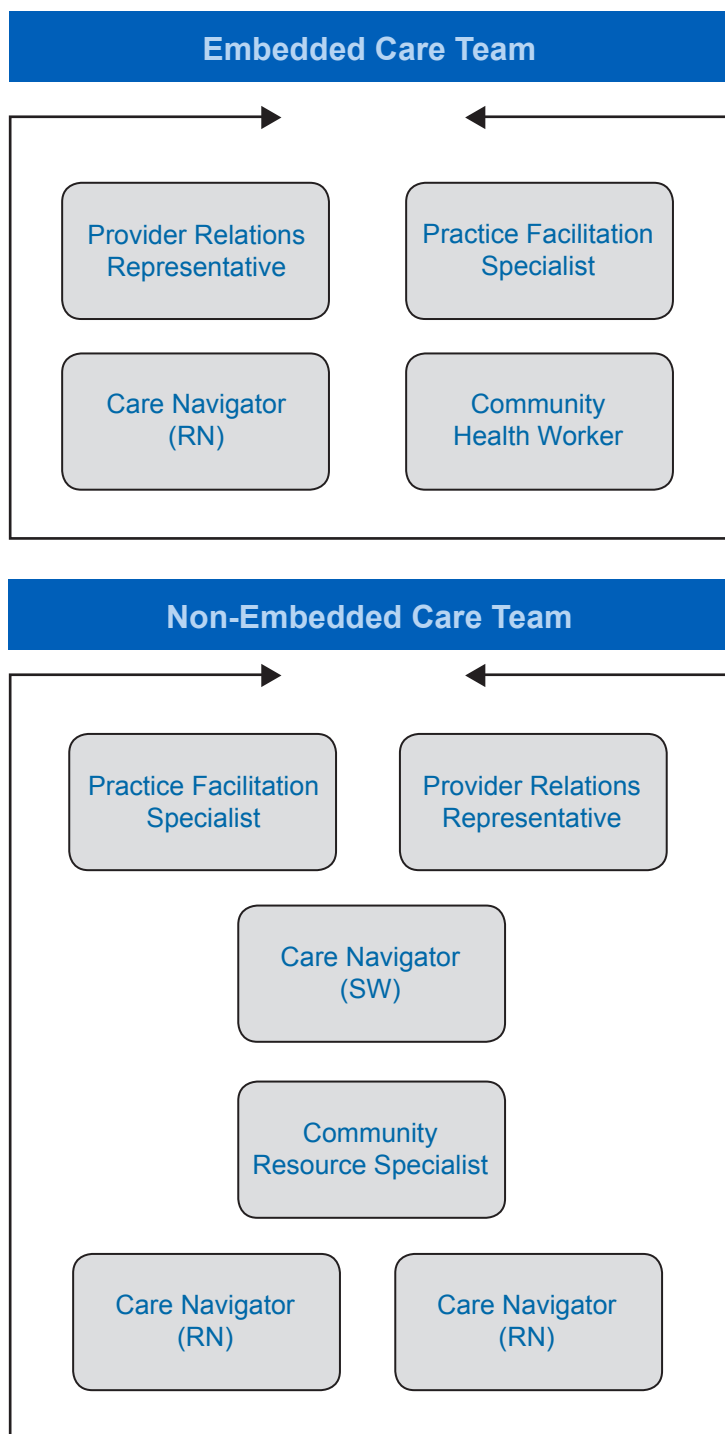
Run Date: 10/06/2016										Gaps in Care						
Patient Name	Gender	DOB	Attributed PCP	Address 1	Address 2	City	State	Zip Code	Phone #	Number of Care Gaps	Asthma Medication (75%)	Immun-Age2 - Combo 2	Well Child Visits - First 15 Months	Well Child Visits - 3-5 Years	Well Child Visits - 12-18 Years	EPSDT - Expected Screenings
	Male									6	Y	Y	Y	Y	Y	Y
	Female									6	Y	Y	Y	Y	Y	Y
	Male									6	Y	Y	Y	Y	Y	Y
	Male									6	Y	Y	Y	Y	Y	Y
	Male									6	Y	Y	Y	Y	Y	Y
	Male									6	Y	Y	Y	Y	Y	Y
	Female									6	Y	Y	Y	Y	Y	Y
	Male									6	Y	Y	Y	Y	Y	Y
	Female									6	Y	Y	Y	Y	Y	Y
	Male									6	Y	Y	Y	Y	Y	Y
	Female									6	Y	Y	Y	Y	Y	Y
	Female									6	Y	Y	Y	Y	Y	Y
	Female									6	Y	Y	Y	Y	Y	Y
	Female									5	Y	Y	Y	Y	Y	Y
	Female									5	Y	Y	Y	Y	Y	Y
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METHODS

METHODS

PCP Aligned Care Teams



The PCN employs multiple disciplines for its population health management initiatives. These include registered nurses, social workers, respiratory therapists, certified asthma educators, certified diabetes educators, physicians, and administrative/

non-clinical staff. The primary roles within the PCN working directly with patients, caregivers, and community providers are detailed below.



Care Navigators

Care Navigators are licensed Registered Nurses or Social Workers whose primary role is to provide care coordination for identified at-risk members, addressing barriers to care for an assigned population of patients and primary care practice(s). The Care Navigator provides care coordination services in order to make sure that patients receive well-coordinated care along the health care continuum and promotes quality care through appropriate, cost effective interventions.

The scope of practice for Care Navigators includes:

- Provides onsite care coordination, physically located in a Primary Care Provider office setting (Embedded Care Navigator)
- Engages with members and providers utilizing all available resources, including integrated platforms (e.g., telehealth, portal access, face to face visits) for effective communication and workflow process
- Uses data analytic tools and registries to identify and address needs of at-risk populations
- Participates in quarterly Provider Practice Performance Profile reviews with each assigned PCP office and assists in identifying care team priorities based on data analysis and care team discussion
- Facilitates successful transitions of care for patients and families across care settings, including assessing barriers, facilitating discharge planning,

and promoting a seamless plan of care, which is communicated to all care team members

- Follows a care planning process to identify patient-centric goals and establish priorities
- Utilizes a holistic approach, applying multiple theories and interventions, to motivate patient/family engagement
- Conducts psychosocial screening and interventions to address behavioral and social needs (SW Care Navigator)
- Addresses social determinants of health as part of the ongoing assessment and care planning process
- Facilitates access to behavioral health resources and services
- Provides targeted education and facilitation of available health plan benefits and incentive programs
- Participates in pre-visit planning with the healthcare team to identify patients appropriate for care coordination and/or tasks needed to meet patient needs (Embedded Care Navigator)
- Identifies and stratifies patient needs to facilitate referrals to other members of the care team (e.g., Community Health Worker, Social Worker, Nurse, Provider, Community Resource Agency, School, Family Member)
- Facilitates end of life support for patients, families and the healthcare team (SW Care Navigators)
- Promotes wellness through patient education on disease-specific conditions and preventative care
- Participates in shared accountability for the identified team-based population measures



Community Health Workers

Community Health Workers are specially trained, non-licensed members of the care team who bridge the gap between health care providers and patients/families in need of care. Community Health Workers are trusted members of and/or have a close understanding of the communities they serve. They serve as a link between the patients/families and the health or social service agencies.

The scope of practice for Community Health Workers includes:

- Continuously expands knowledge of community resource services and programs
- Helps patients and their families adopt healthy behaviors
- Establishes trusting relationships with patients and their families while providing general support and encouragement
- Refers and assists with accessing necessary social services (e.g., Legal Aid; housing, food, and transportation services)
- Facilitates successful appointments for patients and families, including: assisting with preparation for appointments, attending appointments, and helping patients and families understand information
- Assists patients and their families in accessing health related services, including but not limited to: connecting with a medical home, providing instruction on appropriate use of the medical home, and overcoming barriers to obtaining medical, social, and behavioral health services
- Participates in shared accountability for the identified team-based population measures



Community Resource Specialists

Community Resource Specialists work as members of the care team to support population health initiatives and care coordination. This position works closely with all areas of the PCN and its stakeholders, including providers, patients and families, community agencies, and other health care professionals.

The scope of practice for Community Resource Specialists includes:

- Provides outreach and education to patients, families, and other healthcare team members in addressing gaps in care and resource needs

- Distributes tasks and referrals to appropriate care team members
- Participates in quarterly Provider Practice Performance Profile reviews with each assigned PCP office and assists in identifying care team priorities based on data analysis and care team discussion
- Assists members and families with problem solving, addressing concerns and ensuring education about available community resources
- Provides support for prior authorization processing for assigned care team
- Provides education and organization of community resources
- Establishes and maintains relationships with key community stakeholders through ongoing shared information and learning (e.g., lunch and learns, participation in volunteer opportunities, maintaining event calendar for team member access, ensuring key information is updated and shared)
- Participates in shared accountability for the identified team-based population measures
- Provides education and organization of community resources



Practice Facilitation Specialists

Practice Facilitation Specialists work with Primary Care Provider practices to facilitate practice transformation and support practice management processes aimed toward improving patient outcomes. Practice Facilitation Specialists use evidence-based guidelines and best practices as a basis for teaching chronic disease management, wellness promotion, and patient-centered medical home (PCMH) concepts. Their role includes promoting a culture of learning and quality improvement (QI) within practices and providing coaching to support transformation and sustained change.

The scope of practice for Practice Facilitation Specialists includes:

- Provides training on data analytic tools, such as Valence, EMR, Provider Portal, etc. to support population health/PCMH initiatives.
- Assists care teams with data analytics for Provider Practice Performance Profile reviews to support care team discussions and initiatives
- Participates in quarterly Provider Practice Performance Profile reviews with each assigned PCP office and assists in identifying care team priorities based on data analysis and care team discussion
- Prepares PCP quarterly engagement progress reports and compensation education
- Teaches and supports PCMH concepts and monitors ongoing sustainability of processes
- Provides evidence-based, condition specific training for provider practices, including asthma, diabetes, and healthy lifestyles
- Participates in shared accountability for the identified team-based population measures



Provider Relations Representatives

The Provider Relations Representatives work as part of the care team to keep provider offices informed and functioning at the highest level possible with all population management tools and resources. They assist practices with understanding the Medicaid contracts and provide a streamlined communication with the Managed Care Organization (MCO) on behalf of the PCN providers.

The scope of practice for Provider Relations Representatives includes:

- Maintains accurate participating provider status, updating provider directories and assisting in maintenance of online provider directories

- Assists with resolution of provider issues regarding claims status and enrollment issues
- Assists with individual PCP assignment issues and PCP changes from the PCN providers to the MCO
- Facilitates a streamlined, non-redundant credentialing process for PCN providers
- Participates in quarterly Provider Practice Performance Profile reviews with each assigned PCP office and assists in identifying care team priorities based on data analysis
- Provides training on data analytic tools, such as Valence, Provider Portal, etc. to support population health/PCMH initiatives
- Assists care teams with data analytics for Provider Practice Performance Profile reviews to support care team discussions and initiatives

- Prepares PCP quarterly engagement progress reports and compensation education
- Participates in shared accountability for the identified team-based population measures analysis and team discussions



Care Coordination

Care Navigators follow a process of assessment, barrier identification, care planning, and ongoing re-evaluation of progress to ensure medical, social, and behavioral needs of the patients are met. This process centers on facilitating the development of patient-centric goals, communicated with the entire care team, to help drive care team interventions and activities toward attaining optimal patient outcomes. The Care Navigator assists not only patients and families with navigation of the healthcare system, but also supports Primary Care Providers and their staff in navigating complex medical systems and facilitating access to community resources for patients and families.

Services and Support

Behavioral Health Integration

Care teams are comprised of both nurse and social worker Care Navigators to offer a holistic approach to care for patients and their families. The Social Work Care Navigators coordinate care for patients with primarily high risk psychosocial needs and the Nurse Care Navigators coordinate care for patients with identified complex medical needs. Whether the Care Navigator is located on site in a primary care office or working remotely from the PCN office, the Primary Care Provider and staff have dedicated Care Navigators who are an extension of their care team to address ongoing needs of patients.

To enhance the care team model, the Health Plan embeds Behavioral Health Care Manager staff in the PCN office to work collaboratively in support of the care teams. The embedded Behavioral Health Care Manager acts as a liaison between the PCN, the PCP network, the Health Plan behavioral health network and other community providers in order to offer a

seamless delivery system of behavioral health services for the patient. Care Navigators utilize evidence-based screening tools to identify patients with behavioral health needs, working collaboratively with the embedded Behavioral Health Care Manager to create a comprehensive care plan that address the medical, behavioral and social needs of the patient. These activities are documented in one platform that allows for continuous communication among the care team.

Team Huddles

Team huddles foster an opportunity for open communication and collaboration between care team participants. Each care team meets regularly to review and distribute care coordination referrals and tasks, discuss quality improvement initiatives regarding identified at-risk populations and communicate status updates on identified team metrics. Team huddles involve important participants involved in the provision of services to the population, including providers, their staff, community representatives, etc.

Team Metrics

Each care team identifies target population health metrics, using data analytic tools, with defined goals to improve the identified metrics over a specific period of time. Teams are empowered to select measures that are relevant to their assigned population; metrics could be related to gaps in care, avoidable emergency room utilization, avoidable readmissions, chronic disease management, etc. The team creates an actionable and measureable strategic plan to achieve the desired outcomes for the metric(s) identified. During quarterly care team meetings, the care teams share best practices and data with their peers to allow for wide spread quality improvement initiatives across all care teams.



Care Coordination Tools

Telehealth

The PCN supports a high touch care coordination model, including face to face visits in provider offices, community and home visits, telephonic and telehealth communication. The PCN's telehealth platform offers patients the convenience of working with members of their care team while remaining in their own home. This face to face approach increases engagement between the patient and care team members and allows an opportunity for observation of health management activities, health education, medication reconciliation and open collaboration for care plan development and monitoring. The telehealth platform can also be utilized by the Care Navigator and the Behavioral Health Care Manager by scheduling a session with the patient to address both medical and behavioral needs simultaneously.

Online Care Team Communication Tool

An online communication tool is used by all members of the care team, including the embedded Behavioral Health Care Manager, to allow for a real time exchange of information regarding care coordination activities. Tasks can be distributed and tracked by individuals and teams to share in the responsibility of coordinating care. This system also integrates data from the population health analytical systems to provide care teams with dashboards to assist in identifying at risk patients and targeting care coordination activities. The dashboards are used to facilitate preventative outreach, health education, and wellness promotion. This

effective communication tool decreases duplication of services to the patient and creates confidence in the patient that the care team is working toward common goals.

Community & Social Service Organization Directory

The PCN utilizes a comprehensive online community and social service directory, the Community Engagement Resource Application (C.E.R.A.), which is available to care teams, including provider practices, to assist in facilitating resources for patients and families. This interactive database, designed around social determinants of health categories, allows for customized criteria to be searched, based on patient specific needs. Another feature of C.E.R.A. is the ability for staff to search for educational opportunities and access agency specific event information.

PCN Provider Portal

The PCN Secure Network Portal is a secure website designed for all practice staff (practice managers, providers, and care support staff). The care teams utilize the portal to promote collaboration, engagement, and communication across the network. Information from the online communication tool is transmitted to the secure portal in order for providers to see real time documentation of outreach efforts being conducted for their patients. Through the portal, provider practices can submit care coordination referrals and provide input into the patient-centered care plans.

Quality Improvement

PCP Engagement

Engagement incentives and outcome based performance incentives are the foundation of the payment model change that allows PCP's to provide high-value care to meet patient needs. The engagement incentive encourages the provider practices to partner with the PCN and assist with transformation to a successful PCMH model. This quarterly progress report provides the components necessary to achieve transformation and assist with continuous quality improvement while aligning with the overall network objectives and strategies for support of the Triple Aim.*

*Institutes for Healthcare Improvement's "Triple Aim"

- Improving the patient experience of care (including quality and satisfaction);
- Improving the health of populations; and
- Reducing the per capita cost of health care.



Progress Report for Engagement Compensation

confidential and proprietary

Clinic:

Date:

	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
1. The Practice has achieved recognition as a NCQA PCMH Level 1 3.				
• NCQA Recognition Level 1, 2, or 3 will be an automatic \$1.50 engagement cap plus 1 point toward total				
2. The Practice will regularly use team based care [e.g., huddles] to implement population health processes and address gaps in care & preventive care (HEDIS) measures by working 3 different registries. Examples include:				
• PCP Panel List				
• Preventive care (WCC, Immunizations, Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents)				
• Chronic disease (Asthma, Diabetes, ADHD)				
3. The Practice solicits patient feedback for all providers annually using a Patient Satisfaction Survey.				
• Use CMPCN-provided or CMPCN-approved survey measurement tool				
• Implement and document one quality improvement (QI) Project based on PSS results				
4. The Practice, Providers, and Staff participate in the CMPCN Learning Collaborative.				
• Attend at least 6 web-based Learning Collaboratives (at least 1 per quarter)				
• Post response to Learning Collaborative topic on PCN portal discussion board				
5. The Practice demonstrates the use of QI tools and training.				
• Create or demonstrate CQI infrastructure for office including identification of CQI leader				
• Implement and document two QI initiatives during the year				
- One QI initiative must be an improvement in a HEDIS measure (AWC, CIS, WC34, WC15, ASM)				
- The PSS CQI project may count as one of the two.				
6. The Practice implements and documents a process/policy for closed loop referral tracking.				
7. The Practice implements and documents a process/policy to manage high risk patients.				
• Provide care coordination				
• Work ED high utilizer list (e.g., asthma)				
• Practice will disseminate information to patients about member incentive programs (e.g., update website, publications, awareness, etc.)				
8. The Practice implements and documents a process/policy to manage transitions.				
• Identify patients with a hospital admission and/or ER visits and ensure appropriate office follow up				
9. The Practice implements and documents a care coordination process/policy with PCN Care Managers.				
• Practice responds to case management summaries on a quarterly basis (May count PCN portal summaries)				
• Practice collaborates with PCN Care Managers as necessary for care coordination.				
10. The Practice implements and documents a process/policy for addressing behavioral health concerns.				
• Development of a written process and use of a Depression Screening Tool (ex: PHQ-2)				
• Utilize behavioral health resources				
• Care coordination with PCN Care Managers				

Engagement Compensation Grid:

1. The maximum engagement compensation that can be earned is \$3.00 pmpm.
2. PCMH NCQA Recognition: Level 1-3=\$1.50 engagement compensation
3. PCN Engagement Compensation Point Achievement:
 - a. 0-4 points=\$0.00 engagement compensation
 - b. 5-6 points=\$1.50 engagement compensation
 - c. 7-10 points=\$3.00 engagement compensation



Patient-Centered Medical Home (PCMH) Transformation and Support Program

The primary care medical home demonstrates a commitment to quality and quality improvement by ongoing engagement in activities such as using evidence-based medicine and clinical decision-support tools to guide shared decision making with patients and families, engaging in performance measurement and improvement, measuring and responding to patient experiences and patient satisfaction, and practicing population health management. Sharing robust quality and safety data and improvement activities publicly is also an important marker of a system-level commitment to quality.

- Agency for Healthcare Research and Quality PCMH Resource Center, June 2012

The PCN makes the following strategies and resources available to help practices transform and maintain Patient-Centered Medical Home (PCMH) components:

- PCMH readiness evaluation
- PCMH and NCQA consulting services
- Use of patient registries for population management
- Patient communication/outreach templates and material
- Gaps in Care reports for assigned members
- Quarterly progress reports provided and reviewed with the provider practice

PCN's programs target best practices and underscore the patient-provider relationship, patient self-management skills and improved health care utilization. These programs are designed to educate providers, the office staff and patients/caregivers on appropriate diagnosis, treatment and management of chronic conditions and promote preventive care for the entire patient population.

Quality Improvement Tools

Utilizing multiple tools assists practices as they progress towards PCMH transformation. These evaluation methods allow for practices to improve their processes, while using their own provider specific data to strengthen the delivery of patient and family centered care.

Interactive Voice Response (IVR) Program

The PCN provides patient outreach services utilizing an IVR platform to place a series of automated calls aimed at motivating action to close gaps in care. Specifically, the service informs patients of needed well-visit exams and gaps in care related to immunizations. This initiative is designed to drive patient engagement, as well as improve provider and practice performance related to key preventive quality measures.

Learning Collaboratives

The Learning Collaborative has been used extensively in the support of the dissemination of information required for PCMH transformation. The PCMH transformation team has developed a model to use in community settings to coach practices by providing education related to the medical home concepts and allowing for educational topics to be presented. Each month, a 30-minute topic is presented via a web-based interactive tool. The PCN encourages all clinics to participate, including providers and their office staff.

The goals of the Learning Collaborative include providing education on the development of PCMH processes and policies, while also sharing best practices in a supportive group environment. Didactic sessions offered include PCMH topics, such as team-based care, quality improvement, care management, and care coordination.

This monthly format also includes common collaborative learning techniques, such as structured problem solving and opportunities for brainstorming. Sessions are recorded which offers the practices an opportunity to review the materials at a later date. After each webinar, each practice is encouraged to document a question on the PCN portal message board to confirm participation and seek feedback from the practices. This information is used to make the Learning Collaborative as effective as possible.

Plan, Do, Study, Act (PDSA)

Rapid cycle evaluations are the foundation of the continuous quality improvement methodologies that have been developed to support medical home implementation and transformation. The care team uses the PDSA quality tool to assist practices with planning and documenting the tests of change that are associated with PCMH transformation. Each provider practice is encouraged to maintain these PDSA rapid cycles and related quality improvement efforts for review with the care team at least quarterly.

PDSA Worksheet



	PDSA Topic: Decreasing 30-day post NICU discharge ER visits	Cycle #: 1	Date: 4/20/16
	Objective of PDSA Cycle: Identify key factors and barriers contributing to ER visits within 30 days of post NICU discharge		
	Questions: <ol style="list-style-type: none"> 1. Why did parents decide to bring their child to the ER? 2. How were parents directed to the ER? 3. Did the child receive a follow-up visit with a primary care physician or nurse practitioner within 1-2 weeks of being discharged from the NICU? 4. If not, why did the child not have a follow-up visit? 5. Did the child receive a home health visit following discharge from the NICU? 6. Would having support from a home health nurse been helpful in preventing the child from visiting the ER? 7. Should more patients been referred to case management? 8. Should more patients been referred to a home health visit? 		
	Predictions: By expanding outreach and educational resources, parents of post NICU patients will be less likely to utilize the ER for unnecessary services.		
Plan	Plan for change or test: <ol style="list-style-type: none"> 1. Add automatic referral for Level II calls for all NICU discharges. 2. Implement partnership pilot with home care to refer NICU patients for home education and support – develop educational material based on parent survey and key contributing factors. 		
	Plan for collection of data: Pulled the detail on the post NICU discharge ER visits from 4 th quarter 2015 to identify: <ul style="list-style-type: none"> • # of unique members • Diagnoses for the visits • Day of the week of discharge • Average time since discharge that first ER visit occurred • % called by TOC process • % reached by TOC process • # of days between NICU discharge and contact with patient via TOC call • % referred to case management 		



PROGRAM MEASURES

PROGRAM MEASURES

Effectiveness of the LCCCP program is measured according to key categories and metrics on a monthly, quarterly, and/or annual basis. Below is a chart of some of the key metrics utilized.

	Measure Description	Frequency
Category	General Population Data	
Providers	Total number of Providers: Number of providers in the LCCCP for the reporting period	Quarterly/Annual
Members	Total number of Members: Number of members in the LCCCP for the reporting period	Quarterly/Annual
Category	Access	
Access to PCP Services	Access to PCP Services: Percentage of children and young adults, ages 12 months to 19 years, who had a visit with a PCP	Annual
Access to Well Care Services	Access to Well Care: Percentage of times that a regular visit was changed to a Well Care visit	Quarterly/Annual
Category	Care Coordination	
Transitional Support	Transitional Care Support: Percentage of hospital-discharged members who had an ER visit within 30 days of discharge	Quarterly/Annual
Member Engagement	Member Engagement in Care Coordination: Number of members who had a plan of care initiated by the Care Team	Quarterly/Annual
Provider Engagement	Provider Engagement: Percentage of providers that accept and concur with the care plan <i>** Measure is in development and targeted to be available by end of Q4 FY2017</i>	Quarterly/Annual
Community Engagement	Community Engagement: Percentage of at-risk members linked to community resources <i>** Measure is in development and targeted to be available by end of Q4 FY2017</i>	Quarterly/Annual
Care Team Engagement	Interdisciplinary Team: Percentage of care plans including more than one discipline (MD, RN, SW, CRS) <i>** Measure is in development and targeted to be available by end of Q4 FY2017</i>	Quarterly/Annual
Member Activation	Goal Completion: Percentage of at-risk members that successfully completed a personal goal in the care plan <i>** Measure is in development and targeted to be available by end of Q4 FY2017</i>	Quarterly/Annual
Category	Pediatric Behavioral Health	
Depression Management	Depression Closed Loop Referral Process: Percentage of PCP practices with a documented process for closed loop referral tracking. This is measured based on review of a minimum of 30 behavioral health chart audits from the previous 12 months, with a minimum of 7 chart audits from each quarter. Chart audit samples are based on members identified with behavioral health claims for depression.	Quarterly/Annual

	Depression Screening: Members 12 through 18 years of age with evidence of a depression screening during the measurement year (excludes those with dx of depression or other serious mental illness).	Annual
	Depression Follow Up: Members 12 through 18 years of age who had an outpatient visit and a positive depression screen in the first 11 months of the measurement year AND evidence of any one of the following within 30 days of the positive depression screening: 1. Suicide Risk Assessment 2. Any visit with one of the following specialties: - Licensed Clinical Social Worker - Psychologist - Psychiatrist - Child and Adolescent Psychiatry 3. Prescription of antidepressants within the measurement year 4. Any outpatient or home visit coded for depression	Annual
Category	Condition Management	
Pediatric Asthma	Medication Management for Asthma: Members ages 5-20 who had persistent asthma and remained on an asthma controller for at least 50% of the treatment period	Annual
	Medication Management for Asthma: Members ages 5-20 who had persistent asthma and remained on an asthma controller for at least 75% of the treatment period	Annual
	Asthma Prevalence: Members identified with a diagnosis of asthma as a percentage of total members through 20 years of age - look back period of 12 months for asthma diagnosis	Quarterly/Annual
Pediatric Diabetes	Diabetes Management: Percentage of members under 18 years of age with diabetes (type 1 or type 2) who had a HbA1c < 7.5% (per American Diabetes Association recommendation)	Annual
	Diabetes Prevalence: Members identified with a diagnosis of diabetes as a percentage of total members through 20 years of age - Type I and Type II combined - lookback period of 12 months for diabetes diagnosis	Quarterly/Annual
Pediatric Weight Assessment and Counseling	Pediatric Weight Assessment: The percentage of members 3-17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of BMI percentile documentation	Annual
	Pediatric Counseling for Nutrition: The percentage of members 3-17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of counseling for nutrition	Annual
	Pediatric Counseling for Physical Activity: The percentage of members 3-17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of counseling for physical activity	Annual
Ambulatory Sensitive Conditions- Pediatric Quality Acute Composite¹	Pediatric Quality Acute Composite (AHRQ PDI 91) – Composite of the following acute conditions per 100,000 population ages 6 to 17 years. PDI #16 – Gastroenteritis Admission Rate	Quarterly/Annual

	<p>PDI #18 – Urinary Tract Infection Admission Rate</p> <p><i>** Measure is in development and targeted to be available by end of Q4 FY2017</i></p>	
<p>Ambulatory Sensitive Conditions- Pediatric Quality Chronic Composite¹</p>	<p>Pediatric Quality Chronic Composite (AHRQ PDI 92) – Composite of the following chronic conditions per 100,000 population ages 6 to 17 years.</p> <p>PDI #14 – Asthma Admission Rate</p> <p>PDI #15 – Diabetes Short-Term Complications Admission Rate</p> <p><i>** Measure is in development and targeted to be available by end of Q24 FY2017</i></p>	Quarterly/Annual
Category	Prevention and Wellness	
Tobacco Use	Tobacco Use Screening: Members ages 13 through 18 years of age with evidence of at least one tobacco screening with any provider in any setting during the measurement year	Annual
	Tobacco Use Cessation Intervention: Members ages 13 through 18 years of age who are current tobacco users and have evidence of cessation counseling by any provider in any setting during the measurement year	Annual
Adolescent Care	Adolescent Well Care: Members 12-20 years of age with at least one comprehensive well-care visit with a PCP or OB/GYN during the measurement year	Annual
	Adolescent Immunization: Members turning 13 years of age during the measurement year who had evidence of the following: 1 Tdap or 1 Td on or between the 10th and 13th birthday AND 1 meningococcal conjugate or meningococcal polysaccharide vaccine on or between the 11th and 13th birthday	Annual
Immunizations	Childhood Immunizations – age 2 (Combo 10): Members 2 years of age during the measurement year with evidence of receiving the following by 2 years of age: 4 DTaP, 3 IPV, 1 MMR, 3 HiB, 3 Hepatitis B, 4 PCV, 1 VZV, 2 or 3 Rotavirus (depending on series), 1 Hepatitis A, and 2 Influenza vaccines	Annual
	Childhood Immunizations - Age 6: Members turning 6 years of age during the measurement year with evidence of receiving the following immunizations between the 4th and 6th birthday: 1 DTaP, 1 IPV, 1 MMR, 1 VZV, and 1 Influenza vaccine (between 5th and 6th birthday)	Annual
	Childhood Immunizations - Age 13: Members turning 13 years of age during the measurement year with evidence of receiving the following immunizations: 1 MCV (between 11th and 13th birthday), 1 Tdap/Td or 1 Tetanus/1 Diphtheria (between 10th and 13th birthday), and 1 Influenza vaccine (between 12th and 13th birthday)	Annual
Well Care	Well Child in the First 15 Months of Life: Members who turn 15 months of age during the measurement year and have evidence of six or more well-child visits since birth	Annual

	Well Child in the 3rd, 4th, 5th and 6th Years of Life: Members between the ages of 3 and 6 years of age with at least one well-child visit with a PCP during the measurement year	Annual
Lead Screening	Lead Screening in Children: Members who turn 2 years of age during the measurement year and have at least one lead capillary or venous blood test on or before their second birthday	Annual
Chlamydia Screening	Chlamydia Screening in Women: Sexually active women aged 16 - 20 years with at least one chlamydia test during the measurement year	Annual
Category	Medication Adherence	
Antidepressant Management	Antidepressant Medication Adherence: Members ages 18 years of age or older who were treated with anti-depressant medication and have evidence of the following: Acute treatment phase: At least 84 days of continuous treatment with antidepressant medication during the 114 day period following the earliest prescription date between May 1 of the year prior to the measurement year and April 30 of the measurement year. Continuation phase: At least 180 days of continuous treatment with antidepressant medication during the 231 day period following the earliest prescription date between May 1 of the year prior to the measurement year and April 30 of the measurement year.	Annual
ADHD Management	ADHD Medication Adherence: Members with newly prescribed attention-deficit/hyperactivity disorder (ADHD) medication and as follows: Initiation Phase: Children six years of age as of March 1st of the year prior to the measurement year to 12 years as of February 29th of the measurement year and evidence of: One face-to-face outpatient, intensive outpatient or partial hospitalization follow-up visit with a practitioner with prescribing authority within 30 days after the new prescription Continuation Phase: Children six years of age as of March 1st of the year prior to the measurement year to 12 years as of February 29th of the measurement year with continuous enrollment prior to and after the new prescription date and evidence of: An Initiation Phase Visit in the first 30 days AND at least two follow-up visits from 31–300 days (10 months) after the new prescription	Annual
Category	Utilization	
Emergency Room	Emergency Room Utilization: ER Visits per 1,000 members	Quarterly/Annual
Inpatient	Hospital Readmission: Hospital readmissions within 30 days - all cause	Quarterly/Annual
	Inpatient Utilization: Inpatient Medical/Surgical Admissions per 1,000 members	Quarterly/Annual
	Inpatient Utilization: Inpatient Medical/Surgical Days per 1,000 members	Quarterly/Annual
Cost of Care	Cost of Care: Per Member Per Month (PMPM) cost total and by service category - Inpatient acute medical, Inpatient acute surgical, Inpatient Maternity, Inpatient Mental Health/Substance Abuse, Outpatient Mental Health, Emergency Room, Outpatient - All, Pharmacy, Physician/Professional - All, Home Health, and DME.	Quarterly/Annual

Out of Network Utilization	Outside of LCCCP Primary Care Utilization: <i>(measure under development)</i> Percentage of utilization for primary care services outside the LCCCP network	Quarterly/Annual
Category	Experience	
Member Satisfaction	Member Satisfaction Survey	Annual
Provider Satisfaction	Provider Satisfaction survey	Annual

¹AHRQ Pediatric Quality Indicators (PDIs) apply to the special characteristics of the pediatric population; screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the provider level or area level; and, help to evaluate preventive care for children in an outpatient setting, and most children are rarely hospitalized. For more information about the Pediatric Quality Indicators, download the [Pediatric Quality Indicators Brochure](#).

Children's National Health System

Dear Mr. Billioux:

On behalf of Children's National Health System, I am pleased to provide comments on the Request for Information on Pediatric Alternative Payment Model Concepts. Children's National is the only exclusive provider of hospital care to children and families in the Washington, DC metropolitan region. It is our experience that there is great interest in child and youth-focused care delivery models that combine health care and health-related services. We look forward to continuing the conversation on this important issue.

Sincerely,



Children's National
Health System.pdf



April 7, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

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Sincerely,

Tonya Vidal Kinlow

**Response from
Children's National Health System
Kurt Newman, MD
Chief Executive Officer
Washington, DC
April 7, 2017**

**Submitted to
Alexander Billioux
Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services**

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

QUESTIONS:

- 1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.***

Children's National Response

Children's National Health System is the primary provider of health care for children in the District of Columbia metropolitan region. The Health System is comprised of a 313 bed hospital with over 6,000 employees, including 559 physicians and 1,663 nurses; 2 emergency departments; 7 regional outpatient centers in DC, Maryland and Virginia; 6 Primary Care Medical Homes in DC certified Level III by National Committee for Quality Assurance (NCQA); and additionally more than 40 providers delivering primary care through our Children's Pediatricians and Associates offices. It is our experience that there is great interest in child and youth-focused care delivery models that combine health care and health-related services. The following summarizes our partnership with the District of Columbia on care coordination programs.

School-Based Nursing Care

The Children's School Services (CSS) Program is responsible for providing high-quality, effective, efficient, appropriate, safe, and timely nursing services to the approximately 74,000 students enrolled in 110 public schools and 68 public charter schools located at 53 sites in the District of Columbia. The Children's National CSS Program team provides the District with school-based nursing services, limited physician and dental services, and health promotion and care coordination services to students. Children's National is honored to have served for more than a decade as administrator of the DC school health program. The mission of the CSS Program is to advance the health and well-being, academic success, and lifelong achievement of public school students in the District of Columbia. Our vision is for the DC school health program to be recognized nationally as a best practices model for the delivery of the highest-quality school health nursing services, enhanced by collaboration with public and private sector partnerships.

Asthma Care Coordination

There is a great level of interest in DC regarding child and youth-focused care delivery models. Children's National has invested in care delivery models that combine and coordinate health care and health-related social services. An example of this work is our Improving Pediatric Asthma Care in the District of Columbia (IMPACT DC) program. IMPACT DC is a pediatric asthma program in Washington, DC, dedicated to improving asthma care and outcomes for children. A disproportionately high number of DC's children suffer from asthma. One of IMPACT DC's main goals is to lessen the need for emergency room visits and hospital stays by educating patients and families about ways to manage the condition, and connecting them with valuable resources in the local community. The heart of the program is the IMPACT DC Asthma Clinic. The clinic sees children who have recently been to the emergency room, were hospitalized for asthma, or who generally have trouble controlling their asthma. The IMPACT DC staff provides detailed medical consultation and develops unique care plans for each child. They then coordinate care with each child's primary care provider, school nurse, and others involved in your child's asthma care. IMPACT DC staff also provides individualized education about the

disease and medications, and show children how to best use their inhalers and other devices. While working with individual patients, this program also has a strong community focus. The IMPACT team participates in community outreach activities, providing information through health fairs, school-based programs, and other educational and advocacy events. IMPACT DC is additionally working to measurably improve asthma care regionally by coaching community primary care practices to improve asthma clinical management and patient education through regional quality improvement initiatives.

My Health GPS

Beginning in July 2017 the DC Department of Healthcare Financing will provide a PMPM payment for care coordination of Medicaid beneficiaries with three or more chronic conditions. The PMPM payment will support embedding interdisciplinary care coordination teams in primary care medical homes. Children's National will implement the program with Nurse Case Managers, Social Workers and Community Health Workers. The centralized care management model aims to integrate primary, acute, behavioral on long term services with the goal of reducing avoidable and preventable hospital admissions and ED visits. The PMPM payment will be claims based and cover all DC Medicaid beneficiaries, even those enrolled in a Medicaid MCO.

Challenges

The biggest challenges are developing and sharing data metrics for outcomes measurement. Data sharing is particularly difficult between health care organizations and schools. Mandatory compliance with HIPAA and FERPA rules prevent our school nurses from sharing data with our own physicians within the health system. Our inability to share information between organizations limits the effective coordination of care. We recommend changes to these rules to allow open communication aimed at improving the care we are able to provide to our children.

Another area of concern is the availability of facilities to provide the appropriate level of care for children with behavioral issues that are not medical. While the District of Columbia has a robust safety net, there is a significant void in the capacity to meet the health care needs of this growing patient population. This is a hidden yet growing problem. In 2016, we saw a 25 percent increase in mental health emergency room visits over 2015. Many of these patients presented with extreme behavioral health needs. Care coordination between community based providers and providers in our health system is ineffective. Health care coverage should be strengthened and there should be an increase in the number available providers to care for these children.

As children represent a minority of the budget for Medicaid services, Medicaid programs tend to be adult centric and focus on illnesses of age as opposed to childhood. Claims based data for selecting eligible beneficiaries places the care management intervention up to six months behind the opportunity for intervention. Lastly, certain costly childhood conditions are often best managed by an appropriately resourced subspecialty medical home. For example, children with sickle cell disease are primarily managed by a Hematology practice and children with cystic fibrosis are managed by a pulmonary practice. There has not been focused discussion around an APM methodology for subspecialty medical homes where care coordination can greatly influence treatment adherence and prevent higher cost utilization in the ED and hospital.

- 2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have***

partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

Children’s National Response

Children’s National has a range of partnerships starting with community pediatricians to community service organizations. Of course, one of our primary partners is our public schools where we not only provide school nursing for all District of Columbia Public Schools, but also staff school health suites in DC and Maryland. These relationships help improve collaborative communication, care and outcomes—reducing both duplication of services and missed opportunities.

School Health

Hospitals play an important role in helping students manage chronic diseases and improving care coordination between hospitals and schools. In a recent survey of children’s hospitals, more than half indicated their hospital had a formal partnership with early education or child care. These types of partnerships strengthen the health care-education continuum and allow for convenient care. Since 2001, our Children’s School Services (CSS) division has staffed the District-wide school nursing program and its management in the DC public and public charter schools, with oversight from the DC Department of Health (DOH). CSS is aligned with Center for Disease Control and Prevention’s Whole School, Whole Community, Whole Child (WSCC) framework. Our school nurse program has a long track record of collaboration and care coordination across the care continuum, including primary care and specialty providers, hospitals, community clinics, behavioral health services and other providers. Although school nurses are the clinical backbone of the school health team, the ability to meet student’s needs is dependent on partnerships and linkages with other team members, as well as community providers and resources. In addition to the CSS program, Children’s National contractually provides clinical services to three DC School-Based Health Centers in public high schools and multiple Maryland schools (four school-based health centers in Prince George’s County Public high schools, four Montgomery County public high schools, and nine Montgomery County public elementary schools). Furthermore, other Children’s National departments have partnered with DC schools and community partners to deliver health training and clinical services in various areas including asthma management, healthy relationships and child safety.

Oral Health

Since 2009, the District of Columbia Pediatric Oral Health Coalition (“the Coalition”) has worked diligently to improve oral health literacy and to ensure alignment with its mission of advocating for improved oral health access and care for all children in the District of Columbia (DC). The Coalition partners include hospitals, DC Medicaid leadership, managed care organization leadership, the DC Department of Health, DC Primary Care Association, community health centers, and community organizations.

The Community Health Needs Assessment (CHNA) identified oral health as a priority for children in DC and further identified that Wards 7 & 8 had the highest prevalence of these concerns. Through community based focus groups, the Coalition determined factors that present barriers to care for the populations we were targeting, such as scheduling appointments and transportation. Results of the focus group enabled the creation of messaging that was tailored to the specified audience. Using a train-the-trainer format, the Coalition recruited organizations who work closely with the target population to provide them the tools necessary when communicating about the benefits of oral health care. In order to monitor

implementation, the Coalition provided evaluation forms to gauge the impact of the training program through oral health education for the community.

Today, the Children's National DC Pediatric Oral Health Coalition staff is working with our own pediatricians to address oral health. We have presented at a series of webinars and in-person meetings discussing the oral health messaging training and the importance of discussing with patients the importance of oral health. Trainings were also provided for pediatricians on how to complete an oral exam and when to apply fluoride varnish for their patients. Through a structured quality improvement initiative, we have successfully implemented oral health screening and fluoride varnish application at all of our primary care health centers.

Social Services and Health Care Coordination

Children's National has partnered with two organizations – Health Leads and the Children's Law Center – to link patients to community based supports. Health Leads helped us address patient and families' unmet social needs, such as housing, transportation, and food insecurity. With Health Leads, we facilitated the integration of resource connections into our clinical care by:

- a) Utilizing a simple screening tool that assesses patients' needs and a process for providers to "prescribe" these resources and then refer patients to Health Leads;
- b) Engaging a well-trained volunteer lay workforce of local college students who underwent an intensive pre service training, along with weekly ongoing trainings, coaching, mentoring, and supervision by Health Leads' full-time, clinic-based staff, who was also a seasoned social worker; and
- c) Using a client and resource database to build a comprehensive and up-to-date map of nearby community resources.

From September 2015 to June 2016, we served 870 families with our Health Leads partnership. The majority, 69 percent needed help with provider referrals. Another 11 percent sought non-clinical referrals. In total, 78 percent of those seeking support were able to connect with at least one resource, including adult education, employment, financial assistance, housing, legal aid and transportation.

Food insecurity remains the most common identified need among our Medicaid enrolled children. Children's National is now incorporating food insecurity screening into all primary care preventive health visits and actively partnering with community partners- Capital Area Food Bank, Aunt Bertha and others- to connect families with convenient resources.

The Medical Legal Partnership between Children's National and the Children's Law Center is one of the first in the nation. In a program called, Healthy Together, pediatricians and lawyers work together to find solutions for issues related to insurance coverage, housing, education and transportation that impact health outcomes for children. With the support of clinic staff, Healthy Together received 584 referrals since May 2016. Through these referrals, Healthy Together assisted 558 clients and their 704 children. The most common legal issue identified is unmet education or special education needs. Fifty percent of referrals to Healthy Together require legal assistance to resolve an unmet educational need. It is also common for the medical team to refer families for assistance in improving housing conditions. More than 60% of patient families referred for housing assistance have a child with asthma in the home.

3. What policies or standards should CMS consider adopting to ensure that children, youth and

their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

Children's National Response

We recommend protecting the integrity of the Medicaid program for all children. For children in rural communities, we recommend addressing access to care by developing rules that make it easier to provide care through telemedicine. CMS should also consider:

- Payment incentives that support rural practice models and coverage for use of non-physician providers as well as outreach worker, such as community health navigators
- Substance abuse treatment programs

Protecting Medicaid for Children

CMS should create a tailor-made national health-care plan just for children similar to Medicare for the elderly. We need an approach to pediatric health care that not only provides coverage to every child but also ensures adequate funding for essential services that meet child-specific needs. Our current patchwork system addresses only the first half of that equation. Right now, Medicaid and the Children's Health Insurance Program form the country's pediatric health-care safety net, together serving children across the nation's urban, rural and suburban communities. These programs provide vital access to health services that more than [36 million American children](#) need and cannot afford to lose. But they are force-fit solutions for children in a health-care system designed for adults.

A child focused program should include specialized pediatric care tailored to the needs of children. One possible approach is to carve children out of the Medicaid mix and build a separate plan just for kids. Children [make up 50 percent](#) of today's Medicaid population but account for just [20 percent](#) of Medicaid spending. They compete for a shrinking share of a funding pool. In today's model, children of the same age and family income often qualify for different levels of care just because they live in different states. A cohesive national plan just for children could standardize the eligibility criteria for health coverage, offering every child access to the high quality affordable health care.

Improve Access to Care through Telemedicine Policies

Lack of access to pediatric subspecialty care is a major barrier to pediatric health in the Washington, DC region and extended rural communities. This can significantly reduce quality health outcomes in our pediatric population. Telemedicine is the hope that can link pediatric families to the care they deserve and want. One important obstacle has been access to specialty follow-up appointments. Barriers include distance, lack of transportation, waiting times for appointments (often more than one month), time away from work or school, insurance coverage for the visit, and additional costs including parking and food. As a result the no show rate in many of our specialty clinics exceeds 20%, and creates longer waiting times for those who do show up for appointments. Many of these children end up coming in to our emergency department after they suffer preventable complications because of missed appointments. Telemedicine is a viable alternative to in-person pediatric specialty care with a considerable amount of data supporting that it can provide safe, high quality, cost-effective care in many specialties including cardiology, diabetes, mental health, neurology, feeding and nutrition, critical care and emergency medicine.

Until recently, telemedicine focused on provider-to-provider interactions in the inpatient and outpatient settings. Newer technology and increased consumer demand have resulted in the rapidly growing field of Direct to Consumer telemedicine. The patient can connect securely to a health care provider directly via audio and video from a computer, tablet or smart phone where the patient is. To date much of the

practice of Direct to Consumer telemedicine has centered on primary and urgent care and has been driven by for-profit providers. With Direct to Consumer telemedicine, the potential to improve access for the neediest children with complex and/or chronic specialty care needs is great. Many of the diseases we care for are amenable to a Direct to Consumer model. However, many obstacles remain to integration of Direct to Consumer telemedicine into pediatric specialty care. Several states, including Maryland and the District of Columbia, require telemedicine to be provider to provider (with preexisting provider agreements) and originate from a hospital or outpatient clinic. Some payers do allow use of Direct to Consumer telemedicine on a case-by-case basis, but this is by no means ubiquitous or easy to get approved. This essentially eliminates the possibility of integrating Direct to Consumer telemedicine into a large pediatric care model until reimbursement laws are changed. Unfortunately, most state governments demand data that prove the safety and cost-effectiveness of this approach and until we are able to provide data, Direct to Consumer telemedicine, despite its obvious advantages, will remain in the for-profit world.

At Children's National, we are working to change the equation, and are in the final stages of installation of our own Direct to Consumer solution in partnership with our own advanced information technology team, the Bear Institute and Avizia. We still have a huge gap in navigating reimbursement issues for the majority of our population. We believe new reimbursement strategies provide a perfect opportunity to close that gap.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

QUESTIONS

- 1. *To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health- related social services agencies)?***
 - a. *Please comment particularly on service integration with programs such as [Head Start](#); child welfare programs; Children's Mental Health Initiative programs; [Healthy Transitions](#) grantees; [Safe Schools/Healthy Students](#); foster care programs; the [Maternal, Infant, and Early Childhood Home Visiting Program](#); [Individuals with Disabilities Education Act, Part C](#) programs; [Healthy Start](#) projects; and other state, tribal, and federal programs.***

Children's National Response

The DC Mental Health Collaborative is a multi-disciplinary, cross-sector collaboration, involving health systems, non-profits and government agencies with the aim of systemically improving the integration of mental health into pediatric primary care. Originally funded through a state Title V grant, the DC Collaborative is now funded by both the state mental health agency and local philanthropic dollars, and includes representatives from the Office of the State Superintendent of Education (who administers Part C), DC Public Schools Strong Start (Child Find), Child and Family Services Agency, the Department of Health (who administers the MIECHV program), the Department of Behavioral Health (including the System of Care programs), the Department of Health Care Finance, and others. The DC Collaborative operates under a health network framework, combining resources and expertise to improve the integration of child mental health and primary care services citywide.

Examples of service integration initiatives include: 1) A longitudinal quality improvement learning collaborative focused in increasing the prevalence of mental health screening at primary care visits, resulting in a five-fold increase in screening rates between FY 14 to FY16. 2) Establishment of a model

Child Psychiatry Access Program, the DC Mental Health Access in Pediatrics program (DC MAP), designed to provide specialty consultation to primary care providers managing patients with mental health concerns 3) Collaboration with the MIECHV grantees to increase knowledge of and referrals to local home visiting programs from pediatric primary care providers and 4) Implementation of perinatal mood and anxiety disorder screening in pediatric primary care settings.

The Early Childhood Innovation Network (ECIN) is a partnership between Children's National and Georgetown intended to reduce the impacts of adversity on young children through promoting social-emotional health and parental capacity building. The ECIN pilots science-based, innovative interventions in natural settings such as health clinics, early childhood education settings or social service agencies, with a focus on rapid-cycle evaluation and micro trials to develop effective and sustainable interventions that can be disseminated widely. The ECIN is also building a network of service providers, community leaders and parents to increase the system wide capacity to support young children and their parents. Examples include 1) collaboration with the Office of the State Superintendent of Education to use state level data to inform intervention development, 2) implementation of social emotional curriculum training and supports for children and parents at early childhood education centers, 3) Integration of Early Childhood Mental Health consultation into early childhood education centers and Pre-Kindergarten classrooms, and 4) Implementation of the Healthy Steps program, co-locating a developmental specialist and family support worker in pediatric primary care offices to provide collaborative well child care to young children. The ECIN is in discussions with the local Head Start provider to expand programming in their centers.

Barriers to service integration largely center around infrastructure needed to support collaborative work. Data sharing between agencies is difficult, particularly at the individual child level. For example, a child may receive a developmental or mental health screen at both the health center and the child care center or school-- there is no systemic way to share that information across systems, leading to duplicative services and lack of coordination. Health promotion activities, such as early childhood mental health consultation or mental health care coordination are not paid for, and thus services are unpredictable and reliant on external funding sources. Lastly, ensuring that child health issues are prioritized by the state agencies is a continued challenge, particularly given that children are not the highest cost users of the health system, yet investment at these early and preventative stages is ultimately cost effective and improves health.

2. *Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?*

a. *Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?*

Children's National Response

In addition to our partnership and integrated service delivery work in mental health, Children's National has health related social service providers co-located in our facilities. One of our strongest and most successful partnerships is the Women Infant and Children (WIC) food and nutrition program. We have WIC clinics in six of our Washington, DC locations. It is one of the largest supplemental food programs in the city. WIC safeguards the health of eligible applicants by providing breastfeeding support and education; supplemental nutritious foods at no cost; nutrition education and counseling. Food and nutrition counselors should be a part of any child and youth focused integrated services delivery model. Also co-located in our facilities are certified peer support workers and family navigators. Our Parent Navigator Program informs, educates, supports, and empowers families to be strong partners with providers in advocating for their child's medical, educational, and social well-being. Parent Navigators provide guidance

and support to families about how to access services, work with providers, and manage the various aspects of special needs care giving. Because of our experience with health-related social service providers, we recommend at a minimum that the following be included in a child- and youth-focused integrated service delivery model:

- Mental health care coordinators
- Certified peer support workers and family navigators
- Food and nutrition counselors (WIC)
- Housing counselors
- Health educators

- 3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?***
- 4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.***

Children's National Response

Children's National assists families in enrolling in Medicaid/CHIP through the Financial Information Center (FIC) while also assessing for eligibility in other local and state safety net programs. DC and MD have eligibility workers who work in FIC to expedite Medicaid/CHIP applications. Case Managers support patients and families with further enrollment in Supplemental Security Income (SSI), Medicaid waiver programs, and special health care programs. Every program has different application processes and requirements. Most Medicaid waiver programs for children have waiting periods of three months to four years. A child with a new technology need (such as a ventilator) often has a prolonged hospitalization waiting for a waiver program to cover home services. There is also a waiting period for school based funding for children with special needs that exceed the capacity of the home or school setting. Children with autism are disproportionately impacted by delays in school based and/or state based funding for wrap around Applied Behavioral Analysis (ABA) home services or placement in residential treatment programs.

- 5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?***

Children's National Response

Streamlining Medicaid/CHIP enrollment would expedite the coverage needed to keep children out of the ED and shorten their acute hospital length of stay. Where economy of scale permits, embedding Medicaid workers into pediatric care settings allow for more rapid eligibility decisions and Medicaid enrollment. Further streamlining and standardizing the Medicaid Waiver processes would prevent

unnecessary utilization and prolonged hospital stays. The wait times for Medicaid Waiver services needs review to impact unnecessary healthcare expense.

- 6. *What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?***

Children's National Response

Children's National provides care in a multi-jurisdictional environment. A major obstacle is the variation in eligibility, coverage and reimbursement. A possible solution would be to establish regional coverage and reimbursement models.

- 7. *What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?***

- 8. *What role do models of care such as ACOs play in the pediatric environment?***

- a. *Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?***
- b. *How are pediatric ACOs the same or different from adult-focused ACOs?***
- c. *What opportunities do pediatric ACOs have for integration with community and health services systems?***
- d. *Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?***

- 9. *What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?***

Children's National Response

Of particular note is the critical need for integration of behavioral and physical health in care delivery. The specialized pediatric mental health workforce is inadequate to meet the national need; thus, a broader strategy is necessary.

We use a collective impact model to integrate behavioral and primary care delivery. Seventy percent of Washington, DC area children are enrolled in Medicaid/CHIP and have a large degree of unmet mental health needs. With state public health funding and private philanthropy the infrastructure for a collaborative across disciplines, sectors and delivery sites was established. The DC Mental Health Collaborative works to undergird the capacity, systems, confidence and treatment strategies of primary care providers (PCPs) who see patients with behavioral health concerns. It partnered with state Medicaid agency to create a community resource guide for PCPs. DC Mental Health Access in Pediatrics has promoted screening in primary care; access to a helpline for primary care providers to talk to pediatric psychiatrists; those psychiatrists can offer medication, referral as an immediate support. The program helps with the attrition that happens when general pediatricians make referrals.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

CMS recognizes that accessing the optimal combination of child and youth services to meet each child's unique needs presents a significant challenge for vulnerable children and youth in need of services, as well as for their families. In the draft model concept, we seek to improve coordination and alignment across programs and systems by supporting the establishment of robust health care and health-related social service provider partnerships to improve health, wellness, and total cost of care with the potential for sharing in cost savings for successful performance. We are interested in input on innovative financial arrangements that combine or coordinate funding in an effort to integrate and streamline care for high-need and vulnerable children and adhere to current Medicaid and CHIP program integrity requirements. Since the Innovation Center seeks to test models that, when successful, can be scaled and spread, we seek comments on how current Medicaid and CHIP authorities and programs might be used to support reproducible state-based models to improve care for children and youth.

QUESTIONS

- 1. *What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?***
 - a. *Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?***

Children's National has partnered with the Children's Hospital Association (CHA-formerly NACHRI) and nine other leading children's hospitals across the country on a CMMI award. The CARE (Coordinating All Resources Effectively) initiative targets a high complexity, high utilization/cost cohort of Medicaid enrolled children in a three year clinical learning collaborative to improve care planning, coordination and communication among the child/family, primary care medical home, and hospital-based "complex care" programs.

Preliminary analysis re-affirms that this small cohort drives significant utilization and expense at tertiary and quaternary children's hospitals and that- for children with multiple complex conditions- targeted care planning and case management can flatten or reduce resource utilization and total expense.
 - b. *What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?***
- 2. *How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?***
 - a. *What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.***
 - b. *What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?***

- c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.*
- d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.*

Children's National Response

In the region served by Children's National, CMS should consider the development of state specific or regional ACO to encourage collaborative services between health care providers and health-related social service providers. The ACO should include physical and mental health care providers, one or more payors per state, and social program providers that would coordinate the multidisciplinary care of children. At its core, the ACO model should include a large quaternary pediatric provider that has the scope reach and breadth of services to meet the needs of a broad geographic region and is able to develop ancillary services required to meet social pediatric needs. In such a model, the attribution can be based on geography. An appropriately structured ACO would partner with payor(s), schools, community groups, Departments of Health and Departments of Health Care Finance to effectively coordinate care.

The formation of integrated care networks for providers groups would ensure alignment across objectives. Capitated risk stratification tiers that include social influencers should be developed to appropriately represent the cost of future services to be incurred. A broad geographic reach would ensure that a sufficient population size is available to provide appropriate cost and risk prediction models within the applicable model.

Risk models are limited because the focus is only on healthcare spending and diagnosis. The process does not reflect the cost of social services that would be included in a fully integrated ACO model that covers many of the non-healthcare barriers to improve health outcomes and lower costs. In smaller regions, risk models may not accurately predict the cost so smaller populations of risk for example pediatric populations with multiple chronic conditions remain isolated from the broader pediatric community because of risk predictability.

Hybrid fee and incentive based payment models may work best for specialty services. Nationally attempts to incorporate specialists into ACO's have not worked well therefore a different approach would need to be considered. For other social service providers different payment models maybe appropriate, those can be developed within the framework of the ACO with some emphasis on incentives. Collaboration across Pediatric and adult providers would be essential for an effective program. Separately identifiable payments for Care Coordination will ensure continued focus on the populations most at risk.

- 3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?**
 - a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.*
 - b. What factors are essential to the success of this alignment?*

- c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.***

Children's National Response

MY GPS is one of the first programs to begin aligning care coordination and payment incentives in the District. We anticipate additional programs targeting care coordination and population health improvement to develop over the next twelve to twenty four months. Regionally across MD and VA there has been little development on integration models.

- 4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?***

Children's National Response

Children's National is a lead founder of the DC Healthy Communities Collaborative (DCHCC or Collaborative) a membership group consisting of District of Columbia (DC) hospitals and community health centers. Established in January 2012, the Collaborative combines efforts and resources of its health care provider members to assess and address community needs in a data-driven, community-engaged manner. The Collaborative membership includes four DC hospitals (Children's National Health System (CNHS), Howard University Hospital (HUH), Providence Health System (PHS), and Sibley Memorial Hospital (SMH)); four community health centers (Bread for the City (BC), Community of Hope (CH), Mary's Center (MC), and Unity Health Care (UHC)); and two associations (DC Hospital Association and DC Primary Care Association). The DC Department of Health is a guiding partner and supporter of the Collaborative. While the impetus to come together in DC was born of compliance requirements, the Collaborative is truly investing in community health initiatives that address community needs – with the ultimate goal of creating a culture of health and improving health and wellness.

The DCHCC's 2016 CHNA was a shift from a focus on individual clinical conditions to larger social determinants of health that affect a wide range of health and quality-of-life outcomes. In order to achieve this shift in direction, we placed a much larger emphasis on having our community's perspective to shape this work. To create a culture of health, the DCHCC used a population health framework for our CHIP that focuses on policy, systems, and environmental (PSE) change instead of focusing on individual health programs or diseases.

The idea of using PSE change approaches to address social determinants of health came out of the work of the Center for Disease Control and Prevention (CDC)'s National Expert Panel on Community Health Promotion¹. Specifically, PSE is a way of addressing the root causes within a society or environment for why communities are unable to make healthy choices.² Policy change includes passing laws, ordinances, resolutions, and rules through a variety of institutions including government agencies, schools, and health care organizations. Systems change works closely with policy change but instead impacts the rules within an organization². Environmental changes are structural modifications to the physical environment, such as installing bike signage on an established bike route. By changing laws, internal organizational processes, and shaping physical landscapes, we can impact the well-being of our communities. This is a unique opportunity to harness the collective impact of the DCHCC to make sustainable change in DC.

¹ Comprehensive Cancer Control National Partnership. Policy, Systems, and Environmental Change Resource Guide. <http://mncanceralliance.org/wp-content/uploads/2015/06/PSE-Resource-Guide.pdf>

² Communities Putting Prevention to Work. What is 'Policy, Systems, and Environmental Change'?. <http://www.cookcountypublichealth.org/files/CPPW/PSE%20Change.pdf>

Community Health Improvement Planning Process

The 2016 CHNA provides a foundation for our population health improvement efforts that aims to look upstream, toward ways to create a culture of health and improve wellness. The CHIP process relies on collaboration and leveraging partnerships with many of the same organizations and stakeholders that participated in the CHNA process. The CHIP also represents a synthesis of input from government agencies, community-based organizations, health care leaders, and community residents. This plan is a working document that provides concrete actionable strategies to address the four community needs identified in the CHNA. Through this evolving process, the DCHCC is committed to achieving health equity for all DC residents, where everyone has equal opportunity to attain their full health potential.

DCHCC Community Health Improvement Goals and Strategies for 2017-2019

To address the four priority areas identified in the CHNA, the Collaborative has identified the following CHIP goals:

Mental Health: The Collaborative will improve access to mental health services.

Place-Based Care: The Collaborative will partner to bring convenient and culturally sensitive care options to the community.

Care Coordination: The Collaborative will support the deliberate organization of patient care activities and information sharing protocols among health care providers, government agencies, and community based organizations.

Health Literacy: The Collaborative will improve health literacy or the ability to obtain, process, and understand basic health information and services.

To accomplish the above goals, DCHCC conducted several workshops, community input forums, and surveys to identify best practices, internal/external expertise, resources, and alignment with local and national health priorities, like the DC Department of Health's DC Healthy People 2020 framework

- 5. *In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?***
- a. *While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?***
 - b. *What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?***
 - c. *How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?***

Children's National Response

Mental health, substance abuse, housing, transportation and food security are some the primary obstacles for improvements in pediatric care. Combining or facilitating coordination across authorizers may provide an opportunity to benefit from economies of scale. Other benefits maybe the opportunity for greater collaboration both within the authorities and for those who interact with them. A basis for that collaboration is a singular point of accountability.

- 6. *How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?***

SECTION IV: PEDIATRIC MEASURES

CMS has worked with stakeholders to develop a core set of child health care quality measures that can be used to assess the quality of health care provided to children enrolled in Medicaid and CHIP.

States and tribes can use the child core set of measures to monitor and improve the quality of health care provided to Medicaid and CHIP enrollees; however, CMS notes that state and tribal reporting on the core set is voluntary. CMS is interested in learning from and, where appropriate, building upon its work on pediatric quality measures indicative of health outcomes. In particular, we are interested in short-to-medium term measures associated with both short- and long-term cost reductions and improved quality to both Medicaid and other public sector programs as healthy children become healthy adults. In addition, CMS is interested in learning how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health.

Children's National Response

Children's National recommends evaluating readmissions, missed school days, complex care outcomes such as validated tools that objectively measure outcomes and return to functionality, parent and family engagement out in the community for certain diseases (these would be objective measures as well), immunization rates, medication compliance/adherence. Additionally, we recommend including some mental health outcomes that can be global or disease specific as well. There should be risk-adjustment and stratification when using objective measures to ensure that hospitals and communities do not end up being "risk averse" and only select certain patient populations; or perhaps that they do not "exclude" certain conditions from the denominators when they report on their metrics. Furthermore, certain geographic areas have differing socioeconomic conditions which will influence the metrics such as missed school days, medication adherence/compliance, so these variables need to be taken into account.

QUESTIONS

- 1. *What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.***

Children's National Response

From a hospital inpatient perspective, we suggest the hospital acquired conditions work via Solutions for Patient Safety (SPS) as they indeed do impact the community. One strategy would be to consider readmissions and work with the SPS in applying bundles to targeted cohorts of patients with readmissions and improving this metric. SPS tracks this on an aggregate level. Most recently, National Healthcare Safety Network (NHSN) as well as Leapfrog and others have started tracking Multi-Drug Resistant Organisms (these are CDiff, VRE, and CRE) these have the potential to have a devastating community impact by increasing community resistance for these potentially lethal organisms. Other potential measures that track outpatient care and inpatient admissions would be "returns to ED within 3 days of discharge" and same with "and admitted." Immunizations are already covered (i.e. childhood immunizations) but could include influenza immunizations for the high risk groups, such as diabetics, pulmonary.

- 2. *Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.***

Children's National Response

Yes, these data are collected on a patient level and we have the capability with our Patient Portal and cross-sharing platforms (such as the State of Maryland's CRISP program) to monitor these within discrete State's to identify opportunities on a population level.

SECTION V: OTHER COMMENTS

- 1. *What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?***
- 2. *As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.***

SPECIAL NOTE TO RESPONDENTS: Whenever possible, respondents are asked to draw their responses from objective, empirical, and actionable evidence and to cite this evidence within their responses.

THIS IS A REQUEST FOR INFORMATION (RFI) ONLY. This RFI is issued solely for information and planning purposes; it does not constitute a Request for Proposal, applications, proposal abstracts, or quotations. This RFI does not commit the Government to contract for any supplies or services or make a grant or cooperative agreement award. Further, CMS is not seeking proposals through this RFI and will not accept unsolicited proposals. Responders are advised that the U.S. Government will not pay for any information or administrative costs incurred in response to this RFI; all costs associated with responding to this RFI will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future procurement or program, if conducted. It is the responsibility of the potential responders to monitor this RFI announcement for additional information pertaining to this request.

Please note that CMS will not respond to questions about the policy issues raised in this RFI. CMS may or may not choose to contact individual responders. Such communications would only serve to further clarify written responses. Contractor support personnel may be used to review RFI responses.

Responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. Information obtained as a result of this RFI may be used by the Government for program planning on a non-attribution basis. Respondents should not include any information that might be considered proprietary or confidential. This RFI should not be construed as a commitment or authorization to incur costs for which payment would be required or sought. All submissions become Government property and will not be returned. CMS may publicly post the comments received, or a summary thereof.

Children's National Health System

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Children's National Medical Center

Dear Dr. Billioux:

Thank you for the opportunity to submit comments on designing a Pediatric Alternative Payment Model and supporting concepts with the aim to improve quality and reduce cost of care for children and youth enrolled in Medicaid and the Children's Health Insurance Program (CHIP).

The following comments are a compilation of ideas from letters submitted to you by the Center to Advance Palliative Care, Children's Hospital Association, Children's National Health System and our own experiences in caring and advocating for children with medical complexity.



Children's National
Medical Center.pdf



April 6, 2017

Centers for Medicare & Medicaid Services
US Department of Health and Human Services
Washington, D.C. 20201

Via Electronic Submission:

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

Thank you for the opportunity to submit comments on designing a Pediatric Alternative Payment Model and supporting concepts with the aim to improve quality and reduce cost of care for children and youth enrolled in Medicaid and the Children's Health Insurance Program (CHIP).

The following comments are a compilation of ideas from letters submitted to you by the Center to Advance Palliative Care, Children's Hospital Association, Children's National Health System and our own experiences in caring and advocating for children with medical complexity.

Introduction

Children's National Health System (Children's National) Complex Care Program, a medical home for the medically complex child and their family, thanks you for the opportunity to share our strategies for timely delivery of family-centered, community-based, linguistically and culturally appropriate, cost-effective, and integrated care to those medically complex children covered by Medicaid and CHIP.

As Children's National is the only comprehensive, academic health system focused exclusively on the care of children in the national capital region, we bring a unique perspective to care, policy and payment reform for children with medical complexities. The health care environment in Washington, DC, and neighboring Maryland and Virginia is challenging, as each state has its own version of Medicaid. CMS should identify a common core of covered services applicable to all states. Networks must be organized to address the physical and mental health and housing, school, legal and transportation needs of children that impact their health and access to care. Children with medical complexities are the true test of our health systems, as these patients and families often touch the majority of our services in both the hospital and the community setting. We are committed to provide the best possible care, while ensuring long-term financial sustainability.

We need an approach to pediatric health care that not only provides coverage to every child but also ensures adequate funding for essential services that meet child-specific needs. Children make up 50 percent¹ of today's Medicaid population but account for just 20 percent² of Medicaid spending. Children



with medical complexity account for 34 percent of all health care spending for children with Medicaid.³ In today's model, children of the same age and family income often qualify for different levels of care just because they live in different states. A cohesive national plan just for children could standardize the eligibility criteria for health coverage, offering every child access to the high quality affordable health care.

Overall, we believe a system of care for children with medical complexity must:

- Be child and family centered and supported by an infrastructure aligned around family goals with metrics designed specifically for the pediatric population which will ultimately empower families
- Integrate physical and mental health, as well as palliative care, to address the complete health needs of children and their families
- Be delivered via an integrated network of care that is family centered, based in the home and community with access to specialized services, specifically palliative care and telemedicine

Please find below our comments for your consideration.

Section 1: Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

- Alternative payment models which emphasize both quality and multidisciplinary service delivery can only be achieved when all members are financially incentivized to work together and use common tools for shared communication. Given the unique needs of each child (and family) covered by Medicaid and CHIP, the only shared commonality is the funding mechanism. This will require clarifying regulatory issues to enable flexibility in service provision and enable wide spread data sharing, as organizations currently face significant hurdles when integrating needed social services due to differing regulatory interpretations with respect to allowable service and information sharing. The inability to share information between organizations and state partners severely limits care coordination activities. This provides a unique opportunity for Medicaid and its state partners to leverage the tremendous amount of data for collaborative purposes to the benefit of all parties.
- To ensure access in rural and underserved urban communities, telehealth services should become a standardized method of care delivery among all Medicaid providers. Since transportation to medical providers is often unreliable, inconvenient, time consuming and expensive, telemedicine is an excellent mechanism to provide family-centered, timely, and secure care.⁴ Until recently, telemedicine focused on provider-to-provider interactions in the inpatient and outpatient settings. Newer technology and increased consumer demand have resulted in the rapidly growing field of Direct to Consumer telemedicine. The patient can connect securely to a health care provider directly via audio and video from a computer, tablet or smart phone where the patient is. To date much of the practice of Direct to Consumer telemedicine has centered on primary and urgent care and has been driven by for-profit



providers. With Direct to Consumer telemedicine, the potential to improve access for the neediest children with complex and/or chronic specialty care needs is great. Many of the diseases we care for are amenable to a Direct to Consumer model. However, many obstacles remain to integration of Direct to Consumer telemedicine into pediatric specialty care. Several states, including Maryland and the District of Columbia, require telemedicine to be provider to provider (with preexisting provider agreements) and originate from a hospital or outpatient clinic. Some payers do allow use of Direct to Consumer telemedicine on a case-by-case basis, but this is by no means ubiquitous or easy to get approved. This essentially eliminates the possibility of integrating Direct to Consumer telemedicine into a large pediatric care model until reimbursement laws are changed. Unfortunately, most state governments demand data that prove the safety and cost-effectiveness of this approach and until we are able to provide data, Direct to Consumer telemedicine, despite its obvious advantages, will remain in the for-profit world. In areas where Internet access is sparse and access subsidies are not available, community partners (libraries, community centers, schools, home care nurses, hospice provider) should be engaged to provide secure Direct to Consumer telemedicine access.

Section 2: Operation of Integrated Service Model

- Unlike care for adults, regional competition in pediatric care can be counterproductive. Pediatric populations are smaller and disease incidence rates are lower than their adult counterparts, resulting in the concentration of specialized services across geographic regions. Thus, the size of the pediatric population and availability of specialized pediatric resources must be considered with respect to possible solutions. Solutions must:
 - Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations.
 - Be able to meet the needs across a geographic region and nationally.
 - Provide comprehensive pediatric primary and specialty care.
 - Be able to integrate medically complex children
- Additional benefits can be realized through a single source of entry to a shared electronic platform. The utilization of less efficient and unsecured forms of communication such as faxes, paper documentation and emails should be replaced by a shared platform that is equally accessible by all members of a patient's dynamic care team, including the patient's family, through a single source of entry. Ideally, such a platform would interface with EMRs at the medical system level, and it would be web-accessible to private providers, suppliers, and families via custom mobile applications. When data from individual members of a dynamic care team is combined with data from state partners and then shared on a national platform, the cumulative meta data can provide actionable information. The platform would increase communication and efficiency by removing silos and providing comprehensive information to all members of the dynamic care process.



- Given the potential impact of children with medical complexity on utilization, expenses and the community; the need for a shared national definition of children with medical complexity and associated electronic identification algorithm for implementation in EMR's and shared web-enabled platforms are necessary to identify those patients who would most benefit from additional resources.
- Children's National has seen numerous benefits from engaging with pediatric hospice and palliative care providers. In addition to traditional health-related social service providers, pediatric hospice and palliative care programs should be included in care delivery discussions as these programs have been shown to reduce expenses while increasing quality of life.^{5, 6}
- There is great opportunity to engage parents and families if they are defined as health-related social service providers. Parents or family members must often leave or reduce their employment commitment to care for their medically complex child. "Care" in the medical sense traditionally includes at least the following care coordination activities: coordinating care coordinators, scheduling, advocating, billing, conflict resolution, supply management, pharmacy management, medication administration, equipment maintenance, peer mentoring, transportation, continuing education, meetings/phone calls, budgeting, summarizing and distilling scholarly research and daily care activities. If listed as a professional position, such skills would qualify one for a mid-level position in administration. No one knows the needs of their medically complex child better than that child's parent. They are experts in care delivery of their child's care, but they are often marginalized by the very system trying to help them. If parents and care takers were empowered and given the tools that professionals require to be successful, they would be in the best position to influence outcomes.
 - For example, if parents and caretakers: (a) received opportunities to be paid, trained care coordinators for their children, (b) could identify family members or friends as designated, paid and trained care coordinators, or (c) could continue as recipients of services with state care coordinators, they would be more empowered, engaged and held accountable for their child's care.

Section 3: Integrated Pediatric Service Model Payment and Incentive Arrangements

- CMS should consider models which incentive/reward collaborative services between health care providers and health-related social service provider's. The model should include physical and mental health care providers, one or more payers per state, and social program providers who would coordinate the multidisciplinary care of children. Given the low incidence of certain complex pediatric diseases, often major quaternary medical centers do not provide programs for every disease. Often these centers are outside of their state of residence. Therefore families should direct care at the institution they see as the best fit for their child's care.
- The formation of integrated care networks for providers groups would ensure alignment across objectives. Risk stratification tiers which include social influencers should be developed to



appropriately represent the cost of future services to be incurred. A broad geographic reach would ensure that a sufficient population size is available to provide appropriate cost and risk prediction models within the applicable model. Risk models should be expanded from their narrow focus on healthcare spending and diagnosis, to include the cost of social and community services which remove the non-healthcare barriers to improved health outcomes and lower costs. New models need to accurately predict the cost of smaller populations, such as those with multiple chronic conditions with a focus on care coordination and advance care planning/goals of care efforts.

- As children with medical complexity begin to live longer lives with the support of modern medicine, many live into adulthood where they struggle to find adult providers with knowledge of childhood diseases and time for medically and socially complex patients. Additional resources need to be allocated to developing an educated work force of providers for adults with childhood diseases.
- Caregivers of medically complex children should be included as part of the integrated health care model, specifically the center of the dynamic care team. It is often challenging to manage the care of their child and the effects on other family members. These challenges can impact work, social interactions, family structures, financial stability, all while precipitating stress, moral tension, reduced quality of life, reporting including difficulties balancing caregiving roles with every day needs, a deep sense of loneliness, isolation, impaired social functioning, and anxiety. Frequently caregivers face significant ethical challenges to their values and preferences for care at various transition points in the disease trajectory.⁷
- Beginning in July 2017 the DC Department of Healthcare Financing will implement a Health Homes payment model that provides a PMPM payment for care coordination of Medicaid beneficiaries with three or more chronic conditions. The PMPM payment will support embedding interdisciplinary care coordination teams in primary care medical homes. Children's National will implement the program with Nurse Case Managers, Social Workers and Community Health Workers. The centralized care management model aims to integrate primary, acute, behavioral on long term services with the goal of reducing avoidable and preventable hospital admissions and ED visits. The PMPM payment will be claims based and cover all DC Medicaid beneficiaries, even those enrolled in a Medicaid MCO. Children's National has partnered with the Children's Hospital Association (formerly NACHRI) and nine other leading children's hospitals across the country on a CMMI award. The CARE (Coordinating All Resources Effectively) award initiative targets a high complexity, high utilization/cost cohort (Children with Medical Complexity) of Medicaid enrolled children in a three year clinical learning collaborative to improve care planning, coordination and communication among the child/family, primary care medical home, and hospital-based "complex care" programs. Preliminary analysis re-affirms that this small cohort drives significant utilization and expense at tertiary and quaternary children's hospitals and that-for children with multiple complex conditions- targeted care planning and case management can flatten or reduce resource utilization and total expense.



Section 4: Pediatric Measure

- As providers of care for children with medical complexity, we recognize that a standardized national definition for this population is difficult to determine. However, given the utilization, care coordination needs and the demand for medical services and community providers, a national definition is necessary in moving forward with shared data and analytics.
- We recommend that the National Quality Forum develop and implement pediatric quality measures for children with medical complexity, which are adopted by all stakeholders as applicable to ensure the highest quality of evidence based care for children with medical complexity.
- Registries, with standard metrics, should be designed around children with medical complexities so that shared information can be leveraged for the benefit of population health.

Section 5: Other Comments

- Recommendations listed in the IOM: 2014 Dying in America Report ⁸ should be included into new care and payment models, which value patient and family quality of life. Recommendations of relevance include
 - Recommendation 2: Clinician- Patient Communication and Advance Care Planning
 - Professional societies and other organizations that establish quality standards should develop standards for clinician–patient communication and advance care planning that are measurable, actionable, and evidence based. These standards should change as needed to reflect the evolving population and health system needs and be consistent with emerging evidence, methods, and technologies. Payers and healthcare delivery organizations should adopt these standards and their supporting processes, and integrate them into assessments, care plans, and the reporting of health care quality.
 - Payers should tie such standards to reimbursement, and professional societies should adopt policies that facilitate tying the standards to reimbursement, licensing, and credentialing to encourage
 - all individuals, including children with the capacity to do so, to have the opportunity to participate actively in their health care decision making throughout their lives and as they approach death, and receive medical and related social services consistent with their values, goals, and informed preferences;
 - clinicians to initiate high-quality conversations about advance care planning, integrate the results of these conversations into the ongoing care plans of patients, and communicate with other clinicians as requested by the patient; and



- clinicians to continue to revisit advance care planning discussions with their patients because individuals' preferences and circumstances may change over time.
- Recommendation 4: Policy and Payment Systems
 - Federal, state, and private insurance and health care delivery programs should integrate the financing of medical and social services to support the provision of quality care consistent with the values, goals, and informed preferences of people with advanced serious illness nearing the end of life. To the extent that additional legislation is necessary to implement this recommendation, the administration should seek and Congress should enact such legislation. In addition, the federal government should require public reporting on quality measures, outcomes, and costs regarding care near the end of life (e.g., in the last year of life) for programs it funds or administers (e.g., Medicare, Medicaid, the Department of Veterans Affairs). The federal government should encourage all other payment and health care delivery systems to do the same. Specifically, actions should
 - provide financial incentives for medical and social support services that decrease the need for emergency room and acute care services, and coordination of care across settings and providers (from hospital to ambulatory settings as well as home and community), as well as improved shared decision making and advance care planning that reduces the utilization of unnecessary medical services and those not consistent with a patient's goals for care;
 - require the use of interoperable electronic health records that incorporate advance care planning to improve communication of individuals' wishes across time, settings, and providers, documenting (1) the designation of a surrogate/decision maker, (2) patient values and beliefs and goals for care, (3) the presence of an advance directive, and (4) the presence of medical orders for life-sustaining treatment for appropriate populations; and
 - encourage states to develop and implement a Physician Orders for Life-Sustaining Treatment (POLST) paradigm program in accordance with nationally standardized core requirements.
 - Medical and social services provided should accord with a person's values, goals, informed preferences, condition, circumstances, and needs, with the expectation that individual service needs and intensity will change over time. High-quality, comprehensive, person-centered, and family-oriented care will



help reduce preventable crises that lead to repeated use of 911 calls, emergency department visits, and hospital admissions, and if implemented appropriately, should contribute to stabilizing aggregate societal expenditures for medical and related social services and potentially lowering them over time.

- Recommendation 5: Public Education and Engagement
 - Civic leaders, public health and other governmental agencies, community-based organizations, faithbased organizations, consumer groups, health care delivery organizations, payers, employers, and professional societies should engage their constituents and provide fact-based information about care of people with advanced serious illness to encourage advance care planning and informed choice based on the needs and values of individuals. Specifically, these organizations and groups should
 - use appropriate media and other channels to reach their audiences, including underserved populations;
 - provide evidence-based information about care options and informed decision making regarding treatment and care;
 - encourage meaningful dialogue among individuals and their families and caregivers, clergy, and clinicians about values, care goals, and preferences related to advanced serious illness; and
 - dispel misinformation that may impede informed decision making and public support for health system and policy reform regarding care near the end of life.

Please direct question to:

Dr. Karen Fratantoni, Medical Director of Complex Care
Children's National Health System



Citations

1. <http://kff.org/medicaid/state-indicator/total-medicaid-and-chip-child-enrollment/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
2. <http://kff.org/health-reform/issue-brief/childrens-health-coverage-medicaid-chip-and-the-aca/>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5164920/>
4. https://www.researchgate.net/publication/8937707_Using_Telemedicine_to_Provide_Pediatric_Subspecialty_Care_to_Children_With_Special_Health_Care_Needs_in_an_Underserved_Rural_Community
5. <https://www.ncbi.nlm.nih.gov/pubmed/23838378>
6. <https://www.ncbi.nlm.nih.gov/pubmed/22696532>
7. <https://grants.nih.gov/grants/guide/pa-files/PA-17-017.html>
8. <http://www.nationalacademies.org/hmd/Reports/2014/Dying-In-America-Improving-Quality-and-Honoring-Individual-Preferences-Near-the-End-of-Life.aspx>

Children's Physicians Plattsmouth

I truly believe the Patient Centered Medical Home is the best way to promote overall health and wellness for all children. A medical home can act as the repository for information related to health and wellness including educational, behavioral, medical, mental and dental health.

Children's Specialized Hospital

Dr. Billioux:

On behalf of Children's Specialized Hospital, attached please find our comments on the referenced RFI.

Please do not hesitate to contact me should you have any questions.



Children's
Specialized Hospital



Warren E. Moore, FACHE
President & CEO
Children's Specialized Hospital

March 28, 2017

VIA ELECTRONIC MAIL -

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

On behalf of Children's Specialized Hospital, the leading provider of inpatient and outpatient care for children from birth to 21 years of age facing special health challenges, I appreciate the opportunity to submit these comments in response to the Request for Information on Pediatric Alternative Payment Models.

Based in New Jersey, CSH provides a comprehensive range of services – with a 68-bed inpatient facility, two long-term care facilities and 12 outpatient sites located throughout the State, enabling us to treat more than 30,000 patients in 2016. Our patients battle a wide range of special health care needs, from chronic illnesses and complex physical disabilities such as brain and spinal cord injuries, to developmental and behavioral issues such as autism and mental health. Using innovative therapies and medical treatments, our staff is dedicated to providing high quality and culturally-competent care to our patients and families in order to help our children achieve their goals.

Our comments focus on systems-centered, child and family focused solutions for care. Children's Specialized Hospital wraps our arms around each and every patient and family as they come to us at the most fragile points in their lives. As such, CSH is encouraged by CMS' recognition that our children's "health needs extend beyond [traditional] health care services to include access to health-related social supports," specifically citing nutrition, safe living and a focus on social determinants as essential for healthy growth and living. CSH – and our larger RWJBarnabas Health system – embraces such an approach to providing care to our patients, families and communities and believes CMS should incentivize providers pursuing such an approach to patient care.

Overall, CSH supports the pillars reflected in the Children's Hospital Association comment letter that a system of care for children must:

- Be child-(and family-) driven and supported by an infrastructure aligned around the child's development with metrics designed specifically for kids.
- Integrate physical and mental health to address the complete health needs of children.
- Be delivered via an integrated network of care that is home and community-based with access to specialized services as needed.

Additionally, CSH supports the comments made by the Children's Hospital Association related to integrated networks. We agree that the pediatric population requires special considerations – due to

the smaller population size, different disease incident rate and unique challenges of younger patients. As such, the size of the pediatric population and availability of specialized pediatric resources must be considered with respect to network structure. CSH agrees that networks must:

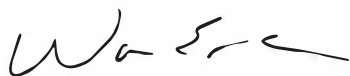
- Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations.
- Be able to meet the needs across a geographic region.
- Provide comprehensive pediatric specialty care.
- Be able to integrate high risk children in other sectors.
- Have large scale EHR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.
- Have a centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.

These recommendations align with recommendations within a recent report entitled “Medicaid 2.0: Blueprint for the Future,” which was released by the New Jersey Health Care Quality Institute. Supported by The Nicholson Foundation, the project brought together a cross-section of health care stakeholders throughout New Jersey to discuss existing successes and future challenges and goals of New Jersey’s Medicaid system. The resulting report highlighted 24 recommendations to improve Medicaid’s efficiency and effectiveness – two of which focused on the children’s system of care. Specifically, the report recommends the creation of a clinically-integrated network of care for children as a way to improve access, care coordination and quality within this unique population. The report recommends, and CSH endorses, government incentives to managed care organizations to contract with certified clinically-integrated networks as well as the reliance on evidence-based medicine and data-driven clinical initiatives within a comprehensive system including children’s behavioral health and developmental service providers.

Additionally, the report recommends and CSH endorses the creation of patient-centered medical home pilots for medically complex children. While the report specifically focuses on a New Jersey-based PCMH, the concept could be realized throughout the nation. CSH believes that a PCMH could be operated by a provider group with proven experience in serving children with medical complexities. By creating a pilot to focus on a small population within a specific geographic area and evaluating the pilot based on quality metrics and total cost of care, CMS could work to ensure that this unique population would receive high-quality, low-cost and culturally-competent care in the most appropriate environment.

We look forward to working with you to explore promising innovations for the health of our children as well as needed public policy changes that can facilitate their spread. If you have any questions on our comments, please contact Ruth Bash, Chief Culture Officer, at ruth.bash@njhealth.org or Sarah Lechner, Vice President, Policy Development and Government Affairs at sarah.lechner@njhealth.org.

Sincerely,



Warren E. Moore, FACHE

President & CEO

CHIP of Virginia

Good afternoon,

I am preparing comments for the RFI, but will not be able to submit them until early next week. Will that cause any problems?

Thank you,

Cincinnati Children's Hospital Medical Center

Dear CMS

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28/2017.

Respectfully submitted

Cleveland Clinic

Good afternoon

Thank you for the opportunity to provide feedback in response to the CMS request for information on pediatric alternative payment model concepts. Cleveland Clinic's letter is attached. If possible, would you send me confirmation of receipt of this letter? Should you have any questions, please don't hesitate to contact me.

Kind regards



Cleveland Clinic.pdf



**Giovanni Piedimonte, M.D., F.A.A.P.,
F.C.C.P**

Professor & Chair, Pediatric Institute
Physician-in-Chief, Cleveland Clinic
Children's

President, Cleveland Clinic Children's
Hospital for Rehabilitation

March 27, 2017

Alexander Billioux, M.D., Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health & Human Services

RE: Request for Information on Pediatric Alternative Payment Model Concepts

Submitted electronically via:

Dear Dr. Billioux:

Cleveland Clinic Children's Hospitals (CC Children's) is part of a not-for-profit, integrated healthcare system dedicated to patient care, teaching and research. The Cleveland Clinic health system is comprised of a main campus, 13 community hospitals and 21 family health centers, with over 3,400 salaried physicians and scientists. Last year, our system had nearly six million patient visits and more than 170,000 hospital admissions. More than 350 pediatric medical and surgical specialists staffing 429 inpatient beds and 50 outpatient clinics form the CC Children's network. Last year CC Children's provided over 750,000 outpatient visits, 17,000 hospital admissions, and 10,000 surgeries.

We appreciate the dedication of the Agency staff on behalf of the Medicare and Medicaid Programs and the work they devote to their administration. We believe it is important for hospitals to share information with the Centers for Medicare & Medicaid Services (CMS) so the Agency staff has a better understanding of the challenges and practicalities faced by the hospitals.

Pediatric health care delivery is unique, whether it entails providing essential preventive care to achieve optimal physical and mental development or addressing the multiple specialized needs of children with complex conditions. The involvement of parents and families, health care providers, social support services, and the community is imperative to meet the needs of a child over the course of a lifetime.

CC Children's understands and has experienced first-hand the benefits of coordinated, community-based integrated care for its patients. In addition to traditional hospital and outpatient services, we partner with local school districts to deliver care directly to children on school premises with its mobile unit. Through the pediatric complex care clinic, we provide a patient-centered medical home for children with multiple, severe, and often lifelong chronic conditions. The complex care clinic uses a multidisciplinary approach to provide high-quality, cost-effective care while optimizing the patient-family experience. In the two years since its establishment, the complex care clinic has achieved significant reductions in inpatient stays while increasing in outpatient primary care visits.

We are encouraged by the Agency's interest in new concepts for pediatric care models. The following are CC

Children's responses to specific inquiries within the captioned request for information.

I. Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

Integration with community-based providers and social services agencies is essential to delivering comprehensive health care, especially to children with medical complexity, children with combined medical and behavioral health issues and those who come from economically very disadvantaged families and neighborhoods. CC Children's answers to some specific questions are included below.

Q2: Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond Medicaid mandatory benefits?

As one of the few CARF-accredited pediatric rehabilitation centers in the nation, CC Children's recognizes that the family and community support system is a constant in any child's life, while service systems and the individuals within it may fluctuate over time. As a result, we believe that any effective pediatric care model must incorporate several essential elements:

State and local government agencies: Rather than simply being a payer for services, we believe that government agencies, by virtue of their overarching view of the utilization and health as well as economic needs of patients, must partner with providers across the full spectrum of needs. CC Children's partners with both the Ohio Department of Medicaid and local Medicaid Managed Care Organizations (MCOs) to integrate case management strategies, ensure transportation, and provide access to expanded preventive care services such as fluoride varnishing and other dental preventive care. While we are encouraged by the participation we have been able to achieve thus far, we believe much can be done to improve the level of cooperation with the proper payment and incentive plans.

Local school systems: Many children are not in households that have the resources and capacity to enable them to get regular health screenings, vaccinations, and follow up care at provider sites, and we believe that partnering with local schools is an alternative that helps these children get the care they need. CC Children's partners with local schools and school systems with mobile pediatric care units that provide regular check-ups, screenings, immunizations, monitoring of chronic conditions (such as asthma or diabetes). We also partner with school systems to provide education about healthy behaviors such as nutrition, tobacco use, and violence prevention. We recognize, however, that the resource involved in this level of community engagement is costly and smaller health systems likely cannot afford this level of outreach without reimbursement. We urge the Agency to consider payment models that enable proactive engagement in the school setting (see below under APMs and payment arrangements).

Community-based social services organizations: Lastly, health systems need to have a structure to partner with organizations that touch patients in their communities. CC Children's, for example, works with organizations such as Help Me Grow, an evidence-based program promoting healthy growth and early

childhood development in children ages 0-3 years, and our wellness program, Fit Youth, collaborates with Head Start.

While the examples above have dealt primarily with preventive care, screenings and activities aimed at keeping children well, we wish to emphasize the important role that families and communities play in helping to manage medically complex children and call out areas where the Agency can incentivize collaboration at the community level. As stated above pediatric care, especially for medically complex children, must be a “team sport.” Social service organizations and individual providers may come and go throughout the life of a child, but the family and community structure remains a constant. With that in mind, we wish to emphasize the role that family and community caregivers can have in managing children with medical complexity and urge the Agency to support programs that provide training and aid to families, teachers, and community health workers. In our own program, we have seen substantial reductions in admissions and inpatient days when the families and communities of these children are trained and supported.

Q3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities have an opportunity to participate?

Children in rural and underserved areas don't always have access to the services they need to be well. In particular, children with medical complexity or behavioral health needs rarely have access to specialist care in rural and otherwise underserved areas. Two approaches are effective in helping to alleviate this need in these populations. First, the use of distance health solutions (both synchronous and asynchronous) can be extremely effective in monitoring chronic disease, performing behavioral health assessments, and providing urgent care services for conditions as mundane as conjunctivitis and UTI or upper respiratory infections. These solutions can be delivered directly to a patient's home using a smart phone or tablet or, if high speed internet is not available, at a community center, school, or church. We believe distance health solutions need to be integrated more fully into care models in order to provide timely and comprehensive care where delays in treatment may result in poor outcomes or needless suffering for pediatric patients.

The second approach is to allow pediatric patients with medical complexity additional flexibility to seek treatment at the facilities best suited to treat their needs, regardless of whether they are in the same state (for Medicaid beneficiaries) or in the same network (for beneficiaries on commercial insurance plans). CC Children's wishes to re-iterate its support of the Children's Hospital Association's ACE Kids Act to enable this flexibility in seeking care.

II. Operation of Integrated Service Model

CC Children's engages with multiple governmental and community-based partners working together toward the common objective of improving the lives of children and their families. Some of these arrangements are formal, while others are incidental. To leverage these multi-stakeholder relationships effectively, a formal level of integration needs to occur to break down silos, streamline authorizations, and facilitate coordinated

communications and data sharing between health care and community service providers while involving families in each step of the child's continuum of care.

We recommend that integrated programs that deliver family-centered support services for children include, but are not limited to, the following critical components:

- Facilitation of family/support system—professional collaboration at all levels of care
- Sharing of unbiased and complete information with the family/support system about the child's care on an ongoing basis, in an appropriate and supportive manner
- Implementation of appropriate policies and programs that are comprehensive and provide emotional and financial support to meet the needs of families/support systems
- Recognition of family/support system strengths and individuality and respect for different methods of coping
- Understanding and incorporating the developmental needs of infants, children, and adolescents and their families/support systems into healthcare systems
- Facilitation of parent-to-parent support services

Our additional thoughts on how to operationalize integrated service models are provided in response to specific questions below.

Q2a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service model?

CC Children's suggests the following gaps may be filled with the integration of services:

- Integrated services for adolescents. Attention tends to focus on infants and young children, and see that robust, coordinated services for pre-teens and teens are lacking.
- Better integration of mental health services, including substance use disorder treatment, for youth and their families.
- Stronger collaboration with pharmacists to facilitate the safe dispensation and affordability of medications, usually a major expense for families.
- Improved integration of services that address the health of caregivers. When caring for children, it is equally important to care for the adults in their lives. Many children with significant and complex health issues have at least one parent or guardian dealing with their own physical and mental health issues. These families are high utilizers of both health care and community-based services.

Q2b. What potential exists for increased partnership for provision of home and community-based services?

We believe there is a high potential and value in such partnerships because there is a demand for cost-effective, family friendly provision of these services. However, consistent and coordinated collaboration between hospitals, payers, home health care agencies, visiting nurses and therapists, and other community-based service providers is necessary for integration to be successful.

Q3. What infrastructure development has been needed to integrate services across Medicaid enrolled providers and health-related social service providers?

The effective use of technology is a key factor in developing the infrastructure needed to coordinate services. An integrated electronic information exchange system must be in place to ensure success in the provision of family-centered, community-based services for children. Our caregivers often have difficulty in accessing patient care plans in the electronic portals Medicaid MCOs use. Effective information exchange should facilitate the transfer of data across different sectors using compatible IT systems.

Expanding telemedicine capabilities would improve on delivery of home- and community-based care. Enabling virtual visits would ease the ability for children and families to receive services and follow-ups without having to make arrangements for face-to-face visits with providers.

While it is important to train health care and social service providers about integrated service arrangements, educating parents, families, teachers, and other community members who touch the lives of children on a daily must not be overlooked. We recommend Agency support for family-centric training programs.

Q5. Where is the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

We see an enormous level of churn as families experience flux in their financial situations and thus move into and out of Medicaid coverage over different periods of time. Streamlining eligibility requirements and application processes, including reducing waiting periods, can help alleviate the problem. But to reduce the stress arising from confusion about obtaining program benefits, service providers need to sit down with families to educate them about eligibility and program requirements and help them navigate the processes for obtaining those benefits.

We also believe there is room to improve the process for issuing Medicaid waivers for home- and community-based services. The waivers influence the extent to which we are able to provide skilled and non-skilled nursing services in the home setting. Yet we experience challenges in attempting to provide the supplemental support our sickest patients need to keep them out of the hospital. An example is the case of a single mother with three children, two of whom have been hospitalized for strokes due to their complex conditions. The youngest child is cognitive delayed with a seizure disorder and is totally dependent. Meanwhile, the parent has her own health issues, including a mental health condition, and could use 1-2 hours of help at home so she can visit her doctor. Despite the demonstrated need, the application for a waiver was denied. The bar that Medicaid insurers use to justify waivers for home visits is getting higher. It's important to keep in mind the cost savings generated from providing home- and community-based services that allow people to stay at home instead of ending up in the hospital by default.

Q6. What are some obstacles that health care and social service providers as well as payers face when integrating services? How might these obstacles be overcome?

- *Regulatory limitations that hinder collaboration, integration, and innovation.* The current regulatory framework with various rules in place from different agencies as well as the oftentimes conflicting interpretations of those rules can discourage arrangements to integrate services. No centralized system is in place to manage services for children with the most serious medical complexities. The paperwork can be immense with physicians having to sign and submit multiple types of forms through different methods (electronically generated, by mail, or by fax) to various agencies to justify supportive services. In addition, certain rules strictly require physician signatures, which can delay the processing of necessary paperwork. A nurse practitioner otherwise capable of providing the appropriate authorization then has limited ability to order home care nursing and therapy. Clarifying requirements and reducing or eliminating conflicting rules can eliminate confusion among providers and streamline authorizations that avoid delay in service provisions. In addition, a centralized system for managing medically complex children must be established to improve access to services.
- *IT incompatibility that restricts data sharing on common beneficiaries across programs to effectively manage interventions and/or evaluate outcomes of these interventions.* Hospitals and Medicaid managed care organization use separate electronic systems that each have limited capacity to follow children as they move between health care and community services. Data is usually not transferrable between systems. As mentioned in our response to the question regarding infrastructure development (Q3), the adoption of compatible electronic information exchange systems will alleviate limitations with data sharing.
- *Misaligned care planning processes and limited collaboration between health care providers and Medicaid managed care organizations.* Some Medicaid MCOs create patient care plans that exclude input from the pediatrician. Hospitals often can't integrate these care plans into the child's electronic medical record. How hospitals and Medicaid address specific needs is also misaligned. Our system offer same-day appointments yet must notify the local Medicaid MCO 48 hours in advance if a patient needs transportation, making it difficult to fulfill that same-day need. In addition, some plans require appointments with different providers on different days before coverage kicks in. For children seeing multiple specialists, limiting time frames for health care visits can create unnecessary challenges for families. Policies governing the care planning process and service provisions must be aligned to meet the needs of children and families effectively in a timely fashion.

III. Integrated Pediatric Service Model Payment and Incentive Arrangements

Q2a. What payment models should CMS consider? CMMI seeks specificity about the methodology for attribution and determining whether different providers have achieved savings. Comment on risk, upside (potential savings) and/or downside (potential costs).

Payment models need to be encouraged that not only incentivize primary care coordination for these patients, but also incentivize specialists to coordinate their efforts with a team-based approach to care, including coordinating appointments and interactions with family and community caregivers. Much like the results seen in the CMMI Bundled Payment pilot programs, shared risk and reward around managing highest risk patients and patients with unique needs has the potential to both improve outcomes and reduce costs for pediatric patients.

Patient Example: Since June 2009, CC Children's has maintained a multi-disciplinary clinic to address the needs of children with severe and chronic health issues surrounding airway maintenance, digestive health, voice, and swallowing. The team includes Pediatric Otolaryngology, Pediatric Pulmonary, Pediatric Gastroenterology, Pediatric Speech Language Pathologist, Pediatric Dietitian, Pediatric Social Work, and Pediatric Developmental and Rehabilitation physician. The multi-disciplinary team approach is to serve as a convenient patient-centered appointment for these children with special needs. The overwhelming majority of children in this clinic have tracheostomy+/-ventilator dependence, feeding tubes, and wheelchairs. Children visit the clinic on average 3 times per year. The result of this inter-disciplinary approach to care has been that we have been able to reduce the average hospitalization for these patients by 2 weeks per year.

CC Children's is generally of the opinion that a Patient-Centered Medical Home (PCMH) approach serves the pediatric population best, with some exceptions as noted below. The State of Ohio Medicaid program has experimented with demonstration projects based both on PCMH and on episode based models with mixed success.

Q2d. Are different payment models appropriate for different potential health care and health-related social service providers? CMMI seeks specifics about which payment approaches would be appropriate for specific patient populations and service providers.

CC Children's is of the view that when it comes to pediatric patients, there is no "one" approach that works best. Because of the limited historical data in dealing with alternative payments models in pediatric patients, it's difficult to make fully informed recommendations. With that said, however, there are lessons to be learned from our experiences with APMs in the Medicare population that can inform the discussion.

We generally feel that a capitated (PMPM) model has the potential to generate both improved value and a decrease in poor health outcomes with a well-attributed population and with flexibility to include a full cohort of integrated health resources into the care continuum. This can include community-based caregivers, distance health strategies where appropriate, training and resourcing of family-based care, and school-based programs and interventions.

- With pediatric patients, the aim is to impact avoidable ED use and direct patients to primary care/medical home and specialty services. To best impact the cost curve and provide the right care at the right time and place, we see the need to make best use of capacity at all levels of the care continuum. Expanding the use of advanced practice nursing, physician assistant and community health worker resources and removing regulatory barriers to allowing each to work at the top of their license will be important to ensuring the success of this approach.
- CC Children's generally supports APMs that meet the definition of "Advanced APMs" in the CMMI model – that is, with significant shared risk/reward, and including the flexibility to deploy resources as necessary while preserving outcomes and quality measures. There is a caveat, however: In any population there will be a very small number of exceptional patients who will need to be exempt from any capitated model. For example, the Accountable Care Organization model provides an exemption for the top 1-5% (depending on the model) of exceptional high utilizers. In order to optimize patients in a risk-bearing model, it is essential

to have timely and detailed access to historical and current claims data for the attributed members. For this reason, we believe it is important to have the Medicaid MCOs involved in the risk model in any capitated plan.

- With these points in mind, we recommend that CMS support innovative care coordination pilots that particularly promote increased access points for children and adolescents, including school-based models, outreach clinics, and virtual visits. CMS should also consider payment pilots for select populations requiring the coordination of multi-disciplinary specialty services that can only be offered at academic medical centers. We have seen good models of this approach at centers using the Cystic Fibrosis Foundation's template for required care using multispecialty services. Success in terms of quality of life and survival have been achieved at these centers in large part due to the aggregation of outcomes data, which has driven development of best practices. Data transparency has led these centers to examine closely their performance related to similar institutions. Demonstration models should factor in support for the coordination of specialty level services that result in the advancement of care and acquisition of medical knowledge.

Q5c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

There are several typical services in pediatric health that lend themselves well to bundling. An example is the immediate post-discharge period after the birth of a child requiring neonatal intensive care. In a typical scenario, we would see a standard visit from a home health care nurse; a care coordinator would visit the home to get a sense of the social/home environment and identify social determinants that might prevent optimal health for the child and parents. There may be follow up referrals to social service organizations such as United Way or expedited access to social welfare programs through local governments. And then there would be the typical physician well-baby visits, immunizations, and lactation services for the promotion of breastfeeding, among other varied services. An integrated team with communication between the providers could deliver this care very cost-effectively and stave off long-term health consequences of early poor nutrition or missed preventive care.

IV. Pediatric Measures

Q: CMS is interested in how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health. Agency inquiries include what additional measures are appropriate for pediatric beneficiaries and whether such measures are indicative of both near-term health and well-being as well as predictive of long-term outcomes.

Metrics for pediatric care are relatively new, and there are no national standards or data sets. Pediatric providers currently rely on state metrics, which are fairly limited. The few existing measures are developed by the National Quality Forum. Many are process measures collected to assess and report on care delivery and access.



**Giovanni Piedimonte, M.D., F.A.A.P.,
F.C.C.P**

Professor & Chair, Pediatric Institute
Physician-in-Chief, Cleveland Clinic
Children's

President, Cleveland Clinic Children's
Hospital for Rehabilitation

For children, we believe in the value and importance of collecting measures to ensure immunizations are up to date, children are visiting their providers annually for well screening, and medications are taken as prescribed.

We do, however, favor a balance of process and outcomes measures allowing for broader participation. While patient-reported outcomes measure might be difficult to measure objectively, we believe they are important because they matter most to patients. Few measures define the well-being in children, and we believe there is a need to collect and test measures that reflect improvements in a child's quality of life resulting from coordinated care. Improvements in school attendance and performance are important functional measures that can demonstrate the potentially positive impact of integrated care. A corollary measure from the whole family perspective is the number of missed work days by the parent or guardian. To reflect service integration and care coordination, Medicaid enrolled providers should report outcomes of collaborations between health care institutions social service agencies, and community organizations.

We recommend that the development of pediatric care measures account for socioeconomic status, developmental stage, and geographic setting.

In closing, thank you for conducting a thoughtful process that allows us to provide input on such important issues and for your consideration of this information. Should you need any further information, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Piedimonte", with a long, sweeping horizontal line extending to the right.

Giovanni Piedimonte, M.D., F.A.A.P., F.C.C.P.
Professor and Chair, Cleveland Clinic Pediatric Institute
Physician-in-Chief, Cleveland Clinic Children's
President, Cleveland Clinic Children's Hospital for Rehabilitation

Clifford Beers Clinic

Please see attachments.



Clifford Beers
Clinic.pdf

Section 1:

Question 2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)?

Clifford Beers Clinic (CBC) is working with the State of CT on a SAMHSA Project LAUNCH Grant for children from birth to age 8 in New Haven, CT as well as across the state. CBC's part in this initiative is to work with local pediatricians to help them implement screening and care coordination within their practice. In CT we do not have Integrated Care Codes within the Clinical setting, although we do know that DSS is working on launching such codes, but we are able to be embedded in Pediatric Clinics to help them expand services through the LAUNCH grant. LAUNCH Licensed Clinical Social Worker is currently embedded in two pediatric practices, two days per week at each site. In 2016, 473 children received some kind of behavioral health service within the pediatric setting (e.g. screening, referral to mental health provider(s), on-the-spot care coordination, crisis intervention/safety-planning, etc.). The average age of children receiving a service by the LAUNCH clinician was 6.33 years (SD=6.15, Range = <1 month to 23 years).

Both pediatric practices have requested support in getting a full-time in-house mental health provider and continue to explore ways to make this possible. Clinician participates in a monthly pediatric consultation group to support a local mental health agency's efforts connect with local medical providers to better coordinate mental and physical healthcare. The LAUNCH clinician has been able to provide Trauma-Informed Child Parent Psychotherapy (TI-CPP) (CPP) within the medical office for one family, with the pediatrician as her active partner in the provision of treatment. The pediatrician takes part in the weekly CPP sessions.

Challenges/Barriers

- Physicians continue to face time barriers as they work to formally implement screening practices within well-child visits. The practices have expressed a desire for full-time availability for the clinician to mitigate time pressures.
- Physical space continues to be a challenge.
 - Clinicians are moving around in pediatric offices without a dedicated office or desk.
 - Babies that are getting vaccinated in a connecting room often cry loudly; this reality can disrupt the therapeutic environment.
- Many mental health and medical providers do not accept insurance. This can be an issue for children that are in need of prescriptions for ongoing medication. Many insurance carriers do not have extensive networks within the New Haven area. Pediatricians are requesting supports for figuring out this insurance matrix for patients.

- Medical providers may not be equipped to address intense mental health needs, such as: suicidal ideations and/or actions, self-harm behaviors, substance abuse, and psychotic symptoms – particularly for older children. Part-time social work support is not enough to adequately address these needs.
- Positive screens for depression and/or anxiety within the pediatric practice create challenges as most pediatricians do not have the capacity to prescribe psychotropic medications and often have difficulty connecting with psychiatrists to obtain medications on behalf of their patients.
- Providers have difficulty confirming the success of the referrals for their patients. Therefore, they may not know if their patients' needs were met.

Final Learning:

- Mental health needs are very apparent within the pediatric setting for children of all ages, including young adults.
- A wide variety of complex needs of families, as well as individual family members, are demonstrated in the pediatric setting. The LAUNCH clinician needs to have experience and comfort working with a wide variety of issues that families are facing.
- Several insurance carriers in the local community have extremely small networks of providers, impeding access to care for many families. Patients have to make choices based on the cost of care rather than their need for care.
- Medication providers for patients with mental health needs are extremely limited; this directly impacts the quality of care available to patients.
- Key-informant interviews with pediatricians who work collaboratively with home visiting programs have expressed a deep understanding of the children they serve and talked about how they were able to utilize the information provided by home visitors to reinforce the work that the home visitor is doing with the family when the child comes to their office.
- Home visitors must take a lead role in reaching out to pediatricians. The heavy work load in pediatric primary care settings limits the physician's ability to initiate the communication with home visitors.

Here is a case example submitted in our 2015 end of year report:

During a meeting to present Project Launch to a local general pediatric practice one of the doctors identified a mother that was in crisis. The doctor shared that she had come into the practice the previous day and left in tears. She reported that the child presented with developmental delays and she worried that she missed something at her two and a half year old check-up. She reported that she was having a hard time getting her connected to a local early childhood assessment team within the town's school district. After the presentation the clinician stayed behind to sit with the provider as she called the mother. The clinician offered a time to come back into the office and meet the family and discuss their needs. This was set up for the very next day.

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The clinician met with the family as scheduled. The child was screened for developmental delays and Autism. The child passed the screener for Autism however presented with significant delays in other areas. The clinician investigated the attempts to refer the child and discovered that the doctor had been referring to the wrong town for services. The clinician referred the family to the correct school district. She faxed over the documents for the request for assessment and the screening that was completed while the family was still in the office. The family was prepped for what paperwork would be needed to prove residency and to enroll their child into school.

The clinician then followed up with the family the day after the appointment to assure that they had received a phone call from the school district. The clinician then followed up a week later and found that the process to evaluate the child for special education had begun. The family had an appointment, felt prepared for their meetings, gathered their data, and reported feeling much better that things were in progress.

Section 2

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health related social services agencies)? a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

We experience multiple challenges with the operation of multiple state agencies; at times each agency may be providing services that are similar to other state agencies. There is a siloed effect which decreases efficiencies and increases burdens on the providers. We find on a local level there is better service integration; collaboration and partnership start with relationships and trust, and where we foster those soft factors of leadership, we find more successful systems of care work for the families.

There are many existing early childhood care and early education programs delivered by dedicated service providers in New Haven that collaborate well, are family-centered, strength and evidence based, that educate and empower parents to advocate for children and their families, and link families to local and state resources. New Haven is a culturally diverse community and direct service providers reflect the population being served. The pediatric community is less involved in the initiatives listed below, but we believe that if staff from their offices like patient navigators or care coordinators could free their time and funding was available, more pediatric community members would participate.

A key participant in the Early Childhood services in New Haven is the New Haven Early Childhood Council (NHECC): The Council brings together community members who share a desire to improve the lives of young children and their families in New Haven. Appointed by the Mayor and Superintendent, the Council works to promote access to early learning opportunities, increase the quality of early learning experiences, support parents in their role as their child's first teacher, and promote children's healthy development.

In 2009 the NHECC put together a strategic plan that has been guiding their work; the plan has provided a continuum of professional development opportunities to help all early care providers to increase their educational levels and to support early childhood programs to achieve NAEYC and NAFCC accreditation. The community offers 2,600 preschool spaces, half of these in the public schools. Infant/toddler care is provided through DSS-funded centers, Early Head Start, and Kith and Kin care.

NHECC and the New Haven Public Schools have also focused on the kindergarten transition, engaging parents in the process. Called "the kindergarten canvas," teachers, principals, and

volunteers go door to door introducing themselves to incoming kindergartners and their parents. The purpose of this initiative is to make sure the schools touch base with the parents prior to the school year and being able to reach the youngest learners. In 2013 and 2014 the program reached out to more than a thousand families per year.

NHECC works to connect children and their families to community resources that support the child's physical, cognitive, psychological language, social, and ethical development. They are working to convert all head start programs to full day services and to provide students additional time for instruction. They are prioritizing the most at risk students for preschool enrollment by creating 750 new preschool slots in New Haven for 3 and 4 year olds. Finally the plan has expanded infant toddler care services in home and in centers across the city, expanding home settings to be licensed and increase early childhood educational resources for home and day care providers.

Another important early care and early education program that started in New Haven and has expanded nation-wide is the All Our Kin Program. All Our Kin's mission is to build high-quality, sustainable family child care programs, giving the youngest and most vulnerable children the quality learning experiences that they need and deserve. This innovative program began as a response to the ramifications of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 on low-income families, especially single mothers of very young children who struggled to find both decent work and affordable high-quality child care in their communities. They train and support over 250 parents and educators each year, who in turn serve nearly 1,500 children. They work with a diverse group of primarily low-income parents and providers from a range of neighborhoods and towns.

All Our Kin has focused on improving early care and education for in home providers, many of whom serving the lowest-income children: 72% of the children in their care qualify for Care4Kids subsidies, state funding only available to low-income working families and families on public assistance. Training is provided by the Family Child Care Network which offers educational mentorship, professional development, advocacy and leadership opportunities, and a network of relationships with other family child care providers. The Network is a high-touch program built on best practices in early childhood consultation and teacher mentoring. Early childhood consultants visit family child cares to lead model lessons, demonstrate new strategies, and reflect with providers on their work. Consultants bring books and materials, professional articles, and curriculum ideas, and offer suggestions to enhance children's learning. Providers in the Network also come together for monthly meetings, workshops and trainings, including Child Development Associate training and college courses, and an annual professional development conference. They have access to a "warm line" they can call for advice at any time.

New research has shown that home visiting programs have long term and short term value in family outcomes (Pew Home Visiting Campaign, 2013). The CT State Office of Early Childhood

(OEC) provides home visiting services, funding and training to support families raising young children to ensure the children's health, well-being and positive growth and development and to prevent child abuse or neglect. The OEC has established guiding principles to improve home visiting programs. The vision of the Office of Early Childhood is that all families should have access to high-quality home-based services and supports, that home visiting programs should be fully coordinated with each other and with systems of care such as health, mental health; early childhood services and early care and education should be created and supported.

There are many local home visiting programs that are supported by both state and local funds that are available. Over 70 programs provide various family support services in New Haven, including state and federal Healthy Start, Nurturing Family Network (home-visiting), and Family Resource Centers. New Haven is working to make sure all home visiting programs are accessible to all families, and are using best practices. Some of the statewide home visiting programs available in New Haven includes Birth to Three, Child First, Early Head Start, and Family Resource Centers for Parents as Teachers, Nurturing Family Network for Parents as Teachers, and the New Haven System of Care. CT State Department of Children and Families funds multiple home visiting programs for eligible families who are involved with the Department, including but not limited to: Caregivers Support, Integrated Family Violence Services, Intensive Home-based Services, Family Based Recovery, Differential Response, Level 4 Positive, Parenting Program (Triple P) and Child First.

New Haven Healthy Start (NHHS) reaches parents prenatally and postpartum to best reach children and families right from birth. They have created a centralized Healthy Start outreach and recruitment program at the New Haven Health Department (NHHD) that provides a structured, standardized risk assessment and care coordination for high-risk participants: a) at the time of entry into the pre-natal care system; and b) after delivery during the interconceptional period. They have developed an improved method of assessing signs of parental depression, and the need for more bereavement services and support. This includes a care coordination/case management for women who: a) enter the prenatal care system but are at risk to drop out of care; and b) deliver with no history of pre-natal healthcare. This level of coordination involves improving linkages with fathers and other significant male partners.

NHHS, like many of the early childhood initiatives in New Haven, has developed a layered approach to family education and support. They provide intensive health education and professional development training for a) Healthy Start participants, parents, and children; b) community-based organizations; and c) professionals and paraprofessionals integral to early childhood system change efforts. This layered systemic approach allows for both the families to grow in their knowledge of child rearing, but also creates an informed and knowledgeable workforce

The Child FIRST (Child and Family Interagency Resource, Support, and Training) is offered for New Haven Families funded by the Department of Children and Families, and run locally by the Clifford Beers Clinic. Child First is an early childhood system of care initially developed in the neighboring city of Bridgeport, which faces similar challenges as New Haven. This collaborative, preventive, early childhood system of care identifies young children and families with multiple challenges, and provides comprehensive assessment, intervention, and access to integrated, family-driven, wraparound services and supports for all family members. (27/49) Child FIRST seeks to decrease the incidence of serious emotional disturbance, developmental and learning problems, and abuse and neglect. In 2001, Child FIRST was chosen as one of five, national Starting Early/Starting Smart – Prototype sites by SAMHSA, which funded the model development and research implementation. The model has been rigorously evaluated through a randomized, controlled, clinical trial.

The target population is children between 6 and 36 months old with significant environmental risks or who were already exhibiting social-emotional or behavioral problems. Families received home-based assessment of the strengths and needs of the child and all family members; child-specific consultation services in early care settings; integrated, family-driven plan development reflecting parental culture and priorities; home-based psychoeducational and psychotherapeutic intervention services as needed; and care coordination/case management to access comprehensive services and supports for all family members. Intervention addressed family risk factors and typically lasted 4-6 months.

The outcomes of Child First showed definitive, statistically significant improvement in the Child FIRST Intervention versus Usual Care Controls. Child FIRST children were A) 5.1 times less likely to have aggressive and defiant behaviors and B) 4.3 times less likely to have language problems; C) families were 5.7 times less likely to be involved with DCF.

The MOMS Partnership is a two generational approach that uses input from families and providers to develop a public health model to ensure that pregnant and parenting women living in New Haven achieve the highest possible standards of mental health and well-being throughout their lives. MOMS Partnership is led by a guide team consisting of nine independent agencies in New Haven including Early Head Start, Clifford Beers Clinic, The New Haven Diaper Bank, Elm City Housing Authority, Maternal and Child group from New Haven Health Department and Yale University. This group make up is from key child and maternal health serving agencies in New Haven. Two key initiatives for family education and support are the MOMS Hubs and the Community Mental Health Ambassadors.

MOMS HUBS are lively, supportive social centers for mothers located conveniently within their neighborhood; the first three hubs are open in New Haven mid-March. The first hub located in the heart of the Dwight neighborhood at the Stop and Shop. Moms are able to utilize the space in many ways: they can drop in and access information or resources, participate occasionally in educational activities, or become members and set goals and participate in a series of trainings

and workshops in order to meet those goals. The workshops and activities are primarily be geared for Mothers, grandmothers, aunts, -- the female caregiver-- but activities are held for the family, children and youth and fathers or male caregivers. The focus of the HUBS will always be on strengthening families through maternal mental health and maternal economic security.

Another component of the MOMS Partnership is creation of the Community Mental Health Ambassadors (CMHA). The CMHA's who work in the hubs are mothers from New Haven trained in brief mental health intervention, key principles to promote health, development and achievement across generations, act as referral sources to the MOMS hubs and care extenders at the hub. A comprehensive workforce development strategy is used to train all outreach workers at existing neighborhood and citywide agencies in key principles of a two generation strategy to promote health, development and achievement. All neighborhood business professionals frequently interacting with mothers, referred to as "door openers" (e.g. nail technicians, hair dressers, and Laundromat owners), are trained on brief "touch points" to use to engage mothers with the neighborhood MOMS hubs. In this way, a large portion of the neighborhood or community would become "mom informed" and filter families at risk or in need to the MOMS hubs. The MOMS Partnership has developed and tested a curriculum for the training of Community Ambassadors.

Minding the Baby® (MTB) is an evidence-based home visiting intervention developed in 2002 to strengthen the health and early relationships of young, vulnerable, first-time parents and their families. MTB grew out of a collaboration of nurses, mental health clinicians, community partners and researchers at the Yale School of Nursing, the Yale Child Study Center, and two local community health centers (Fair Haven Community Health Center and Cornell Scott Hill Health Center). In 2014, MTB was designated by the Department of Health and Human Services as an evidence-based home visiting model, one of only 17 models nationwide. The intervention is based on an adaptation of the Nurse Family Partnership (NFP) home visiting model, pairing advanced practice nurse practitioners (NPs) and licensed clinical social workers (LCSWs) to provide intensive, interdisciplinary in-home mental health and health care, parenting support and anticipatory guidance to young, first time parents and their infants.

MTB is distinct from other home visiting programs in: 1) its innovative interdisciplinary service model that targets both health and mental health outcomes in an effort to meet the complex and multi-layered needs of young at-risk families, 2) its emphasis on enhancing reflective parenting and the development of robust, secure parent-child attachments, both of which have been linked to positive developmental and socio-emotional outcomes, and 3) its focus on emotional trauma and other forms of toxic stress, known to disrupt health and mental health well into adulthood. Young, largely teenage mothers-to-be are recruited into the MTB intervention in the second trimester of pregnancy. They are visited weekly through the child's first birthday, then biweekly until the child is two. The NP and LCSW work collaboratively to engage three generations of family members (grandparents, parents, and child); service

delivery is highly flexible and responsive to families' needs. Because early interactions shape the basic architecture of the infant brain and form the foundation for healthy growth, emotional health and social development, MTB aims to strengthen early parent-child relationships.

MTB has served over 130 economically disadvantaged and ethnic minority families since 2002. Initial data from a randomized controlled trial in New Haven indicate that MTB families show improved outcomes compared with families receiving standard care. Prominent health outcomes include higher rates of on-time pediatric immunization, lower rates of child protection referrals and longer spacing between childbirths in young mothers. Relational outcomes include higher rates of secure attachment and lower rates of disorganized attachment in intervention children compared to the control group. Increases in mothers' abilities to parent in a reflective rather than reactive way were found over the 27 months of the intervention, especially among the most vulnerable mothers. In a follow-up pilot study, lower rates of maternally-reported externalizing disorders were found in intervention children.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery? a. Which health-related social service providers have been or should be included in a child and youth-focused integrated service delivery model? b. What potential exists for increased partnership for provision of home and community-based services?

Founded in 1913, the mission of the Clifford Beers Clinic (CBC) is to promote accessible community-based mental health services and advocacy that encourages healthy and resilient lives for children and families. Annually, CBC directly serves an estimated 5600 total child and family members. CBC's services and support services include: care coordination for the CT Systems of Care using a wraparound model; early childhood in-home family-based interventions; live triage and referral; 24/7 emergency mobile psychiatric service; advocacy for victims of crime; a family support program for children affected by parental incarceration; intensive out-patient mental health programs for youth ages 0-26 and their parents; specialized services and care coordination for youth with problem sexual behavior; substance abuse and risky behavior prevention; and community consultation.

Wraparound New Haven (WANH) is a Centers for Medicare & Medicaid Services (CMS) Health Care Innovations Award-funded program providing multigenerational care coordination for children with both medical and behavioral health needs, as well as for their families. WANH employs a three-tiered model of care: (1) a Family Centered Clinical Model utilizing a wraparound approach to identify and meet family's needs; (2) a rigorous Quality Improvement program that relies on data from families, information from community partners and family feedback, and; (3) Community Partnerships integral to program implementation as well as long-term sustainability. WANH aims to serve high-cost, high-utilizing Medicaid eligible children and their families. The inclusion of a family is dependent on a child meeting eligibility requirements (referred to as the index child). An index child must be: between the ages of 0-17, living in the greater New Haven area, have Medicaid insurance coverage, be living with a chronic medical condition and behavioral health condition or a condition predictive of a behavioral

health condition, have had an inpatient hospitalization OR at least two Emergency Department visits in the past 12-months. Once a child is identified, services are offered to all interested members of the family. These services include: assistance with basic needs, mental health treatment, development of a family-centered care team and plan of care, and care coordination with providers and other community programs. Once a family is enrolled, the length of time in the program will vary depending on the needs and complexities of the individual family. WANH employs a very individualized family plan of care; however, it is estimated that families will receive WANH services for 6 to 12 months.

- 517 families representing 1702 individuals have been served by WANH since December 2014.
- 143 families representing 441 individuals are currently active in WANH services.
- To-date 186 families have successfully met their goals and transitioned from WANH with an average of 318 days in WANH.
- All children enrolled in WANH are experiencing significant reductions in their depressive symptoms after 6-months of participation in services. After 12-months of program participation, we continue to see significant decreases in depression symptoms.
- While baseline adult depression symptom scores are low, we are seeing statistically significant reductions in depressive symptoms after 6-months of participation in WANH. These decreases remain at the 12-month time point.

After piloting the original WANH model of care, updating strategies and developing new interventions based on continuous feedback through formal data reporting, as well as input from Care Coordinators, WANH clinicians, staff and partners, and the voices of families, WANH rolled out an enhanced model of care in March 2016.

One new tool that is utilized with all new families is the Family Binder. This binder was adapted from CT's Department of Public Health's Care Coordination Binder and tailored to the WANH program with significant input from the WANH Yale nurse. The Family Binder, available in English and Spanish, contains personal information about the family, such as: emergency contact information, health insurance and current care providers' names and contacts, as well as educational information about what to do in case of an emergency, how to connect with different providers, checklists and overviews of preventative care practices and a place to develop and store a health plan with records, such as immunizations. Care Coordinators complete certain sections of the binder with the family and help them to utilize the binder and resources as they work together to manage and coordinate their family's health.

What to do When Your Child is Sick. In July 2016, WANH partnered with Lulac Head Start in New Haven and they provided Care Coordinators with an overview on how to support and guide families around seeking care and ED utilization. Each Care Coordinator received a book, "What to do When Your Child is Sick" which provides information around how to manage your family's health needs. WANH has ordered 1,000 copies (500 in English and 500 in Spanish) for each family and are exploring opportunities to have a group training for parents around these important issues and decisions.

The enhanced model of care streamlines individual participants into two primary tracks: (1) a comprehensive medical track and (2) a standard medical track. The comprehensive medical track is for all index children and family members who have a chronic medical condition and want more intensive assistance coordinating their medical care. While participants in both tracks receive intensive, integrated

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care coordination, the comprehensive track offers a more targeted approach for managing one's medical illness and WANH's consulting physicians will provide more direction to the team regarding these individuals.

Comprehensive Medical Track. For all enrollees in the comprehensive medical track (CMT) WANH clinical staff conduct an EPIC chart review to gain a better understanding of medical conditions, physicians involved in the individual's care and current medications. The Care Coordinators working with these individuals and families receive monthly medical consultation during supervision by a WANH physician who provides feedback, general knowledge and discusses possible interventions. For families who wish to access their Yale/EPIC medical chart, Care Coordinators assist them in setting up, using and understanding MyChart (EPIC's patient interface). Additionally, individuals enrolled in the CMT who have asthma receive the Asthma Control Test (individuals age 12+) or Childhood Asthma Control Test (children ages 4-11) to help drive the management asthma symptoms.

Hospital Utilization Follow-Up. One of WANH's program objectives is to follow-up with a family within 24-hours of an emergency room visit or inpatient hospitalization. Reporting has been developed to identify adults and children enrollees who had an emergency room visit or inpatient admission. These daily reports allow the WANH Yale Nurse to conduct follow-up calls and schedule follow-up appointments at the Yale Primary Care Center (PCC), as appropriate. The WANH team continues to work toward understanding the circumstances surrounding the ED visit, including: barriers to care, alternatives to hospital utilization if appropriate and satisfaction with the ED visit. In conjunction with the WANH Yale Nurse and the WANH clinical team, Care Coordinators help the family plan and coordinate next-steps to help better manage their condition.

Primary Care Provider Updates. In a targeted effort to engage with a family's primary care provider (PCP), communication reminders have been added in Essette for all index children. The Care Coordinator will fax/email the plan of care or provide an update to the PCP. The median rate of PCP updates is 0.62 per active family per month. Additionally, WANH has begun to maintain a binder with client updates for PCPs to access at the Yale PCC.

Additional Clinical Indicators. Beginning April 2016, WANH clinicians are conducting clinical/bio-psychosocial assessments with all enrollees (6 years old and older) at baseline, 6-months, 12-months, and discharge. These assessments are adjunctive to the depression and trauma screeners that have been utilized since the beginning of the program.

WANH has convened a Pediatric Think Tank. This group, set to meet monthly, will help frame the future development of the WANH model for all children and families (i.e., design WANH model for children with Autism, developmental disabilities; advance CBC's integration of behavioral health with primary care).

In August 2015, WANH rolled out their modified Tracer, now called a **Family Review**. The impetus for this new model of family review was based on Care Coordinators' feedback and desire for a more meaningful format. Dedicated to using data and feedback to continually improve WANH services, the clinical team adapted the Tracer to reflect a formal family review. Each week the clinical team, including WANH's psychiatrist, Assistant Manager, the WANH program manager, and the consulting physician

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and/or nurse meet with Care Coordinators as a team to review high-risk families and discuss strategies to better understand, engage and support the family. When needed, WANH's consulting physician and/or WANH Yale nurse are available for complex medical need consultations.

WANH developed a **Parent Support Group**, which started in December 2015 and continues to meet on an ad hoc basis. This group meets to help foster social connections and provide feedback on WANH services and community support. WANH coordinates with another CBC Program, CT-Elm City Project LAUNCH, for input on the continuation of this group, which benefits both programs.

Family Feedback. Additionally, two focus groups were conducted with WANH families to collect qualitative data on family's experience with services and how/if they experience WANH services as distinct from other organizational programs and services they receive.

Continuous Quality Improvement. The WANH management team meets monthly with the Yale evaluators to review the monthly report. The goal of this meeting is to discuss process and outcome findings and ensure that the data are useful and provide helpful feedback that then informs the WANH model. Mindful of health inequities, WANH invited an expert researcher in cultural competence and health disparities to conduct training on microaggressions and cultural humility in September 2015. This training aimed to raise awareness of implicit bias and discrimination that may decrease quality of care for low income minority children and their families and provided Care Coordinators with a framework in which to understand and reflect on their interactions with families.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

To date, CBC has executed data-sharing and/or mutual disclosure agreements with the following community partners: Yale New Haven Hospital, Health Management Associates, Family Centered Services of Connecticut, CT Value Options (Beacon Health Options), Fair Haven Community Health Clinic, Mathematica, Read-To-Grow, Community Health Network of Connecticut, Inc. (CHN-CT) and Lulac Head Start. Additionally, WANH has begun collecting releases from applicable participants in an effort to receive New Haven Public School data and is in the process of finalizing agreements with asthma certified educators. Yale New Haven Hospital has facilitated credentialing for WANH Care Coordinators and clinical staff on their EPICare Link system. This allows WANH service providers to send secure messages through the electronic health record. Care Coordinators send and receive secure emails with participants' primary and community providers who do not utilize EPIC. All Care Coordinators have been trained in this method of communication. As of May 2016, WANH is exploring additional data extract ability from EPIC for non-Medicaid enrollees, including clinical values such as Hemoglobin A1C levels to help quantify WANH's impact for individuals not covered by Medicaid.

Cost & Utilization Evaluation The overall goals of the Cost & Utilization evaluation are to determine the impact of the intervention on utilization and costs of care, primarily for the child, but also for the family. Health Management Associates (HMA) has finalized their evaluation design, proposing an interrupted time series design or segmented regression model. The proposed plan will analyze cost and utilization for the enrolled children and for their family members using data from two years prior to enrollment and one year after the family has been discharged from WANH.

Questions of Interest

Methods

1. What were utilization (ED and inpatient) and cost trends prior to the intervention for the child (and for the family, if these data are available)?
2. What are utilization and cost trends since implementation of the intervention?
3. Are there statistically significant differences in utilization and cost patterns since the intervention was implemented?
4. If so, in what areas of utilization and cost, and for which subpopulations? Utilizing an interrupted time series design, statistical analyses of claims/encounter and cost data at many points in time to assess changes in utilization patterns, including analyses of subgroups of interest Cost and Utilization Data.

Medicaid claims/encounter and cost data are requested for each program participant enrolled in Medicaid 24-months prior to the program start date through 12-months after the family/individual stopped receiving WANH services. This allows for exploration of trends in utilization and cost prior to the intervention, as well as trends once an individual/family enrolled with WANH. While some impacts WANH may be fairly immediate, others may not, and understanding the impact for a longer period of time will help uncover whether impacts are short-term or are longer lasting. Utilization metrics are detailed below. WANH has created a structure to track services, products and interventions for enrollees in the asthma program.

Emergency Room & Hospital Follow-Up The WANH model of care involves connecting with families within 24-hours of an ED visit or inpatient admission. Initially, tracking when a WANH participant utilized the ED or was admitted to the hospital was difficult as there was no systematic coordination between the local hospital and WANH, so Care Coordinators often relied solely on family report of recent hospital utilization. However, subsequently the WANH Yale nurse has created an Epic-based WANH patient list from which she runs reports on ED visits and hospital admissions. At the beginning of the implementation of this process, the nurse notified the Care Coordinator when a participant has been to the hospital. This allowed the Care Coordinators to respond to the family, offer support and to help develop a plan moving forward. In June 2016 the follow-up process has been modified. The WANH Yale Nurse is now the first to call the family with the goal to assist with any medical clarification and schedule follow-up appointments at the Yale Primary Care Center (PCC), as appropriate. Consequently, the WANH

Yale Nurse and Care Coordinators work together to coordinate next-steps to help families better manage their conditions.

The follow-up rates have been consistently high (well over 75%). While these follow-up rates are impressive given that this protocol has recently been implemented, it will be important to continue to closely monitor the ED follow-up rates, as this protocol continues to be modified to meet the needs of WANH families. Thirty ED/hospital admissions occurred in February 2017. WANH's nurse and physicians are reviewing EPIC records to determine if the ED visit was an emergency or was used for a non-urgent and preventable condition.

In-Person Visits. As part of the model of care, Care Coordinators are expected to meet with a WANH family at least once a week. As part of the quality assurance model, the evaluators created a target benchmark based on the model of care by multiplying the number of active families in WANH in a given month by four. The cornerstone of the WANH model of care is assisting families in the community, meeting families in their 'natural environment', accompanying them to important meetings, such as physician and social service appointments with the aim of teaching families how to access the services they need, advocate for themselves and their family and improve their overall quality of life.

WANH has been utilizing these data in weekly individual supervision to review home visits scheduled and to drive targeted conversations between supervisors and Care Coordinators about strategies to increase the number of home visits. Through these efforts, the WANH team has significantly reduced the variance between the target number of visits and actual number of visits. Through open communication, constant feedback and team problem solving, WANH has demonstrated great improvements during the months since implementing the home visiting action plan. On average, WANH staff are able to complete about 75-80% of in-person scheduled visits per month.

Other Contact. Care Coordinators and team members often communicate with families via text messages, as well as electronic communications with families' other care providers through EPIC messages, faxes and emails. The graph below shows the rate of telephone contacts per family, excluding phone calls to schedule or remind a family of an appointment. There is not a model of care benchmark for this indicator, yet it is a helpful barometer to gauge engagement with families. The median number of telephone/electronic contacts with or on behalf of active families is 1.95 per family per month.

Depressive Symptoms. CES-DC The Center for Epidemiological Studies Depression Scale – Child was administered to children enrolled in WANH. The CES-DC is a 20-item depression inventory with possible scores ranging from 0-60 with higher scores indicating increasing depressive symptoms. Scores over 15 are considered indicative of depression. 8. To-date, 435 children have completed the CES-DC at baseline. The average baseline score of these children is 15.0 (SD= 11.7). Looking at baseline scores for index children (N=183), the average score is 18.4 (SD=13.0).

To-date, 212 children have completed both a baseline and 6-month CES-DC assessment. Looking at all children (index children and their siblings) who have completed baseline and 6-month assessments, the graph shows that depressive symptoms have significantly decreased for all children ($p=0.005$). Looking

only at index children who have completed both baseline and 6-month assessments (N=83), we see a statistically significant decrease in depressive symptoms, with an average score of 21.1 (SD=13.4) at baseline and an average score of 17.2 (SD=11.1) after 6-months of receiving WANH services ($p=0.004$).

These data indicate that WANH is successfully working toward reducing depression in children. It is important to note that average symptom scores on the CES-DC remains clinically significant for index children at the 6-month time point. We hope to see symptom levels drop below the clinically significant level after 12-months of WANH services. Currently, we do not have a large enough sample size to look at this for index children only; however, we do have a large enough sample size to look at symptom scores at baseline, 6-months and 12-months for all children.

Sixty-three children have completed baseline, 6-month and 12-month CESDC assessments. Using a Repeated Measure ANOVA test, looking only at children who have assessment scores at all three time points (N=63), we continue to see statistically significant decreases in depressive symptoms. The graph shows these scores decreasing over time ($F(2, 124)=6.5$, $p=0.002$).

Adult Depressive Symptoms. The Patient Health Questionnaire (PHQ) depression module is a nine-item survey assessing depressive symptoms. 9. The PHQ-9 is used broadly and higher scores are indicative of higher levels of depressive symptoms. To-date 497 adults have completed the PHQ-9 at baseline with an average score of 8.2 (SD=6.5), which is not indicative of clinical depressive symptoms. Looking only at adults who have completed baseline, 6-month and 12-month assessments (N=70), we see a statistically significant effect of time in the program on depression symptoms ($F(2, 138)=4.12$, $p=0.02$).

The WANH leadership team and the Yale evaluators have been curious about why baseline depression levels are so low. This is incongruent with baseline depressive levels of this population in other studies and baseline self-report of depression on the Medical Checklist (40.5% of adults said they struggle with depression yet only 19% are screening positive for depression on the PHQ-9). Initially, WANH clinicians were administering the PHQ-9 as an interview. The Yale evaluators recommended that participants self-administer the questionnaire, unless assistance is requested, in accordance with general guidelines for this measure. 10. This change was made in March 2016.

Patient Activation Measure. The Patient Activation Measure (PAM) is used to assess the skills, basic knowledge and confidence level of an individual in managing their own health and healthcare. 11. The PAM categorizes individuals into four “activation levels”: Level 1 – disengaged and overwhelmed. These individuals are usually passive participants in their care and overall health knowledge is low; they also tend to have poor treatment adherence. Level 2 – becoming aware, but still struggling. These individuals have some knowledge, but large knowledge gaps exist and they tend to feel less control over managing their health. Level 3 – Taking Action. These individuals have key knowledge and are goal-oriented. They often feel they are part of their healthcare team. Level 4 – Maintaining behaviors and pushing forward. These individuals are working hard to maintain a healthy lifestyle and they have adopted healthy behaviors. They may still struggle during times of stress, but feel very much a part of their healthcare and often are able to advocate for themselves.

In general, 60% of index children and 43% were assessed at the highest Level of activation and just over one-fourth of children and 36% of adults assessed at Level 3. The baseline total score for index children is 77.1 (SD=19.0; N=415) and 70.4 (SD=17.9; N=344) for adults. Baseline indicators of such high levels are surprising and there are a few hypotheses that can be made. One cannot know what they do not know. High baseline levels of activation may be, in part, due to limited knowledge of engagement and activation of enrollees at the beginning of WANH. As families learn more skills and obtain more information about managing their care and medical conditions, their perceptions of their current level of activation may actually go down. If this is the case, we would expect to see scores drop at the 6-month time point of data collection and then increase again at 12-months or discharge from the program. Another hypothesis is some parents, by the nature of having a child living with complex medical and behavioral needs may be, in fact, very engaged and involved in managing their child's condition. There may be a cultural bias occurring here as well. Care Coordinators have expressed that they perceive Latino families to take longer to open up and often portray a picture of their lives that is more reflective of socially desirable responses than may actually be accurate. Additionally, many families, while dealing with complex medical situations, are being referred to WANH mainly for psychosocial and basic needs.

Some families feel they are able to manage their family's medical care, but can benefit from psychosocial and basic need support and resources. This is another hypothesis as to why baseline levels of patient activation are high. The evaluators will closely monitor these data for changes over time and will look at correlations and potential covariates as more data become available. Since WANH has implemented their enhanced model of care, only individuals enrolled in the comprehensive medical track will complete the PAM or Parent PAM. We may see a change in baseline levels as we begin to only collect these data on index children and family members who have a chronic medical condition and elect to enroll in the comprehensive medical track. Looking at average total scores over time, Parent PAM scores of index children with baseline, 6- and 12-month assessment scores (N=55) saw a statistically significant effect of time in WANH and activation scores, $F(X, X)=X$, $p=0.009$. Adults with baseline, 6- and 12-month completed assessments also see a statistically significant effect of time in WANH and activation scores, $F(X, X)=X$.

Kendler Social Support Interview The Kendler Social Support Interview is a 24-item questionnaire designed to assess quality of social support. Questions include concepts of emotional and tangible support, as well as information on social network quality, number of people one is close to (confidant network) and frequency of contact. Values range from 0-5 for frequency and 1-5 for emotional and tangible support. Higher values indicate stronger levels of support. Four hundred fifty five adults have completed the Kendler Social Support Interview at baseline. These adults expressed they felt they received moderate levels of emotional (average score = 2.5, SD=1.0) and tangible support (average score = 2.5, SD=1.1) with an overall perceived total support of 2.3 (SD=0.8) with 5 being the highest possible score. These adults also reported feeling close to an average of 1.5 (SD=1.4) individuals (confidant network).

Sixty-five adults have completed the Kendler Social Support Interview at baseline, 6- and 12-month time points. The table above details average scores over time. Looking across all three time points, we see a statistically significant effect of time in WANH on perceptions of tangible/instrumental support.

Client Satisfaction (CSQ-8) The Client Satisfaction Questionnaire 13 (CSQ-8) is an 8-item self-administered measure of a client's satisfaction with services and provides information about the client's perspective on the value of the services they received. Scores range from 8 to 32 with higher scores indicating greater satisfaction with services. WANH families are asked to complete the CSQ-8 at 6 and 12-months once enrolled in the program, and upon program discharge. To date, 199 families have completed the survey at 6-month and 66 families have completed the survey at 12-months. The table below breaks down the individual items measured by the CSQ-8. While WANH is seeing high satisfaction scores at both 6- and 12-months, it is worth noting that only 51% of families strongly agreed that WANH met their needs, but at the 12-month time point the percentage increased to 73% of families strongly agreed that WANH met their needs. This suggests that longer time spent in WANH programming is having a positive impact on perceptions of satisfaction.

Family Story:

Family Goal: For mother to be independent

A five-year old boy, along with his older sister and mother, was enrolled in Wraparound New Haven in early 2016. The Index Child had one inpatient admission and 3 ED visits in the 12-months prior to enrolling in WANH. He has a developmental delay, chronic asthma and has been struggling with severe digestive issues. The mother had symptoms indicative of mild depression at baseline. The family has struggled with basic needs and provisions.

The Care Coordinator has been working with the family and successfully connected them with community services and entitlement programs, such as: SNAP, subsidized housing and All Our Kin. Additionally, DCF Flex Funding was allocated to provide furniture for the family. The family was connected to Putting on Airs, a Department of Public Health program to assist with home-based asthma management. Both children have been experiencing difficulty in school.

The Index Child has missed a significant amount of school as a result of medical illnesses and his older sister reported being bullied. The Care Coordinator accompanied the mother to each child's school to meet with school staff to discuss and address the bullying, as well as to assist her with providing appropriate medical documentation to justify all absences. The sister was referred to Clifford Beers Clinic for other therapeutic treatment and is currently receiving these services. Throughout the time in Wraparound, the sister's depression symptoms have decreased from moderate depression symptoms to minimal depression symptoms.

Transportation has been a barrier for this family. Wraparound New Haven was able to secure flex funding for this family to pay for driving lessons for the mother and supported her in scheduling her DMV test. Additionally, the Care Coordinator connected the mother with a senior mobility trainer who

Response to CMS request for Feedback for Pediatric Care Redesign for Medicaid

Alice M. Forrester, CEO, Clifford W. Beers Child Guidance Clinic,

visited the mother in her home to teach her how to use public transportation to travel to locations she and her family frequent. In the current political environment, the mother has expressed concerns regarding immigration and deportation. At the request of the mother, the Care Coordinator has provided her information regarding the Immigration and Customs Enforcement agency in Connecticut and information on how to report anything that she feels may be illegal.

The family has been successfully connected with community resources and service programs and significant medical management supports are in place for the Index Child. The family is more equipped to manage the physical and mental health challenges they face as a result of Wraparound services. While the family continues to face challenges, many barriers to success have been removed. Now that the proper supports are in place and the family is more stable, they are currently preparing to discharge from Wraparound Programming.

Coalition for Compassionate Care of California

Thank you for the opportunity to submit comments on designing a Pediatric Alternative Payment Model that will improve quality and reduce cost of care for children and youth enrolled in Medicaid and the Children's Health Insurance Program (CHIP).

We are pleased to submit the attached report on Partners for Children, a pediatric palliative care Medical program in California, which has demonstrated the medical, emotional and fiscal benefits of providing in-home/community-based palliative care for children with life-threatening conditions.

We appreciate your interest and consideration and would welcome the opportunity to speak with you further about the benefits of pediatric palliative care and in-home services for children.

Sincerely,



Coalition for
Compassionate Care

April 5, 2017

Centers for Medicare & Medicaid Services
US Department of Health and Human Services

Re: Pediatric Alternative Payment Model Concepts – Partners for Children, a California Medi-Cal Pediatric Palliative Care Program

To Whom It May Concern:

Thank you for the opportunity to provide input into the design of alternative payment models to improve the health of our nation's children. Children's Hospice and Palliative Care Coalition (CHPCC), the pediatric division of the Coalition for Compassionate Care of California, has been engaged in increasing children's access to home and community-based hospice and palliative care services for over a decade.

In partnership with the state of California, CHPCC developed one of the country's first and only pediatric palliative care programs, Partners for Children (PFC), which enables children with life-threatening conditions to access in-home palliative care services concurrent with treatment. The impact of these services has dramatically increased the medical and emotional well being of the children and their families and proved to be highly cost effective utilization of our state and federal healthcare dollars.

BACKGROUND ON PARTNERS FOR CHILDREN (PFC)

Serious and terminal illnesses in children are different from terminal illnesses in adults and consequently require different modalities and care plans. Pediatric palliative care (PPC) provides seriously ill children with extensive care coordination and holistic care that considers every aspect of their and their family's physical, psychological, and spiritual health and offers hospice-like therapeutic, respite, and pain management services. PPC focuses on enhancing quality of life for the child and their family, preventing and/or minimizing suffering, and optimizing function – as well as minimizing hospital admissions and length of stays.

Pediatric palliative care, provided concurrently with life-prolonging or curative care, has been shown to improve patient care and quality of life, with measurable improvements to the physical and emotional well being of the children and their families. The American Academy of Pediatrics recommends that PPC, as defined by the Institute of Medicine (IOM), begin upon the diagnosis of a child's life-threatening condition, and continue for the duration of the disease and alongside

curative care or life-saving treatment, and that it be included in both public and private insurance plans.¹

California was one of the first states to respond to the need for comprehensive pediatric palliative care. The Nick Snow Children's Hospice and Palliative Care Act of 2006 (Assembly Bill 1745) required the California Department of Health Care Services (DHCS) to submit a Medicaid Home and Community-Based Services (HCBS) waiver that would allow children with life-limiting or life-threatening conditions to receive curative treatment and an array of in-home palliative care services without electing to receive hospice care. The Pediatric Palliative Care Waiver (PPCW) was designed to improve quality of life for children and their families through supportive home-based services provided by licensed hospice and home health agencies, and to minimize hospital admissions and length of stays through community-based care. The PPCW was first approved as a pilot project in December 2008 and established the Partners for Children (PFC/PPCW) Program within the Service of Care Division (SCD) of DHCS. The first children to participate in PFC were enrolled in March 2009.

To qualify for the PFC Program, children must be younger than 21 years, have full-scope Medicaid, and have a qualifying life-limiting condition. They must additionally meet the level-of-care determination, which requires that a physician assert that the child is at risk of being hospitalized for at least 30 nonconsecutive days in the coming year due to their eligible condition(s). However, children enrolled in PFC are not required to meet hospice eligibility life-expectancy requirements. This stands in contrast to the federal concurrent care requirement where qualifying children are those who have less than six months to live if the disease follows its normal course. The waiver is based on the principle that if curative treatment is provided along with palliative care irrespective of life-expectancy projections, there can be an effective continuum of care throughout the course of the participant's medical condition. Through the PFC Program, children receive ongoing, supportive medical and psychosocial services at home.

The PFC program is built on collaboration between the Children's Medical Services (CMS) Branch of DHCS, California Children's Services (CCS) program at the state and county levels, special care centers where children receive curative treatments, and local licensed private hospice and home health agencies that have voluntarily decided to participate in the program. The California Children's Services Nurse Liaison (CCSNL) for the participating child's county serves as the liaison among all state, local and private agencies involved in the child's care. PFC contracts with nurses and social workers at hospice and home health agencies to serve as care coordinators; each child and their family is assigned a care coordinator to help families manage their child's care based on each child's and family's identified needs.

PFC care coordinators complete a formal evaluation, the Family-Centered Action Plan (F-CAP), at least every 60 days to ensure that the family's needs and goals are at the forefront of decisions about the child's care. The referring physician and CCSNL review the Family-Centered Action Plans. The care coordinator interacts and/or visits with the family monthly providing at minimum 8-12 hours of care coordination and often accompanies the caregiver on visits to physicians and/or to Individualized Education Plan conferences at the child's school. In addition to continued care coordination, children receive pain and symptom management and expressive therapies such as

¹ American Academy of Pediatrics, Committee on Bioethics, Committee on Hospital Care. Palliative care for children. *Pediatrics* 2000; 106(2): 351-357.

art, music, play, and massage. Families receive education and instruction on providing care and usage of equipment, counseling and bereavement, including anticipatory grief, services, access to a 24/7 on-call hospice or home health agency nurse, and respite care in and out of the home.

OUTCOMES

At present, eleven California counties participate in Partners for Children Program. PFC has been demonstrated to benefit children with a wide range of disease progression, with even greater efficacy for children with less severe disease progression, further demonstration of the benefits of introducing PPC services earlier on within the continuum of care.² PFC services such as enhanced family-provider communication and coordination of social and community supports have been independently shown to improve the family experience. PFC has demonstrated success in reducing caregivers' stress and worry related to their child's care, in building the confidence of the caregiver in their ability to provide care in the home, and in reducing children's pain as observed by their caregiver.³ Notably, studies have shown high levels of family and staff satisfaction with the PFC program among diverse families and children and a wide range of service providers.

PFC has also demonstrated notable reductions in days spent in the hospital as well as expenditures per enrollee, and improvements in families' quality of life.⁴ By reducing symptoms and stresses, PFC helps support caring for children in their communities and at home as they often prefer, giving families relief and alternatives to 911 calls, ED visits, and unwanted hospitalizations – and consequently results in substantial cost avoidance. A 2015 study demonstrated:

- A nearly 50% reduction in the average number of inpatient days per month, from 4.2 to 2.3
- A significant drop in average hospital length of stay from 16.7 days to 6.5 days (more than a 60% reduction)
- A strong trend in reducing 30-day readmission rates, from 45% of admissions to 37%
- Net savings – after deducting program costs – of \$3,331 per enrollee per month⁵.

PAYMENT METHODS

The California Children's Services (CCS) program requires authorization for PFC waiver services related to a client's CCS-eligible medical condition. Participating PFC providers must submit a Family- Centered Action Plan (F-CAP) to the CCS county program in which the participant resides. Only approved PFC providers may receive authorization to provide waiver services.

Upon F-CAP approval, the CCS program generates a Service Authorization Request (SAR) for PFC services only. Other CCS authorized services must be authorized on a separate SAR. Appendix A provides a list of all billable PFC services including who can provide and bill for them,

² Gans D, Hadler MW, Chen X, et al. Impact of a Pediatric Palliative Care Program on the Caregiver Experience. *Journal of Hospice & Palliative Care Nursing*, 2015; 17(6)

³ Gans D, Hadler MW, Chen X, et al. Cost Analysis and Policy Implications of a Pediatric Palliative Care Program. *Journal of Palliative Care and Symptom Management*, 2016; 52(3)

⁴ Ibid.

⁵ Ibid.

as approved in the PPC Waiver. The PFC codes and billable rates are determined by California State Medi-Cal rates.

The California Children's Services Nurse Liaison (CCSNL) at the County California Children's Services office provides administrative activities (specifically utilization management; i.e. review and authorization of service requests, level of care determinations, and waiver enrollment). These activities are not waiver services. The CCSNL is funded through the DHCS County administrative allocation budget.

FUTURE OF THE PROGRAM

On December 27, 2012, the PPCW was renewed for a period of five years, through December 26, 2017. DHCS is currently preparing for the upcoming PFC/PPCW renewal, to become effective December 27, 2017 through December 26, 2022. This includes soliciting input from PFC/PPCW participants, family members, advocates, providers, and other interested stakeholders on the development of the PPCW and possible changes to the PFC program. However, a number of factors are likely to complicate the waiver development process and limit stakeholder engagement. Principally, on December 1, 2016, DHCS announced that the PFC/PPCW program would be transitioned from the Systems of Care Division (SCD) to the Long Term Care Division (LTCD) starting in January 2017. This means that LTCD will also be leading the waiver renewal process moving forward.

In addition, the Centers for Medicare and Medicaid Services (CMS) has determined that the care coordination structure within the Pediatric Palliative Care (PPC) Waiver fails to comply with federal law requiring that providers of home and community-based services (HCBS), or those who have an interest in or are employed by a provider of HCBS, must not provide case management or develop the person-centered service plan. DHCS is therefore requiring that all PPC Waiver providers administratively separate the care coordination and F-CAP development functions from the direct service provider functions. By June 1, 2017, all PPC Waiver providers must clearly identify in writing how the organization will meet the following requirements:

- Separate the electronic file maintenance systems of the two services;
- Create and maintain separate business processes, procedures, and manuals;
- Provide full disclosure of the arrangement to the waiver participant and assure that their right of free choice is protected (DHCS will develop a letter template that can be customized by the PPC Waiver providers and sent to each waiver participant);
- Organize the two services in separate and distinct management chains; and
- Submit a signed attestation from their Chief Executive Officer ensuring the separation of business functions between the care coordination and F-CAP development and all other direct waiver services being provided by the agency. The attestation must also include how the PPC Waiver provider will meet the requirements laid out in Attachment 3 - PPC Waiver Remediation Plan - Phase I.

DHCS will work with PPC Waiver providers through this process and help alleviate any issues that may arise. DHCS is committed to these and any other necessary steps to assist PPC Waiver providers in making this change possible. However, it is unclear at this stage how this change in requirements will impact PFC provider retention and recruitment.

The PFC program as denoted previously has successfully improved the physical and emotional well being of the children and their caregiving families enrolled in the program and has mitigated state healthcare costs due to a reduction in hospital admissions and length of stay. The program, however, has proved to be a costly investment on the part of PFC providers, who continue to subsidize program costs due to inadequate Medi-Cal reimbursement rates and internal billing errors on the part of Xerox, the state fiscal intermediary.

CONCLUSION

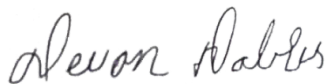
For more information on PFC, please visit:

- <http://www.dhcs.ca.gov/services/ppc/Pages/default.aspx>
- <http://coalitionccc.org/tools-resources/pediatric-palliative-care/partners-for-children/>

We appreciate and commend CMS interest in designing a Pediatric Alternative Payment Model that will facilitate timely and appropriate delivery of family-centered, community-based, linguistically and culturally appropriate, cost effective and integrated services to all children and youth covered by Medicaid and CHIP.

Partners for Children demonstrates the physical, emotional and fiscal benefits of integrated pediatric palliative care services especially for high risk, high need pediatric populations. We would welcome the opportunity to provide any additional detail or assistance.

Sincerely,



Devon Dabbs

Vice President, Pediatric Programming and Education

Coalition for Compassionate Care of California

Cogdell Memorial Hospital

Comments regarding proposed changes to Medicaid and CHIP for children

We want to provide the best care possible for the children located in our rural area. We try very hard to support these patients, and since we have an active OB program we have the opportunity to deliver the child and then work with that child as they grow and develop.

By far our biggest obstacle in the delivery of care is the frequency of patient no shows for scheduled visits, including Texas Health Steps wellness exams. We have tried a variety of methods and patient reminders, to little avail. We have even scheduled for the Medicaid vendors to be on site to schedule appointments – even Saturday appointments – but nothing has helped. Every day these no show visits prevent another patient in need not to be able to access care for that same time period. Years ago in Texas there was a penalty associated with patients not fulfilling their Texas Health Steps well child exams; for example to keep their other sources of assistance such as WIC or food stamps, their children had to be kept current on immunizations and well child exams.

It's also very confusing to have coverage that patients can change literally every month. It makes billing and registration much more difficult. It would be helpful if a patient made an annual selection of the plan they wanted, which could be changed if a patient family moved to another location.

We would like to incorporate other sources of social support for our children, but the first obstacle is that the kids need to show up for appointments!

Thank you

Colorado Department of Health Care Policy & Financing

Hello,

The Colorado Department of Health Care Policy and Financing (the Department) is gratified to have the opportunity to respond to the RFI on Pediatric Alternative Payment Model Concepts; it is a topic that has long been of immense interest in Colorado. However, the deadline of March 28th conflicts with other major federal deadlines at the end of March, and may result in less robust responses.

Our Payment Reform Section, on whom much of the work of the Department's response would fall, had all of their federal deadlines moved up several months under the new managed care regulations; they would like the chance to give a thoughtful response to the RFI after those new deadlines.

Would it be possible to submit our response by the start of the second week of April and still be assured consideration?

Thank you,



Colorado
Department of Health

This response has been prepared by The Colorado Department of Health Care Policy and Financing (the Department), the single state Medicaid agency in Colorado, administering Health First Colorado (Colorado's Medicaid Program) and Child Health Plans Plus (CHP+), with input from several of our partners and key stakeholders.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL	
QUESTIONS	RESPONSE RESOURCES & EVIDENCE
1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.	<p>The state of Colorado is extremely interested in care delivery models that combine and coordinate health care and health related social services, particularly with a child and youth focus. Clearly there are many opportunities and challenges inherent to the design and implementation of such a model; we will address several in this Request for Information response, but there are some questions we are not yet able to adequately respond to. Collaboration with other states and clear guidance and leadership from the Center for Medicare and Medicaid Services (CMS) will be necessary to determine the most salient areas for technical assistance, as well areas for alignment with existing programs. Colorado, for example, is implementing a State Innovation Model (SIM) with a unique focus on the integration of physical and behavioral health, which has payer interest as well; payers participating in SIM have developed a subset framework/milestones for pediatric practices. Colorado has launched the Colorado Opportunity Project, a cross-agency collaboration of the Department, the Colorado Department of Public Health and Environment (CDPHE), the Colorado Department of Human Services (CDHS), and the Colorado Department of Labor and Employment (CDLE), utilizing data to align interventions of government, private, non-profit and community partners through a life stage/indicator-based framework, with the goal of removing roadblocks to economic self-sufficiency by delivering evidence-based interventions in an integrated system of health, social and educational well-being so all people have the opportunity to reach and maintain their full potential. The initial life-stage focus areas – in accord with this RFI - are family formation, early childhood, middle childhood and adolescence. Colorado, through a Substance Abuse and Mental Health Services Administration (SAMHSA) award to CDHS, participates in Systems of Care, with a current initiative targeting children with serious behavioral health issues in or at risk of out of home placement. Colorado has also recently been awarded two Accountable Health Communities (AHC) Model cooperative agreements, to the Denver Regional Council of Governments (DRCOG) and Rocky Mountain Health Plans (RMHP); both awardees had the support of the Department in their applications and now in implementation. The value of creating a model of change to integrate Social Determinants of Health into delivery has strong traction in Colorado, with interest in both universal and more targeted approaches for high need populations, but we recognize that <i>data sharing needs, regulatory hurdles, and current lack of adequate, nationally standardized pediatric outcomes measures will be key challenges</i>. The Two-Generation (2Gen) approach, the Colorado Opportunity Project, Systems of Care and other aligned initiatives all demonstrate challenge and opportunity in the degree to which pediatric outcomes are dependent on parents. <i>Any model that doesn't address parent/caregiver issues (health, et al) will be less effective</i>. Health First Colorado and its primary health care program, the Accountable Care Collaborative (ACC), administered through seven Regional</p>

Collaborative Care Organizations (RCCO), is itself a demonstration of these values and challenges, including data sharing, referrals and follow up, behavioral health integration, adequate and aligned measures, and reimbursement.

The Department, and our partners and stakeholders, are extremely interested in braiding funding between our Department and CDHS and CDPHE. The [Colorado Opportunity Project](#), mentioned above, is one example of a cross-agency collaboration with the possibility of aligning interventions of government, private, non-profit and community partners. Significant opportunity also exists to coordinate with state 2Gen efforts to provide holistic services and supports, particularly for children and families. Limitations to move these efforts forward include: federal limitations on which entity is designated to spend which federal funds; potential duplicative care coordination within federal programs (e.g., Early Intervention, Special Supplemental Nutrition Program for Women, Infants and Children or WIC, Nurse Family Partnership or NFP); data sharing that protects Health First Colorado members' privacy; and data sharing across disparate county, tribal, state, federal systems. Technical assistance required to support these efforts would be high.

Our interest in moving towards a child and youth-focused care delivery model that combines and coordinates health care and health-related social services can be seen in questions that were added to the Department's Medicaid application (e.g., has your child been hospitalized in the past year). Such questions allow us to identify higher need children at eligibility and not after ACC assignment. These children are then moved to the top of the list for care coordination and case management—outreached by Early and Periodic Screening Diagnostic Treatment (EPSDT) Healthy Communities and the ACC. Colorado requires referring children in child welfare to the state early intervention program, in part supported by the Child Abuse Prevention and Treatment Act (Public Law 93-247). Children ages 0-5 who are identified in CDHS child welfare are referred to Early Intervention at CDHS. This is a systematic assessment and care coordination that sits in CDHS and refers children to Medicaid.

A strong infrastructure to support a model of this type exists in the Systems of Care in Colorado, which was established in 2012 through a System of Care Implementation Grant from the U.S Department of Health and Human Services (HHS), SAMHSA awarded to DHS, and in Colorado's School Based Health Centers (SBHCs)

The Systems of Care project is currently working with SAMHSA on a system of care initiative targeting children with serious behavioral health issues in or at risk of out of home placement. The Colorado model known as COACT provides an evidence-based form of intensive case management, called wraparound, which brings together the relevant family members, friends and needed services to develop a comprehensive plan for the child and family to accomplish their goals. Family advocates help engage families who may be system wary. The services coordinated include housing, employment, schools, juvenile justice, child welfare and mental health. One rural community is placing wraparound facilitators at the doctor's office and is seeing great success. Five clinics screened over 7,000 individuals with over 2,000 indicating behavioral health needs. COACT is a SAMHSA grant that aligns these programs—and counties receiving funds have a

50/50 split with SAMHSA. With this existing infrastructure, there is a strong interest in improving the way information and children (and parents/families) move between these systems.

Colorado has a strong system of SBHCs because we access state general funds and Medicaid funds to deliver services. State legislators passed a law that created a line item in state budget, passed by the General Assembly and renewed annually, to support these services. Those extra services provide integrated care (e.g., oral and vision along with physical and behavioral health), and the line item moves through CDPHE. There are 60 sites across the state; they are all Medicaid providers and integrated pediatric medical homes. Some SIM enhanced practices and FQHCs also have examples of integrated care.

Health First Colorado's child dental benefits program, in addition to the required minimal dental services (relief of pain and infections, restoration of teeth and maintenance of dental health), includes comprehensive orthodontia care for members with handicapping malocclusions and additional preventive visits and fluoride treatment for members with demonstrated risk of caries. We cover oral health screenings and fluoride treatment from qualified medical personnel and support several medical/dental co-location projects. Our registered dental hygienists are allowed an expanded scope of practice that includes connection to a hub dentist through teledentistry. We have a broad network of dental providers that include pediatric dentists and specialists.

Opportunities in service delivery are clear – SBHCs, Federally Qualified Health Centers (FQHCs), private offices participating in SIM, are all examples of integration – but integration needs to be achieved at a broader level, particularly, as shown by SIM, around physical and behavioral health. Technical assistance with a high impact, for example, could be helping primary health care providers to better identify needs (what screenings?) and, crucially, how to effectively follow up (did a patient go to a food pantry they were referred to? Is that pantry able to meet their needs?).

However, even with this fairly robust infrastructure, there are still significant challenges to braiding or blending funding: Federal restrictions on funding for school districts limits how much Medicaid can pay for school health services. School Health Services (SHS) reimburses districts on a cost basis for Individualized Education Plans (IEP) services, but not for other health services that districts provide. Recent federal changes would allow SHS to pay for non-IEP services, but if Colorado changes its SHS contract with CMS, CMS may change the way it calculates funding such that districts will receive lower reimbursements for more services. This gets into the weeds a bit, but is a fundamental example of the difficulty of braiding/blending funding. EPSDT screens at schools, non-Medicaid providers, basic first aid, and school nursing services when not associated with an IEP, non-Medicaid eligible psychologist services—none of that is SHS eligible. Colorado cannot risk funding levels to expand what funding may cover; fundamental changes recognizing the importance of braided/blended funding are necessary for states to truly move to a delivery model that combines and coordinates health care and health-related social services for our whole child and youth Medicaid and CHP+ population. Good pediatric outcomes often show up years later, but they rely on connections to early interventions.

<p>2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?</p>	<p>Colorado has five child specific special service waivers; we provide behavioral health services through waiver authority to deliver a state managed care model. The Patient Protection and Affordable Care Act (ACA) extends coverage beyond eligible Health First Colorado children to former foster care children under age 26 and children age six through nineteen with Federal Poverty Level (FPL) >100% and below 133% to include the state’s Children’s Health Insurance Program (CHIP). The State worked with CMS to move most (b)(3) services provided to children/youth under EPSDT to an appropriate location in the State Plan and to develop an appropriate methodology for these services. Services for children/youth that remain (b)(3) services are respite and vocational rehabilitation. Additionally, other extended services include recovery services (e.g., peer mentoring) and prevention/early intervention (e.g. Love and Logic parenting classes). In addition to waiver services, child welfare works with EPSDT Outreach to ensure that well child visits and oral health screenings are delivered within the mandated timeframes.</p> <p>The Department uses our claims data to determine Behavioral Health Organization (BHO) penetration rates for children on child welfare. We pull the children in child welfare and ensure that they’ve had a visit, then break down EPSDT 416 by the ten different child welfare categories and provide detailed information back to CDHS, BHOs, and counties for quality improvement work.</p> <p>The SBHCs provide oral health, vision care, nutrition education, reproductive health education, prenatal education, care coordination, and outreach and enrollment for kids outside of Medicaid reimbursed services.</p> <p>Beyond SBHCs, there are several provider and community-level projects and initiatives which could achieve sustainability and see long-range outcomes through a payment model allowing for health-related social services. These include Project Linking Actions for Unmet Needs in Children’s Health (LAUNCH)/LAUNCH Together, Project Consultation Liaison in Mental Health and Behavior (Project CLIMB), Reach Out and Read, and others. LAUNCH Together was founded by several Colorado foundations and inspired by the federally funded Project LAUNCH. It aims to ensure that families in several Colorado communities have access to a system of prevention and other services including behavioral health care within a primary care setting and enhanced home visitation and parental education. Reach Out and Read “prescribes” books, distributed to children through clinics and health care providers, recognizing that literacy and educational attainment impact health outcomes. Project CLIMB/Healthy Steps is a collaborative effort between the Department of Psychiatry and Behavioral Sciences and the Child Health Clinic at The Children’s Hospital to facilitate the early identification and treatment of mental health and behavioral issues within a primary pediatric care setting and to increase access to mental health services in an underserved population. It is staffed by a transdisciplinary team, which includes a psychiatrist, psychologist, pediatricians, postdoctoral fellow, psychiatry fellows, psychology interns, pediatric residents, and staff from the Child Health Clinic. The team provides developmental interventions, diagnostic assessments, medication evaluations, staff consultation and training, psychosocial and behavioral group and individual interventions, and recommendations for treatment of infants, children and adolescents seen in a primary care setting.</p>
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	<p>The ACC and the Colorado Opportunity Project are both exploring ways to include health related social services and measures. The ACC is Health First Colorado's primary health care program, designed to drive outcomes improvement and provide access to services. We are preparing to build on its success with ACC Phase II, focusing on improving health and life outcomes for members and using resources wisely. Phase II objectives are to join physical and behavioral health under one accountable entity; strengthen coordination of services by advancing Team-based Care and Health Neighborhoods; promote member choice and engagement; pay providers for increased value they deliver; and ensure greater accountability and transparency. The ability to appropriately refer to, follow up on, and pay for health-related social services would serve all of these objectives. The Colorado Opportunity Project, which is based on work by the Center for Children and Families at Brookings, is predicated on the idea that multiple areas – medical health, education, workforce development, criminal justice, etc. – all have an impact on people's overall health and success, with evidence-based interventions at targeted life stages having the greatest impact on individual outcomes. The Project currently has 17 interventions; evidence based programs, partnerships & collaborations, and two on system infrastructure. Their evaluation will mainly draw on common measures already gathered by partner orgs. Some unique measures are targeted to individual interventions, with consideration given to source and frequency of collection. The need for common, reasonable measures is key to the success of the Project, as it is for the ACC and many of the partners shared by both. A core success of the ACC is relationship building – longer term impact has been much greater than we are able to measure quantitatively yet, but ample qualitative support and this is also one of the primary aims of the Colorado Opportunity Project.</p> <p>Overall, we would like to see facilitation for transformation of Primary Care practices to move towards more holistic care – going beyond SIM to look at social determinants of health and linkages to human services, and how best to pay for that.</p>
<p>3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a</p>	<p>Some policies or standards CMS could adopt are:</p> <ul style="list-style-type: none"> • Telehealth billing and guideline changes. Telehealth can increase access, but has several issues, primary among which is reimbursement. That is problematic for incentivizing Rural Health Centers to engage in telehealth. Also, there is little guidance around what services are provided from a patient's home setting vs. at a local provider's office or other site, or how patient/provider communication is best maintained (email, chat, etc.) • Enhanced rural and frontier payments for low volume underserved communities. • Specialist workforce development in rural and tribal areas, particularly for Intellectual and Developmental Disabilities (IDD), behavioral health, and early childhood. • Clarifying how Medicaid transportation serves children accessing Hospice Item Set (HIS) within the state and across state lines, and clarifying how to follow up on patients doing so.

new care delivery model for children and youth?	<ul style="list-style-type: none"> • Integrated and 2Gen care from prenatal onward, including for rural areas. Challenges unique to rural areas include transportation availability and specialist availability. It is worth considering enhanced payment potential for rural service provision. • More fully integrate behavioral health and EPSDT to connect children to early intervention behavioral health services. • Expansion of scopes of practice, as we have done for registered dental hygienists who are allowed an expanded scope of practice that includes connection to a hub dentist through teledentistry.
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SECTION II: OPERATION OF INTEGRATED SERVICE MODEL	
QUESTIONS	
<p>1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?</p> <p>a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the</p>	<p>With any service integration work, data sharing is the key issue. This is crucial for providers to easily know what programs to refer their patients <i>to</i>, and what programs their patients are already enrolled <i>in</i>. Even successful service integration efforts, such as COACT Colorado, struggles with this. COACT Colorado is a cooperative initiative between CDHS and other state, local, and federal partners. COACT Colorado focuses on children with serious behavioral health needs in or at risk of out of home placement. Colorado has demonstrated that wraparound and family peer support is a successful model to integrate care across multiple state agencies. Colorado has placed a staff person from CDHS at the Department two days a week to help facilitate service coordination and build long-term sustainability for the program. Work is underway to build a cross-system training institute which will standardize training for wraparound facilitators and family peer support specialists. We have a successful rural model that actually places the wraparound facilitators in the doctor's office.</p> <p>Challenges include federal limitations on which entity is designated to spend which federal funds; data sharing that protects Health First Colorado members' privacy; and data sharing across disparate county, tribal, state, federal systems; duplicative care coordination. Limitations on outcomes tracking because of encounter rates and global billing and general billing related to non-covered services.</p> <p>A) Integration of maternal child health policy and Maternal, Infant, and Early Childhood Home Visiting Program (MEICHV), such as:</p> <ul style="list-style-type: none"> • EPSDT also aligns with Head Start and Child Welfare partnerships. • The Infant and Early Childhood Mental Health (IECMH) Group convenes the Department, CDPHE, CDHS, private foundations, and expert providers to troubleshoot how to improve financing and service delivery for IECMH. • Based on SAMHSA's Safe Schools/Healthy Students (SS/HS) model, Project Advancing Wellness and Resilience Education (AWARE) and Project LAUNCH are statewide child/youth behavioral health efforts that are also multi-agency, public, and non-profit collaborations with positive local impacts. • Colorado's Assuring Better Child Health & Development (ABCD) project works with funds from CDHS and the Department reimbursement to provide care in pediatrics care settings and in the home. This funding has been

<p>Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.</p>	<p>challenged because of losing MEICHV funds and limitations around Medicaid reimbursement for provider type and place of service.</p> <ul style="list-style-type: none"> • ABCD program Healthy Steps, MEICHV-approved for expansion, provides enhanced, comprehensive well-child care to children ages birth to three years, and, crucially, to their families, by promoting close relationships between providers and guardians in addressing physical, emotional and intellectual growth. • NFP also receives funds from CDHS and the Department to provide in-home dyadic care for kids and their moms' up to the child's second birthday. A state rule amendment in February 2017 will allow nurses to begin billing for more direct services, outside of only Targeted Case Management. This evidence-based program improves health (e.g., reduced low birth weight babies), health utilization (e.g., immunization rates), school readiness (e.g., pre-school graduation rates), and even decrease in juvenile justice involvement for kids who participated in the program early in life. • To deliver NFP services, the Department receives state funds from CDHS Tobacco Master Settlement Agreements and is able to pull down federal matching funds versus using the Department's budget. • RCCO care coordinator and Healthy Communities and Prenatal Plus work to build relationships with other local groups that impact social determinants of health. • Multiple interagency agreements are in process to share information on Medicaid members who are Eligible but Not Enrolled (EBNE) in other programs. Currently, this is done for NFP with attempts to expand to WIC and the Supplemental Nutrition Assistance Program (SNAP). • Systems of Care condensed applications for multiple services into one online system: the Colorado Program Eligibility and Application Kit (PEAK) application, which is intended to serve as a single entry point for Coloradans to receive services delivered by different agencies, including Temporary Assistance for Needy Families (TANF), NFP, SNAP, and disabilities services. • Colorado has a PEAK mobile application that is a person-centered account maintenance program for members that allows them to update their information (e.g., income), and access services (e.g., check SNAP balance) across multiple Department services.
<p>2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery? a. Which health-related social service providers have been or should be included in a child- and</p>	<p>Health First Colorado's primary health care program, the ACC, is administered through seven Regional Collaborative Care Organizations (RCCO). These connect Medicaid members to Medicaid providers and helps them members find community and social services in their area. Several RCCOs already work with their local public health agencies. 2Gen and SIM efforts in Colorado are both working on how best to integrate and align pediatric health care providers with health-related social service providers. In fact, the most current federal programs, including the Comprehensive Primary Care Initiative (CPCi) and its successor Comprehensive Primary Care Plus (CPC+), are working on integration. However, the lack of focus on pediatrics, and the lack of adequate and aligned pediatric measures across programs that include pediatric populations, is a persistent issue.</p> <p>The Colorado Opportunity Project, as previously noted, emphasizes that all service provision is not just about the child; it must be about the whole family, and therefore will rely on strong, clear partnerships between pediatric health care providers who have partnered with health-related social service providers.</p>

<p>youth-focused integrated service delivery model?</p> <p>b. What potential exists for increased partnership for provision of home and community-based services?</p>	<p>The SBHC Program at CDPHE has integrated primary and behavioral health service with some locations having oral health and vision services as well. Some school-based clinics connect families to community resources for nutrition, recreation, child care and other supports. Some advanced primary care practices and FQHCs also have some integrated services.</p> <p>Other Services:</p> <ul style="list-style-type: none"> • Colorado's ABCD project • Cavity Free at Three (CF3), Colorado-based program aimed at preventing oral disease in young children and pregnant women • Early Intervention Colorado (Part C) program <p>Potential for increased partnership:</p> <ul style="list-style-type: none"> • Alignment of Social Determinants of Health through a life stage, indicator approach- SNAP for food insecurities/summer food programs, parent workforce development, and mental health services. • Expansion of home visitation through NFP or similar programs with oversight by the Department, CDHS, NFP National Service Office, and local non-profit Invest in Kids (IIK). • Additional behavioral health professionals from ABCD who provide in-home services and services in the pediatric primary care setting. Studies showing that paraprofessionals have high impact on outcomes for in-home services (e.g., nurses versus paraprofessionals for prenatal care both have significant impact on reducing low birth weight (LBW)). • Specialized childhood paraprofessionals show strong outcomes but are difficult to pay under limited provider types. <p>Besides these, and in support of whole-family care, more and better connections are needed with housing assistance, legal services, workforce/employment programs, and food assistance beyond WIC.</p>
<p>3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate</p>	<p>Behavioral health and primary care electronic health records (EHRs) do not align for several reasons. Professionals are cautious about sharing data on behavioral health in primary care patient EHRs. Privacy needs a stronger assimilation of Health Insurance Portability and Accountability Act (HIPAA) compliant consent forms for team that reflects multidisciplinary care.</p> <p>Disparate data tracking systems between agencies have made any aggregation of data between health-related services challenging. While individual reports can be shared, a meaningful landscape of service integration between departments is lacking.</p> <p>Process of sharing Medicaid member information:</p> <ul style="list-style-type: none"> • Newly enrolled pregnant women data shared with NFP so they can outreach and enroll clients

<p>services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?</p>	<ul style="list-style-type: none"> • WIC and SNAP: working on data sharing agreements with other state agencies to help them engage the EBNE population • Currently a cross-agency effort to create “Master Language” for data sharing between agencies • WIC and Healthy Communities – EPSDT: Share data to outreach EBNE programs at certain sites <p>Healthy Communities, as do most other programs mentioned in this response, has its own database to streamline care coordination and case management workflow across the state and with related social services programs. <i>However, these databases do not connect.</i> This is a real problem. Most commercially available EHRs don’t allow entry for social services a patient is accessing, and none of the independent program databases, like WIC, connect to EHRs. No one gets paid or reimbursed to update databases; it is difficult to get organizational agreements on sharing and updating information because it is unclear where payment will come from to support this time-consuming work. Efforts such as the just-launched AHC Model (with, as mentioned, two awardees in Colorado) might be able to foster the cooperation needed to begin database partnerships, but does not have the funding to sustain it. A model that may have relevant learnings is the Colorado Regional Health Information Organization’s (CORHIO) work on a behavioral health electronic health information exchange (HIE). They aim to tackle many of the issues highlighted in the RFI, including confidentiality/data sharing, provider coordination, and stakeholder engagement.</p>
<p>4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.</p>	<p>Key examples of streamlining eligibility and/or alignments of program requirements come from the ACC’s successful RCCO collaborations:</p> <ul style="list-style-type: none"> • Healthy Communities and RCCO collaboration – developed recommendations for data sharing, sharing best practices, delineating organizational division of labor, and sharing incentive money. • County Office and RCCO collaboration – currently working to develop incentive for county offices to connect kids in social welfare to RCCOs through enrollment and special case conferences; all are involved in case conferences at county offices that are receptive to RCCO involvement. • Public Health and RCCO collaboration – many work with their public health departments to strategically align their maternal and pediatric care coordination programs to reduce redundancy and duplication of services. • Also of note - The Colorado Center on Law & Policy and Hunger Free Colorado developed the Human Services Gap Map (www.gapmap.org) to increase transparency and better align human services programs in Colorado. The online interactive website provides county level data on enrollment, allocations and expenditures for WIC, SNAP, CCCAP, Colorado Works and Medicaid. The Gap Map was first released in August 2016. They are working on updating the data for a new release in late spring or early summer.

<p>5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?</p>	<p>With food assistance programs like WIC, SNAP and free and reduced lunch programs, schools are doing an increasingly better job identifying children using these programs who may be EBNE for Medicaid or CHP+. Exploring the reverse is worthwhile for a relatively quick, high impact.</p>
<p>6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?</p>	<p>Obstacles are a lack of knowledge of resources. Communication and having the resources to collaborate between organizations will ensure projects are effective. This includes having updated information; knowing where to go to get the most correct and up-to-date information; knowing where to direct members to provide them with direct answers; and having the ability to share information between organizations. Such obstacles are due in part to the lack of funding to identify the resources and maintain relationships. Without the availability of a sufficiently trained workforce, especially around Early Childhood Mental Health (ECMH), who can do the connecting, be in an office or service site and help screen, these obstacles to integrating services will remain. More flexible funding arrangements could help solve this. So long as funding is siloed, it will be difficult to maintain interest in overcoming obstacles to integrating services. Braiding/blending funding would mitigate this, giving organizations an incentive to talk to each other and figure out how to share funding and resources.</p> <p>Obstacles include payment methods that do not support integration and use of non-medical (social) services. The issues arising from an integrated, managed care model are the following payment issues:</p> <ul style="list-style-type: none"> • Sufficient payment • Lack of ability to bill for discrete behavioral health services during primary care provider (PCP) visits • High cost to keep psychiatric and social work staff on full-time payroll <p>Telehealth services could be one method of circumnavigating some of the overhead costs of keeping psychiatric staff on-site; however, telepsych providers would need to be able to bill discretely for services rendered during those visits. Warm handoffs between behavioral health and case managers could also help with guiding members to other social supports in a real-time fashion.</p>
<p>7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to</p>	<p>We are unable to respond to this question, as Health First Colorado is not really a MCO. Health First Colorado's primary health care program, the ACC, operates under the primary care case management entity (PCCM entity) authority. The PCCMs, referred to as RCCOs, have responsibility for the full spectrum of the Medicaid population, including children and adults. Colorado's ACC could be used to inform this model concept.</p>

<p>inform this model concept? What challenges/barriers have managed care entities encountered?</p>	
<p>8. What role do models of care such as ACOs play in the pediatric environment?</p> <p>a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?</p> <p>b. How are pediatric ACOs the same or different from adult-focused ACOs?</p> <p>c. What opportunities do pediatric ACOs have for integration with community and health services systems?</p> <p>d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?</p>	<p>Colorado does not have pediatric-specific ACOs. Health First Colorado's primary health care program, the ACC, operates under the primary care case management entity (PCCM entity) authority. The PCCMs, referred to as RCCOs have responsibility for the full spectrum of the Medicaid population, including children and adults. RCCOs contract with primary care providers, including pediatric providers, to meet the needs of their patient populations. RCCOs are responsible for providing coordinated care to their enrolled populations, connecting members to medical and non-medical services and supports. Colorado's ACC approach has been to the whole life spectrum; pediatric populations present harder challenges:</p> <ul style="list-style-type: none"> • Cost saving opportunities are not as great, or may be in other areas (health intervention might impact school costs, for example), so can be difficult to bring delivery systems to focus on pediatrics as adults are a bigger cost driver; • Lack of good quality metrics - nationally, there is less experience with validated measures and solid outcomes for pediatrics, so we end up with process measures; • Volume issue for pediatric ACO –there are significant differences in the number of children a practice sees that varies by factors including specialty (family practice vs. pediatrics), FQHC vs. private practice, urban vs. rural, etc. <p>In the ACC pediatric providers contracted with the RCCO receive per-member-per-month payments to provide medical home services and care coordination for their eligible populations. They are also eligible to receive incentive payments for achieving certain health outcomes.</p> <p>These models can provide additional flexibility in terms of funding to support alternative (non-medical) activities.</p> <p>Colorado does not have pediatric-specific ACOs; however, Colorado has pediatric providers participating in the ACC. Pediatric providers can contract with the RCCO to provide care coordination and medical home services to their members. Furthermore, value-based payments are tied to health outcomes; they are standard across the entire population and include a pediatric specific well-child measure.</p> <p>The ACC encourages integration and collaboration with community and health services systems. RCCOs are contractually obligated to connect their Medicaid members to community and social services that are needed to improve health. The RCCOs can support pediatric providers in working towards greater integration with other community-based organizations through practice transformation efforts.</p>

<p>9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?</p>	<p>Colorado recommends the PCCM Entity model because it allows for similar flexibility - this is the managed care authority under which the ACC operates. SIM may also have relevant learnings here, with its focus on payment reform through a lens of behavioral and physical health integration in Colorado.</p>
<p>SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS</p>	
<p>QUESTIONS</p>	
<p>1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? b. What specific age ranges of CMS</p>	<p>The primary population that should be targeted for enrollment in a pediatric integrated care services model based on potential improvement in outcomes and cost savings is children with serious behavioral health issues in or at risk of out of home placement (described in the response to Section 1, Question 1). Research and early pilots that incorporate a “systems of care” approach (coordination across medical, social, and judicial services including coordination of payment and care management) have shown promise by markedly reducing medical expenditure for this population.</p> <p>Additionally, medically complex children such as those enrolled in the state’s 1915 (c) waiver programs (described in the response to Section 1, Question 2) could potentially benefit from the program.</p> <p>Due to intersections with youth corrections, and the foster care system, the age range should reach age 18 at a minimum. The lower bound should not be a specifically defined age; it should rely on qualifying criteria multisystem involvement, and risk assessment.</p> <p>Please note, as mentioned elsewhere in this response, that it would behoove us to think in terms of long-term savings, not just short-term savings. The effect of pediatric interventions might not show up until years later, or in another area related to health outcomes, as in NFP – we know it generates long-term savings, but it accrues to different parts of the system largely outside of health care.</p> <p>All ages should be included in a new model, but expectations on outcomes and savings should reflect age-based realities.</p>

<p>beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?</p>	
<p>2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?</p> <p>a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.</p> <p>b. What specific approaches to attribution and risk-adjustment</p>	<p>The primary obstacles that prevent collaboration are the fragmentation of the regulatory, administrative, and financial constructs across medical and social service systems. Flexibility to diverge from the traditional framework in each of these areas, and to ability blend funding sources would allow for centralized accountability for outcomes and would reduce duplication and waste. The regulatory frameworks that come with each Federal agencies' funds are cumbersome and make collaboration very difficult.</p> <p>We think Colorado could implement the ACC model financing with some wrap dollars for systems of care like models. The ACC already has attribution to regional entities and evolving alternative payment methodologies.</p> <p>One 'new' methodology CMS could consider for other states is a per member per month based block grant funding with adequate funds from multiple Federal agencies for the program. This would hold states accountable for cost containment while allowing the necessary additional flexibility to navigate the disparate regulatory framework of multiple different systems to achieve better outcomes for the children. This would also facilitate blending funding streams to create centralized accountability. With this flexibility, a payment model based on global budgets (client specific capitation) across medical and social services based on client assessed need could be established. Care could then be provided as efficiently as possible and as best suites the clients' needs while maintaining cost containment. Quality and outcomes would need to be monitored closely to ensure perverse incentives typically encountered with capitation are mitigated.</p> <p>Shared savings is not necessary under this financial construct as the funding mechanism provides adequate incentives. Other payment methodologies already exist as state plan options. If enhanced federal funding is available, as much flexibility for which services receive enhanced funding as possible is recommended for the reasons listed above.</p> <p>Both attribution and risk adjustment would vary depending on the payment methodology selected, and the extent to which funding streams can be blended across agencies. The goal of the attribution methodology would be to assign a client to the entity with centralized accountability for coordination/predominance of care. For this population, that could be a physical health provider, mental health provider, or social services provider. It could also be an agency charged with service coordination for the target population, in which case attribution would either be statewide to the entity or regional.</p>

<p>should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?</p> <p>c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.</p> <p>d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.</p>	<p>Risk adjustment for a blended funding stream that includes social services would be extremely challenging. Traditional risk adjustment for medical services does not capture social factors that would predict 1) expected health care costs, 2) case management intensity, or 3) need for social services. Ultimately, any risk adjustment would need to reflect the variance in expected costs across the full scope of services 'at risk'. As the risk adjustment models for children are poor even for medical expenditure, there likely isn't a solution for a program such as this other than individual needs assessment at program entry as a foundation for resource allocation to the accountable entity.</p> <p>Under a client specific global budget, the accountable entity could modify the payment structure to accommodate the variable needs of the service providers.</p> <p>Different payment models seems to invite challenges to integration and coordination.</p>
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<p>3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?</p> <p>a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.</p> <p>b. What factors are essential to the success of this alignment?</p> <p>c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.</p>	<p>The Department agrees with the National Association for Medicaid Directors (NAMD) that CMS could take the following step to work with its federal partners to break down federal silos between health and health-related social support programs:</p> <ul style="list-style-type: none"> • The current federal statutory and regulatory frameworks often prevent state and community partners from pursuing innovations that integrate health and health-related social services for children. Each program is subject to a distinct and complex sets of federal rules and oversight. This often limits how funding streams can be leveraged in a holistic and value-based way. For example, cost neutrality calculations in Medicaid 1115 waivers do not consider cost savings that they create for other federal funding streams. This, in turn, prevents states from testing new integrated service delivery initiative that are cost-effective for the federal government. • These federal silos also make it difficult for data to flow between health and health-related programs. The exchange of this information is essential to integrated care models. For example, the education system and health care programs operate under distinct privacy requirements. This prevents data from flowing between schools and pediatricians who are seeking to deliver integrated care. • We encourage CMS to work with its federal partners – such as HRSA, SAMHSA, DOE, DOJ, HUD and others – to improve data sharing and address the siloed program structures that prevent integrated care for children. <p>It is common to see goals and priorities vary among different funding streams. Funders often target specific pediatric sub-populations, creating a narrow scope that makes it difficult to align with a broader pediatric population. For example, EPSDT covers children 0-21, Colorado’s ACC program currently incentivizes well-child checks for children ages 3-9 and maternal depression screening, while county offices are more narrowly focused on children involved in child welfare system.</p> <p>The Department also agrees with the NAMD’s recommendations to align pediatric quality measures across Medicaid and other health care programs:</p> <p>Medicaid Directors regularly identify the lack of alignment across quality measure sets in Medicaid, and in other programs where Medicaid is a major payer, as a major barrier to health system transformation. For example, there are substantial differences between the Medicaid meaningful use incentive program measures and the Medicaid child core set. This type of misalignment across federal measure sets prevents states, providers, and managed care organizations from working towards common quality goals for children. It also creates a significant administrative burden on providers.</p> <p>Factors essential to the success of this alignment:</p> <ul style="list-style-type: none"> • Shared buy-in and alignment of goals/priorities are essential • Clear roles and responsibilities for front-line staff involved in cross-system collaboration
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	<p>Various eligibility systems often do not communicate with one another, which hinders collaboration. Also, access to timely data can be an issue as Medicaid data sources are claims based. Data sharing agreements would ensure proper data privacy, a big lift in cross-system collaboration.</p>
<p>4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?</p>	<p>Under a budget with blended funding, different entities could contribute to the blended funding stream allowing for a focus on care delivery and coordination rather than ensuring billable units of service and disparate regulatory requirements. Provider incentives could be based on savings, which would foster cross-system collaboration and would reduce cost shifting (Ex - reducing social services and drive up medical costs).</p>
<p>5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?</p> <p>a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?</p> <p>b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?</p> <p>c. How could the Health Home model be further adapted to better meet</p>	<p>Care coordination appropriate to a patient's complexity of needs is likely to be of benefit in any new integrated service delivery model. For example, Medicare Chronic Care Management (CCM) services are seen as a critical component of primary care that contributes to better health and care for individuals. As of January 2017, providers may bill for CCM or Complex CCM, which includes comprehensive care plans that are person-centered, based on a physical, mental, cognitive, psychosocial, functional, and environmental (re)assessment, and an inventory of resources (a comprehensive plan of care for all health issues, with particular focus on the chronic conditions being managed), and are able to be shared electronically with the patient and their multiple providers, with regulations and guidance around structured recording of patient health information using certified EHRs.</p> <p>Paraprofessional provider types that were given authority at the federal level would improve access in rural areas and could be appropriate for lower level preventive services that are especially appropriate in home-based pediatric populations. Being able to pay for lay home visitors, paraprofessionals, or care managers would be helpful (and more cost effective than using nurses for these services), as would the ability to pay for linking patients with needed social services (early intervention programs, home visitation, etc).</p> <p>As previously discussed, the Colorado Opportunity Project emphasizes the necessity of including services beyond Medicaid mandatory benefits to address multiple aspects of a children and families' needs. Linkages of patients with services in the community like nurse home visits, Parents as Teachers, other home visit models, food assistance beyond WIC, behavioral health services, etc., are crucial, as is the emphasis on identifying evidence-based interventions at all life stages from family formation onwards.</p> <p>In Colorado, American Indians living in tribal lands face many of the same issues as other Medicaid members in rural and underserved areas, namely of access to culturally appropriate services, especially to specialty services, and connections to community-based, health-related services such as housing, food safety, and transportation. Additionally, data connection</p>

<p>the needs of a pediatric population? Are there particular “bundles” of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?</p>	<p>needs are even more acute, including Indian Health Services, tribal and urban Indian clinics, besides other provider types (private practices, hospital systems, FQHCs, Rural Health Clinics, etc.).</p> <p>Better alignment between systems and their funding (all with the understanding that they impact health) will promote these services and supports:</p> <ul style="list-style-type: none"> • Home visit models • Trauma informed care • Full integration systems that acknowledge the social determinants of health <p>An overall model of either an ACC for children or a clearly defined program within the ACC that focused on children would still need operate in the context of family. A key component would be screening, early identification and treatment (EPSDT fully implemented) and a process to identify the correct level of care coordination across health and other social service programs with wraparound being used for the highest need children such as foster care. Clear health and behavioral health outcomes shared across CDHS and the Department would be a strong part of the program.</p> <p>Savings would come from a reduction in care coordination costs; early intervention preventing more serious issues in the future; reduction in multiple assessments; and overall reductions in out of home care and psychotropic medications.</p> <p>Other ideas include:</p> <ul style="list-style-type: none"> • Colorado has adopted a 2GEN approach that recognizes the inherent mother child dyad as a single entity but the operations of treating the dyad as one are limited. • Limitations on MIECHV dollars for services that are split between home and primary care settings (e.g., Healthy Steps) undermines the value of integrated and wraparound services. • “Bundles” of services appropriate for a pediatric population: <ul style="list-style-type: none"> ○ Behavioral and physical health ○ Preventive services ○ Dental ○ Family formation (family planning, prenatal care, labor/delivery) • The home health model needs to clearly include the pediatric population and its verbiage. A pediatric coordination of care code or requirement could be built in, similar to the Medicare population. • Trauma informed care assessments should be bundled into mental health screenings.
<p>6. How might CMS, states and tribes, and health care and health-related social service providers calculate</p>	<p>Typically, calculation of program savings relies on development of a counterfactual model to which actual expenditure is compared. This strategy would be applicable for the integrated pediatric service model as well. To evaluate the Medicare, Medicaid and CHIP expenditures, a combined model that incorporates multiple payer sources would be needed. The model utilized for the duals demonstration is a recent example.</p>

<p>the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?</p>	<p>Where these models fall short is that they do not account for indirect impacts, and typically only focus on a single year of savings rather than accounting for the long-term change in health trajectory that would be even more likely with the population served by the integrated pediatric services model.</p>
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SECTION IV: PEDIATRIC MEASURES	
QUESTIONS	
<p>1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.</p>	<p>The Colorado Opportunity Project is mentioned several times throughout this RFI response, because it establishes a common set of population health, data-driven indicators to define wellness in Colorado, so government agencies, non-profit, private and community initiatives can work toward the same goals. The indicators are common milestones that are important to success in life, like being born at a healthy weight, preventing unintended pregnancies, graduating from high school, access to affordable housing. The Project then works across State Departments to align new and existing evidence-based interventions around the State that drive outcomes in one or more indicator to serve as a metric for success throughout each life state. Here is a fuller explanation of the life stage indicator-based outcomes measures which the Colorado Opportunity Project intends to use; the Project is addressing family formation, and early and middle childhood first:</p> <p>Family Formation: (conception -birth)</p> <ul style="list-style-type: none"> • rate of low birthweight • household income • maternal depression • single or dual caregiver/parent household • intendedness of pregnancy • early screening and intervention <p>Early Childhood: (0-5)</p> <ul style="list-style-type: none"> • social emotional health • school readiness • food security • early screening and intervention <p>Middle Childhood: (6-11)</p> <ul style="list-style-type: none"> • standardized math scores • standardized reading scores • social emotional health <p>Adolescence: (12-17)</p> <ul style="list-style-type: none"> • high school graduation • violent arrest and property arrest rates • teen parent status • social emotional health <p>Transition to adulthood: (18-29)</p> <ul style="list-style-type: none"> • employment status/workforce opportunities • household income

	<ul style="list-style-type: none"> • post-secondary education • social emotional health
<p>2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.</p>	<p>NAMD restates the need to align pediatric quality measures across Medicaid and other health care programs: Medicaid Directors regularly identify the lack of alignment across quality measure sets in Medicaid, and in other programs where Medicaid is a major payer, as a major barrier to health system transformation. For example, there are substantial differences between the Medicaid meaningful use incentive program measures and the Medicaid child core set. This type of misalignment across federal measure sets prevents states, providers, and managed care organizations from working towards common quality goals for children. It also creates a significant administrative burden on providers.</p> <p>For successfully collecting data elements and providing payment incentives, we need:</p> <ul style="list-style-type: none"> • Ability to track the child across all medical and social programs on a long-term basis through the age of 20 and beyond – this allows states to look at the whole child and to <i>track long term outcomes</i>; • Effective outcome based quality care coordination at both federal and State level (to determine which programs work better and which ones do not); • FQHC performance measures can be challenging because all data may not be captured in encounters-based payment model if coding is not included. • Integrated physical and behavioral health vs nonintegrated physical and behavioral health quality of care outcome performance measures – what level of integrated care is cost effective yet works for the families and providers?

The chart below shows a selection of data elements that could be used for Pay for Performance:					
Measure	Near-Term Health & Well-Being	Long-Term Outcomes	Currently Collected?	Data Elements / How Collected	Systems
Effective outcome based quality care coordination at the State and Federal Level	Y	Y	N		
Link of children from medical home to other services	Y	Y	N		
Developmental Screening	Y	Y	Y	96110 / Claims Data	
Children with Developmental Condition - Tracking referrals to BH and Early Intervention	Y	Y	Y	ABCD & Early Intervention	
Tracking across all medical and social program through the age of 20 (and beyond)	Y	Y	N		
Foster Care Children Receiveing EPSDT Services (Dental, Wellness, BH)	Y	Y	Y	EPSDT 416	
BH Providers - ensuring Physical Health and Oral Health are accessed for children on prescribed medications	Y	Y	N		
Adolescent High Risk Behavior Assessment (Per Bright Futures Recommendations)	Y	Y	Y	96127 / Claims Data	
Coordination of Care - Hospital to Community Transition	Y	Y	N		
Coordination of Care - Identifying and providing appropriate referrals and access to follow-up care	Y	Y	Y	EPSDT 416	
Coordination of Care - Appropriate transition from PCP to SPC	Y	Y	N		
Coordination of Care - Children having trouble in securing referral (exclude children 0-17 who did not need a referral)	Y	Y	Y	EPSDT Program	As requested
Coordination of Care - Education, Access, and Appropriate Use of Benefits	Y	Y	N		
SECTION V: OTHER COMMENTS					
QUESTIONS					
1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve	<p>The federal government needs to collaborate with other federal agencies in working to provide clear guidance of how their programs can be blended and braided to provide the best possible outcomes for children and families—reduce duplication of case management and care coordination and to assure someone has the final authority—hierarchy of programs.</p> <p>Again, data issues are a significant barrier, where federal guidance and technical assistance could have a high impact.</p>				

better health outcomes for children and youth?	
<p>2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.</p>	<p>Treating children separately from their caretakers limits our ability to serve children effectively. The impact that a parents' educational attainment, economic stability, and mental and physical health have on a child's development and trajectory is well-documented; reciprocally, when a child is thriving, he or she has a positive impact on the parent. To truly improve outcomes for children and youth, delivery and payment models should incorporate a 2Gen approach and consider not only the health-related social services for pediatric populations, but for their parents/adult caregivers as well. Simply incentivizing states to build claims/ID systems that link caretakers and children is not sufficient, and could have big repercussions for tracking quality of care and care coordination. The systems level change is large enough that federal authority and technical assistance would be needed.</p> <p>This is also significant for children of undocumented mothers. These mothers lose eligibility after delivery but their children are citizens, are eligible for services, and their health depends on the ability of their caretakers to meet their needs. Creating ways for those undocumented parents to access services that serve the future health of their children would be important. States need more guidance and support around dyadic treatment for children that involve treating a parent, who may not be Medicaid eligible, but who is imperative to the child's development.</p> <p>The issues Colorado would most like to see addressed are more flexible financing; agreement on adequate and appropriate short- and long-term pediatric outcomes measures aligned across programs; data sharing rules and guidance; and addressing family, not just child, needs. Regional and local collaboration is needed with a strong commitment and alignment across state agencies.</p>

Columbus Regional Medical Group

It would be helpful if the following things could occur:

1. Payment for chronic care management and transitional care management codes under Medicaid similar to what is offered for Medicare
2. Increased reimbursement or incentives for practices that are Patient centered medical homes
3. Grants/support for programs like Centering Parenting where cohorts of patients come in together to receive care, education and share stories
4. Programs similar to MSSP for ACO's to help coordinate care for pediatric patients and allow practices to share in the savings this generates
5. Programs similar to Medicare annual wellness visit for pediatric patients ages 3 years and up that could occur in the school settings to close gaps on preventive visits and screenings for school aged children
6. Support for programs like Safe Sleep that have proven to decrease morbidity and mortality rates
7. Grants/support for Reach Out and Read programs or similar programs in every pediatric practice to aid in literacy efforts
8. Creation/support of programs that can certify general pediatricians who do a lot of behavioral health care to take on some of the burden of behavioral health management since there is such a shortage
9. Grants/support for education/implementation of community initiatives like the Mobile Integrated Health Community Paramedicine (MIH-CP) program

Connecticut Children's Medical Center

On behalf of the Connecticut Children's Office for Community Child Health and our Help Me Grow National Center, I am pleased to submit the attached response to the CMMI Request for Information on Pediatric Alternative Payment Model Concepts. For your convenience, I have attached both a word document and pdf.

Thank you for the opportunity to share our thoughts.

Please let me know if we may provide any further information.

Sincerely,



Connecticut
Children's Medical C

Response to Center for Medicare and Medicaid Innovation Request for Information (RFI) on Pediatric Alternative Payment Model Concepts

Comments Prepared by the Connecticut Children's Medical Center Office for Community Child Health and The *Help Me Grow* National Center

NAME OF ORGANIZATION: Connecticut Children's Medical Center Office for Community Child Health and *Help Me Grow* National Center

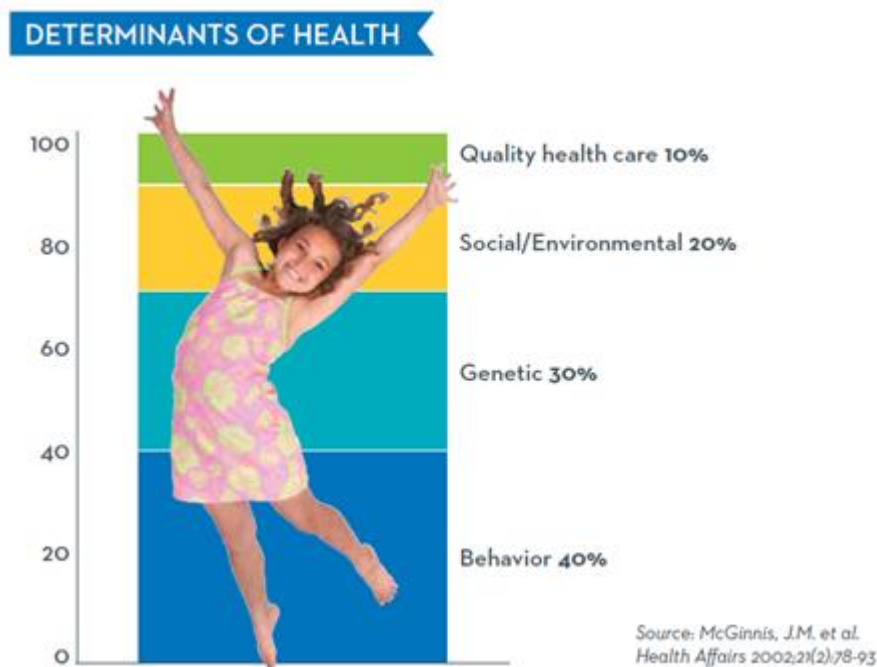
CONTACT PERSON: Paul H. Dworkin, MD, Executive Vice President for Community Child Health, Connecticut Children's Medical Center; Professor of Pediatrics, University of Connecticut School of Medicine

Connecticut Children's Office for Community Child Health (OCCH) and the *Help Me Grow* National Center, a program of OCCH, are pleased to provide comment in response to the Center for Medicare and Medicaid Innovation Request for Information (RFI) on Pediatric Alternative Payment Model Concepts. OCCH oversees a variety of community-oriented programs that address a wide range of factors that influence children's healthy development. The programs of OCCH, including the *Help Me Grow* National Center, focus on developing strategies to foster health promotion and the prevention of negative outcomes, which aligns with the core concepts of accountable care. The *Help Me Grow* National Center provides technical assistance and support to a network of over 28 affiliate states across the country that are working to build a *Help Me Grow* system that is intended to advance children's optimal health and development. The *Help Me Grow* model aims to promote cross-sector collaboration in order to build efficient and effective systems. We have organized our comments according to major themes identified within the RFI and have responded to only those questions for which our experiences are relevant. We are pleased to expand on any information that may be considered useful.

BACKGROUND

We applaud the development of a new pediatric health care payment and service delivery model. While we acknowledge the relatively modest potential for scorable savings within the pediatric health care arena, especially as compared to adults (e.g., seniors), the potential for long-term savings is great. Furthermore, the benefits of investing in a new model of pediatric service delivery that prioritizes the optimal, healthy development of vulnerable children yield returns on investment in multiple sectors,

including child health, behavioral health, special education, child welfare, and the corrections system. From a societal perspective, such investments are critical to ensure long-term workforce development and even national security. While quality health care is a key determinant of children's healthy development, the critical contributions of social/environmental, genetic, and behavioral factors demand a comprehensive, cross-sector approach.



We also applaud your call for models of state-driven integration of health care and health-related social services. Our experience partnering with numerous Connecticut state agencies (e.g., Department of Public Health, Department of Social Services [i.e., the administrator for Connecticut's Medicaid program], Department of Children and Families, the Office of Early Childhood) in strengthening both the efficacy and cost effectiveness of such processes as health promotion, early detection, care coordination, and access to pediatric care reinforces the feasibility and the benefits of such collaboration. For example, the bringing together of care coordinators from diverse sectors enables synergy and collaboration, more effective problem solving for families, and fiscal efficiencies through minimizing duplicative efforts. Furthermore, our experiences in providing technical assistance in building *Help Me Grow* systems in more than 28 ("red" and "blue") states illustrate the non-partisan, universal support for strengthening families to promote their children's optimal healthy development.

We also recognize that much of the work to innovate and diffuse effective approaches occurs at the practice and community level (i.e., is "place-based") and requires investment at that level with champions who can advance practice among their colleagues. We are particularly mindful of the importance of system building to support such community-based initiatives to achieve both scale and sustainability. We also agree with your expansive focus on those at risk for adverse outcomes, as opposed to an exclusive focus on children with complex medical conditions, as interventions for

vulnerable children are noteworthy for their community availability and their efficacy. At present, our current system infrastructure has too narrowly focused on children with special and diagnosable health care needs, without expanding to address the needs of those children and youth who are vulnerable and at-risk, and for whom early detection and intervention is key to ensuring positive outcomes in the short- and long-term. In such a system, children with mild and moderate concerns are often served by those programs and supports designed for children with more complex needs, diverting scarce resources and shifting the locus of care to a more expensive setting than needed. In contrast, linkage of families to parenting programs and neighborhood resource centers addresses behavioral concerns before they escalate to more challenging behavioral disorders.

We concur with your focus on comprehensive, universal screening as a core component of an integrated service delivery model. However, we are mindful of the limitations of an isolated screening strategy that is not implemented in the context of a comprehensive approach to early detection, referral, and linkage to programs and services. In our experience with *Help Me Grow*, with its focus on the early detection of vulnerable children at risk for adverse developmental and behavioral outcomes, we place screening within the context of the comprehensive practice of developmental surveillance and screening and place such early detection activities within the context of a comprehensive, integrated process of developmental promotion, early detection, referral and linkage (Dworkin PH. J Dev Behav Pediatr 2015; 36:637–638. DOI: 10.1097/DBP.0000000000000216). Our experience is that early detection (i.e., screening) is unlikely to be useful without ensuring facilitation of referral and linkage to assessment and/or intervention.

HELP ME GROW®

Help Me Grow (HMG) is defined by the integration and cohesion of four core components:

1. Child Health Care Provider Outreach (i.e., education on developmental promotion, detection, intervention)
2. Centralized Access Point (i.e., facilitated linkage to community-based programs/services)
3. Family and Community Outreach (i.e., advocacy and education on developmental promotion, early identification, intervention)
4. Data Collection (i.e., identification of gaps/capacity issues to inform advocacy, document impact)

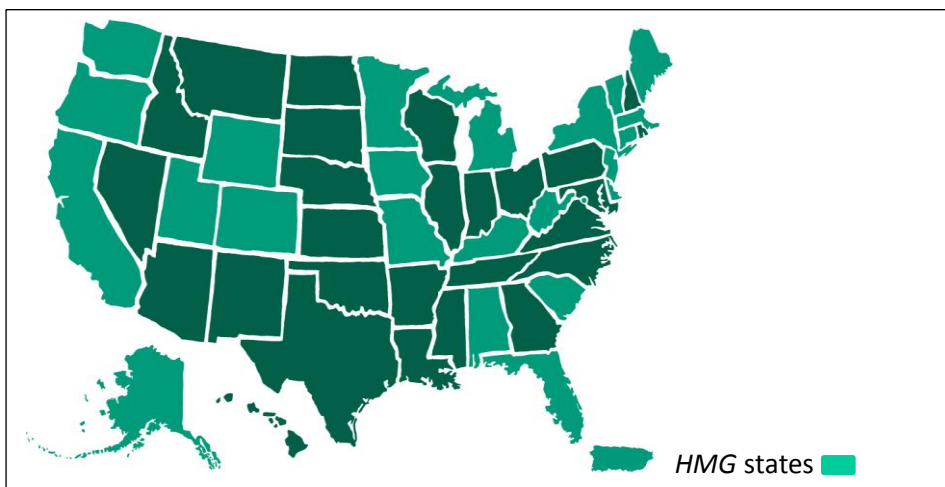
HMG supports community-based child health providers and multi-sector early childhood service providers by enhancing their effective developmental promotion and early detection activities for all children and families. This support is provided through educating and motivating providers to conduct systematic surveillance and screening of young children, as well as providing community-based providers and families with access to a centralized access point to serve as a care coordination arm for busy pediatric primary care practices and multi-sector early childhood service providers. HMG leverages community- and family-based support services to link children to the most appropriate services and, in so doing, offers a child health care model that has the potential to maximize cost savings. ***HMG*** was recently acknowledged in a joint policy statement by the US Departments of Health and Human Services and Education. The policy statement encouraged all states to adopt a centralized intake and referral system, such as ***HMG***, to ensure families have timely access to appropriate services.

Connecticut's major health care reform efforts, which include the Medicaid Person Centered Medical Home program (PCMH) and the State Innovation Model (SIM), have embraced our pediatric strategies, programs, and innovations and have recognized their contributions to cross-sector collaboration and integrated service delivery. CMS recently approved Connecticut's state plan amendment for a shared savings program within Medicaid. This initiative, and its Community and Clinical Integration Program (CCIP), recognize the support that the models discussed below, which are largely built on a primary care platform, make to the State's health care reform efforts.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND RELATED SOCIAL SERVICE DELIVERY MODEL

1. Our experience to date within Connecticut and across the 28 states of the *Help Me Grow* affiliate network demonstrates that states, regardless of their political orientation, have strong interest in a child- and youth-focused care delivery model that combines and coordinates health care and health-related social services. We have engaged in numerous discussions with many states and national initiatives (e.g., the Nemours/Aspen Institute Defining an Accountable Community for Health for Children and Families initiative; All Children Thrive [ACT], Child and Family Policy Center's Health Equity CoIIN, Campaign for Grade Level Reading) that have all emphasized the desirability of a new child health service delivery model that prioritizes the optimal, healthy development of vulnerable children. To date, the daunting requirements of significant scorable savings and the formidable demand for scaling across a population have impeded pediatric efforts in this arena. Calls for child health specific service delivery models would, we believe, be met with enthusiasm and creativity. Many multi-sector, early childhood initiatives have acknowledged the role of health promotion and prevention in achieving their systemic outcomes, such as school readiness, child welfare, truancy prevention, and 3rd grade reading achievement.

Our experience working with a large and growing network of *HMG* affiliate states suggests that states readily benefit from ongoing technical assistance with respect to new or innovative strategies or approaches. In particular, our state affiliates receive initial and ongoing technical assistance from our National Center with respect to introducing, scaling, and evaluating the *HMG* model. In addition, states benefit from participating in a Community of Practice that allows them to learn from other states undergoing similar reform in their early childhood systems. Based on our experience, we recommend that a technical assistance model that, at a minimum, allows for shared learning across a community of similarly engaged states or communities be offered as part of future care delivery redesign.



2. Many evidence-based innovations are available for embedding with such a model including, but not limited to, *Help Me Grow*, the Care Coordination Collaborative Model, Mid-Level Developmental Assessment, Co-Management, as well as a number of specific programs that engage the many sectors so critical to children's healthy development (i.e., healthy homes, safe neighborhoods, food and nutrition, early care and education, family support [e.g., home visiting], etc.). The policy framework developed by the Learning Collaborative on Health Equity and Young Children offers brief descriptions of a number of programmatic initiatives, including *Help Me Grow*, that do this specifically for young children and their families

(https://www.cfpciowa.org/documents/filelibrary/issues/health_equity/KitchenCabinetPolicyStatementAugust_0A57AC53B7DCC.pdf).

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

1. We agree that varying eligibility criteria and program requirements can be challenging for children, youth, families and providers to manage, resulting in both service gaps and implementation challenges. We are particularly mindful of the challenges of different case managers for each program, changes in program capacity and focus, and the extent to which families may be overwhelmed when multiple care coordinators seek to simultaneously provide assistance. In our experience with *Help Me Grow*, we have demonstrated the effectiveness of a centralized, shared resource, care coordination utility (e.g., Connecticut's Child Development Infoline) that can successfully link children and their families to community-based programs and services. The central utility is particularly adept at ensuring that families are effectively linked to geographically- and culturally-appropriate services that address their priorities and meet their needs. By lowering barriers to referral, *Help Me Grow* successfully links more than 80% of referred families to programs and services (Hughes M, et al. *Infants Young Child* 2016; 29(2): 114–127. DOI: 10.1097/IYC.0000000000000059). Effective community, child health provider, and family outreach to ensure awareness of *HMG* has reduced common barriers to referral, such as lack of knowledge of available programs and services and/or lack of staffing to support care coordination activities of community-based, primary care practices. Among *HMG* affiliates, the central portal of entry serves to connect children and their families to the wide array of developmental, behavioral, and health-related services available throughout the state, including Part C early intervention, Part B preschool special education, Title V services for children with special healthcare needs, and a diverse array of community-based programs and services for vulnerable children and their families. Such consolidation of care coordination capacity is facilitated by the blending of administrative and financial resources across agencies and sectors, achieving efficiencies and economies of scale. The centralized access point for community early childhood services is embedded within Connecticut's shared savings and Community and Clinical Integration Program (CCIP) initiatives. This ensures that participating primary care networks do not duplicate efforts to develop and maintain inventories of community services, but use the resource supported by existing service systems (i.e., Title V Block grant, Part C from IDEA under the federal Department of Education, and the Connecticut state budget).

We also find that the type of care coordination we provide (i.e., from a family-centric and holistic perspective of identifying and responding to what families see as their needs and opportunities) is, for most families we serve, the only care coordination they experience that engages them as partners. Even

in the relatively uncommon instances in which there are other engaged care coordinators or case managers, they typically operate from a categorical perspective that is limited in its focus upon specific presenting issues. Particularly with very young children, who are not yet in school and are not experiencing extreme conditions, there are generally few points of contact for screening and care coordination beyond the child health provider's office. For example, home visiting, Early Head Start, and Part C serve only a small fraction of young children, and less than one in five very young children (i.e., under 3 years) is in a formal child care setting.

Service integration is thus occurring with moderate frequency across early childhood systems. Our experiences, both within Connecticut and in other states' system building efforts, suggest that there are strengths and opportunities with respect to service integration. For example, *HMG* has established strong alignment with related federal initiatives such as the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program. Many *HMG* affiliates have leveraged MIECHV dollars to support their development of a central utility access point and robust community outreach efforts, both core components of *HMG* and essential for sustaining efficient home visiting efforts. Similarly, there is alignment between the work of State Implementation Grant grantees through the Health Resources and Services Administration and *HMG*. The State Implementation Grant focuses on developing a shared resource which, for a *HMG* affiliate, can be achieved through their implementation of a single portal of entry to community-based programs and services and *HMG* care coordination via the central access point.

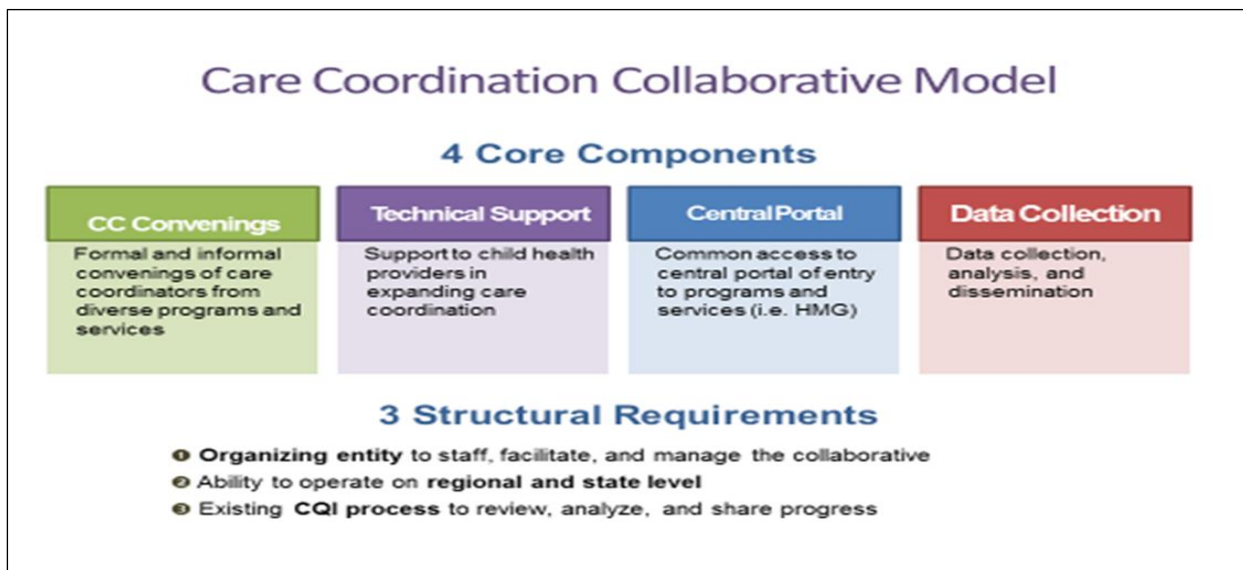
2. Recognizing the need to engage a broad array of service providers from multiple sectors, we have partnered with Connecticut's Department of Public Health to use Title V funds to scale the Care Coordination Collaborative Model (the Collaborative). Our Connecticut Children's Center for Care Coordination serves as the backbone organization for the Collaborative.

THE CARE COORDINATION COLLABORATIVE MODEL

The **Care Coordination Collaborative Model** (the **Collaborative**) was established as a vehicle to improve communication among diverse programs (e.g., child health, early care and education, family support, food and nutrition, healthy homes, etc.) providing care coordination to all children and families, to increase the efficiency and effectiveness of care coordination within a comprehensive child health system, and to serve as a resource for medical homes seeking community-based services for their families. The goal is to "coordinate the care coordinators" and ensure that children and families are connected to services across multiple sectors as effectively and efficiently as possible.

A recent survey of participants found more than 90 percent planned to use information from the meetings in their future work. Also, participants reported their knowledge of eligible services, their ability to explain the value of such services, and their ability to make referrals tripled. Furthermore, success of the model in Connecticut offers the experience and expertise needed to scale the model across the *HMG* network of affiliates, thus diffusing this promising model of service integration and

alignment to multiple states. Similar to Connecticut, other affiliate sites have implemented the Collaborative model with positive results with respect to cross-sector collaboration and synergy.

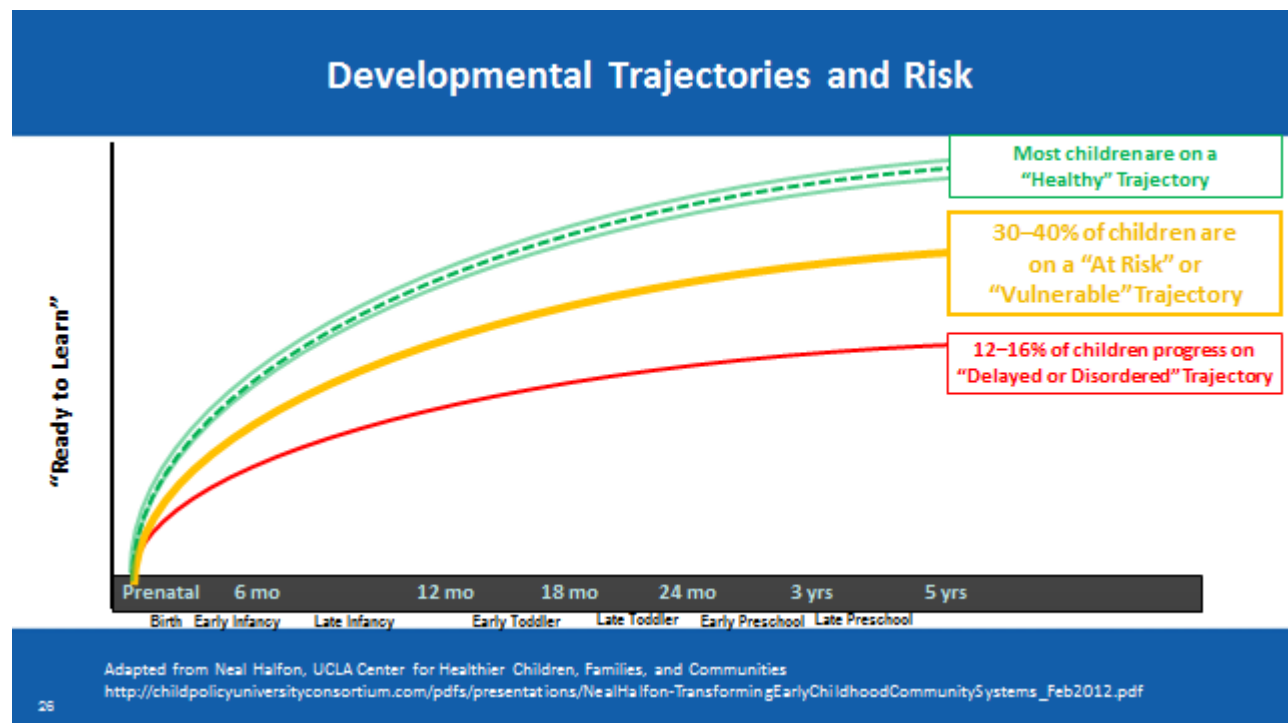


In addition to supporting the development of the Collaborative, our Connecticut Children's Center for Care Coordination (the Center) offers community-based child health practices the opportunity to increase their care coordination capacity through education, training, care coordinator support for children with complex needs, and access to the regional care coordination collaborative. This resource for primary care sites also supports their participation in PCMH, Medicaid shared savings, and CCIP initiatives, all of which require extensive care coordination that extends to community services.

3. We have recognized the need to integrate services across Medicaid-enrolled providers and social service providers. We have facilitated such integration through providing access to our medical center EHR for the Center for Care Coordination's staff and leadership. This build out to enable care coordinators to access and enter information within the medical record required training and adherence to regulatory protocols (i.e., HIPAA), but brought efficiency and improved quality of care coordination for children and families using Connecticut Children's inpatient and subspecialty services.

4. As noted above, Title V funding has been used to expand the capacity of our regional centers for care coordination from an exclusive focus on children with special health care needs to potentially addressing the needs of all children and families, especially those vulnerable and at increased risk for adverse outcomes. The Title V supported Center for Care Coordination has also targeted populations with specific needs. For example, it has implemented an enhanced care coordination model to address the needs of children admitted to the emergency department for acute behavioral health issues. This project demonstrates how this level of support can potentially achieve cost savings by impacting length of stay in the ED and the ability to more efficiently render appropriate dispositions.

5. As also noted above, we believe that the greatest potential for improved outcomes and/or savings is associated with targeting vulnerable children at risk for adverse developmental, behavioral, and medical problems but are not yet manifesting delays, diseases, and disorders. We base this belief on research documenting the efficacy and availability of such interventions (Halfon N, et al. *Matern Child Health J.* 2014; 18(2): 344–365). Again, there are few public programs for children in the first years of life that address this population—in the birth to three years, home visiting, Early Head Start, and family resource programs do -- but, in most states, they serve only a very small fraction of vulnerable children. Subsequently, a systemic response that targets this population and affords communities and child health providers the opportunity to promote healthy development is a major priority for child health care reform.



(Based on Dworkin, PH and Courtesy of CDC Public Health Grand Rounds)

9. In our experience, the implementation of a central utility, shared resource model of care coordination can improve the quality and reduce the cost of care for the pediatric population. For example, our *Help Me Grow* model, developed in Connecticut and now being replicated in 28 states, has shown cost savings associated with "demedicalizing" behavioral concerns and shifting referrals from pediatric subspecialists (e.g., developmental-behavioral pediatricians, neurologists) to community-based programs and services (e.g., parenting programs, family resource centers) (see http://helpmegrownational.org/includes/research/PolicyBrief_FINAL_31MAY2012.pdf). An analysis of *HMG* in one community found that among roughly 2,000 callers, approximately 10% were able to be appropriately diverted from costly tertiary services to community-based interventions, resulting in an anticipated savings of approximately \$500,000. With greater utilization of *HMG* in a community and scaled across the growing network of affiliate states, the *HMG* model offers the capacity to generate

significant cost savings. A second model of relevance is the previously described Care Coordination Collaborative Model. This model brings together care coordinators from across diverse sectors to regularly convene, to jointly problem-solve, to promote “warm” hand offs, and to expand the care coordination capacity available to child health providers and their practices.

We have also expanded the capacity of primary care providers to address common problems (e.g., headaches, obesity, food allergy, anxiety/depression) often deferred to subspecialists through the development of referral guidelines, protocols, and expedited access for real-time subspecialty consultation and support. The Co-Management model preserves the capacity of subspecialists for those problems that truly warrant their level of care. Yet, in the current infrastructure, the subspecialists who lend their expertise and guidance and primary care providers who expand their capacity to manage conditions traditionally referred for subspecialty care do not experience any cost benefit to doing so. Future payment models focused on rewarding maximization of preventive services, as well as seeking to shift the locus of care to the right provider, in the right setting, at the right time, will greatly shift the cost curve for all patients. A model such as Co-Management has the capacity to be scaled across multiple community child health systems, multiplying the potential for optimal outcomes at the lowest possible costs.

CO-MANAGEMENT MODEL

Co-Management arms primary care providers (PCPs) with the technology and tools to contribute to population health, improve quality and access for patients, and bring efficiency to the health care system. Development of algorithms and provider- and family-centered tools for primary care implementation is based on current evidence, input from PCPs, and subspecialty consensus supporting increased collaboration. Because the model targets high volume, lower acuity and complexity conditions in subspecialty areas with long wait times, scalability of **Co-Management** can improve health outcomes by enabling timely access to care and reducing barriers for families and children.

In addition to Co-Management, the design, evaluation, and implementation of the Mid-Level Developmental Assessment Model provides vulnerable children with an efficient assessment that is sufficient to inform referral and linkage of such children to community-based programs and services, thereby preserving tertiary-level developmental assessment capacity for children with delays and disorders more likely to meet the typically rigorous eligibility criteria for early intervention.

MID-LEVEL DEVELOPMENTAL ASSESSMENT MODEL

Mid-Level Developmental Assessment (MLDA) partners with community- based social service and behavioral health providers to provide developmental assessment services that are beyond the mandatory Medicaid services. By leveraging spheres of influence, reimbursement , and practice level expertise, an efficient and cost-saving assessment model can connect families with young children to the community-based services that support vulnerable children’s healthy development.

These models are embedded within Connecticut's health reform efforts. To ensure successful and meaningful implementation, fidelity to the models is strengthened by technical assistance which promotes adherence to each model's core components and structural requirements. Primary care sites and accountable care organizations work collaboratively with community services and publicly-funded evaluation and intervention programs to improve the primary care/subspecialty interface. The Medicaid shared savings program and CCIP encourage primary care sites to use Care Coordination Collaboratives in their regions, as well as Child Development Infoline and *Help Me Grow* to connect children and families to community-based services. These models successfully address the barriers confronting practices when attempting to assist families to successfully access a bewildering and constantly evolving array of community-based programs and services, as well as strengthen the role of the practice as a key component within a place-based system of care, the health neighborhood. Such supports are particularly important in underserved rural and urban centers. Connecticut's SIM initiative also funds expansion of e-consult support and co-management protocols to participating ACOs to expand the capacity of primary care providers and ensure availability and efficiency of the pediatric subspecialty referral process.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

The general concept of combining and coordinating funding is perhaps best exemplified by the blending of administrative and financial resources of four Connecticut state agencies in support of Child Development Infoline (CDI) as a central portal of entry for developmental, behavioral, and health services. CDI serves as the portal of entry for the State's Part C Early Intervention Services (Office of Early Childhood), Part B Preschool Special Education Services (Department of Education), Title V Children with Special Healthcare Needs (Department of Public Health), *Help Me Grow* (Children's Trust Fund/OEC), and is a specialized call line of Connecticut's United Way/211.

1. While children with complex medical conditions offer the greatest opportunity for short-term cost savings, we believe that the greatest potential for improved outcomes and/or savings is associated with targeting vulnerable children who are at risk for adverse developmental, behavioral, and medical problems but are not yet manifesting delays, diseases, or disorders. Our research suggests the potential for some "real-time" cost savings associated with "demedicalizing" behavioral concerns and shifting referrals from pediatric subspecialists (e.g., developmental-behavioral pediatricians, neurologists) to community-based programs and services (e.g., parenting programs, family resource centers) (see http://helpmegrownational.org/includes/research/PolicyBrief_FINAL_31MAY2012.pdf). However, the major savings that can be achieved are long-term and life course in nature. Future value-based, population health financing systems need to find some way of recognizing and ascribing value to improvements in healthy child development in contracts and grants that promote such actions. CMMI can play a particularly important role in supporting the development of value models based upon intermediate impacts that correspond to improving trajectories of health and reward such short-term outcomes in the context of their contributions to managing long-term risk. For example, research has proven the impact of strengthening families' protective factors on children's healthy development. We have embraced such protective factors as and operationalized these factors as important, short-term

proximate measures to document the efficacy of interventions such as *HMG* (see response to Section IV, question 1 below).

3. Our best example of aligning funding streams across health care and other health-related providers serving children and families is Child Development Infoline (see response to question 1).

4. In our experience providing technical assistance to states replicating *Help Me Grow*, we have been impressed with the extent to which states use state and federal grant funding, as well as such sources as hospitals' community benefit dollars, to support an integrated care delivery model. For example, states support the implementation of *HMG* through a variety of funding mechanisms including, but not limited to, state budget line items, federal grants relevant to early childhood system building (e.g., MIECHV, ECCS, Project LAUNCH, Race to the Top-Early Learning Challenge, Learn The Signs. Act Early), special state funding streams (e.g., CA 1st Five, FL Children's Services Councils), and foundation grants and gifts. We encourage states to blend and braid such funding to achieve efficacy and sustainability.

5. We support the wisdom of preferentially considering the primary care practice as a "health neighborhood" as opposed to a medical home, since the latter terminology implies that the programs, services, and interventions necessary to support families to promote their children's optimal healthy development necessarily reside within the child health sector (Garg A, et al. *J Pediatr* 2012;160:535-536.e1. DOI: 10.1016/j.jpeds.2012.01.001). Any consideration of "bundles" of services" should include outreach (i.e., home visiting) and care coordination supported by a "community hub" that ideally includes a central portal of entry to access community-based programs, services, and supports, as well as a repository for data collection and analysis to inform priorities, performance improvement, and fulfill requirements for results-based accountability. In particular, collection of data across sectors is of critical importance to capture returns on investment, as investments made in such sectors as child health, early care and education, and family support typically accrue to such diverse sectors as behavioral health, special education, and the justice system. As Connecticut's Office of Healthcare Innovation is preparing for a future round of Medicare's Comprehensive Primary Care+ initiatives in partnership with the Child Health and Development Institute of Connecticut, we are advocating for and leading the exploration of pediatric payment models that reflect opportunities in pediatric service delivery and recognition of the unique components of pediatric primary care. With our state partners, we will ensure that payment reform proposals address the critical importance of early health services to children's life outcomes by considering payment bundles that recognize the abundant opportunities in the early years to use health services as a platform for developmental and health promotion, early detection, and connection of vulnerable children and their families to community services that mitigate the effects of poverty and related adverse social determinants of health.

SECTION IV: PEDIATRIC MEASURES

We share your interest in short- and medium term-outcomes and have embraced the Protective Factors Framework of the Center for the Study of Social Policy's Strengthening Families initiative to develop short-term, proximate measures for elusive, challenging-to-asertain, long-term developmental outcomes.

1. We embrace the use of proximate measures to expand our capacity to measure the impact of developmental interventions such as *Help Me Grow*. Our work has focused, albeit not exclusively, on the strengthening of protective factors to enhance the capacity of families to support their children's healthy development (see Hughes M, et al. *Infants Young Child* 2016; 29(2): 114–127. DOI: 10.1097/YYC.000000000000059). For example, a specific measure of parents' knowledge of parenting and child development is the proportion of parents reporting that they feel confident in understanding developmental milestones. We have similarly developed strategies to measure the impact of our interventions on such critical factors as parental resilience, social connections, concrete support in times of need, and families' capacity to promote their children's social and emotional competence. To complement our measurement of proximate, family-level protective factors, we also seek to build capacity to utilize a broader set of measures at the community and system level that capture our impact across the early childhood spectrum. Such efforts ensure that we adopt a comprehensive approach to measurement that offers a variety of lenses through which to view our impact. We are encouraged by a recent commentary (Chung P, et al. *Pediatr Res* 81: 140-141) in the prestigious journal, *Pediatric Research*, that concluded with the following perspective, "...ultimately, the most important thing we can do is to demonstrate, through our work, how pediatric research makes children and families stronger, and to advocate passionately for all innovations, activities, and programs that research informs us will make children and families stronger."

With our partner organization, the Child Health and Development Institute of Connecticut, we are also ensuring that the first round of quality measures for SIM initiatives reflect essential components of pediatric primary care that are fundamental to optimal health and development. Measures that support health promotion, early detection, and connection to services have been vetted within the context of data available from electronic health records, claims systems, and onsite audits.

Connecticut's PCMH program has shown impressive per member/per month savings of approximately \$48 when costs for beneficiaries enrolled in PCMH practices are compared with costs for beneficiaries receiving care in non-PCMH sites. The PCMH program pays enhanced fee-for-service and per member/per month quality bonuses to practices that meet NCQA medical home recognition standards and improve care according to defined quality measures. The initiatives highlighted in our response describe how programs that support the connection of pediatric primary care to community services help practices meet NCQA standards and contribute to health savings. As our state explores other alternative primary care payment models, such programs that build supportive community hubs as systems in which practices deliver care are essential to ensuring continued cost savings, quality of services, improved short- and long-term patient outcomes, and patient and provider satisfaction.

SECTION V: OTHER COMMENTS

2. Our work is informed by the application of models that facilitate system building. Specific models offering concepts of particular utility include Collective Impact and the Social Impact Model developed by Root Cause (Boston).

Our experiences within our Office for Community Child Health and *Help Me Grow* National Center and our activities at the local, state, and national levels have informed the evolution of our thinking as to key public policy concepts critical to successful early childhood system building. Increasingly, our strategy is to universally embed certain key concepts which we view as crucial to promoting children's healthy development. I am attaching a brief summary of our ever-evolving list of such key concepts that informs (and is informed by) our participation in these (and other) efforts. We respectfully suggest that you consider how such concepts may serve as guiding principles for the design of a Pediatric Alternative Payment Model.

Thank you for the opportunity to share our thoughts.

Key Public Policy Messages

Promote the healthy development of all children

1. Focus on children at-risk for adverse health, developmental, and behavioral outcomes to maximize value and impact.
2. Support community-based efforts (i.e., community hubs) that promote the health and safety of children and their families in a variety of settings (e.g., homes, neighborhoods, communities).
3. Support community-based efforts to identify and address children's needs as early as possible.

Create integrated systems of care with strong linkages

4. Integrate services and supports for children, linking child health, early care and education, family support services, and all other essential sectors (e.g., housing, neighborhood health and safety, food and nutrition, etc.).
5. Embed developmental surveillance and screening into the full spectrum of services that support developmental promotion, early detection, and referral and linkage
6. Ensure that early detection leads to assessment and intervention.
7. Connect community-based programs and services to each other, to increase access and streamline services for families and decrease duplication in services.
8. Emphasize the importance of the interface between place-based initiatives (e.g., community hubs) and system building.
9. Encourage the design and dissemination of, and support for, new roles for such staff as community health workers, home visitors, and care coordinators to support families' promotion of children's healthy development.
10. Identify and support synergies among Connecticut Children's overall health policy agenda, OCCCH health policy messages, and partners' policy work.

Make better use of existing resources

11. Elevate the role of care coordination in accessing services within and across sectors

12. Strengthen the effectiveness of primary care child health services to make an optimal contribution to children's healthy development.
13. Expand the capacity of primary care providers through such strategies as co-management, referral guidelines, and e-consultation to strengthen access and preserve the capacity of subspecialists to meet the needs of children with complex conditions.
14. Identify ways to achieve cost efficiencies through the blending of administrative and financial resources of departments and agencies.
15. Document short- and longer-term cost savings.
16. Encourage the formal financial scoring of interventions over years to decades (i.e., "dynamic scoring") to capture ROI.
17. Employ such strategies as de-medicalization, mid-level developmental assessment, and linkage to community-based programs and services to demonstrate real-time cost-effectiveness.

Build a strong evidence base and use data more effectively

18. Use data when documenting gaps and capacity issues to inform advocacy and to emphasize the need to strengthen child health and community services
19. Demonstrate the efficacy of innovations.
20. Embrace evidence-based, strength-building, and health promoting frameworks (e.g., Strengthening Families Protective Factors Framework) in all programs, systems, and policy work.
21. Promote the adoption and acceptance of proximate measures/mediating factors as valid means to evaluate the impact and efficacy of community-oriented programming.
22. Promote the use of stories to exemplify best practices and innovations and to influence and inform policy.
23. Pursue opportunities to develop common indicators and data sets, which may include sharing or integrating data across systems, in order to establish a comprehensive resources and referrals database, coordinate care, and monitor outcomes.

Cook Children's Health Care System

Good evening,

I would like to request an extension to the RFI request until the end of this week.

Please let me know if this possible.

Thank you

Cook Children's Health Care System

Good afternoon,

Attached is the Cook Children's response to the RFI. We are glad to provide further clarification as needed.

Thank you for the opportunity,



Cook Children's
Health Care System.



**Center for Medicare and Medicaid Innovation Request for Information on
Pediatric Alternative Payment Model Concepts**

Section I:

Q3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

A3: For rural populations, CMS should consider incentives for mechanisms for rural providers to develop telemedicine capabilities and/or to partner with institutions (regional or state referral centers) that provide the consulting services.

Section II:

Children's health system's financially integrated models usually take the form of accountable health organizations, capitated networks and pediatric managed care organizations. This is true for Cook Children's with our 430-bed medical center, 400 member physician group, 120,000 member health plan and wholly-owned home health company.

We advocate that children's health systems in an accountable care or alternative payment model should be able to:

- Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations
- Meet the needs across a geographic region
- Provide comprehensive pediatric specialty care
- Integrate high risk children in other sectors
- Sustain large scale EMR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities
- Show successful centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors

Q1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)? a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

A1: In North Texas, there are varying levels of collaboration with governmental organizations. Texas, in general, is unique in that 92% of medicaid is managed care. Cook Children's Health Plan enrolls 126,000 members number of patients on Medicaid CHIP and 9,000 members through the newly implemented Star Kids.

In the past year, Tarrant County has implemented a successful collaboration between Cook Children's Health Care System, The City of Fort Worth, Fort Worth Independent School District and John Peter Smith Health System (the county hospital) and is now garnered enthusiastic support from the Tarrant County. Asthma 411, a school base program, was developed to improve absenteeism and health of students with asthma. In Fort Worth, asthma is one of the leading causes of student absenteeism impacting students but also parents/guardians and siblings. Conservative estimates put the number of children in Tarrant County with asthma at greater than 56,000. Each absence is associated with 3% - 5% increase in risk of failing the grade level in math and reading.

The approach is comprehensive and uncomplicated and is focused on emergency management of asthma as an important part of keeping students with asthma in school. Equipment, medicine, authority and resources are provided for school nurses to administer emergency treatment to students in respiratory distress. School nurses are educated and coached on asthma and recognizing respiratory distress. They are also involved on the plan for data collection in order to monitor impact and value of the program on a school by school and district level. FWISD supports and administers the program; JPS physician provides the standing orders; Cook Children's provides funding for the supplies for each school as well as education. An important part of the program is the nurses follow up with parents about an asthma action plan.

In the schools that implemented the pilot of Asthma 411, there were 19 times where 911 was called to campuses for students with respiratory distress before the program was implemented (2012 – 2013). After Asthma 411 was implemented, there was only one 911 call, which occurred after school hours (2013 – 2015). We are glad to provide more information on this effective partnership.

Q2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery? a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?
b. What potential exists for increased partnership for provision of home and community-based services?

A2:

Children's hospitals extend their reach outside of the campus to engage children and families where they live, work and play in their community. Typically these models of health service outreach are a deployed asset of the children's hospital/system and not the asset of the community organization. This is the case for Cook Children's in that we created a model to sustain our Promise: Understanding that every child's life is sacred, it the promise of Cook Children's to improve the health of every child in our region through the prevention and treatment of illness, disease and injury. This model is called the Center for Children's Health and has been able to accomplish what few organizations in the country have. Detailed information can be found here <http://www.centerforchildrenshealth.org/>

In addition, the Foster Care system in Texas has endured many challenges in the past few years and is top of mind for the legislature convening currently. This has led to private organizations developing thoughtful, strategic solutions in concert with community partners.

This year, Cook Children's will implement a Foster Care program focused on tight medical and social care coordination and would be glad to share outcomes as the pilot is complete in 2018. Because Foster Care is organized so differently from state to state, it would be challenging to develop a one-size-fits-all framework. One suggestion is to outline outcome goals or process measures that would encourage public/private partnerships. The Texas legislature is in the process of deliberating these important issues and more will be known in May at the close.

Children's Hospital Association of Texas is advocating for the following:

- Children entering foster care in Texas are required to receive a well child visit within 30 days. This standard is only met currently for half of children. The American Academy of Pediatrics recommends that children be seen within 72 hours to screen for significant health concerns. Plans are underway for a pilot to test the operational aspects of adopting this requirement in Texas. The State should adopt the AAP standard and ensure the standard is met for all children.
- To provide quality health care to children in foster care, the state should build local capacity for specialized foster care clinics with expertise in child welfare and trauma-informed care. The Medical Child Abuse Resources and Education System (MEDCARES) program, developed to improve the assessment, diagnosis and treatment of child abuse and neglect could be used as a model. One potential funding options for these clinics is state funding that would be matched by federal government for Network Access Improvement Programs (NAIP) available through Medicaid.

A2b: In Cook Children's Health Plan's experience with STAR Kids, home care services account for over half of total expenditures, the majority of which was delivered outside of our integrated system. There is tremendous room for further integration with Cook Children's Home Health as we begin in this first year of implementation. Home care services are ripe with issues of Fraud, Waste and Abuse. It would be beneficial for CMS to guide parameters for home care use with providers and families.

Q3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration,

timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

A3: To support the development of the necessary prior to infrastructure building, integration of services across Medicaid enrolled providers and health-related social service providers will likely require clarification of HIPAA regulations. Sharing information in a meaningful way to better coordinate care in pediatrics usually involves small numbers of children and families and often in a non-electronic format. Sharing information is hampered by differing interpretations of what is allowable.

For an electronic exchange of information related to social services, electronic structures for a standard core set of elements relevant to care management for the pediatric population will be required.

Q5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

A5: Integration would most benefit those Children and Youth with Special Health Care Needs (CYSHCN). Integration with community-based organizations to assist in addressing social determinants of health is key to improving outcomes and/or savings.

When considering future models, priority should be placed on partnerships that enable work across geographies. Potential exists for increased utilization of telemedicine, telepsychology and other efforts that build virtual capacities connecting pediatric specialty care with allied health and community providers in rural settings and health care centers.

Q6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

A6: Health care and social services providers have traditionally operated in silos with minimal to no collaboration/communication. Within health care, medical and mental health providers operate in silos, as well. Often this lack of collaboration/communication results in suboptimal outcomes. Patients with health complexity and/or their parents frequently spend hours each week coordinating their care which leads to frustration and a dissatisfaction with the health care system and, potentially, a lack of engagement in their health care. Models of care that encourage the integration of medical, behavioral and social services will significantly improve health care outcomes, lower costs and improve the patient/parent engagement.

Obstacles include: lack of payment or risk adjusted payments for social determinants of health, differing eligibility requirements, restrictions (real or perceived) on data sharing, competing measures of success, and regulatory limitations for innovative solutions. Investment in a centralized coordinating function may decrease duplication of services, and care coordination functions, and increase information sharing.

As part of an alternative payment model, CMS could provide incentives or measures that require health systems to partner with community organizations.

Q7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

A7:

Lessons learned:

1. Pediatric patients that utilize a significant amount of medical services are typically fragmented with little coordination or continuity across primary care and specialists. An integrated delivery organization comprised of component medical services across the spectrum of care is key to coordinating and managing the care for the population effectively.
2. LTSS (Long Term Services and Supports) are critical and high cost services for the complex pediatric medicaid population. Coordination and management of these services are key to the overall success of the management of the pediatric population.

Challenges/barriers:

1. Basic member/patient contact information received from the state is materially inaccurate which in turn causes difficulty in engaging and coordinating the care for the member.
2. Prescriptive state specific requirements for managing the care of the population (i.e. extensive questionnaire that is required for each patient).

Q8. What role do models of care such as ACOs play in the pediatric environment? a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?
b. How are pediatric ACOs the same or different from adult-focused ACOs?
c. What opportunities do pediatric ACOs have for integration with community and health services systems?
d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

A8:

Both - ACOs that are comprised of integrated medical delivery systems that possess integrated care coordination platforms as well as a formal legal and governance structure are typically more successful. In these integrated medical delivery systems, components such as acute care, home health, urgent care and primary and specialty physician organizations are formally aligned under the same leadership to assure commitment to the overall goal of improving the coordination and the health of the assigned population. When medical delivery system components are not aligned under a formal integrated structure with common leadership, individual component decisions can often conflict with the overall goal of better coordinating and improving the health of the population.

In comparing pediatric ACOs to adult-focused ACOs:

- Pediatric ACOs generally have smaller populations, and will need additional participation to create efficiencies for initial cost savings
- Pediatric ACOs require longer term contracts for outcomes measurement. Thus, short term measures related to or proxies for longer term outcomes are needed for shorter contract windows
- Pediatric ACOs find savings via efficiencies and coordinated care vs. efficiencies found through competition as in the adult markets
- Pediatric ACOs must be able to prospectively versus retrospectively attribute their patients to the ACO

There are varying thoughts on question d, however ACO would need to work closely with state MCO's to ensure there is clear line of sight and understanding of programming.

Q9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

A9: Complex Care Clinics that focus on the needs of the intensive pediatric population. The Complex Care Clinic serves as the care coordinator and integration point for the multiple medical service providers that care for the complex patient.

Also, there is the critical need for integration of behavioral and physical health in care delivery. The specialized pediatric mental health workforce is inadequate to meet the national need; thus, a broader strategy is necessary including payment reform.

Section III:

Q.1: What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

A1:

Medicaid and CHIP beneficiary populations/participants that offer the greatest opportunity for generating savings and/or improving outcomes from integrated health care and health-related social services systems include:

- Children with complex medical conditions as their medical issues are often intertwined with social complexity. This is a high cost, high need population where intensive care management and integration with social services can reduce hospital days and ED visits which will significantly lower the total cost of care.
- Children with high social risk. This includes those experiencing poverty and exposure to childhood adverse events as well as immigrant and minority children.
- Youth with medical complexity who are transitioning to adulthood. Early intervention starting at 12, can help youth develop autonomy in medical care and encourage effective

self-management of the medical condition. Strong linkages with providers and community organizations who care for physically and cognitively impaired adults can reduce patient costs through reduced hospital days and home care services as well as lower social costs.

Q2: How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs? a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models. b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures? c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients. d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

A2: Below are comments on payment models and incentive arrangements:

- The population must be large enough to drive ample savings to encourage provider participation and reward optimal outcomes.
- To achieve savings in this population, providers must foster proactive family relationships with their care manager. This starts with effective communication from CMS to beneficiary parents regarding the ACO including its importance and specific instructions (including compliance with care manager).
- Savings are likely achievable with specific subsets of high risk, high need populations.
- Regulatory barriers to the provision of services and incentives to families must be addressed to allow maximum flexibility within any payment model.
- CMS must consider payment models that encourage support of the primary care physician to keep even the most complex children closer to home and enable more cost efficient care.
- One additional consideration is a PMPM payment for a centralized care coordinating function such as the Care Management Entity for complex mental health patients utilized in some states.
- Considerations for "ramp-up" periods include upside only shared savings or shadow shared savings or PMPM care management fees until actuarially sufficient sized populations are achieved.

Ten children's hospital sites in collaboration with their primary care partners are focused on improving care and reducing costs for children with complex conditions as part of a Health Care Innovation Award. Children in the Award represent a significant spend due to the fragility of their medical conditions. Cook Children's is a participant in this award and finds that this population often exhibits variable spending. An individual patient can pose an unexpected result when not accounted for properly. Unpredicted spending has a greater impact in models with smaller populations. The Award experience found that for children with complex medical conditions, payment models should serve to foster dynamic care teams (the team includes the family) to readily share information among primary care, specialists and community providers. A care manager may serve as a central point for information sharing. In addition, Award hospitals noted payer concerns regarding provider capability to take on risk associated with high cost populations.

Section IV:

Q1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

A1: Benchmarks to measures should have local/regional calculations, not simply a national benchmark, so goals can be achieved.

Coordination of Healthcare for Complex Kids (CHECK)

Hello,

Please find attached responses to the CMMI Pediatrics RFI. We appreciate the opportunity to share feedback.

Thanks,

What is the level of interest of states for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

- CMMI HCIA awardee focusing on decreasing health care costs, decreasing school absenteeism and increasing family engagement for children and young adults with chronic disease.
- Main components of project deal with coordination of care using Community Health Workers (CHWs) to function as “health-related social service” connector.
- CHWs play a large role in serving as the liaison between the patient/family and the health system and the community (including community based organizations, social service agencies, community mental health, etc.); and schools. • Strong interest in combining health-related social services into the traditional medical care model that exists for children.
- Current clinic/hospital staffing models do not support extensive connections with community-based providers as clinicians (doctors, nurses, and social workers) are overwhelmed with other responsibilities.
- CHWs connect healthcare agencies, social service agencies, and patients through education, social support, and navigation. A growing body of evidence highlights the effects CHW services have on clinical outcomes as well as cost savings to systems and individuals generated by the model.
- CHWs need to be a billable, reimbursed service through Medicaid. Current programs are dependent on grant funds and thus create poorly aligned, non-sustainable programs that make comprehensive, consistent care coordination difficult
- Contractual arrangements between local Medicaid agencies and managed care organizations serving the Medicaid population should recognize the CHW workforce as credible for addressing social determinants of health for the pediatric population and being a member of the inter-disciplinary care team.
- Medicaid agencies could better support community based care coordination programs to provide specific and directed services to the pediatric population, specifically those who are exempt from mandatory managed care.
- CHWs should be based in community organizations like FQHCs to be most effective. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

- Program focused on patients with Medicaid, ages 0-25 years old, with chronic disease, specifically (1) asthma, (2) diabetes, (3) sickle cell disease, and (4) prematurity
- Focus on social determinants of health and CHWs makes referrals and connections to:
 - Parental education (GED programs)
 - Childcare
 - Job training programs
 - Legal assistance (through an embedded legal team as part of a Medical-Legal Partnership)
 - Housing services
- Internal mental health team working with families to assess mental health needs, provide immediate interventions and connect to additional community mental health programs where needed.
- These health and health-related social service outcomes are currently being measured:
 - For individuals: Disease control, healthcare utilization, referrals to services, quality of life, social support, home chaos, school attendance
 - Program-level: Referrals to services, formal partnerships with service agencies
- Integrity strategies include dedicated staff to develop and maintain partnerships with social service agencies, as well as advisory boards that include agency members
- While these are programs designed for children, it became clear very quickly that many of the services need to be targeted to the parents of the enrolled child. Any program that is looking at health-related social services or children needs to be a holistic model and to serve the families of these children as well as the specific child.
- Having a relationship with social service partners where they are on site or CHWs can go to their sites is essentially. Also having a champion at service agencies to help support the program efforts and ensure referrals are processed improves implementation.
- Social service outcomes should include the need for legal assistance and the impact on employment, school attendance, access to food and housing. Collection of these data requires partnerships with local agencies. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in underserved communities have an opportunity to participate?
- Have Medicaid designate responsible agencies and organizations for providing care coordination across the state – ensure presence in all counties.
- Ensure community based organizations are partnered with managed care companies.

To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health related social services agencies)? a. Please comment on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, etc.

- Program has strong partnership with school district to work on school absenteeism
- Challenges are around data sharing and access to data with State Medicaid, MCOs, and schools.
- Challenge of having many programs serving the same families.

This creates confusion for the family as they have multiple case workers who are trying to assist them but often times the case workers (in our case, CHWs) are unaware of the other services that are being provided to the family. Some efforts also become redundant.

- Care coordination within the same institution needs to be streamlined. Having a smaller and more focused managed care network and Medicaid agency, would support this. Medicaid agencies could also help to ensure the same types of requirements across providers. Variation in available services and protocols across systems can cause challenges.
- To contain costs and ensure that services are delivered only where they are needed, a data-driven approach must be taken. That means data needs to be available to those who are making service determinations.

Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery? a. Which health-related social service providers have been or should be included in a child and youth-focused integrated service delivery model? b. What potential exists for increased partnership for provision of home and community-based services?

- CHWs (functioning as health-related social service providers) are integrated into the clinical functions of our hospital and outpatient clinics. CHWs are physically present on the in-patient wards and assist with discharge planning and connection to primary care at the time of discharge. Additionally, CHWs are present in the outpatient clinics and work directly with physicians, nurses and social workers.
- CHW's work frequently alongside onsite mental health staff to ensure that patient and caregiver mental health needs are fully considered in patient care.
- CHWs meet regularly with clinical leaders (i.e. Medical Director of sickle cell program, Medical Director of High Risk Prematurity program), as well as integrated mental health staff, to discuss patient cases and share information. This assures that the CHW and the clinical care team are operating with the same goals for the patient. This has helped improve collaboration between doctors and CHWs
- CHWs and mental health clinicians should be included in a child and youth-focused integrated service delivery model
- School nurses should be included to increase partnership between health systems and schools and community-based services
- Recommend having mobile van options for dental and asthma care which can be part of the community and supported/facilitated by CHWs. What infrastructure development (EMRs, HIE), and IT systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?
- Purple Binder – online social services directory
- Care management software
- Text messaging platform – with automated features using predictive analytics
- Video conferencing software to conduct sessions with patients in their home, particularly for mental health
- Online self-directed resources around mental health and other disease-specific education
- Total of roughly \$3 million for all of the above.
- We developed general and disease-specific training curricula for the CHWs.

- Shared communication tools need to be in place. A care management software linked with the EMR is ideal.
- Easy ways of referring patients into programs need to be developed.
- All IT systems need to be connected to each other.
- ADT feed between the program and the hospital/multiple hospitals needs to be established from the beginning.
- Implementing new software tends to have high up front cost and take significant time to build and operationalize. This needs to be taken into account.

Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

- Medicaid agency was not as well prepared to understand how to integrate eligibility for a federal grant vs. state level requirements.
- Most key role for Medicaid has been in receiving data.
- Currently, Illinois has applied for an 1115 waiver – still waiting to hear on approval. Integration of programs utilizing CHWs could help with this.
- Ideally, data collection processes from Medicaid should be established from the beginning.
- Medicaid agency shares all specific pediatric benefit programs.
- Increased support from Medicaid for navigators to sign children up for Medicaid and other benefits.
- Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?
- Coordination for both medium and high risk. Availability for low risk and also maintenance.
- Savings in reduced utilization and improvements in reducing the impact of social determinants of health – focused on immediate needs plus long term prevention.
- Integration with managed care and Medicaid agency. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?
- Sharing of data is a large obstacle. Social Service and Community-based providers are often not connected to EMRs and thus causes fragmentation in service delivery.
- More real-time data, particularly on health care utilization, needs to be made available to frontline staff
- The inability to cost-share between health care and social service providers is a barrier. Patients are hospitalized repeatedly because they do not have stable housing. Patients miss important appointments due to lack of transportation or unstable cell phone service. Schools can't support students' health issues due to lack of information.
- Schools need to be included in health related initiatives
- What lessons can a Medicaid MCO or delivery system offer to inform this model concept?
- CHWs need to be a recognized work force in managed care contracts.
- MCOs can help community care coordination organizations with data analysis and data quality review.
- MCOs can also help with sending gap reports for HEDIS measures, and overall helping to define needs to that community care coordination organizations can assist.

What role do models of care such as ACOs play in the pediatric environment? a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both? b. How are pediatric ACOs the same or different from adult-focused ACOs? c. What opportunities do pediatric ACOs have for integration with community and health services systems? d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

- To our knowledge, there is only one pediatric ACO in Illinois.
- It would be helpful to have an incentive and guidance on establishing pediatric ACOs, and also ACOs that combine the pediatric and adult population – this would likely help with overall levels of cost containment and allow for a holistic model of working with the entire family. This would also prevent fragmentation within a health system.
- Pediatric ACOs can incorporate things like skill building for new parents, and specific initiatives aimed at addressing child and parent needs as well as young adults.
- It would be essential for the ACO to have strong community ties and community partnerships. Ideally the ACO and MCO have some type of a shared savings or risk based arrangement which is able to support internal care coordination efforts. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?
- Care coordination hubs could be funded and established throughout the state with similar models and staffing, utilizing a community health worker workforce in collaboration with traditional care coordination, and a mental health support element. One stop shop community based options need to be established, and partnership with the MCOs/ACOs needs to be encouraged at the state level.
- There could also be increased guidance on how community organizations can enter into value based payment arrangements at a lower risk level.
- There needs to be a clear incentive for hospitals to participate in cost reduction initiatives.
- Models like Medicare that transfer benefits across states and allow for larger price negotiations and standardization would be useful for this population.

To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state and local levels, including through public and private endeavors? a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers. b. What factors are essential to the success of this alignment? c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

- This is an area that could use improvement and would be ideal if when policies are made at the federal level, there are ways to enable participation at the local level.
- The health homes match would help but has not been adopted in every state.
- MCOs could be paid a higher care coordination rate from Medicaid, or be asked to create a fund for this within their own companies.
- It would help if funding was more consolidated and streamlined and there was not a need to pursue multiple sources, e.g. institutional, MCO, grant, etc.
- How could states and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

- Pursuing an 1115 waiver or SIM could help with consolidation.
- Further guidance on payment model development would be helpful – how to integrate incentives like through shared savings and quality measures that would not hurt the provider/community care organization especially when still in inception.

What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

- Most pediatric programs end at 18 years of age. Our program intentionally extended its age eligibility to 25 years and this has proved to be very important.
- The transition from a pediatric care environment to an adult care environment can be very difficult, particularly for children with chronic diseases who see specialists. Programs need to be able to help adolescents transition to adult care programs (including subspecialists)
- Obtaining mental health services for children and their families is a major struggle. •Children on SSI, children with chronic conditions, children and young adults, children using DCFS and DHS services are important populations to focus on.
- Young adults from 18-25 offer great opportunity for improved care and cost savings.
- Increased access to mental health services for all, especially for children, would improve health outcomes as well as school outcomes and caregiver work productivity.
- How could states and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?
- Pursuing an 1115 waiver or SIM could help with consolidation.
- Further guidance on payment model development would be helpful – how to integrate incentives like through shared savings and quality measures that would not hurt the provider/community care organization especially when still in inception.

In addition to Medicaid's mandatory benefits (including the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model? a. While these are currently available to states, what barriers exist to states using more of these options? b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation? c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

Expanded mental health and dental services are critical. Research continues to support the basic concept that an individual and family's mental health has a significant impact on their physical health (and vice versa). A system that supports managing both aspects of the individual and family within the same place is crucial for success. Furthermore, systems that work to prevent mental and behavioral health issues could prove themselves to have a large impact on future healthcare cost.

How might CMS, states, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

- Looking at utilization and ensuring that utilization is tracked over at least an 18-month period.
- Looking at social determinants of health – a programs impact on violence reduction, education, employment of the parents, etc.
- Need to be an initial and publicly available baseline understanding of costs and all the different agencies coming together to better understand this.

Section IV: Pediatric Measures

Question	Experience	Comments
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What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

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|---|--|--|
| <ul style="list-style-type: none"> • Our program does an extensive intake of all patients which covers a broad array of topics from health care access to school attendance to family stressors and social challenges • Patients who are higher risk get additional screening for mental health concerns (in the child and parent) and issues related to social supports • Adverse Childhood Experiences (ACEs) are known to lead to and exacerbate chronic conditions, yet screening for ACEs is not routinely performed. • There are many reasons that this screening is not done but one reason is that ACEs screening is not reimbursed by Medicaid. If screening for social issues/ACEs could be reimbursed we would increase rate and then be able to use the revenue to develop more health-related social service connections and community partnerships. • Quality of life measures for children and their caregivers are important indicators of the impact health has on family productivity. • Mental health measures to assess patient and caregiver mental health concerns should occur • Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes. • Medicaid, MCOs, primary care organizations, etc collect measures. The measures can vary and some are associated with withholds while some are associated with earn backs. • There could be more transparency and consolidation among measure collection. If MCOs or Medicaid shared with community organizations the measures and runs gap reports, the organizations can help to address these gaps. | | |
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Dana-Farber Cancer Institute/Boston Children's Hospital

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28. As a pediatric palliative care physician who cares for children with medical complexity, I am confronted daily with the gaps in our current health care system that our patients face. I am convinced that the future of value-driven, patient-centered care lies in the enhanced and integrated delivery of palliative care in the home and community.

Respectfully submitted,

Division of General Pediatrics

See attachments



Division of General
Pediatrics.pdf

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Section 1, Question 1:

As a pediatrician with 30 years experience with the child welfare system and other high risk pediatric populations, I think the interest level would be high on the part of providers. The current funding streams for children in foster care, as an example, are siloed. In Rochester NY, I was Medical Director of an Integrated Care Medical Home for Children in Foster Care and worked very closely with the Deputy Director of Social Services and several mental health leaders to develop care resources for children in foster and kinship care in our county. Despite making a lot of progress in coordinating care across systems (child welfare, mental health, dental, education, early intervention and pediatrics) over several decades, there were a variety of barriers that either impeded coordination or prevented it.

One major barrier was that Medicaid and Title IV were not aligned in a way that promoted a) Integrated Care between Pediatrics and Mental Health; b) did not pay for the intensive health care coordination that children in foster care needed. For example, once we decided to integrate MH services into our primary care medical home, we found that we could not bill for the services under Medicaid. This eventually changed as NYS in about 2013 opted to allow primary care providers to bill up to 33% of their total visits as MH visits as long as they were provided by a licensed MH provider at the site. By the time I left in mid 2014, the technical side of the billing issues had still not been resolved. We continued to rely on grant support for MH services in the pediatric office, as we had been doing for over a decade. However, this was challenging in that there were gaps in funding and we occasionally had to switch MH providers.

My work with the American Academy of Pediatrics and the National Child Traumatic Stress Network and multiple other partners over 3 decades has certainly reinforced that there is a deep interest in delivering high quality, comprehensive, coordinated services to high risk children. It is often the lack of funding, the lack of alignment of funding with the goals, or the lack of sustainable funding streams for effective interventions that are the largest barriers to achieving these goals.

Section 1, Question 2:

Child welfare had a funding stream to pay for case management (Targeted Case Management) which we piloted using for about a year to cover the costs of intensive health care management in the medical home. However, there were concerns that Medicaid might not view this favorably since children in foster care already have a case manager in the form of the child welfare caseworker. However, it was abundantly clear that the complex nature of the health, mental health,

developmental and educational concerns required a sophisticated health case manager. In our medical home, we utilized bachelor's level nurses with a background in community health. They carried mixed caseloads of 150 children even though NYS recommended a caseload of 50. The local county health department paid for this out of general health dollars. The cost of health care management for this intensive population was essentially the same as the cost of providing health care—staff spent 54% of their time on case management.

Case Management: we considered children entering care to be level 4 or 3 in terms of intensity. After the first 2 months, some children were moved to a lower level so that most children were level 3 or 2. We had a small group of level 4 children who were those with complex chronic medical conditions (usually technology dependent with severe to profound cognitive impairment and home health services; complex mental health and trauma symptoms; dually diagnosed as DD and MH). Level 4 children received weekly contact or more with a health case manager, and so on down to Level 1 children who were seen according to the AAP recommended schedule for children in foster care (WCC schedule up to age 2 yrs with monthly visits to 6 months of age and one additional visit at 21 months; twice a year starting at 24 months-21 years).

In addition to the EPSDT schedule, we saw children 3 times within the first 60-90 days of foster care as recommended by the AAP. The first visit was a screening visit that occurred within the first 72 hours whenever possible, but by 1 week of care. The second was a comprehensive health visit at 30 days and then a follow-up at 60-90 days. The recommended care for children in foster care and involved with child welfare is available at: <http://pediatrics.aappublications.org/content/136/4/e1131> And the accompanying technical report at: <http://pediatrics.aappublications.org/content/early/2015/09/22/peds.2015-2656> Tables 3,4,5 and 6 are particularly relevant to this question.

We extended our care for youth aging out of care up to age 24 years because we found that these young people basically disconnected from health and mental health services shortly after emancipation from the system. We were fairly successful in keeping them connected as we worked to link them to adult health services.

Since we could not bill Medicaid, we integrated evidence-based MH services into both the pediatric office and foster care visitation. We were able to do individual therapy with children and teens in addition to dyadic therapy.

One key to creating a child and family centered integrated care system for the child welfare population was education of staff and caregivers. Over several years, child welfare trained all of their administrative, supervisory and front-line casework staff in childhood trauma, shared parenting, and mental health in addition to the usual training. They also mandated that all foster and certified kinship caregivers participate in evidence-based trauma education for resource parents. Our health clinic offered evidence based parenting education to caregivers and trained our

health staff on childhood trauma and positive parenting using the Incredible Years Curriculum. Visitation, which is the best predictor of reunification, is fraught with difficulty for children and parents—child welfare identified and trained specific caseworkers to provide supervision and coaching of visits. All of them were trained using evidence based curricula in childhood trauma and positive parenting, received education about child development and were trained on a promising approach to visitation called Coached Visitation.

Child welfare obtained permission from county officials to reduce caseloads and focus on preventive work. There was a great emphasis on identifying families early who would benefit from preventive services (alternative resources). Caseworkers again received intensive education around working with traumatized families and children and had a menu of evidence-based services to refer them to. Over several years, this upfront work by a well-trained workforce resulted in a 75% decline in foster care admissions with a decrease in the cost of services since preventive services were less expensive to deliver than foster care.

I think that child welfare and Medicaid funding could be aligned in such a way to promote cross-systems collaboration and planning, cross-systems education, implementation and use of evidence-based practices, to create a system that better serves the needs of children and families.

We also worked with an after school program to create a foster care specific educationally based after school and summer program that was very popular with children and families. We worked closely with Early Intervention to streamline referrals and consent. However, the inability of child welfare to provide consent for EI evaluation and services is a major barrier to care and a quirk in federal law that probably needs to be corrected. Child Welfare has to approach birth parents for consent for mental health and EI evaluation and for health care for children, as is reasonable. However, most states have protocols so that the Commissioner or their designee can provide consent when parents are unavailable or uncooperative or without capacity to consent. EI services are exempt from these alternate protocols which means that sometimes children with developmental problems do not receive either evaluation or needed services. Monroe County included EI evaluation as part of the Admission Assessment for children who failed screening or had developmental concerns, but services required parental consent. Some states bypass this issue by going to court for consent or to grant educational surrogacy to the foster or kinship caregiver.

Through the Medical Home and with caseworker support for transportation and consent, we ran Teen Groups once a week. When we built our Integrated Care Medical Home, we shared the building with the Visitation Center and had conference rooms for caregiver and youth education and a teaching kitchen. We referred a lot of children to Boys and Girls Clubs. However, it was always challenging to connect children in foster care to Early Head Start and Head Start

because of their consent requirements. This was a real missed opportunity to place high-risk children in evidence-based preschool programs.

Recognizing the importance of cross-systems collaboration and partnering, the AAP Council on Foster Care Adoption and Kinship Care has provided a small amount of funding to a total of 21 state AAP Chapters over the last 6 years. Each applicant for these small grants (\$5000-15,000) is asked to develop a project that requires cross-systems effort and includes child welfare, mental health, consumers of care, and Medicaid and possibly others in their state. They are then asked to identify a health issue or need that needs to be addressed for the foster care population. States have engaged in a variety of activities from starting health evaluation clinics, improving linkages with mental health services, improving communication among child welfare and all health providers etc.

There are multiple centers of excellence around the country that have addressed various aspects of providing health.

It is very challenging to provide quality health care for this high risk population—they are highly mobile, have not had good health care access prior to foster care and enter care with a variety of unaddressed health needs. Their trauma histories place them in a very high-risk category for poor health, mental health, developmental, educational, and psychosocial outcomes. We found that leadership and the creation of a cross-systems leadership group was essential to all the steps that needed to be engaged in to improve their care and outcomes. Creating a trauma-informed workforce and population of caregivers was an important step as was implementing an intensive health care management system. We tailored the health care schedule and mental health services to the specific needs of the population and were able to reduce preventable ED visits and hospitalizations (known high cost items for this population). We implemented MH services and coaching into visitation to improve visitation quality and reduce distress for children and connected children and youth to EB-TI-MH services both within and beyond our medical home. Almost 100% of our children and youth had a dental home while in foster care, an increase from the 33% when we began. We introduced systematic universal developmental and mental health screenings using validated age appropriate instruments and doubled our detection of children with potential problems. We were able to connect teens and young adults to MH services in our office when they declined to access services in a mental health facility. And, we offered teen groups on-site and linked with educators to provide a foster care specific after school program.

These changes in care were possible NOT because the financing streams enabled them, but because a group of committed professionals and caregivers worked together to effectively meet the needs of this very vulnerable population. Most of the solutions we created were funded by county (which were in increasingly short supply as time passed) and grant dollars (and therefore often time-limited if we could not find sustainable funding).

Section 1, Question 3:

I would suggest the following policies or standards for children in foster/kinship care or involved with child welfare, including tribal children, those in group home or RTF care, and unaccompanied refugee minors:

1. Align financing to support cross-systems collaboration among at least child welfare, Medicaid, pediatric, mental health and child development/early intervention experts.
2. Provide financing for intensive health care management as outlined by the AAP and delivered by qualified individuals.
3. Provide financing for the health care parameters for this population as recommended by the AAP and American Academy of Child and Adolescent Psychiatry.
4. Provide funding for dissemination and implementation of evidence-based trauma-informed interventions in mental health and health and developmental services for this population.
5. Provide funding for enrollment of children and youth in healthy, normalizing, age-appropriate activities. (This is currently quite under-funded).
6. Provide funding for educational evaluations for children who are not functioning at grade level or have behavioral or other concerns that reduce their ability to participate fully in school.
7. Provide financing to educate child welfare, health, mental health, staff and caregivers about childhood trauma and its management.
8. Ideally, I think there should be a federal curriculum that all child welfare professionals have to complete over a 5-year time frame during which they earn credits toward an MSW. This would be a great step toward creating a professionalized workforce in child welfare. Child welfare workers have a wide range in skills, education and competence and yet they work with the most vulnerable children and families in our society, are making decisions about disrupting children from their parents or not, and are then expected to be part family therapist, part case manager, and part attorney as they help families navigate the often treacherous waters of the child welfare and legal systems. Many caseworkers are not only under-prepared for the overwhelming work they do every day, they have their own trauma histories that sometimes affect that work in deleterious ways. We owe it to them and those they serve to ensure that they have the skills and knowledge and competence to do the work we call on them to do in ways that are safe and effective for children and families.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

Section II, Question 1: Beyond my scope to answer

Section II, Question 2: See Section I above.

I am now in Los Angeles County which operates 7 Medical Hubs to provide initial evaluations for children entering foster care or involved with child welfare. The Hubs provide a combination of forensic and comprehensive admission evaluations that include developmental screening for those under age 5 years. Most of the Hubs now also operate a small Medical Home practice for children in foster care. The Hubs now include medical caseworkers, social workers, child welfare liaison, and mental health coordinators in addition to core pediatric staff. Some of the Hubs provide on-site integrated mental health care. The Hubs are run by the Department of Health Services, which includes the Department of Mental Health under its umbrella. All DMH staff have been trained on evidence-based trauma-informed MH interventions. Hubs are open daily 8:30 -4:30 pm and one Hub serves is open 24 hours/7days a week to manage admissions outside of regular hours. All the Hubs are co-located with county hospital facilities. The Hubs bill Medi-Cal and one Medicaid HMO (LA CARE) but DHS assumes a lot of the costs of care. At the administrative level, there are quarterly meetings among DHS (and DMH) and DCFS; all the Hub Medical Directors are include in this meeting.

I think Early Intervention, EHS, HS and an education leader would ideally be included along with Medicaid in these meetings. Ideally court or someone affiliated with court should also be involved.

If one were interested in re-design from the ground up, one might include design experts, technology, QI expertise if not available among those already involved, foster care alumni and caregivers, nursing, WIC, the Y, Boys and Girls Clubs, local colleges and universities, and other community agencies that could serve these children and families.

Discharge planning and after care are 2 other areas that need to be addressed someplace.

Section II, Question 3.

EMR and child welfare IT systems that can communicate directly with each other with capacity to:

1. Tier access to patient portal so that one could link youth in foster care, foster/kinship parent, birth parent when reasonable, caseworker to records so that each had access to information per what is appropriate and necessary. For example, youth with capacity to consent might have access to health info including STI testing whereas caregivers and caseworkers would have more limited access.
2. Entry to child welfare in the case of a pediatric medical home could generate a referral to the health care system.
3. Cross-systems training as noted above or at least appropriate quality training for various professionals and caregivers that is trauma-informed.
4. Auto-update caseworker changes in both systems.
5. Auto-update placement changes and discharges in both systems.
6. The remaining parts of this question are out of my purview to address.

7. Use of tele-health or tele-training to bring needed training and services to very underserved areas: rural and tribal come to mind as two areas where services and training are often not accessible. One could create regional or statewide resources with appropriate funding to provide high quality training to professionals and caregivers and also provide some services that are not currently accessible in some locations: comprehensive pediatric care and subspecialty care, trauma-informed mental health services, parenting education.

Section II, Question 4: This is not my area of expertise.

Section II, Question 5:

I think that there are several areas for potential savings if the following can be achieved: alignment of financing with goals; high quality training and education of professionals and caregivers; intensive health care management; implementation of evidence based mental health and preventive services; improved visitation services; better/creative use of technology; improved discharge planning and after care services, etc. Some of these savings will accrue from:

1. Reduced foster care admissions (because of better training, access to evidence-based trauma-informed prevention services and Mental Health treatment)
2. Shorter lengths of stay (because of better training of resource and birth/kinship parents, access of parents to evidence-based drug and alcohol and MH services, improved visitation services, access to evidence-based parenting, connection to community resources)
3. Reduced preventable ED visits and inpatient hospitalizations for shorter lengths of stay for the latter (because of early comprehensive health assessment in a trauma-informed medical home or by such a provider and/or by a trauma-informed MH provider; evidence-based parenting education)
4. Reduced trauma symptoms that drive much of short and long term morbidity (health, mental health, educational, developmental, psychosocial)
5. Reduced recidivism.

Section II, Question 6:

In the child welfare world, my top 10 barriers:

1. Different funding streams for child welfare and health that are inflexible. (Increasing flexibility across systems)
2. Failure of financing to align with goals of trauma-informed integrated cross-systems care by well-educated professionals and caregivers. (re-alignment)
3. Funds are often used to continue to pay for what we know does not work (a poorly educated caseworker managing a complex family; limited access to what ends up being poor quality health care that is not trauma-informed; lack of support for care coordination; psychotropic medication use for

- trauma symptoms instead of evidence-based trauma care etc.) (Could incentivize use of evidence-based or promising interventions by providing funding for them, including training on the interventions so you create a workforce.)
4. Different languages, goals and mandates of various systems
 5. Barriers to information sharing: for example, MH may not share diagnostic information with pediatrician who then may be at a loss in terms of advising caregivers/schools about managing behaviors or who may inadvertently remind a child of a prior trauma experience etc.
 6. Inadequate measures that lead to inadequate data collection.
 7. High variability in skill of child welfare workforce. (National curriculum through which caseworkers earn the equivalent of an MSW for free from recognized universities over 5 yrs with pay increases based on credits earned and degree completed.)
 8. Failure to use technology to solve some of the barriers issues (integrate technology, adapt technology as noted above)
 9. Lack of intensive health care management (pay for it, train people how to do it)
 10. Consent: clear guidelines about who can consent, protocols when parent or legal guardian cannot or will not, solve the early intervention consent issue.

Section II, Question 7:

During my time in Rochester NY, we had a period of about 2 years where we had some children enrolled in MMC and some in Fee for service Medicaid. Prior to that, every child in foster care was in FFS because it enabled us to better access mental health services from specific agencies that offered the trauma-informed services our patients needed. Access to subspecialty care remained okay, although subspecialists received lower payment than they would have if children were MMC. However, MH was their biggest single health need. It turned out that MMC was not ideal for some patients so child welfare enrolled certain groups in FFS:

1. Medically complex children had better access to home health care via FFS
2. Dually diagnosed (DD plus MH) seemed to fare best under FFS.

The variability in the benefits offered by different MMC plans was a problem. We had one MMC provider that did not cover contraception so we did not enroll anyone older than 12 yrs in that plan. Another MMC plan had very poor MH benefits and a group of providers whose services did not meet the same standards for evidence-based trauma-informed care as providers in another MMC.

Enrollment was technically parent choice. However, parents were often unavailable, so that child welfare often ended up choosing the MMC plan. When it became apparent that certain plans were better than others in terms of meeting children's needs, child welfare made a choice about which plan to use for certain groups of children.

Not all MMC plans were delighted to have children in foster care enrolled because of the known high cost of their care.

I do think states or counties should negotiate a comprehensive package of benefits for children in foster care that are based on AAP recommended guidelines, support for evidence based trauma-informed pediatric and MH care, etc. I think WI has a pilot going on with an enhanced benefit package. While I recognize that all children need a certain basic package of services, high-risk subpopulations might have better outcomes with a different benefit package. For example, paying a bit more for a comprehensive evaluation that includes developmental and mental health screening might result in more timely referral to TI-MH services that divert a child away from the ED.

Section II, Question 8: This question is beyond the scope of my expertise.

Section II, Question 9: This question is beyond the scope of my expertise.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

Section III, Question 1:

1a. I think any very high risk complex population of children would benefit from integrated/coordinated care models. Such populations include: Medically complex, children in foster care or involved with child welfare, dually diagnosed, children with severe/complex mental health disorders and those with substance use disorders.

1b. The ages probably vary with the population subgroup. Children with medically complex conditions and probably dually diagnosed children should always receive this level of care, from birth to 21 yrs when they transition to a similar model in the adult care system. Children in foster care certainly should while they are in foster care, but the system should be designed so that those children needing the highest levels of care coordination while in the system or needing ongoing mental health services after discharge continue with these services. I think those with substance disorders will be older by definition and those with mental health disorders might benefit from services for a specific time period in their lives—the system should be able to address needs regardless of age for this group.

Section III, Question 2: This question is not in my area of expertise but I have some thoughts.

2a. Payment could be in the form of shared payments for certain things such as intensive case management or shared savings. I suppose there could be an upstream funding resource that paid for case management or integrated care upfront with savings then split among downstream providers and upstream funder. Costs for case management, for example, would require investment upfront and

intensive case management by well trained individuals would be an investment. I believe such case management, even if paid for upstream, has to be pretty close to the frontline of care (in the medical home or no more than one step removed). I am not a fan of the case management models used by MMC for high risk patients—the ones in my experience are not skilled enough to truly manage the needs of the patients. Health care professionals should be the case managers for these complex populations.

2b. I find this question confusing since this RFI is inquiring about caring for complex populations—what would be an adverse selection pressure? Not providing access or appropriate services for a complex patient? The right payment system and right benefit package with the right case management model tailored to the patient and family would prevent this.

2c. You will need payment models that incentivize different care and management models in rural areas...telehealth?

2d. I think one of the disadvantages of the current payment system is that different primary care providers (small private office vs larger federally qualified health center) receive different payments for seeing same type of patient. In general, it is a disincentive for the small practice/solo provider. On the other hand, I recognize that the FQHC or university practice has a larger, more complex infrastructure and wider array of services to support.

Section III, Question 3.

3a. The challenges of aligning payments are immense. We spent several days in our state capitol one year with social services and state Medicaid trying to figure out how to pay for intensive health care management in the medical home for our patients without success. We looked at Targeted Case Management dollars, increasing the threshold rate, a foster care specific benefit package as options, to no avail.

3b. Some flexibility in funding streams and regulations that do not currently, or did not then, exist. Some funding for small pilots would probably be the best approach so that one could trial some options before launching a bigger system wide change.

3c. I think some states like IL have some ability to track use of services by children in foster care but not sure if they have outcome measures.

Section III, Question 4.

Section III, Question 5.

Section III, Question 6.

Pass.

Section IV. PEDIATRIC MEASURES

Section IV. Question 1.

For the population of children involved with child welfare, it would be ideal if child welfare and health measures at least reinforced each other.

Child welfare goals for children include well-being, permanency and safety. Improving health and mental health outcomes support result from safety, permanency and many other supports and in turn support well-being and permanency.

Well-being Outcomes:

% of children in foster care with improved health and wellbeing outcomes

% of children achieving *timely* permanency in a forever family

75% reduction in placement changes while in foster or kinship or group care

90% reduction in use of shelter care

% of network partnership and effectiveness goals met

90% reduction in children awaiting adoption

Improved recruitment and retention of foster and kinship caregivers

Improved recruitment and retention of foster and kinship caregivers expressing desire to care for adolescents, children with medically complex, developmental and/or behavioral health problems

50% reduction in recidivism rates

20% reduction in Length of stay (this one is challenging because have some children who benefit from longer stays or do not have safe alternative)

Education and Training

90% of child welfare administrators, supervisors and caseworkers receive training in evidence-based positive parenting, childhood trauma, child development and child health and mental health

90% of professionals interacting with children and families involved with child welfare receive inter-disciplinary education about evidence-based positive parenting, childhood trauma, child development, child health and mental health

90% of monitored/supervised visits have a trained visitation specialist in place

50% of child welfare agencies provide specialized training to those staff who monitor or supervise visits.

Care Process and Experience Impact

of leverage points for transformation identified

90% of children in foster care linked to a medical home following AAP standards of care

90% of children involved with child welfare receive a health screen including a mental health screen for acute needs within 72 hours of entry to foster care or within a week of involvement with child welfare

90% of children involved with child welfare receive a comprehensive health assessment within 30 days of placement in foster care or involvement with child welfare.

90% of children involved with child welfare under 5 years receive a developmental screen

90% of children with potential developmental problems identified through screening or caregiver concern receive a developmental evaluation by Early Intervention (< 3 years of age), Special Education (3-17 years of age), or a developmental-behavioral pediatrician

90% of children involved with child welfare and their families receive screening or assessment for trauma symptoms and history

90% of children involved with child welfare receive a mental health assessment

90% of children identified as having a potential mental health problem or trauma symptoms receive evaluation by a licensed trauma-informed mental health professional

90% of children identified as having a developmental health problem are enrolled in and receiving indicated services within 30 days of identification of the problem(s)

90% of children identified as having a mental health problem and/or trauma symptoms receive evidence-based trauma-informed mental health services within 30 days of identification of the problem(s)

90% of children in foster/kinship care receive periodic reassessment of developmental, mental health and health needs according to AAP Standards for this population

90% of children receive dental care within 60 days of involvement with child welfare

90% of children have health insurance within 10 days of involvement with child welfare

90% of caregivers report reduced parenting stress, and increased competence in identifying and managing their children's health, behavioral, developmental and educational needs and services

75% reduction of school and childcare suspensions for children involved with child welfare

90% of youth aging out have health insurance coverage

20% reduction in missed visits

Increase in use of evidence-based trauma-informed MH interventions during visitation

Increase in use of Ice-breaker meetings between foster and birth parents (improves empathy).

Health Behavior Impact

90% of youth aging out have a health behavior and health plan

90% of foster/kinship parents report adequate social and emotional support

90% of birth parents report adequate social and emotional support

90% of caseworkers report adequate social and emotional support

90% of caregivers report reading with child <10 years on a daily basis

90% of caregivers report reduction children engage in <2 hours of screen time daily

90% of caregivers report children engage in a minimum of 60 minutes of active play or exercise daily

90% of children involved with child welfare have access to at least one normalizing activity 3 times a week

90% of children involved with child welfare attend at least 2 weeks of summer camp annually

90% of children involved with child welfare who are behind in grade level skills receive tutoring or other intervention to accelerate catch-up

90% of birth parents complete an evidence-based parenting course

90% of children prescribed psychotropic medication have mental health diagnosis made by a qualified MH professional for which medication is appropriate

90% of children prescribed psychotropic medication have routine mental health follow-up related to medication

90% of children on psychotropic medication are on no more than 2 such medications without a clear indication

90% of children aging out of care have a written health plan

90% of children adopted out of care have a written health plan and follow-up

90% of children returned to family have a written health plan and follow-up

90% of children discharged from care by court have a health plan in their discharge plan

90% of CFSR meetings include health information and planning

90% of CFSR meetings include mental health information and planning

Health Impact

20% reduction in ED visits for MH or behavioral concerns

20% reduction in ED visits for medical concerns

20% reduction in RTC placement

20% reduction in hospitalizations for MH or behavioral concerns

20% reduction in hospitalizations for medical concerns

20% reduction in length of hospital stay

20% reduction in missed school days

20% reduction in psychotropic medication use when diagnosis is unclear

50% reduction in prescribing of psychotropic medications by providers who are not qualified MH professionals

Primary Drivers

Provide a seamless continuum of cross-sector supports and services

Increase extrinsic motivation (regulations, policy, financing) and leadership to support cross-sector supports and services

Strengthen child welfare cross-systems infrastructure promote communication, collaboration, coordination, co-location and integrated care across disciplines

Engage leadership across disciplines to support collective health goals

Empower and activate caregivers, youth in foster care and alumni to manage their own health needs.

Secondary Drivers grouped by Primary Driver

Provide a seamless continuum of cross-sector supports and services

Cross-systems trauma-informed training and education that is designed to build an inter-disciplinary collaborative, trauma aware and responsive workforce

Equip care teams with skills and processes for child/caregiver engagement

Tier care based on assessed need/risk

Adopt care plan protocols that are holistic, trauma-informed, developmentally-rooted, family-centered and child-focused, strengths-based, preventive, promote resilience, relationship-building, promote self-efficacy

Define and deliver cross-sector individualized care bundles customized to social and health risk

Build cross sector teams with right roles/right people

Increase extrinsic motivation (regulations, policy, financing) and leadership to support cross-sector supports and services

Leaders align extrinsic motivators with population care goals*

Reduce barriers to collaboration, coordination, communication, and co-location and integrated care**

Payment mechanisms that promote evidence-based or –informed, trauma-informed preventive and treatment approaches

Reward success by using saved moneys to reduce caseloads, improve training of providers and caregivers, extend supports

Bundled payment for cross-sector trauma-informed preventive and treatment interventions

Stewardship of ecological model

Strengthen child welfare cross-systems infrastructure promote communication, collaboration, coordination, co-location and integrated care across disciplines

Reduce barriers to collaboration, coordination, communication, and co-location and integrated care**

Design to population needs (child-centered, family-focused)

Apply QI methods throughout

Support people to handle new ways of practicing, parenting

Strengthen and manage relationships among partners

Test changed between programs/sectors

Measure change and use data for insight and improvement

Use IT to connect population, providers and both to each other; describe the population; analyze the infrastructure and supports; track and manage needs; improve family and care team decision making

Engage leadership across disciplines to support collective health goals

Leaders set health optimization and improved outcomes as goals (wellbeing, safety, permanency, stability, preparation of youth for independence, parent rehabilitation, improved training of caregivers and providers)

Leaders align extrinsic motivators with population care goals*

Empower and activate caregivers, youth in foster care and alumni to manage their own health needs.

Engage caregivers, youth and alumni, and child welfare in future orientation, choices and decisions to promote health and well being over the lifecourse

Build on child and family assets (all families child belongs to)

Promote a sense of belonging in family

Promote building of peer relationships

Build social networks (foster parent and kinship parent peer networks; youth networks; alumni networks) that support their well-being

Positive marketing re foster and kin parenting

Family Care Associates of Effingham, S.C.

We received this notice yesterday and I have not had a chance to get all the physicians and nurse practitioners input. Is there any way this can be extended on a response time?

One suggestion in the meantime that affects our office is our Medicaid participants on Illinois Health Connect. We receive reports on our panel that is not patient specific and it is not current data.

If this was received monthly and it was a patient listing it would help us to reach out to these patients to get their needs taken care of. Which would reduce risk and health conditions in the future. I would be happy to send this information for your reference if interested.

Family Care Associates of Effingham, S.C.

Centers for Medicare & Medicaid Services

Re: Pediatric Care Improvement Request for Information

Our population has a significant shortage of reliable, consistent mental health and social services. Many of our kids would benefit from access to social service interventions such as financial counseling, stable housing, assisting parents with parenting skills and strategies for providing structure. Nutrition guidance would also be invaluable. Arranging these services in a timely manner can be difficult and require a collaborative effort with our local health department, hospitals, and school district as well as other community agencies such as One Hope United and the Birth to Three Program. These services would actually decrease the use of emergency services and increase the likelihood of long term health issues and therefore lead to healthier, less costly adults.

Financially supporting successful social service intervention working in tandem with medical services in a guided and constructive way would greatly improve the health and well-being of our kids. The guidance medical providers give in short office visits is so inadequate when it is not able to be followed up with the social work guidance as well.

First Quality Enterprises

See attachment.



First Quality
Enterprises.pdf



First Quality Enterprises, Inc. (FQE) founded in 1988, is a global multi-billion dollar privately held company with nearly 5000 employees. Its corporate offices are located in Great Neck, New York, with manufacturing facilities and offices in Pennsylvania, South Carolina, Georgia, Canada and China. FQE is a diversified family of companies manufacturing consumer products ranging from Absorbent Hygiene (adult incontinence, feminine care, and baby care), Tissue (batch and towel), and Industrial (non-woven fabrics, print and packaging materials, thermoformed plastics), and Purified Bottled Water, serving institutional and retail markets throughout the world. FQE focuses on private label and branded products.

For more than 25 years, First Quality® has been creating incontinence products that provide the absorbency, comfort, and skin care that we can proudly offer to our own loved ones. Our products are engineered and assembled in our manufacturing plants in the U.S., with a focus on quality that has made us a leading incontinence product manufacturer in the U.S.A.

We have proven our commitment to the incontinence market by being the only Incontinence Product manufacturer to manufacture a full line of absorbent products and incontinence washcloths. Our focus and commitment ensures the highest levels of product quality, service and understanding of the industry and the needs of our customers.

As we move into the future, our First Quality family continues to grow, and live by the First Quality philosophy of Integrity, Service and Quality.

For more Information:

Contact:

Julie Hyer-

Or

Judy Smalley-

The Importance of Quality Incontinence Management

For Medicaid Children and Youth Populations

For the I/DD populations living at home or in group homes, managing incontinence can be an important part of overall care. Lack of education and access to quality products can cause stressful situations for caregivers, resulting in poor short-term and long-term care for the children/youth populations.

Properly managing incontinence is important for the comfort and overall well-being of children/youth populations. Children with disabilities graduate from diapers to training pants in the same way as children without disabilities. However, when children grow past this stage, becoming big enough for pull-on underwear and eventually adult-style products, many caregivers find themselves in unknown territory. As caregivers strive to select the right product for children/youth to manage incontinence, it is critical that they are properly educated on how to choose the ideal style, size, and level of absorbency required to adequately address their children's incontinence needs.

Changes in body size and shape impact product selection, as larger bodies create more waste and are more difficult to maneuver. As children grow, how much they will manage their own incontinence should be taken into consideration as it relates to product choices. Additional considerations include social connections and relationships with family members, caregivers, and community

First Quality can provide a range of education materials and clinical guidance to CMS that can help families and caregivers understand the full range of absorbent products available, and why the right choice of product can offer meaningful improvements in the quality of life.

CMS may also realize costs savings as beneficiaries reduce incorrect and wasteful product use while improving the management of incontinence.

Skin care is also critically important related to proper incontinence management.

Key impacts:

Cleaning the skin with a washcloth/disposable wipe – during or between changes – can help reduce the risks of irritation, infection, or rash

Caregivers should check the skin every time they change a product: if there is any sign of serious irritation or redness, they should contact their healthcare provider

It is widely known that pH balance is important in perineal skin health. Normal skin pH is slightly acidic, at about 5. Most soaps on the market are alkaline. When used on perineal skin at risk, it changes the pH which can lead to a weakening of the skin and subsequent damage (IAD).¹



When the wrong style or size is used, the absorbent products often leak and can cause serious skin irritation. By providing educational resources for caregivers, State Medicaid System and Medicaid Health Plans can avoid spending significant time and money addressing skin issues like Incontinence Associated Dermatitis (IAD). IAD can be a precursor for the development of pressure ulcers. According to the National Pressure Ulcer Advisory Panel, “Pressure Ulcers increase hospital costs significantly. In the US, pressure ulcer care is estimated to approach \$11 billion (USD) annually, with a cost of between \$500 (USD) and \$70,000 (USD) per individual pressure ulcer.”²

Despite the importance of proper skin care, **most state Medicaid systems do not cover wipes as part of their fee schedule for disposable incontinence supplies.** As a result, health plans that take on the care for Medicaid beneficiaries also do not reimburse for wipes. Home Medical Equipment dealers (HMEs), who that are the primary deliverer of incontinence products for Medicaid beneficiaries being cared for at home, cannot provide wipes at no cost. Since most caregivers are reluctant to pay for skin care out-of-pocket, little to no wipes are used.

Requiring Medicaid Systems to reimburse for wipes can improve overall skin care and may help the states and Medicaid Health Plans reduce ancillary medical.

1. Beeckman D et al. Proceedings of the Global IAD Expert panel Wounds International 2015.
2. National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. Emily Haesler (Ed.) Cambridge Media; Osborne Park, Western Australia; 2014.

Founder and CEO of Serendipity Alliance

My comments are made as a healthcare beneficiary, consumer, provider, family advocate, and administrator of Pediatric, Family Practice, Developmental and Behavioral Health services. I am vested in improving this Nations care for Children, especially mental health care and school special needs. My career as a Pediatrician and Healthcare Advocate has focused on Integration of Behavioral Health into ALL Primary Care - Pediatrics, Family Practice, Internal Medicine, and OB/GYN (if doing full women's healthcare). In particular, my experience with the DoD since 2001 to establish Primary Care Optimization followed by Patient-Centered Medical Homes with a new Tri-Service resourcing model used to integrate Walter Reed with Bethesda in 2010. This involved programs to optimize all services, primary care and specialties and resource each clinic optimally with staff and space. My work included being Medical Director of the Exceptional Family Member Program (EFMP) working with schools, and of Tri-Care establishing Network capacity and timely referral mechanisms. On retiring from the USArmy in 2011 after 23 years, I began working these same issues providing research and training consultation founding Serendipity Alliance, a 501c3.

1. Page 1 The draft pediatric care model concept includes

- Integrated Pediatric Health Care and Health-Related Social Service Delivery Model (general)
- Operation of Integrated Service Model
- Integrated Pediatric Service Model Payment and Incentive Arrangements
- Pediatric measures
- Other comments.

You have missed including a section emphasizing the importance of Family Practice providers, as care givers of children as well. Please be inclusive and acknowledge they care for children, to include screen for mental health and follow with behavioral health, and ask for their input. A major problem with our current 'sick care' fee-for-service system is the silo'ing of services and billing, with a lack of communication and collaboration between providers, in both inpatient and outpatient environments. Write this directive to be sure we don't inadvertently continue this oversight and practice.

2. BACKGROUND The "Innovation Center" needs to promote allowing individual providers working on the same day in the same location to charge for their services. The current push is to continue to presume that only one charge can be made for a visit, by one provider. With an integrated clinical setting, the physician and behavioral health providers need to be able to charge for their time. If we keep the 'one charge' mandate healthcare expense will keep going up, as Primary Care Clinics are adding redundant BH personnel as patient-centered medical homes to do screening and initial intake, only to refer the client to the standard BH clinics, effectively doubling the cost. A reduction of program expenditures will only be forthcoming if we remove personnel from current BH operations and transfer them into PC Practices, and still allow for separate billing. It will be 'one-stop shop' service for the patient with same-day access, much better, inclusive, and continuous with improved outcomes, "preserving (AND) enhancing the quality of care for Medicare, Medicaid, and Children's Health Insurance Program (CHIP) beneficiaries."

3. The "new pediatric health care payment and service delivery model" will "improve the health of children and youth covered by Medicaid and CHIP through state-driven integration of health care and health-related social services" only with shared accountability and cost savings among all primary care

and behavioral health providers. Do not maintain two separate systems as it is today.

4. Regardless of payment model, we need to stop thinking the "integrated services to all children and youth covered by Medicaid and CHIP" are to be provided only to the high utilizers with risk for "developmental, social, emotional, or behavioral health challenges, intellectual or physical developmental delays or disabilities, and/or those with complex and/or chronic health conditions." Every child needs to be screened and followed by integrated preventive, proactive teams in the primary care setting to effect the earliest identification of need to initiate "therapeutic health care services (that include access to health-related social supports through case management." With attention to all children, those without genetic disorders or severe developmental conditions will not need more than screening resources and preventive measures, including "sound nutrition, safe living environments, responsive adult caregivers, and nurturing social relationships." Our current system is reactive; we need to become much more proactive, especially in regards to mental health issues.

5. We agree that children and youth currently covered by Medicaid and CHIP are experiencing adverse childhood traumas ("unfavorable social conditions") compounding their inherent genetic and/or environmental conditions. That said, being covered by the social healthcare programs does not mean children born into families who have the means to purchase healthcare (or insurance plans) do not need integrated timely services as well. Just because they have "insurance" does not mean they enjoy access to high quality integrated care. Make all "federally-funded programs (playing) a role (today) in addressing threats to children's health (i.e. Medicaid and CHIP, Healthy Start, Head Start, Child Welfare)" available to all children. Children not on these programs also "often receive the wrong care at the wrong time because of late presentations."

6. Page 2. All medical providers need to "focus on paying for value instead of volume," not only those accepting Medicaid and CHIP programs. This is best done, as mentioned, with (Medicaid) "Health Homes, accountable care organizations, community health teams, care management programs, and other services and models"... promoting shared accountability, patient-centeredness, and service integration." However, I think we are wrong to think these concepts are understood and already working "primarily on the adult Medicaid population." In fact, integration and inclusion began in this country in Pediatric circles, not adult. The "pediatric alternative payment model" needs to enhance the integrated developmental team model already existing in the pre-school and elementary years. We simply need to make payment contingent on being integrated, removing redundancy and waste to "encourage (ALL) providers to collaborate with health-related social service providers (e.g., early childhood development programs, child welfare services, crisis intervention programs, behavioral health providers, and home and community based service providers)... and share accountability for outcomes for children and youth." Write the funding, payment, and grants with this mandate applied.

7. All Primary Care Providers should be providing

1. Comprehensive, universal screening of (all) pediatric beneficiaries to "increase identification of health care needs (such as behavioral health) and community-based and other health-related social services supports among children, youth, and their families..." at an earlier stage than what is currently commonly experienced;
2. Reduced service interruptions and churn resulting in administrative cost savings;
3. Streamlined, coordinated care across health care and health-related social services providers with families at the center of decision-making (with) improvement in health and wellness and reduced total cost of care and service delivery; and,

4. An infrastructure supporting sharing in accountability and cost savings."

8. CMS needs to recognize and highlight that most ACOs today are mostly striving to be "accountable" only to the business office and their bottom line. Revised billing and payment mechanisms need to be focused on increased value and establishment of health versus treatment of disorders and provision of procedures. It is accepted that the fee-for-service models are fine for procedural services, but not appropriate for prevention and generation of health, wherein the client does not need to generate visits anymore, thereby reducing costs.

9. No question the success of transformational payment mechanisms will require "streamlining and coordination" and new "infrastructure, training, and data analytics models." Shared responsibility and authorities will allow multiple entities participating in a child's assessment and care to apply "waivers with other health-related social services...as incentive payments and sharing in cost savings."

10. Page 3. SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Remind all that mental health and health-related social services are all health care. Provide the stipulation that monies provided to either provider is contingent on showing integrated screening preventive programs as well as assessment and treatment with warm hand-offs and close follow-up. These are the outcomes that should be measured, monitored and paid for to effect this transformation from sick care (fee-for-service) to health care (value-based). The challenge is to realize we cannot, and will not, continue separate professional payment streams for provision of these services. The currently disparate providers should be made to share the resources to ensure healthy outcomes at lower cost. This collaboration needs to begin with healthy children and continue when they are recognized as having special needs.

11. Partnering with dental (oral) health would be ideal, although these collaborations can be virtual and not physical.

14. "Children, youth and their families and providers in rural and underserved communities such as tribal reservations" (should) have an opportunity to participate" via use of tele-medicine and roving providers staffed based on reliant population levels.

15. SECTION II: OPERATION OF INTEGRATED SERVICE MODEL.

"Partnerships between child- and youth-focused health care and health-related social services providers" can be physical, on the same campus, or virtual, separated by a reasonable distance, as long as they provide same-day, timely coordination and services. Tele-medicine and transportation resources are crucial if teams are physically separated but virtually connected for same-day service.

16. Service gaps and timely implementation are avoided with a system wherein case managers and navigators are shared by each entity, rather than resourcing separate ones for each program, as it is today. In addition, the payers must provide case managers to assist with specialty referrals and access to take that responsibility off the patient. We must remember "who's the patient." They have conditions, both physical and mental, limiting their ability to coordinate multiple appointments and schedules. Medical and payer case managers with shared responsibility for assisting the Providers in getting patients to services would reduce the current expense and waste, as well as the morbidity and mortality

seen, especially for mental health behavioral conditions. Asking "Who's your Primary Care Provider?" or "Where's your Community Health (Integrated) Clinic?" on first contact would vastly facilitate lowering of barriers to identifying, enrolling, and maintaining coverage. If the provider is an urgent care or emergency room entity, they should be mandated to forward healthcare they provided directly to the client's PC Provider, without exception!

17. Page 4. Service integration would occur with emphasis on payment being tied to established connection with local programs such as Head Start and Early Childhood Home Visiting Programs, with partnering in place up front with health-related social service providers integrated services are delivered in a timely manner within the first window of opportunity. Health-related social service providers who should be included in a child and youth-focused integrated service delivery model would be developmental physicians and psychologists, speech, physical therapy, dental hygiene, and learning-school specialists.

18. Infrastructure development, such as electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, is ideal, but frankly, just mandating that team members share records, even if still on paper, would still provide the service children need. Integrated training programs, especially to instruct on the new processes being implemented, would be crucial. Emphasize that the most successful programs to date have recognized the need for a highly trained, proficient coder on the shared staff. Of course, business administrators will need to be trained on new mechanisms for payment processing.

19. The "most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs" is seen with earlier identification and onset of care, to include education of the parents, before costly interventions are needed and/or potential is forever lost.

20. The main "obstacle for health care and social services providers as well as payers when integrating services" is overcoming ownership and control of resources within the silos existing today. Leadership must develop trust and a unified attitude of cooperation and sharing in the work place. Early introduction of changes is always helpful as well as getting employee buy-in.

21. Offering lessons learned from successful ACOs within the Patient-Centered Primary Care Collaborative (PCPCC) is highly recommended. They are organizations who have already made the changes required, made the mistakes, and are already reaping the benefits of the cost savings.

22. SECTION III: Page 5. Again, we should not continue to promote the concept that we should look at high utilizer beneficiary populations/participants that supposedly "offer the greatest opportunity for generating savings;" rather, look at improving outcomes for all children and youth in earliest identification for all children and early treatment to prevent the need for chronic services (cost avoidance). Integrated health care and health-related social services should be available to all children prenatally on. Those with intensive and multiple needs would require increased case management and coordination as those needs are identified. All age ranges should be included.

23. Health care providers can be encouraged to provide collaborative services with health-related social service providers by receiving a capitated fee by showing they provide this type of oversight for every child enrolled in their practice.

24. Ensure case management is done efficiently and timely by the integrated teams, removing this responsibility from parents and guardians. Pull reimbursement for payers who don't help with this task and give those funds to the clinics to ensure the best patient-centered, effective, approach.

25. Page 6. Successful alignment is best accomplished by emphasizing shared responsibility...and successes (cost savings). Give the majority of cost savings to the clinicians, not the insurance companies. It is time to balance this out!

26. The Health Home model should measure continuity to better meet the needs of the pediatric population. The most efficient practice is one wherein the patient knows their provider, nurse, and care coordinators. The teams should be rewarded for conducting huddles in which preventive services and complete follow-up plans are established even before the patient comes in for the visit. Huddles take time away from visits, but ultimately remove 'false demand' and replace it with doing "today's work today."

27. SECTION IV: PEDIATRIC MEASURES. Pediatric quality measures indicative of health outcomes should start with (1) % of children with access to a continuity provider in a patient-centered integrated medical home community clinic. We already have short-to-medium term measures such as (2) vaccination rates and (3) timely well-child visits. Long-term cost reductions would be seen by measuring (4) time from referral to implementation of services, along with (5) ER utilization and (6) reduction of unnecessary hospitalizations and re-admissions, already used by PCPCC and PCMH operations to show efficacy of making this transformation to integrated care. A measure of health-related social need would be to measure (7) parent/guardian lost work days. Clinics who have the most (8) patient-centered and family-driven processes would see parents able to be at work. Decreasing the need for guardians to (9) use of sick time to stay home with the child would please employers, especially if this contribution to societal return on investment were calculated. Similarly, we could develop a measure to indicate (10) missed school days as an indicator of effective health care delivery for children.

27. SECTION V. Page 7. A major initiative needed to improve care to all people, but especially for those with mental health and developmental learning conditions, is to improve communications between medical providers who have a 'need to know' with up front signed release of information form signatures. Adding school personnel to these ROI is also needed so studies done out side of school (I.e. vision and psychological assessments, especially for children in the CPS) are shared immediately to accelerate school application of learning programs for children with challenges. The case managers should be facilitating this on the first visit.

28. A second initiative is to identify case managers within primary Care, SWpecialy Care, and payers and mandate they work together, as a team. Currently, even with case managers in place, parents are made to make calls and ensure follow-up as though they are the case managers.

29. My final recommendation is make payments reliant on establishing a release of information (ROI) list of trusted 'family/friends' for all children, especially teens, to be used when the child is in life-threatening situations, whether due to physical trauma, abuse, or severe depression/ suicidal-ideation. The development of a safety net for patients of all ages would be facilitated if this were common practice along with screening for other preventable, treatable conditions (I.e. smoking, cancer, vision. hearing).

Franciscan Children's

Hi,

Please accept this RFI submission from Franciscan Children's. We are the only pediatric post-acute care hospital in Massachusetts, as well as one of the largest providers of pediatric behavioral health services.

If you could confirm receipt of this submission, it would be greatly appreciated.

If you have any questions, please do not hesitate to be in touch.

Many thanks,



Franciscan
Children's.pdf

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

QUESTIONS:

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

Franciscan Children's is a small specialty hospital located in the metropolitan area of Boston. Franciscan is the only pediatric post-acute care provider serving the most medically complex children in Massachusetts. We are also one of the largest providers of pediatric behavioral health services – from our outpatient behavioral health services, to our short-term residential community based acute treatment program, to our inpatient psychiatric program. In addition, Franciscan Children's offers a variety of outpatient programs, including primary care, dental care, outpatient dental surgery, and rehabilitative therapies. Collectively, across our programs, we serve over 12,000 children a year.

We believe that there is a great value in having a child and youth-focused care delivery model that combines and coordinates health care and health-related social services. Most of the patients that we serve are on Medicaid. Many come from families that face complex socioeconomic, cultural, and geographic challenges. We also work with many children who are referred to us from the Department of Children and Families. Coordinating with social services, from the Department of Children and Families, to housing agencies, to immigration assistance agencies, to community mental health providers, has historically been important to us so that we can provide the most optimal care we can to our patients. We have found that children at-risk for developmental, social, emotional, behavioral, or mental health problems often become "stuck" at acute care facilities, preventing transfer of a patient in need of our services. Sometimes, in spite of our best efforts, patients with these risk factors become "stuck" at our facility, preventing us from accepting new patients. Further collaboration with social service agencies across all levels of the health care industry would help to move patients more smoothly through the system.

While our organization collaborates with and refers to social service agencies, we have few formal partnerships in place and we suspect that is the same is true for many hospitals. Having technical assistance in this area and system reforms to encourage more formal collaborations would be helpful.

Effective models are needed particularly for the integration of behavioral health services. Child health encapsulates physical and mental health, yet today's system does not adequately facilitate the integration for the well-being of the child.

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to "ramp up")? Additionally, what program integrity strategies were employed where these partnerships exist?

Franciscan Children's is fortunate that Massachusetts is a very progressive state with regard to the range of covered services for Medicaid beneficiaries. We have not partnered with social services in any way to support services beyond what is covered in the mandatory Medicaid benefits.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an

opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

Franciscan Children's is located in the metropolitan area of Boston. As such, we have no insights on rural or tribal reservations.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?
 - a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

Franciscan Children's offers a school-based mental health program called the Children's Wellness Initiative. Through this program, Franciscan stations psychiatrists, psychologists, and social workers in five Boston public schools. Many of these students come from underserved backgrounds where it would be difficult for their family to transport them to a mental health program. By bringing the program to these students, Franciscan Children's provides services that are accessible in an environment where the students feel comfortable. The schools greatly appreciate this service and Franciscan Children's has been approached by others to replicate this program in other parts of the city of Boston. However, what remains a challenge is reimbursement for the services that we provide. This program was initially funded through grants. When the grant funding disappeared, Medicaid became our sole source of funding for this program. Unfortunately, mental health services for children are woefully underfunded so we do not cover our costs for this valuable program. This prevents us from expanding to meet the demand in the surrounding community. In order to expand service integrations like the one achieved through the Children's Wellness Initiative, adequate reimbursement must be provided.

We believe that further external service integration could be achieved through the provision of telehealth services. We would like to be able to use telehealth services to partner with other acute care providers in the area to provide subspecialty consults that we do not offer but our medically complex patients need. Having to transport these children with complex medical conditions for outpatient appointments is burdensome both for our patients and staff. While the Massachusetts Medicaid program does not reimburse for telehealth services at this time, we believe that telehealth is a cost-effective way to provide further access to care and expand partnerships with other institutions across the health care delivery system.

Service integration also occurs internally at Franciscan. Approximately 1.5 years ago, we began to integrate outpatient behavioral health services into our primary care clinic through a Licensed Independent Clinical Social Worker. Although Massachusetts is a progressive state with regard to health policy and actively encourages service integration, we found billing multiple services on the same day for the same patient to be very complex. In Massachusetts, reimbursement for behavioral health services is completely distinct from reimbursement for medical services. Other clinics in the Boston area – many of them much more experienced than we are in behavioral health/primary care integration – face the same challenges that we do in terms of reimbursement. These other clinics were only able to expand their service integration efforts through grants or through covering their costs from other services. Now, as we look toward implementing a patient-centered medical home, we would like to integrate all of our outpatient services – dental, behavioral health, primary care, and rehabilitative therapies - so that the patient can be seen on the same day but we still struggle with billing Medicaid for integrated services.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?
 - a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?

While we have not generally partnered with health-related social service providers in an intensive, formal way other than sending them referrals as appropriate, we think it would be appropriate to especially include community-based mental health entities in a child and youth-focused integrated service delivery model. In Massachusetts, there is a network called the Children's Behavioral Health Initiative. These entities provide intensive case management and also home-based mental health services. Providers that are part of the Children's Behavioral Health Initiative each represent different regions of the state. We collaborate with all of the providers in this network when we discharge patients from our inpatient psychiatric unit back into their communities. This network helps to ensure our patients' needs are being met when they are no longer within the confines of our hospital. As the Massachusetts Medicaid program implements delivery system reform through ACOs, this behavioral health provider network will play a fundamental role in supporting the ACOs that are formed. Although these reforms have not been implemented yet, we believe that this partnership will be beneficial in ensuring that behavioral health is a fundamental part of a child's care, particularly in a risk-based model.

- b. What potential exists for increased partnership for provision of home and community-based services?

There is a strong potential for increased partnership for provision of home and community-based services. Franciscan works with children who have complex medical conditions. We discharge the majority of our patient population back into their homes. Although we do not provide home care services, we feel that partnering with home health agencies and community agencies that support these families would further enable optimal care for these children. As the Massachusetts Medicaid program works to develop reforms around ACOs, the state is seeking community organizations that will facilitate referrals and provide case management to populations requiring long term services and supports. These community organizations will directly partner with hospitals and health systems that are forming ACOs. While this model has not been implemented yet, we feel that it will be beneficial to have this multi-dimensional collaboration in place. As mentioned above, the Massachusetts Medicaid program is also including community-based behavioral health providers in its reform efforts. These providers will partner with ACOs to ensure that children's behavioral health needs are met.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

In order to integrate services across Medicaid enrolled providers and health-related social service providers, there must be interoperability between electronic health record systems. As pediatric post-acute provider, we receive referrals directly from local acute care hospitals. These acute care hospitals generally have different electronic health record systems than ours. A lack of interoperability between electronic health records makes the transfer of information across institutions very burdensome for us. We suffer the same interoperability challenge in our inpatient psychiatric program as well, where we receive referrals from emergency departments across the state.

In addition to interoperability, it would be helpful to have more training on electronic health record systems. Many of our medical providers received their training before electronic health records existed and struggle balancing the provision of care with electronic documentation. Additional training and technical assistance would help them to become more proficient.

Furthermore, post-acute care facilities are not eligible for monies through Meaningful Use. In order to encourage optimal use of electronic health records, all providers must be incentivized to do so. Thus, changing this requirement would be helpful in ensuring the most effective and efficient exchange of information.

We would recommend involving stakeholders at all levels of health care – acute care hospitals, post-acute care hospitals, behavioral health providers, community practices, and social service agencies – to maximize integration. Electronic health record vendors and interoperability platforms should also be involved in this discussion. At this time, we do not have any insight into specific costs or timelines.

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

As mentioned previously, the Massachusetts Medicaid program is working on a system-wide reform effort that will involve the proliferation of ACOs and connecting those ACOs to community-based organizations providing behavioral health care and long term care services and supports. Massachusetts applied for an 1115 waiver to achieve this reform effort. This reform effort has not yet begun, so we are unable to provide any specifics on operationalization at this time.

5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

When considering future models, priority should be placed on partnerships that enable work across geographies. Potential exists for increased utilization of telemedicine, telepsychology and other efforts that build virtual capacities connecting pediatric specialty care with allied health and community providers.

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

As mentioned previously, service integration has been challenging for our organization because payment for services is fragmented among various Medicaid departments. It is challenging in Massachusetts to bill for different services on the same day, even though this enables care for the patient to be provided in a seamless, coordinated, and holistic way. These obstacles could be overcome if payers, such as Medicaid, had centralized authorization for services.

Other obstacles we know through the Children's Hospital Association that pediatric providers generally face with regard to integration include:

- *Lack of payment or risk adjusted payments for social determinants of health*
- *Differing eligibility requirements*
- *Restrictions (real or perceived) on data sharing*
- *Competing measures of success*
- *Regulatory limitations for innovative solutions*
- *IT incompatibility or restrictions on sharing data on common beneficiaries across programs to effectively manage interventions and/or evaluate outcomes of these interventions.*
- *Differing measures, despite aligned goals*
- *Mismatch in cultures typical to health care and social sectors*
- *Capacities, expertise and infrastructure needed for successful service and payment integration*
- *Competing goals, agendas and measures of success across service sectors with overlapping beneficiaries*
- *Gaps in data management and analytic capabilities*
- *Sustainable funding with decreasing rates once savings are recognized*

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

We do not have any comment on this question.

8. What role do models of care such as ACOs play in the pediatric environment?
- a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?

ACOs in Massachusetts are still developing at this time. The Massachusetts Medicaid program will have ACOs coordinating care across the delivery system beginning in December 2017. As a small institution, Franciscan Children's does not have the ability to take on financial risk and thus will not become an ACO. In spite of that, we see ACOs as an opportunity to coordinate care across the delivery system and incentivize providers to place a necessary focus on both costs and quality.

From our experience with the Children's Hospital Association, we understand the following: Pediatric ACOs are relatively new players in terms of managing the health care of populations. Few pediatric ACOs currently negotiate with states directly for payment.i The pediatric ACO develops the care model specific to its defined population. Care models regularly include care coordination within and across care delivery sites and patient and family-centered medical homes. Often the provider networks and system-based contracts are uniquely constructed to cater to the needs of the population. ii Many ACOs distribute some sort of incentive pay (savings) to providers based on the achievement of cost and quality goals. MCOs maintain the needed claims and related infrastructure for services such as claims processing and utilization review. Pediatric ACOs tend to provide case and care management.iii

- c. How are pediatric ACOs the same or different from adult-focused ACOs?

Although Franciscan Children's does not have an ACO and pediatric ACOs are relatively new players in managing the health care of populations, we have heard the following from the Children's Hospital Association about the difference between children and adult ACOs:

- *Pediatric ACOs generally have smaller populations, and will need additional participation to create efficiencies for initial cost savings*
- *Pediatric ACOs find savings via efficiencies and coordinated care vs. efficiencies found through competition as in the adult markets*
- *Pediatric ACOs must be able to prospectively versus retrospectively attribute their patients to the ACO.*

- d. What opportunities do pediatric ACOs have for integration with community and health services systems?

As mentioned, the Massachusetts Medicaid program will have community providers – both for behavioral health and long term services and supports – integrated into the ACO models that they are proposing. ACOs will be required to have contracts with these community providers to ensure coordination and collaboration across the health care system. In turn, community organizations will receive funding so that they can provide case management and facilitate referrals on behalf of the ACOs.

- e. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

With Massachusetts's ACO reform efforts, MCOs are an integral part of most of the ACO models providers can select. This is because Massachusetts will be shifting an estimated 80% of its Medicaid population into

managed Medicaid organizations. In the various ACO models proposed, MCOs can administer the ACO on behalf of a hospital or health system, or a hospital /health system can share full financial risk with a MCO.

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

Patient-centered medical homes could play a large role in future reform efforts. Our primary care practice is currently working to become a patient-centered medical home and the enhancements that we are making – in terms of team-based care, care management, expanded access, and many other areas – will help to improve care for patients and make our primary care clinic operate more smoothly.

Section III

What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?

- a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?

Integrated care models should consider children who have complex medical conditions. These are the children that we see every day and care for in our pediatric post-acute care service. These children account for a small percentage of the pediatric patient population, but represent as much as 40% of the Medicaid spend on children nationally. According to the Children's Hospital Association, this population is growing by as much as 5% per year. CMS should be careful not to design an integrated model where pediatric post-acute care providers cannot participate due to their inability to take on financial risk. If providers were instead reimbursed based on the acuity of patients that they see, small organizations like ours would be able to play a much larger role in population health initiatives.

Children who have mental health conditions should also be included in an integrated care model, as behavioral health and medical conditions are often interlinked and require a high spend. However, the design of the model must be careful not to limit children's access to inpatient psychiatric care. Suicide is now the second leading cause of death among adolescents nationwide. The demand for inpatient psychiatric services like ours is exploding but mental health services are still underfunded. While mental health is an important aspect of any integrated care model, the design must not restrict access in any way so that children are prevented from receiving the highest level of care that they need.

- b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

All ages of children should be included in an integrated care model. Because children with complex needs can require extensive care, we recommend that the model for integrated care cover ages 0-19.

2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs? a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

Franciscan Children's does not have an ACO model but from following Massachusetts's ACO reform efforts, the state will be using a shared savings model and will be attributing patients to an ACO through their primary care provider. This model is not in place yet, so we are not able to comment on its success at this time.

- b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

Franciscan Children's does not have an ACO. We know that Massachusetts is working on its ACO model to avoid adverse selection and address the needs of high-risk individuals by having community organizations partner with ACOs in structured way, but we do not have more details on the specifics of payment at this time.

- c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

The relative advantage of such payment arrangements is that they focus the health care system away from fee-for-service to a value-based delivery system, with cost and quality at the forefront. Instead of having a fragmented delivery system, such payment arrangements work to coordinate care across the delivery system. As a pediatric post-acute care provider, we appreciate the incentive that these payment arrangements give to acute care hospitals to move their patients to us – a lower cost setting – when clinically appropriate.

However, we do believe that risk arrangements need to be designed carefully for smaller providers like us to participate. The health care models that exist today are designed for organizations with a much larger scope that can take on financial risk. We do not have the ability to take financial risk but are an essential part of the delivery system, especially with regard to reducing costs.

- d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

Different payment models are appropriate for providers depending on their size. As a small organization treating the most complex patients in the state of Massachusetts, a model that would account for the acuity of the patients we serve and not require us to take on financial risk would be desired.

- 3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?

- a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.

As mentioned, reimbursement is challenging in Massachusetts because the Medicaid program is siloed. It is difficult to get reimbursed for multiple services provided on the same day, which hinders integration efforts. As such, financial incentives and funding streams are not as aligned as they could be. Massachusetts is working on improving this integration through its Medicaid ACO reform efforts that will be implemented in December 2017. Additionally, as mentioned, mental health services are underfunded. As a provider of outpatient, short-term residential, and inpatient services, we have seen the demand for children grow rapidly but increases in reimbursement have not kept pace. In Massachusetts, as many as 70% of the children stuck in emergency departments are there because of behavioral issues. The low reimbursement hinders many providers from opening or expanding services in behavioral health.

- b. What factors are essential to the success of this alignment?

To promote the success of this alignment, health care providers must be incentivized to coordinate with others in the health care delivery system to move patients through in a seamless fashion. Many acute care facilities today hold on to their medically complex patients past the point when they are clinically appropriate to be there, adding costs to the health care system. These patients should be transferred to our post-acute care service and financial incentives would help assist in this effort. On the outpatient side, we make every attempt to provide holistic services but in order to integrate them fully, we must be able to bill for multiple services for the same patient on the same day.

- c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

We have no comments on this question.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

In the Massachusetts Medicaid health reform, both ACOs and community agencies will be incentivized through Delivery System Reform Incentive Payments (DSRIP) that they can use to build their infrastructure with regard to workforce, data analytics, case management, and other areas. While this model is not in place yet, we believe that financially incentivizing providers and community organizations is necessary to achieve the level of transformation and coordination desired.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model? a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

In any integrated service delivery model, it is important to be reimbursed for all developmental screenings. In Massachusetts, we are required to provide certain pediatric screenings but not all of them are reimbursed. The ones that are reimbursed are often reimbursed at a low level, in spite of the fact that they are time intensive.

- c. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?

We do not have any comments or insights for this question.

- d. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

We do not work closely with Health Homes models and thus have no comments for this question.

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

We assume that savings would be calculated in the form of a total spend per covered life. Small providers working with medically complex populations should be involved in integrated pediatric service models but not in ways that involve financial risk that they cannot undertake.

SECTION IV: PEDIATRIC MEASURES

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

We think that the following measures would be appropriate for beneficiaries: readmissions to an acute care facility, immunizations administered, mental health screenings administered, and referrals to a pediatric post-acute care facility when a patient with complex medical conditions is clinically appropriate. Referrals to a pediatric post-acute care facility would be a new measure but we strongly believe that acute care facilities should be incentivized to refer to pediatric post-acute care provider - if there is one within geographic proximity - in order to promote high quality, cost effective care. For all of these measures, we believe that they could be both predictive of near-term and long-term outcomes.

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

Readmission information is currently collected by providers and is an industry standard for determining health care quality. Immunization data is typically collected by providers and reported on by the state. Information on completion of mental health screenings is collected by the state of Massachusetts and by providers. Referrals to pediatric post-acute care facilities when patients are clinically appropriate is a new measure that could be jointly collected by acute care facilities and post-acute care facilities. We do not have further information to provide on data systems to collect these elements or predictive validity evidence at this time.

SECTION V: OTHER COMMENTS

1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

In order to achieve better health outcomes for children and youth across the delivery system, reimbursement must be better coordinated to allow for innovative models that promote integration. Payers should centralize departments in charge of different services where integration is desired. Technical assistance should be administered to providers that want to integrate their services with others but are unsure of how to do so.

In thinking about effective partnerships for children and youth, the role of mental health and post-acute care cannot be underscored. Mental health is underfunded but suicide is the 2nd leading cause of death for those ages 15-24. With the number of medically complex children growing at 5% annually according to the Children's Hospital Association, pediatric post-acute care services like ours will become all the more valuable in keeping children healthy and lowering costs.

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

As you work to improve care and health outcomes for children, you should consider the following principles that the Children's Hospital Association has put forth in terms of having care:

- *Be child-(and family-) driven and supported by an infrastructure aligned around the child's development with metrics designed specifically for kids.*
- *Integrate physical and mental health to address the complete health needs of children*
- *Be delivered via an integrated network of care that is home and community-based with access to specialized services as needed.*

We also support the Children's Hospital Association's recommendations for the following:

Alternative Payment Models

- *Clarify regulatory issues to enable flexibility in service provision and enable more widespread data sharing. Organizations currently face significant hurdles when integrating needed social services due to differing regulatory interpretations with respect to allowable services and information sharing.*
- *Develop a payment mechanism (e.g., PMPM care management fee) for a centralized care coordination function and funding for emergency social services for high need populations. This will serve to stabilize the revenue stream and provide readily available support more reliably for families.*
- *Provide payment incentives for primary care and rural practices to keep children close to home.*
- *With experience, move to capitation for an actuarial sufficiently sized population that:*
 - *Includes payment for physical and mental health care*
 - *Incorporates social services into the medical cost*
 - *Includes a socio-economic risk adjustment factor*
 - *Ensures patient attribution is prospective*
 - *Establishes credible risk adjustment and outlier protection for children with complex conditions*
 - *Calculates the return on investment over the long-term (10+ years)*

Integrated Networks

Unlike adult solutions, regional competition in pediatric care can be counterproductive. Pediatric populations are smaller and disease incident rates are lower than their adult counterparts, resulting in the concentration of specialized services across geographic regions. Thus, the size of the pediatric population and availability of specialized pediatric resources must be considered with respect to network structure. Networks must:

- *Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations.*
- *Be able to meet the needs across a geographic region.*
- *Provide comprehensive pediatric specialty care.*
- *Be able to integrate high risk children in other sectors.*
- *Have large scale EHR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.*
- *Have a centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.*

ⁱ http://jamanetwork.com/data/Journals/PEDS/934898/POI150080supp1_prod.pdf

ⁱⁱ

ⁱⁱⁱ Survey data from Children's Hospital Association Accountable Care Organizations Study, 2014

Franciscan Children's

Hi,

I work at Franciscan Children's, a small specialty hospital outside of Boston largely focused on providing pediatric post-acute care and mental health services. Our organization is not in any sort of risk model or ACO at this time and because of our small size, we are not planning to be in any sort of alternative payment model in the future. I recently came across the CMMI pediatric alternative payment model RFI. I was curious to know:

- how will CMMI use the responses from the RFI?

- what information would be valuable to CMMI (responses formulated directly from our experience taking care of our patients or thoughts on the pediatric health care system in general?)

- if CMMI is just looking for responses specifically from organizations that have or are planning to be in alternative payment models or ACOs, or if responses from organizations like ours (not in alternative payment models) would still be valuable?

We just want to make sure if we respond to this RFI, we are providing CMMI with information that will be most useful and valuable.

Thank you so much for your thoughts.

FREDLA

The Family-Run Executive Director Leadership Association (FREDLA) is a network of family-run organizations dedicated to supporting families caring for a child with behavioral health needs. Family-run organizations are governed and staffed by parents with "lived experience" caring for a child with behavioral health needs.

A recent study of 74 family-run organizations across the country showed that family-run organizations are working with families in all child-serving systems and children with complex behavioral health and other health concerns such as asthma, diabetes, autism and more.

Parent peer support is a valuable service provided by family-run organizations that research has shown helps families access services earlier, engage in services and adhere to treatment longer.

Medicaid data has shown that the highest cost child users of Medicaid have behavioral health needs. Parent peer support provided by trained certified parent peer support providers with lived experience are an effective and cost-saving service for families and children. Parent peer support provided in partnership with pediatric care in an integrated health care model is being implemented in some states and a model that could be replicated throughout the country.

I am happy to provide additional information on the services and impact of parent peer support provided by family-run organizations.

Thank you for the opportunity to provide input into this important discussion.

Futures Without Violence

To Whom It May Concern:

Futures Without Violence (FUTURES) thanks CMMI for the opportunity to comment on this Request for Information on Pediatric Alternative Payment Model Concepts. Futures Without Violence is a national non-profit organization dedicated to preventing and ending violence against women and children. We are a technical assistance provider to multiple state and federal agencies, including the Department of Justice's Defending Childhood Initiative, and the Administration for Children, Youth and Families' Promising Futures Initiative and new Quality Improvement Center for Children Impacted by Domestic Violence whose families are served by the child welfare system. For almost two decades, FUTURES has been the federally-designated National Health Resource Center on Domestic Violence, bridging the gaps between domestic and sexual violence advocates, health care professionals, and child-serving systems. We agree now is the time to improve the health and well-being of children and their families and reduce costs associated with unaddressed trauma and adversity by better connecting federal and state Medicaid and CHIP programs with services and supports provided by other agencies and programs. Medicaid can be an important source of financing for health and behavioral health services, and blending and braiding funding across silos can provide a strong foundation for integrated services.

The health care system plays an important role both in identifying children who may be exposed to extreme adversity and violence, currently and in the past, and in providing the evidence-based interventions that can help children heal and prevent chronic health conditions and other poor outcomes associated with trauma and Adverse Childhood Experiences (ACEs). The health care system is also central in supporting the greatest resource a child has: a stable, safe and nurturing parent or caregiver. By adopting a two-generation approach that understands and addresses the individual health needs of children and their caregivers as well as supporting parents in their caregiving capacity, the potential to help children is great.

Alternative payment models that better integrate and coordinate care have the potential to ensure better health outcomes in the short term and over the lifetime for children and adolescents who are exposed to violence and ACEs and experience trauma. Indeed, they may be the most effective method for incentivizing change. Alternative delivery systems can also play a critical role in supporting two-generation solutions to violence, and research shows that serving a family together has a positive impact on the health outcomes of children.

As this RFI makes clear, the consequences of adverse childhood experiences are irrefutable and include higher rates of suicide, substance abuse and mental health challenges, shorter life spans, higher rates of violence and criminal activity and poorer educational and economic outcomes. Importantly, children who have been affected by ACE's, violence and trauma can heal. The often-cascading effects of ACE's and exposure to violence in childhood can be mitigated if it is recognized and if appropriate actions are taken at the personal, clinical and policy levels.

Increasing the capacity of the health care system to recognize and respond to childhood trauma and ACE's will result in improved health care outcomes for children and adults, and a reduction in health care expenditures, given the health costs associated with trauma and ACEs. As a result, we strongly support the goals of this RFI.



Futures Without
Violence.pdf



April 7, 2017

Center for Medicare and Medicaid Innovation (CMMI)
Request for Information on Pediatric Alternative Payment Model Concepts
Submitted electronically

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Section 1: Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

FUTURES supports an integrated pediatric health care and social services delivery model that coordinates services across child-facing agencies and to ensure that the child's needs are met.

Trauma-Informed Pediatric Health Homes

We see great potential in the development of trauma-informed health homes for children. It is possible to develop a health home that integrates trauma approaches, and may be possible to develop a health home that would be targeted at individuals who have been exposed to violence and other ACEs and designed to treat the resulting trauma symptoms. For children and caregivers, participating in a trauma- informed health home could mean coordinated access to the broad array of services that are covered by the state plan to treat the impacts of trauma, as well as receive age-appropriate medical care. They would receive additional care coordination and case management services to help their families navigate the health system and make sure that needed services are received.

In New York State, a health home program is designed primarily to serve adults with serious mental health conditions, and "trauma" is a qualifying condition for participation in a coordinated care health home. FUTURES recommends testing this approach for children.

One important element of a trauma- informed pediatric health home is routine screening for intimate partner violence by pediatricians. Since 1998, The American Academy of Pediatrics has encouraged its members to better identify intimate partner violence (IPV) and understand its effects on child health and development and its role in the continuum of family violence. Because of the frequency of pediatric visits, pediatricians have a unique opportunity to identify abused caregivers, offer education and referrals to advocacy programs and to evaluate and treat the health and safety needs of children raised in homes where IPV may occur. The AAP, the American Academy of Family Physicians, the American College of Gynecologists and Obstetricians all recommend that health care providers seeing children and adolescents should provide intimate partner violence assessment and response as part of patient care. The US Preventative Services Task Force also recommends screening and brief counseling for IPV for all childbearing aged women, and the Women's Preventive Services section of the Affordable Care Act requires that screening and brief counselling be a covered benefit at no cost to the patient. Despite the longevity of these recommendations and the more recent policy supports for that practice, payment mechanisms for health providers to provide the assessment and brief counselling are inadequate. There are currently no CPT codes for IPV assessment and response, only ICD10 codes and there is insufficient support for social service programs for families experience IPV as discussed below.

[http://fvpf.convio.net/site/EcommerceDownload/pediatric%20Consensus%20Blue-1861 Updated%20Feb%202016-1861.compressed%20\(1\).pdf?dnl=97021-1861-WZ6vzypmYPxIVUv-](http://fvpf.convio.net/site/EcommerceDownload/pediatric%20Consensus%20Blue-1861%20Updated%20Feb%202016-1861.compressed%20(1).pdf?dnl=97021-1861-WZ6vzypmYPxIVUv-)

Two-Generation Solutions

States have options to cover two-generation solutions under Medicaid but this is an emerging best practice and only a limited number of states cover these strategiesⁱ. The most powerful tool to implement two-generation strategies is EPSDT. To cover services for a caregiver, or for the caregiver and child together, a state must cover a range of services for the benefit of the child, that serve the caregiver and child together, or that would allow services for the caregiver to take place in a pediatric setting. States are permitted to cover interventions in pediatric settings, such as parental education or assessment, so long as these services cannot be considered treatment for the caregiver (treatment services for the sole benefit of the caregiver would have to be referred out or billed to the caregiver's insurance).

A May 2016 Informational Bulletin from the Centers for Medicare and Medicaid Services discussed using Medicaid to support two-generation solutions—and explicitly maternal depression screening and treatmentⁱⁱ.

FUTURES strongly recommends using Medicaid and other social services programs to support children exposed to violence and their caregivers who also may be victims. We recommend any new model expand beyond just maternal depression to make two-generation supports and services available that are comprehensive, systemic, and trauma-informed. We encourage an integrated system to allow and encourage pediatricians to do education and screening of the mother or caregiver at well child visits. This can also be furthered by linking services for parents to EPSDT or creating Medicaid “family accounts” which are billable for children and parents togetherⁱⁱⁱ.

Home Visitation

In March 2016 the Health Resources and Services Administration (HRSA) and CMS released an Informational Bulletin that outlines how states can fund their home visitation programs, and identified home visiting as a critical support for children^{iv}. The Bulletin specifically identifies how states can use their Medicaid program to fund the health care aspects of a home visitation program.

There is no state plan option called “home visiting” under the Medicaid program—but many of the individual components of home visiting will be covered by the program (some non-medical/behavioral health components may need alternate sources of funding). Examples of home visiting services that could be covered include: case management services; preventive services (including preventive maternal screenings for depression or exposure to violence); home health and therapy visits; and expanded services to pregnant women. Home visits can also be used to perform EPSDT periodic assessments and screenings for children and adolescents.

FUTURES recommends expanding Medicaid options to support home visiting, and to allow home visiting programs to be reimbursed under Medicaid. Expanding Medicaid's coverage of home visitation programs would increase the number of children and caregivers who could receive home visitation and, if coordinated with the Maternal, Infant and Early Childhood Home Visiting Program at the state level, could better utilize federal resources because MIECHV already has strong metrics for measuring effectiveness and evaluating success. It is essential, however, that any such expansion *supplement* services provided through MIECHV) and not supplant them. In addition, better integration with community-based domestic violence agencies, could ease workforce shortages and improve efficiencies if professional advocates and counselors became licensed Medicaid providers and were then allowed to participate in home visiting programs that serve children and families where there is violence. Early estimates suggest that a quarter and up to a half of families served by home visiting experience domestic or intimate partner violence.

Additional Recommendations:

- CMS should ensure that payment models cover a wide range of evidence-based interventions in both the health care and social services settings, even if these services are not covered by the Medicaid state plan. For example, the following services are written into state plans of many, but not all, states:
 - Multi-systemic Therapy, an evidence-based in-home services intervention that has been implemented in many states^v.
 - Parent-Child Interaction Therapy, an evidence-based intervention identified as a promising practice by CMS^{vi}.
 - Intensive-in-home services, therapeutic interventions to prevent out-of-home placements associated with the child welfare system, typically including individual and family therapy, skills training and behavioral interventions^{vii}.
 - Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), an evidence-based intervention that helps children and their families recover from the negative effects of traumatic exposure.

Guaranteeing coverage for interventions such as these (but not limited to these) would help children access the best treatment at the best time, while preventing more severe mental, physical or behavioral health issues from developing. In addition, grant funding should be made available for the start up costs of materials and training of these interventions.

- CMS should clarify and test out Medicaid case management or other incentives to do care coordination and referral among clinical and non-medical services.
- CMS should work with other agencies and programs (e.g. child welfare, the Women, Infants and Children Program, MCHB's Title V program) to encourage blending and braiding of administrative and financial resources across sectors and programs and allow flexibility in the use of grant dollars from non-CMS programs to test new solutions. State agencies should be expressly permitted to blend or integrate funding streams with aligned goals and explore public-private partnerships and should explore ways to improve coordination among programs from different sectors (potentially through Section 1115 waivers).
- CMS should test approaches to incentivize providers to work with aligned community partners to investigate what is happening with groups of patients in the community (e.g. investing in analytics to investigate what is a local trigger of asthma in a particular hotspot).
- CMS should allow for testing of new approaches to improving provision of services, based on direct input from patients and families.

Section II: Operation of Integrated Service Model

Eligibility Criteria

FUTURES acknowledges that participation in many alternative payment models requires a specific diagnosis (or set of diagnoses). As noted in the discussion of health homes above, we support exposure to violence and/ACEs or symptoms of trauma as an important eligibility criteria for services for children. Importantly, FUTURES supports a universal education approach, rather than one that is disclosure driven (which may or may NOT be coupled with screening questions if they are delivered in a trauma- informed manner). With a universal education approach, providers can promote prevention, resiliency, healing, and offer strategies that buffer the potential adverse impact

of trauma on health regardless of if an individual is ready to disclose their experiences with trauma. This is particularly important for caregivers who may be concerned about punitive responses to screening forms. Rather, a universal education approach emphasizes the caring and supportive relationships that can help enhance resilience and define concrete action steps to support parent or caregiver skills and children's resiliency. There are practice implications for how to safely and effectively implement these and other approaches, and a growing body of literature can provide examples and resources but this is not covered in depth here.

FUTURES recommends that CMMI test models of care that include universal education efforts by health care providers, and appropriate referrals and support when a patient discloses abuse or exposure to violence.

Early Intervention and Prevention

FUTURES also strongly supports early intervention and prevention for children and families exposed to violence/ACEs. But some health insurance plans may require a formal diagnosis (and sometimes a severe behavioral health diagnosis) to cover certain services. This often drives up health costs long term because problems can only be addressed once they become severe. The federal government importantly gave support to states to address trauma early through the "the tri-agency trauma letter" that gives guidance to state Medicaid directors.

FUTURES pulled from this letter:

"...Many of these children will demonstrate complex symptoms and/or behaviors that may not map directly to the [DSM] or the [ICD]...For example, there is currently no DSM diagnosis that adequately captures the range of child trauma effects...Yet, trauma-related symptoms are identifiable, can be clinically significant and can be addressed with appropriate interventions. For these children, appropriate screening, assessment and referral to evidenced-based practices are clearly indicated."

North Carolina has started down this path, allowing up to six outpatient behavioral health visits without requiring a diagnosis on the claim¹. Despite the challenges, it may be possible to cover preventative mental health services for a preliminary, time-limited manner without a diagnosis under Medicaid. We encourage programs to be restructured to allow for these prevention services in addition to evidence-based interventions, and for advocates to have these conversations with state policymakers when discussing policy change.

FUTURES recently released a paper building on this letter that identified state policies and payment strategies for a wide-range of services and to address mild-to-moderate diagnoses before there is a behavioral health crisis. In the interests of time, we did not pull out each innovative state strategy, but we encourage you to review the following, for state-specific examples and lessons learned <https://www.futureswithoutviolence.org/health-care-policy-and-payment-strategies-to-improve-childrens-trauma-services/>.

Additional Recommendations

- We recommend that a pediatric model linking health care providers with health-related social service providers should 1) include some type of backbone structure, such as a coalition, community leadership team, or integrator, to work across key community stakeholders to create alignment regarding the goals, metrics, governance, sustainability (including financial sustainability), learning systems, and other key aspects of the partnership; 2) include robust community engagement; and 3) include a process for identifying community needs, assets and gaps.

- CMS can improve coordination and reduce inefficiencies for Medicaid-eligible children who are also known to the child welfare system, by providing incentives to states to physically co-locate services. Specifically, some states are looking at Medicaid financing of health and behavioral health liaisons in child welfare offices^{viii}. This allows greater coordination between eligibility and caseworkers, as well as an integrated computer system.
- We support electronic solutions for sharing and coordinating care across providers, including electronic health records and encourage a strong data collection infrastructure to support patients in real time. However, strong privacy and confidentiality safeguards must be maintained. Survivors of domestic violence and sexual assault, and children exposed to violence will have unique privacy and security needs. Individuals should receive notice of how health information is used and disclosed, including specific notification of the limits of confidentiality. Parents and caregivers should be given choices of how they would like to communicate with—and receive communications from—their providers and plan, including by phone or email and under what circumstances.

FUTURES looks forward to continuing to work with CMMI on developing and testing a new model that meets the needs of our children most at risk for developmental, social emotional or behavioral challenges. We appreciate CMMI's commitment to finding new ways to help our most vulnerable children and families and your understanding of the importance of addressing culture and family. For additional information, please contact Kiersten Stewart at or email

i Improving the Lives of Young Children: Meeting Parents' Health and mental Health Needs through Medicaid so Children Can Thrive. Urban Institute. Olivia Golden and Karina Fortuny. March 2011. <http://www.urban.org/UploadedPDF/412315-Meeting-Parents-Health.pdf>

ii CMCS Informational Bulletin. Maternal Depression Screening and Treatment: A critical Role for Medicaid in the Care of Mothers and Children. May 11, 2016

iii Children do better when their caregivers do better: the need for intergenerational family services in pediatrics. Nov 23, 2015. CHOP Policy Lab. <http://policylab.chop.edu/blog/children-do-better-when-their-caregivers-do-better-need-intergenerational-family-services>

iv Coverage of Maternal Infant and Early Childhood Home Visiting Services. March 2, 2016. <https://www.medicaid.gov/federal-policy-guidance/downloads/cib-03-02-16.pdf>

v <http://mstservices.com/resources/funding-and-medicaid-standards>

vi Joint CMCS and SAMHSA Informational Bulletin: Coverage of Behavioral Health Services for Children, Youth and Young Adults with Significant Mental Health Conditions. May 7, 2013. <http://www.medicaid.gov/federal-policy-guidance/downloads/CIB-05-07-2013.pdf>

vii Department of Children and Family Services. <http://www.ct.gov/dcf/cwp/view.asp?a=2558&q=314366>

viii Making Medicaid Work for Children in Child Welfare: Examples from the Field. Center for Health Care Strategies. June 2013. http://www.chcs.org/media/Making_Medicaid_Work.pdf

Georgetown University Center for Children and Families

Thank you for the opportunity to respond to the recent Request for Information (RFI) on Pediatric Alternative Payment Model Concepts. Georgetown University Center for Children and Families is a nonpartisan research and policy center with a mission to improve access to affordable, comprehensive health coverage for children and their families. In October 2016, we provided input on State Innovation Model concepts, urging CMS to prioritize children in supporting state efforts to improve health care delivery for children. Thus, we were pleased to see the recent Request for Information (RFI) on Pediatric Alternative Payment Model Concepts and thank you for the opportunity to respond. We commend CMS for exploring different ways that states are taking innovative approaches to pediatric health care delivery in Medicaid. Children represent more than half (51%) of all Medicaid enrollees, and are the lowest cost population served because they are generally healthy. Given that a primary goal in delivery system reform to date has been to generate quick cost-savings, improving children's health has not been a focus. Importantly, in order to advance pediatric care, there must be the recognition that improvements in child health and costs will be longer-term and across sectors, including early childhood and education.

Recently, Bright Futures – a national health promotion and prevention initiative, led by the American Academy of Pediatrics – was updated to recommend that children be screened for poverty, caregiver depression and other social determinants that impact not only a child's health but also his/her success in life. HHS has adopted Bright Futures as the guide for children's preventive care for all private health insurance plans that must provide the Essential Health Benefits. While Bright Futures is not a federal standard in Medicaid, many states have adopted it or something similar to ensure that children receive the full scope of services required under Early Periodic Screening Diagnostic and Treatment. But screening is just a first step, and more can be done to connect children and families with social services that can improve the social and physical environment in which the child lives. We encourage CMS to incentivize states to explore these broader connections.

New York State is a leader in examining ways to advance value based purchasing for children. Last year, the Medicaid agency announced a pilot program in one community that will incentivize plans/pediatricians to undertake developmental screening of all children, connect children/families to appropriate services/interventions, and reward plans/pediatricians to the extent children enter kindergarten school-ready. And recently, the United Hospital Fund launched a Partnership for Early Childhood Development with NYC hospitals and other funders. The initiative will screen and address social and economic factors affecting children's health. These initiatives and efforts underway at Nationwide Children's Hospital in Ohio, the Colorado Pediatric Initiative, and the Oregon Health Authority summarized in a recent report by BailitHealth offer examples of innovative practices in pediatric care.

In the short run, more resources will be needed to change the way our pediatric health care system delivers care to incorporate a more holistic approach to health. And yet, recent health proposals at the federal level would cut Medicaid and domestic program spending on social programs such as housing and food assistance. Such cuts would harm children and families and thwart further innovation just when promising practices are emerging.

Thank you for your consideration of these recommendations.

Gillette Children's Specialty Healthcare

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Green & Healthy Homes Initiative

On behalf of President & CEO Ruth Ann Norton, please find the attached response from the Green & Healthy Homes Initiative to the Center for Medicare and Medicaid Innovation Request for Information on Pediatric Alternative Payment Model Concepts.

Thanks,



Green & Healthy
Homes Initiative.pdf



Pediatric Alternative Payment Models

Center for Medicare and Medicaid Innovation Request for Information Response

April 2017

A response to the Center for Medicare and Medicaid Innovation Request for Information on Pediatric Alternative Payment Model Concepts. This response focuses on the development of non-‘fee-for-service’ compensation models that address the link between unhealthy homes and unhealthy families, drawing from GHHI’s experience as an award-winning direct-service provider, national technical-service provider, and industry leader in social-innovation financing.

The Green & Healthy Homes Initiative (GHHI), founded in 1986, is a national 501(c)3 nonprofit organization that provides evidence-based direct services and technical assistance to create healthy, safe and energy efficient homes to improve health, economic and social outcomes for low-income families while reducing public and private healthcare costs.

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Organization Background

An overview of our organization, history, and mission.

The Green & Healthy Homes Initiative (GHHI) is a nonprofit with the mission of breaking the link between unhealthy homes and unhealthy families. GHHI utilizes a holistic approach to housing rehabilitation that aligns, braids, and coordinates resources to deliver healthier housing and healthier communities. Known for its innovation and common sense approach, GHHI was launched to more effectively and efficiently integrate housing interventions that improve health, economic, and social outcomes as well as build new avenues for funding what works at a scale matching the needs of communities.

GHHI is currently working in over 30 cities, counties, and states as well as with 11 Medicaid managed care organizations, and health care systems in the United States. For over 30 years, GHHI has played a strong leadership role in the reduction of childhood lead poisoning, the advancement of healthier housing, has changed standards for federal agencies, and built new avenues for funding – including significant changes in funding for the integrated standard of healthy, safe, and energy efficient homes.

Since 1993, GHHI has raised over USD 325 million to support partner organizations to advance this work. GHHI has had its standards and innovations adopted by federal and state agencies as well as national and local nonprofits. GHHI has successfully helped in the adoption into law of 30 lead and healthy homes policies and best practices. The organization is leading the national effort to have Medicaid invest in healthier, safer, and more energy efficient homes – a proven approach to improve health. The adoption of the GHHI comprehensive approach for HUD-funded programs resulted in 509,726 Green & Healthy Homes Units that were produced between FY2010 and FY2015. GHHI won EPA's National Environmental Leadership for Asthma Award in 2015 for its comprehensive home-based asthma program that has served over 1,700 patients in Maryland. GHHI's asthma program works directly with Medicaid health plans and clinics such as Amerigroup and Johns Hopkins Healthcare.

GHHI is one of the nation's leading Pay for Success (PFS) organizations, focusing on utilizing the innovative financing model to address social determinants of health. The financing model (sometimes also known as "social impact bonds") leverages cross-sector partnerships that focus on the results caused by a social-service, rather than solely on the delivery of services. In its most basic form, private investors pay to provide social services and government or other institutions repay those investors if the program achieves agreed-upon outcomes, such as decreased healthcare expenditures. We believe this model aligns perfectly with the goal of transitioning from volume- to value-based payments and have completed a body of work that allows states to implement the system in their appropriate context.¹

GHHI created the first national cohort of Pay for Success initiatives and investment opportunities to demonstrate that home-based interventions can improve health outcomes and reduce the cost of care for asthmatics. Forty percent of all asthma incidents are attributable to home-based environmental health hazards, but currently no federal health programs provide resources to address them sufficiently.² Comprehensive mitigation of environmental asthma triggers in homes, paired with asthma education, has proven to have a significant effect on rates of hospitalizations and ED visits.^{3,4} The National Asthma Education and Prevention Program at the National Institutes of Health include environmental control as part of guidelines for asthma management and the Community Guide to Preventive Services found that multi-trigger, multi-component home-based interventions had a return of USD 5-14 for every dollar invested.⁵ The strong business-case, current gap between service funding and community needs, as well as the strong evidence behind environmental asthma trigger reduction make asthma an optimal application of PFS for improving outcomes and reducing health costs.

¹ (Olson and McKnight, Outcomes-Based Payments Handbook 2016)
(Olson and McKnight, Pay for Success: Managed-Care Rate Setting Implications 2016)
(Olson and McKnight, Pay for Success: Opportunities for Public Health Investment 2016)
(Olson and McKnight, Policy Analysis: 2016 CMS Medicaid Managed-Care Value-Based Purchasing Authority 2016)

² (Robert Wood Johnson Foundation Commission to Build a Healthier America 2009)

³ (Taskforce on Community Preventive Services 2011)

⁴ (Norton and Brown 2014)

⁵ (The Centers for Disease Control 2008)

In arranging Pay for Success financing for large-scale asthma intervention programs, we have worked very closely with Medicaid managed care entities on issues of healthcare economics and financing. While the managed care entities were interested in pursuing asthma control projects from many perspectives, they could not undertake a project where doing so would result in an adverse fiscal impact, despite the improved health-outcomes. The reason that these projects improving health-outcomes and reducing the cost of care result in financial losses for managed care entities is because by not recognizing the expenditures for the services, the medical value of prevented services, or the cost-savings they generate in the calculation of future rates, the state will capture all the savings a project generates beyond the immediate rate-calculation period. The rate-setting process still prohibited the managed care entities from moving forward despite that many of our projects had subpopulations with actuarially-projected cost-savings of nearly USD 20 thousand dollars over a few years.

To address this, we have worked to create options for parties to invest in the long-term health of vulnerable communities, where it advances their mission. We determined there were no fewer than 16 options of varying complexity and applicability given differences between jurisdictions. During our engagement with the Centers for Medicare and Medicaid Services, we were told that there is no current barrier to any project being advanced under the authority of 42 CFR § 438(c), which grants states the authority to require, and therefore also allow, their managed care entities to use value-based payment arrangements of ‘other’ types that recognize the value of services rather than their cost. Since that discussion, we have been pursuing this option with a coalition of partners including working directly with multiple states and developing materials that will allow them to implement such value-based purchasing frameworks.

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SECTION I: Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

GHHI appreciates the emphasis that CMS places on Alternative Payment Models (APMs), especially those that emphasize both quality and integrated delivery from multi-disciplinary services. There is no shortage of needs for services among vulnerable communities and these models represent an opportunity to leverage publicly-financed healthcare spending as investments in the health of their enrolled populations in ways that will ultimately reduce the fiscal burden of providing supportive services for those populations.

Questions and answers:

- 1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.**

GHHI Response:

From our work with over 30 cities, counties, and states around the country, we believe that there is a strong level of interest among states in coordinated care. GHHI works directly with jurisdictions on how to implement efficient delivery of housing and environmental services along with traditional health care services, with a focus on addressing home-based health risks to children. Dozens of other jurisdictions in states around the country have reached out to GHHI for support to work on similar comprehensive models. In working with the Spirit Lake Tribe and the Cowlitz Tribe on housing conditions that were impacting the health of families, there was a strong interest indicated on more coordination of services and a more holistic approach to address

the needs of children. We do believe that there is a strong value-proposition for developing such a model that includes more comprehensive, effective, and efficient delivery of services that can ultimately improve public health while reducing cost by making more efficient usage of publicly financed healthcare spending.

- 2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?**

GHHI response:

GHHI has worked with pediatric healthcare entities to address health-related social services, especially those that address the role of healthy and energy-efficient housing. The results have shown to have been impactful in reducing avoidable acute care events and other negative health outcomes.⁶

In GHHI’s direct services program in Maryland, the organization receives referrals from Medicaid health plans, clinics, local health departments, and federally qualified health centers. We then deliver home-based services that include comprehensive environmental assessments for hazards such as asthma triggers, lead paint, and injury risks. Certified asthma educators and case managers work with children and caregivers in their home, supporting the clinical work of hospitals by providing medication management services, self-management education for asthma, and doing structural

⁶ (Norton and Brown 2014)

repairs to address identified asthma triggers in the home. There is communication back to through the providers including primary care physicians throughout the process. Follow-up is conducted including utilizing clinical tools such as the Childhood Asthma Control Test and the Childhood Asthma Severity Index. The *Environmental Justice* journal published the outcomes of this model, including a 66 percent reduction in asthma-related hospitalizations and a 28 percent reduction in asthma-related emergency department visits.⁷

Other GHHI-designated jurisdictions have implemented similar programs to provide coordinated clinical and housing-based services for children. In GHHI's Philadelphia site, St. Christopher's Children's hospital serves children with asthma. They receive home visits by nurses and community health workers. If environmental assessments identify environmental or asthma triggers such as mold, pests, or moisture issues, home-based structural repairs are conducted by a healthy homes program housed at the Philadelphia Department of Public Health. These services have led to reductions of over 70 percent of asthma-related hospitalizations and emergency department visits.

We also currently operate a portfolio of Pay for Success programs that look to pioneer state-wide scalable value-based purchasing models with pilot projects seeking to address the causes and triggers of asthma in the home. These programs will reduce asthma readmissions, redefine what a preventable readmission is, and lower the cost of care. Beyond medical costs, these programs deliver numerous social benefits beyond the direct services benefit. These programs also improve education participation, workforce participation, workforce development, and contribute to local economic development.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved

⁷ (Norton and Brown 2014)

communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

GHHI response:

GHHI's model has been applied across vulnerable communities, especially focusing on urban populations, though we do operate in rural areas. Our experience is that their unique challenges include access to services, lack of infrastructure, as well as lack of training and workforce development opportunities. GHHI's experience working with tribes in North Dakota and Washington has helped provide perspective to these challenges as well. To address these issues, we recommend:

- A focus on access including support for transportation to and from Rural Health Clinics,
- Investing in telehealth services that can be delivered by providers off site, using call-lines, and
- Utilizing technology such as smartphones to bolster how rural families receive health care.

Providers are starting to use telehealth for asthma visits, which can include some examinations of childhood asthmatics. Call lines such as NurseAdvice in New Mexico has been used to effectively provide services to families so that the families have not had to go to the emergency room for care. With the length of time it may take for a rural family to get to an emergency room or urgent care center means that the burden that is lifted by avoiding these services is often more significant than in urban communities. There are also new apps to support self-management of care for children, especially around asthma, that allows them to monitor their asthma through games and exercises on a smartphone or tablet.

SECTION II: Operation of Integrated Service Model

GHHI, as a direct service provider, has a particular interest in the operation of integrated service-delivery models. We currently provide technical assistance nationally to GHHI sites that align, braid, and coordinate resources and persons in vulnerable communities to meet local needs. From our experience, CMMI's focus on this area is admirable and certainly a worthy focus of future efforts. Our partners have experienced many barriers to their programs being most effective in integrating with medical-service providers and leveraging publicly-financed healthcare dollars.

Questions and answers

1. **To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health related social services agencies)?**

GHHI response:

Varying levels of service integration is occurring for children, differing widely by state and local jurisdiction. There are three primary challenges that we have identified nationally and they are:

- A. Differentiation and specification of funding streams that could be better-leveraged for collective impact,
- B. Lack of data platforms to effectively communicate between health care and other social service providers, both between state agencies and with non-governmental organizations, and
- C. Lack of general approaches for creating collaborative-impact models across public, private, and nonprofit entities.

In our Maryland direct services program we align, braid, and coordinate resources from city, state, federal, and private funding streams, including resources like HUD's Lead Hazard Control and Healthy Homes program, Community Development Block Grants, Health and Human Services' (HHS') Low-Income Heating and Energy Assistance Program (LIHEAP), Community Services Block Grant Program, the Department of Energy's (DOE's) Weatherization Assistance Program, the Center for Disease Control's (CDC's) Asthma Control Program, CDC's Childhood Lead Poisoning Prevention program, contracts through the Maryland Public Service Commission, and philanthropic interests. This collective funding pool allows us to optimize the allocation of funding to serve the needs of the local community. It ensures that there is no duplication of efforts across or funding flows to parties, meeting their needs for the lowest cost possible.

Working closely with the City of Baltimore, we have established a process by which home visitors and inspectors with the city will work with families to enroll them in up to 65 service programs, through the Leading Innovation for a Green and Health Tomorrow (LIGHT) program. These services include WIC, SNAP, financial literacy programs, and other services. Inspectors use tablets and scan documents needed for enrollment directly during the home visit. This is similar to the 'navigator' model, but working with GHHI, the City has ensured it has eligibility forms that are more uniform across different programs, and have mapped out the eligibility criteria for dozens of programs so that in one resource service providers can more holistically address family needs.

In our national GHHI model, we actively work with over 30 jurisdictions to develop similar mechanisms.

- In Buffalo, we leverage city resources such as HUD lead hazard control and CDBG grants, asthma home visiting resources managed by the Erie County health department, flexible funding from settlement funding from New York state, and philanthropic resources for coordination and data analysis at the Community Foundation of Greater Buffalo to deliver over 400 comprehensive health and environmental interventions over the last several years.

- In Rhode Island, we have aligned resources at a state level through the Rhode Island Alliance for Healthy Housing, and coordinate activities that leverage weatherization funds from state energy, DOE, and utilities, federal grants from HUD, coordination, and project management support from the Rhode Island Foundation to deliver over 300 interventions that comprehensively address health, safety, and energy efficiency needs.
- In Detroit, we leverage resources from nonprofit services providers like ClearCorps Detroit, city agencies like the Department of Planning and Development, Wayne County Health Department, and convening support from foundations like the Kresge foundation, to coordinate and braid services from several dozen on the ground partners. The Detroit GHHI site not only addresses individual clients, but also works on policy recommendations with the city and state to scale up best practices and embed efficiencies in government.

In a current feasibility exploration with the New York State Energy Research and Development Authority (NYSERDA), we are exploring leveraging resources from across multiple agencies for a targeted state-wide intervention strategy that addresses the link between unhealthy families and inefficient, unhealthy housing. The projects goals are to determine if and for whom it would be feasible to implement the strategy.

In our Pay for Success portfolio we are actively exploring and submitting purchasing value-based arrangements that allow managed-care entities to spend publicly-financed healthcare dollars to reducing the total cost of care for high-risk asthma populations. By leveraging the future potential of medical shared-savings (or risk) agreements, the managed care entities can raise funds to pay for the services now, allowing them to deliver scalable social-service partnerships with existing medical institutions.

- a. **Please comment particularly on service integration with programs such as [Head Start](#); child welfare programs; Children’s Mental Health Initiative programs; [Healthy Transitions](#) grantees; [Safe Schools/Healthy Students](#); foster care programs; the [Maternal, Infant, and Early Childhood Home Visiting Program](#); [Individuals with Disabilities Education Act, Part C](#) programs; [Healthy Start](#) projects; and other state, tribal, and federal programs.**

GHHI response:

GHHI has worked extensively with cities on enrollment, referrals, and eligibility for multiple governmental programs, particularly as they relate to enrolling families in the HUD lead hazard control and healthy homes demonstration programs. GHHI has made recommendations to HUD on utilizing automatic eligibility for families that are already enrolled in programs such as Head Start, or child welfare programs like WIC and SNAP. This would streamline entry into the HUD programs so that families that need environmental support would not have to prove eligibility separately. Some of this ‘fast-tracking’ of eligibility was used early on in the Affordable Care Act (ACA) roll-out, where families that were eligible for child welfare programs were automatically deemed eligible for enrollment to Medicaid/CHIP. These types of streamlined policies should be in place for multiple federal programs that serve children.

GHHI has had some interaction with the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV), in light of that program’s robust support through the ACA. GHHI spoke with MIECHV regarding utilizing their home visiting models as referral sources for other healthy homes agencies, because they often are the first and only programs that are directly working with families in their homes and may identify home-based health hazards. GHHI discussed with MIECHV about providing additional assessments for holistic needs outside of the specific focus of each home visiting program’s model. GHHI had

successfully worked with the Department of Energy on providing greater direction for weatherization home auditors to inspect for health and safety hazards as part of their energy audit and refer families to healthy homes programs if any hazards were identified. MIECHV were hesitant to adjust their services in any way, citing fidelity to their well-researched models. GHHI proposes having separate opportunities through MIECHV to holistically serve families. For example, if a home visiting model involves 4-5 home visits lasting 30-45 minutes per visit, then separate to the standard services that are delivered for that model, the home visitor should take an additional 10 minutes in one of their visits just to assess for needs that the family may have that would be addressed by other service providers, such as healthy homes programs.

2. **Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?**

GHHI response:

The most effective integrated program operations follow these primary best-practices which are singular coordination of aligned processes that include standard data collection, service-process flows, available funding sources (when eligible), and designating actors whose role is to coordinate and drive collaboration between social services and health care providers.

Coordination best-practice and example: While there are many best-practices that would improve the operation of integrated service-delivery models, an absolutely critical element is visibility. Without the ability to communicate projects cannot effectively coordinate, scale, or achieve the economic and health-benefits of collective impact models. For example, in Springfield Massachusetts, Partners for a Healthier Community works directly with Baystate Health system on playing that connective

tissue role, with Partners for a Healthier Community staff directly working with and in Baystate clinics, conducting co-branded community events, and cross training staff.

Standardization best practice and example 2: Standardization gains are possible without a fully-standardized system. For example, by standardizing the data collection on social-service forms and environmental assessments the GHHI program is able to leverage a variety of different funding sources to braid together resources without needing to standardize the eligibility criteria. While we would certainly advocate for the standardization of those criteria in a permissive manner, there is a risk that the standardization effort could take a more constricting approach. If that constricting approach would exclude parties that are currently eligible for some component of assistance, it would make the ultimate pool of parties eligible for assistance smaller.

Best-practice and example 3: In Grand Rapids Michigan, Health Net of West Michigan is a backbone service provider organization that intersects between local health systems like Spectrum Health, Medicaid Managed Care Organizations such as Priority Health, and on the ground service Healthy Homes Coalition of West Michigan. Health Net is able to provide coordinated referrals, deliver services through health navigators, and provide coordination and data support for the other service organizations. This allows organizations like the Healthy Homes Coalition to focus solely on the home assessment and structural repair services that they provide, without having to build extensive infrastructure within the organization.

- a. **Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?**

GHHI response:

No piecemeal approach will be effective as a holistic approach to health, but there are key drivers of good-health. Considering how much time is spent in a person's home, it plays an absolutely critical part in health that should not be

excluded. In addition to healthy housing service providers, other housing service providers' involvement would allow for the capture of the non-energy benefits of weatherization and energy-efficiency programs. Beyond medical and housing areas, service providers from the maternal child health home visiting field, early education field, legal services field, and behavioral health fields should be included in a comprehensive model to address the social determinants of health.

Service provider example – In Chicago, Elevate Energy is non-profit service provider delivering energy efficiency, weatherization, and healthy homes resources. Elevate partnered with the Chicago health department to provide home renovations including energy efficient window replacement of windows with lead hazards for families with children under six who are receiving lead-hazard control grants from the city. The program, CLEAR-WIN, was a model for the state of Illinois. Now, Elevate is working with Presence Health system to provide environmental assessment and asthma trigger reduction including remediation of mold, improving air quality, and reducing pests for children with asthma.

Service provider example – In Memphis, Le Bonheur Children's Hospital partnered with Memphis Area Legal Services and the University of Memphis School of Law in 2014 to establish Memphis CHiLD (Children's Health Law Directive), the first medical-legal partnership in the region. Memphis CHiLD has offices on site at Le Bonheur Children's Hospital, and physicians in the hospital can refer families to Memphis CHiLD prior to discharge. The medical-legal partnership works with a variety of issues with children and their families including domestic violence and landlord-tenant issues around rental housing quality.

- b. What potential exists for increased partnership for provision of home and community-based services?**

GHHI response:

There are ample opportunities for partnerships in the provision of home and community based services. The primary opportunities in for doing so can be most effectively scaled by the development of coordination functions. These functions can take the form of universal applications for social services, automation of referrals, and establishment of social-services coordination entities.

Universal applications example: Baltimore Housing Department's Division of Green, Healthy, and Sustainable Homes has placed programs such as energy conservation services, lead hazard reduction program, rehabilitation services, and homeownership services under one application, and utilizes in home coordinators through its Leading Innovation for a Green and Healthier Tomorrow (LIGHT) program to also enroll families in programs led by partners such as the Baltimore City Community Action Partnership, Catholica Charities of Baltimore, Habitat for Humanity of the Chesapeake, HealthCare Access Maryland, the Public Justice Center, and the Baltimore City Health Department.

Automation of referrals: The use of data-sharing agreements allows many of our health-partners to automate or create scalable processes for referring parties to their GHHI site, who then effectively coordinates their services. Even without a coordinating entity, these automated referral processes could ensure that those parties in need of services can be actively recruited by those service provider programs that can benefit them the most. In Salt Lake County, GHHI housing services partner Salt Lake County Office of Regional Development has worked over the last several years with the University of Utah Health Plan to utilize the Efforts-to-Outcomes data platform to streamline referrals from the asthma care management program at the health plan to home assessors and environmental services providers at the County.

Establishment of social-service coordination entities: One GHHI partner, Baystate Health in Springfield, MA, has created an entity who plays the role of coordinating social services for those parties that participate in their insurance products or medical services, Partners for a Healthier Community. This ensures that multiple housing programs can be effectively managed in partnership with the local city government, county programs, state-wide efforts, and other community based organizations while maintaining a link to the medical services providers. Many other health-plans have functions that play a similar role, at least in part. Encouraging investment in these areas should be explored in more depth and may be a potential, even pragmatic focus area for the implementation of any alternative payment model focusing on integrated services.

3. **What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?**

GHHI response:

Information exchanges are pivotal for the development of integrated models, but there is not a requirement that it be the health data. The additional data-sharing allows parties to more effectively operate and evaluate their progress, but as long as those functions are performed and effectively communicated, they are not a barrier to implementation. Two alternate models are illustrative:

- (a) Medical services provider (or party with access such as a Health Information Exchange or HIE) share health information directly with a services coordinator. The

services-coordinator is then able to analyze the data with analytical models to determine resources allocation based on expected need. They can then refine their services-model with their in-house evaluation or contract for outside parties to do so, creating a feedback loop of effectiveness and continuous improvement, which can be weighted by cost to optimize for value.

- (b) Medical services providers refer parties to the social service providers (possibly through a coordinating entity). The medical services provider then conducts their own assessment and continuous improvement effort based on the health information or may provide the information to an outside party for analytical or evaluation assistance.

In both models, there are infrastructure needs to collect, analyze, and act on data within the system. How the communication and coordination takes place can be optimized to meet the needs of the specific circumstance. GHHI would recommend that CMMI intentionally pursue multiple models to determine which method(s) are most effective in varying circumstances.

4. **Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.**

GHHI response:

Opportunity and example 1: The streamlining of eligibility has been achieved in multiple states. Many are moving in the direction of having children and families who are currently receiving support from child welfare services and programs such as SNAP or WIC being ‘fast-tracked’ for ‘fast-track’ Medicaid enrollment. Many states have utilized this model to expand Medicaid enrollees in coordination with the ACA roll out.

States have incorporated this fast-tracking into state plan amendments. Implementing this fast-tracking has heavily relied upon healthcare navigators working with potential enrollees either on site at clinics or federally qualified health centers or working with families in their home ensuring there is the proper documentation of prior support through child welfare programs. GHHI has not been aware of significant work in the other direction, where Medicaid members are automatically deemed eligible (at least for relevant income requirements) for other social services, although this seems to be a tremendous opportunity to utilize federal, state, and local resources more efficiently. GHHI has worked with city and counties on streamlining housing-related services eligibility, and strongly encourage CMMI to work with state Medicaid programs to implement similar efforts.

Opportunity and example 2: During GHHI's work with Medicaid managed care entities, state Medicaid programs, and health systems around asthma Pay for Success financing models, the flexibility in having private funding supporting the delivery of social services has been very promising in terms of eligibility and enrollment. Under the Pay for Success model, any child who is currently enrolled with a Medicaid managed care entity is automatically eligible for any services that entity is offering through its network of providers. The program sets up eligibility criteria just based on medical need and utilization, with no additional eligibility requirements for the social services. The example serves to illustrate that there may be ample cost-savings opportunities associated with doing so.

5. **Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?**

GHHI response:

The automation of application and referral for programs would provide ample opportunities to reduce administrative burdens while additionally ensuring that the number of enrollees seeking appropriate assistance is maximized.

Opportunity and example 1 – CMMI portal: CMMI could create an application portal with a broad application for additional social services beyond Medicaid that the prospective enrollee might be eligible for and ask the prospective enrollee to opt-out, ‘opting-out’ being critical, of social services that they could be eligible for otherwise. This could be integrated with medical records to create automated referrals to eligible programs where the parties would benefit. Consider that a party with Medicaid benefits tested positive for an elevated blood-lead level, the CMMI system could automatically refer them to a home- and community-based service provider with a federal grant for lead remediation in their area to have the home’s lead hazards addressed. In the process, CMS would realize savings from having a publicly-funded social service generate a health-benefit for a Medicaid enrollee without requiring Medicaid resources. Similar examples would be applicable for the spectrum of social services including behavioral health, long-term support, and others beyond the Medicaid programs.

Opportunity and example 2: Incentivizing Medicaid managed care entities and other health care providers to collaborate with social-service agencies and provide access to relevant data will allow greater opportunities for partnership and the ability to identify outcomes and savings in an efficient way.

GHHI, with support from HUD’s Office of Lead Hazard Control and Healthy Homes, has an ongoing study looking at the environmental home-based services that GHHI provides in Maryland, and tracking the impact on Medicaid members. The Hilltop Institute at the University of Maryland Baltimore County is conducting the analysis, which has access to state claims data. The study also incorporates analysis of a home’s energy consumption following the intervention, using information from local utilities. Additionally, the program is tracking the impact of the interventions on education,

specifically using attendance records from the local school system.⁸ This study has led to stronger connections between GHHI's services and Medicaid managed care entities who started out as a referral partner for the study but now, based on their internal evaluation of the outcomes from GHHI services for their members diagnosed with asthma, are exploring payment models to scale up their work with GHHI.

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

GHHI response:

One key obstacle that providers and payers face when integrating services, besides the coordination and eligibility challenges outlined above, is proper recognition for costs associated with integrating traditional health care services with more upstream social services. Some payers see a disincentive to working with providers of social services at scale, because often any related costs count toward their administrative costs and not toward relevant medical expenses. The more cost-effective these social services are, the more the disincentive may be to shift spending upstream if those expenditures are not included in the numerator of the medical-loss ratio for rate-setting purposes. This obstacle can be overcome through having value-added services or flexible services more widely recognized as medically-relevant services, such as what Oregon has negotiated with CMS as part of their 1115 waiver renewal. Services such as providing air conditioners for children with asthma can now be included in the numerator of the medical-loss ratio for managed care entities. Value-based purchasing arrangements is another model to account for social services spending and will be laid out in detail in the section III.

⁸ US Department of Housing and Urban Development. FY13 Healthy Homes Technical Studies Grant Abstracts. <https://archives.hud.gov/news/2013/healthyhomesabstracts2013.pdf>

Opportunity and example 2: Maryland Department of Health and Mental Hygiene, and the state Medicaid program has recognized a significant need to scale environmental services for its pediatric members. Current funding for environmental services such as lead poisoning remediation and environmental services for asthma was seen as insufficient so the state submitted a State Plan Amendment for CHIP Health Services Initiative resources that include funds for environmental lead investigation and remediation of lead paint hazards, up to \$15,000 per member, that would be provided by state housing department partners and contractors. The SPA also includes resources for the state to provide \$2,000 per member of environmental case management services for asthmatics to be conducted by local health departments after training from GHHI.

Opportunity and example 3: Pioneering within current regulatory authority would be broadly impactful as well. Many organizations do not know if and how they are allowed to work with health-related social-service providers, but CMMI could work to put out communications notifying partners of specific mechanisms to implement models. For example, CMMI might create a very tactical walk-through of how states can implement a payment model framework that allows integrating the publicly-financed healthcare system with health-related social service providers; or CMMI could raise the visibility of existing resources detailing these mechanisms which may have been produced by other organizations.

7. **What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?**

GHHI response:

Managed care systems are particularly valuable to learn from. Many have undertaken at least partial reorganizations to support increasing integration of care-delivery models. While they frequently stop-short of services that fall outside the traditional continuum of care due to funding restrictions in publicly-financed healthcare programs

and the potential adverse impacts of undertaking long-term investments in improved health, these programs represent a step in the right direction, but their successes and failures are both instructive.

Managed care success – increased referrals: Managed care has been very successful at demonstrating the importance of integrations with social-services providers. Our Maryland direct-services program has been working with Amerigroup; Johns Hopkins' managed care entity, Priority Partners; and others, we have secured referrals for services that improve the quality of care, while our partners have not yet secured reimbursement for those services through rate-setting designation of the costs as medically-relevant services. Based on the outcomes achieved for their members, both managed care entities are exploring opportunities to scale up these social services, looking at models such as Pay for Success and value-based purchasing arrangements.

Managed care opportunity – funding for services: While there has been an increase in the referrals and integration with Medicaid managed care providers, there is no current funding from the programs that would allow scaling the delivery of the services to meet the needs of the local communities or fund services that have long-term health-impacts. The managed care entities have identified that as long as the cost of (a) the preventive services or (b) the savings value they create are excluded from the rate-setting process in the future, they cannot undertake payment for them. This is because they represent long-term investments in health that are not represented in the publicly-financed healthcare system from which they derive reimbursement that has historically treated these services that contribute to healthcare quality and health outcomes as administrative costs rather than medical costs in setting those rates.

8. What role do models of care such as ACOs play in the pediatric environment?

GHHI response:

GHHI has limited experience interacting with Accountable Care Organizations (ACOs), they do vary widely in implementation. For example, when working with a health system that has an ACO that has its own health-plan and provider network, the ACO model is constructive; however, when it partially overlaps with multiple health-plans or other elements of the system, it becomes an additional complication in establishing integrated models. This is especially true when the ACO has a shared-savings agreement across multiple entities. The financial incentives and opportunities available to ACOs are impressive, but there are tradeoffs associated with the complexity an additional party being compensated from shared-savings and having independent and overlapping attribution issues will bring.

- a. **Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?**

GHHI response:

From our experience, ACOs are typically networks of healthcare practitioners that share some financial interest that is tied to compensation other than fee-for-service models of payment. How these ACOs are viewed in practice across differing regions is a separate issue. In many cases a primary determinant seems to be how well defined the ACO is and how closely it aligns with existing entities. For example, where existing health-systems have created their own ACO for their full network, the ACO is seen very differently than where ACOs are carved out of multiple systems and loosely aggregate networks of practitioners. In the former case, the ACO is seen as indistinguishable from the broader system of healthcare delivery; while in the latter, it is, rightly or wrongly, seen as a financial agreement offering incentives to improve quality.

- b. **How are pediatric ACOs the same or different from adult-focused ACOs?**

GHHI response:

(No Comment)

- c. **What opportunities do pediatric ACOs have for integration with community and health services systems?**

GHHI response:

The opportunities for ACOs to advance integrated models are promising; however, as earlier noted, there are trade-offs to creating an additional entity in the publicly-financed healthcare system. Many of the opportunities for integration that ACOs have are available to MCOs as well.

- d. **Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?**

GHHI response:

GHHI cannot comment as to what the states are interested in having happen, but from the perspective of a service-provider working with health-plans, states, and developing relationships with ACOs, the simpler interaction with the system is, the better. Having a multitude of partners with differing interests can be beneficial if they are non-duplicative, but if there is too much overlap redundancy of authority will prohibit a lot of good ideas and projects from moving forward.

Example 1: Consider that an ACO may have a shared savings agreement with multiple MCOs for 50 percent of the attributed savings in a given period. This sounds advantageous, but due to the limited (by 50 percent) savings potential

for a program due to the sharing component, it created a barrier for any one party to invest in preventing conditions that would otherwise be warranted. Yes, there is now a party dedicated to generating shared savings, but at only half the benefit it may dissuade undertaking any but the most promising opportunities.

9. **What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?**

GHHI response:

GHHI has formulated a proposal to answer this question, *please see Section III*. We believe that these purchasing arrangements should be available under existing authority and CMMI should encourage parties to actively test them for a variety of care models active in a variety of jurisdictions.

SECTION III: Integrated Pediatric Service Model Payment and Incentive Arrangements

This section responds to the CMMI request for information “Section III: integrated pediatric service model payment and incentive arrangements”. This section covers all CMMI questions, proposes a general framework for advancing an alternative payment model of integrated health-related social service provision, and then illustrates its function through the use of examples of projects that could be undertaken at different stages of framework development. The proposed framework should prove naturally adaptive for including traditional Medicaid benefits as well as health-related social services, for urban populations as well as rural populations, and for diverse types of collaborations given the local need and prioritization of different issues. It is adaptive because it involves decentralized approaches to rapidly-successive small-scale innovation projects where the state can scale projects that prove themselves. Simultaneously, the system allows managed care entities to engage private debt markets and issue-area interested private parties for risk mitigation. The system also puts interest groups in the position of proving their value rather than lobbying for funds, by allowing investments but requiring evaluations of their effects and paying only for savings or other social goods as the price explicitly stipulated by the state.

Model proposal:

Health-Related Social-Service Integration Transition Model (HST)

The current situation identified by CMMI that there is a substantive opportunity to advance the publicly-financed healthcare system as well as broader integration efforts with health-related social-service providers. Many of the numerous barriers identified by CMMI can be overcome through private-market mechanisms if the primary barrier of creating a framework with appropriate inherent economic motives can be resolved. The following details how CMMI can demonstrate these models under existing regulatory authority.

Overview

The model proposal focuses on identifying value-based payments and specifically a framework for transitioning from volume-based compensation to value-based compensation for integrated health-related social service provision. The framework can be implemented in three phases of development or allow parties to progress across the spectrum more gradually. All three phases focus on value-based payments.

1. **Transition to Medical Outcomes Payments:** This phase introduces direct payments to service providers for finite and pre-defined health-outcome measures in addition to the fiscal impact programs have on medical utilization needs. Again, predicated on delivering access and health-outcome metrics that are on par or exceed the local standards. Later maturity of these models transition to supplant direct fee-for-service compensation calculations with medical-cost risk-propensity scoring based on historical need. Many states are already moving in this direction.
2. **Pay for Savings Outcomes:** This phase introduces a shared-savings framework where states enable insurance providers to pay their subcontractors for the cost-savings and other medical outcomes generated by programs they run, agnostic to the services they deliver. The arrangement predicates payments on delivering access and health-outcome metrics that are on par or exceed the local standards. Later maturity of this phase transitions the sub-contractors from shared-savings to risk-sharing for their specified outcomes and converts or scales proven programs through states or even federally.
3. **Transition to Outcomes Beyond Health:** This phase introduces payment arrangements for outcomes beyond those traditionally in publicly-financed healthcare outcomes. This phase specifically introduces intra-governmental coordination of payments as a mechanism for Medicaid programs to begin unified compensation for private-sector partners providing health-related social-services and coordination efforts. Additionally, this phase transitions compensation to medi-

cal-need risk-propensity scoring based on historical needs as well as brining in administrative data from other governmental agencies. This phase is and should be considered an unattainable ideal target for transition planning, the goal should be to get closer to this fully integrated model for health-related social service delivery.

An appropriate evaluator, likely an actuarial partner to comply with federal requirements of actuarial soundness, should attribute outcomes of each localized program through analysis of medical claims and other administrative data necessary or beneficial for tracking outcomes or composing matching groups for comparison. That analysis should include participants of all ongoing initiatives in the matched-comparison group to ensure that only the marginal value of any program is attributed for compensation purposes. These types of analysis are highly rigorous and accurately represent the real-world operating conditions of a program at scale, including the role of adverse selection for populations as well as factors such as ‘willingness’ to participate, enrollment capture rates, and program attrition. In real-life implementation, these factors will be important to consider and should be included in the historical performance of the project.

As the states move forward through the phases, states can use statistical analysis of medical claims in concert with other administrative data to produce more inclusive risk adjustment factors. This will allow the state to transition from historical fee-for-service utilization to more-effective prospective indicators of future medical utilization need than the claims record alone will provide. This new system will allow the jurisdictions to move from managed care rates that are representatives of historical fee-for-service values to prospective methods based not only on historical medical records but also socio-economic indicators, geographic factors, environmental factors, and historical health-related social services utilization the parties have had.

Comparison table

The following table shows a comparison of fee-for-service, managed care, early stage development, and complete implementation of an integrated model.

	Fee-for-Service	Managed-Care	Early-stage integration	Late-stage integrated model
<i>Compensation</i>	Price-per-unit	Historical cost-projections	Historical cost projections plus savings	Risk-value plus broad health outcome value
<i>Attribution</i>	Claims reimbursement	Historical claims projected forward	Historical claims projected forward plus matched comparison-group analysis of cost-savings	Key-indicators for medical risk projections plus matched comparison-group analysis of health-outcomes
<i>Economic Motive (Earning Potential)</i>	Increase volume or average price per service	Consistently lower costs than expected within a rate-setting period	Consistently lower cost than expected, especially through long-run investments in medical outcomes	Consistently better health outcomes and lower medical need than expected, especially through long-run investments in health and medical outcomes

Naturally-adaptive framework for different party participation in growth

This framework is naturally adaptive in that it creates a series of natural economic motives for parties to find and develop relationships that are cost-effective in their transition from volume to value. In the later stages, it allows augmenting the natural economic motives of the publicly-financed healthcare system with broader public health values, established by the local jurisdiction. Further, this model uses private market mechanisms to incentivize parties to build the necessary relationships and infrastructure to support their systems – the only exception being that programs require access to government’s administrative data to conduct their evaluation for attribution purposes. CMMI can and should facilitate the model to seed its use and test its effectiveness; however, the managed care entities can be required to have an independent party, likely an actuary, conduct the analysis at no additional administrative burden to CMMI or states.

The same framework will result in vastly different projects in accordance with local needs. One state may advance programs that address issues with opioid substance-abuse, while the same framework would result in addressing homelessness or behavioral health issues in others. The service delivery innovations will be custom-tailored to local parties by the local parties based on their perception of needs.

An additional component of adaptability is that resource availability for the second phase of savings-based outcomes payments is based entirely on need. Parties with low estimated medical needs have low savings potential, while those in the most vulnerable communities with the highest level of medical need have the highest savings potential and, therefore, resource availability.

Example program I: Early-stage development for asthma

The following example program shows an early-stage developmental model that focuses on transitioning existing managed care entity payment arrangements:

- (Before) From a system of historical fee-for-service spending projected forward to form an appropriate capitation rate;
- (After) To the same underlying calculation, now inclusive of shared-savings outcomes payments under a value-based purchasing arrangement adding the option to invest in programs that reduce their overall cost, even if beyond the immediate rate-setting period.

Model proposal

The pilot project for the framework is one where populations are enrolled based on historical medical utilization meeting a trigger threshold of:

- a. An inpatient admission for an asthma-related respiratory condition with a prior diagnosis of asthma, demonstrating its uncontrolled nature, or
- b. Having had two or more emergency department visits in a rolling 12-month period with a prior diagnosis of asthma.

The collaboration with health-related social-service providers includes ensuring access to all standard and necessary medical benefits available to Medicaid enrollees as well as two health-related social-services:

1. A community-based organization delivering comprehensive home-based self-management education and training for the causes and triggers of asthma;
2. The local jurisdiction's department of health providing code enforcement services ensuring that minimum housing quality standards are upheld; and

3. Local community-based partner delivering environmental assessments and asthma trigger remediation services such as mold removal as necessary.

The program targets medical cost-savings from preventing avoidable acute care utilization, targeting reductions and hospitalizations and emergency department visits. The programs cost savings projections use a baseline established by historical analysis of medical claims for the target population. The actuary's projection for abated costs and reductions utilization across Medical Service categories are reflective of industry best practices and current research.

Program enrollments will take place on a rolling basis comprising annual cohorts. An actuarially certified comparative analysis of medical claims between the target population and a matched comparison group will attribute each annual cohort's cost-savings. The matching criteria for the groups will include demographic information available in enrollment and claims data as well as medical histories. The comparison groups will specifically contain the current standard of care, inclusive of other ongoing initiatives which may or may not address the causes and triggers of asthma. This inclusion is specifically to ensure that the marginal attributable effect size for the program measured in dollars is non-duplicative of other ongoing initiatives.

While the health-related social services are currently available and operating in the target jurisdiction, there are substantial barriers to implementing the program at a scale that addresses the need of local community. The local health-related social-service providers were unable to scale their operations to meet the local need due to a lack of comprehensive funding sources. The local managed care providers were prevented from undertaking similar programs due to adverse financial impacts associated with long-term investments in preventive programs. The proposed early-stage integrated payment model addresses those concerns by allowing the managed care entities to pay their subcontracted service-providers for the value that their programs generate measured in cost savings and irrespective of the services delivered.

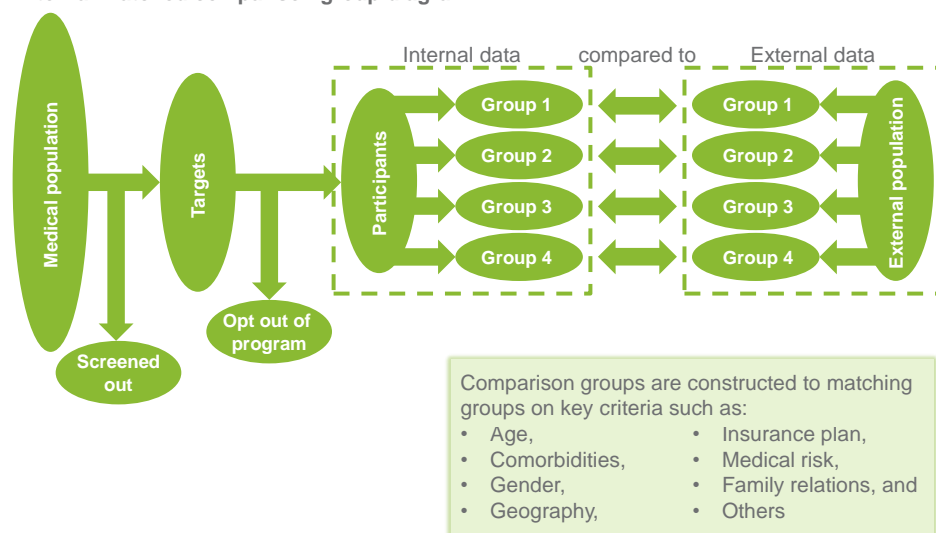
Attribution methods

The attribution methods for the project are relatively simple and based on industry standards and best practices for determining appropriate compensation from the publicly-financed healthcare system. Medical claims records for the target population and an appropriate comparison group will be used to conduct a comparative analysis for the total-cost-of-claims each population prior to and after the triggering medical utilization event. The target population in comparison group will be matched based on a propensity scoring for future medical claims costs and needs. The propensity scoring will be based on socioeconomic demographic information available to parties based on available enrollment, medical-claims history, and other administrative data available.

Quasi-experimental: External matched comparison

With access to detailed information, matched comparison groups can be composed to increase validity in the comparison of sub-groupings.

External matched comparison group diagram



Source(s): GHII

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Theoretically, any state should be able to evaluate multiple programs in this manner and identify what the appropriate value-based payments for each one are, then using a comparative analysis to determine whether or not their aggregate impacts in excess of those impacts that any one program has on a specific population. A simple check and balance is available in that the aggregate capitation payment for the population historically

should never be exceeded by the sum-total of shared savings arrangements or value-based payments based on cost savings alone.

Collective-impact expected

The program is expected to generate multiple types of outcomes including those defined as medical savings, health outcomes benefits, and socioeconomic benefits to program enrollees. Many of the benefits are directly attributed to primary services recipient, however, additional benefits will prove to parties beyond the primary service recipient including their immediate family other residents of the home, future residents of the home, and local community members will benefit from secondary, tertiary, and higher-order effects resulting from the project.

Example program II: lead poisoning prevention (comprehensive program)

The following example program shows a late-stage developmental model. It focuses on addressing the public health concern of childhood lead poisoning by leveraging the publicly-financed Healthcare System spending as a collective investment tool with the local department of health, state department of justice, state department education, and state department of human services.

The project targets transition from:

- (Before) From a system of historical fee-for-service spending projected forward to form an appropriate capitation rate;
- (After) To the same underlying calculation that includes:
 - a. Shared-savings outcomes payments under a value-based purchasing arrangement that reduce their overall cost in the immediate rate-setting period, which may be tracked over subsequent number of years; and
 - b. Outcomes-payments made collectively by participating government agencies, set to target specific public health outcomes at established rates of payment.

Model proposal

This pilot project for the framework is one where populations are enrolled based on prospective measures of likelihood to have an elevated blood-lead level associated with lead poisoning. Propensity scoring is based on a statistical analysis involving multiple administrative datasets including but not limited to:

- a. Historical medical claims analysis; and
- b. Historical analysis of the residence: Each residence is attributed a risk factor based on historical blood testing residents, housing code violations, public assistance and information phone calls (311), public emergency phone calls (911), the age of building, building permit records, and a variety of others.

The parties agreed that enrollments will take place based on the following criteria:

- Any party found through screening to have an elevated blood-lead level;

- Any party rated as having a lead-risk propensity score above the threshold of 0.5;
- The program will admit a minimum of 500 parties per year, and fill the remaining slots not attributed to the above criteria based on having the highest propensity score or of the remaining parties.

A key component of the project's implementation is the provision of incentives for any provider screening 95 percent of children for lead poisoning at the appropriate times (all children covered by Medicaid/CHIP should be screened for lead poisoning at 12 and 24 months, and many states have performance metrics for managed care entities based on their lead screening rates).

The collaboration with health-related social-service providers includes ensuring access to all standard and necessary medical benefits available to Medicaid enrollees as well as two health-related social-services:

1. A community-based organization delivering comprehensive home-based education and training for broad healthy homes education, with particular attention paid to home environmental hazards including lead;
2. The local jurisdiction's department of health providing code enforcement services ensuring that minimum housing quality standards are upheld; and
3. Local community-based partner (usually city or county housing departments) delivering environmental assessments and providing remediation services including remediating lead paint hazards as necessary.

The total cost of providing these social services including lead paint remediation is estimated as 10,000 USD, far above the amount currently reimbursed for environmental lead investigations that are part of EPSDT, but well below the value the services generate more broadly.

The program targets a variety of cost-savings opportunities across different agencies allowing them to collectively fund intervention where no one party would have an economic interest to do so. The program has wide-ranging benefits associated with lead poisoning

and beyond. Specific to lead-poisoning, Elise Gould calculated that lead-poisoning prevention would result in USD 17.00-221.00 in savings for each effective dollar invested.⁹ Other authors have shown that capturing just a fraction of the direct governmental costs associated with the long-term social burden of lead poisoning could easily be developed into a Social Impact Bond generating above-market return rates at no direct incremental cost to the government.¹⁰ In our proposed integrated payment model, we leave funding the intervention to the private-sector partners – there is no need for CMMI or other parties to take a position on the issue. Health plans have the option of directly undertaking the projects or mitigating their risk by going to outside parties and seeking Pay for Success financing.

Cost savings for the second example program are based on reductions in medical needs associated with lead poisoning as well as other outcomes from improving the built environment, a key social determinant of health. Program medical cost-savings will be attributed based on place of residence – meaning that multiple children and adults should be identified for analysis of reductions in total cost of claims based on each address. As a residence is made lead-safe, not only will all of the current residents be made healthier, but subsequent families may also benefit from the healthier home. Additionally, the education on healthy and energy efficient housing may continue to benefit a family after they leave a home where remediation was conducted.

Beyond medical costs the local departments of education will see cost savings associated with reductions in absenteeism, especially for asthmatic patients, and other condition areas where the built environment contributes substantially to health. Improved health and improved educational attainment are linked, though concrete elements such as avoidable absences due to medical complications are something that can be directly quantified and used to base integrated payments coordinating between multiple government agencies. In this program, the department of education agrees to pay a set amount to each health-

⁹ (Gould 2009)

¹⁰ (Olson, Chan and McKnight, Concept Paper: Pay for Success for Lead Poisoning Prevention 2016)

plan, thorough the integrated payment model, for each additional school day that a program enrollee attends in light of an appropriate comparison party.

The department of justice is likely to see cost savings associated with reduced crime rates and juvenile justice system costs for the project participants over an extended period of time. There is a strong link between lead poisoning and diminished capacity for impulse control.¹¹ If the department of justice believes the future savings will be substantial and they are willing to attribute a portion of savings in the more immediate periods associated with prospective measures correlated to future justice system costs. For example, if the justice system expects to save tens of thousands of dollars per incarceration year for the target population that is abated or avoided as a result of the program, even relatively low rates of future incarceration being avoided could result in substantial cost savings being attributed to the project. As a result, for the purposes of the project, the justice system is willing to contribute an outcomes-based payment of USD 2,500 per participant that reaches their appropriate third-grade reading level above the level expected at the onset of the project.

The department of education in this jurisdiction is already spending on average USD 5,500 per student on special initiatives to achieve the same grade level reading goals. They are willing to pay the same amount for any student reaching their goals above the rate of those not participating in the program.

Additionally, the links to diminished earnings potential are well documented and a central component of the Elise Gould article.¹² Additionally, parties as a result, the state departments of revenue and human services and the federal treasury are willing to collaborate and add an additional USD 5,000 for each party living in a home flagged as 'high-risk' for lead-poisoning that tests negative for any elevated blood-lead level on an annual basis for three years after intervention.

¹¹ (Bellinger 2008) & (Wright, et al. 2008)

¹² (Gould 2009)

Here again, program enrollments will take place on a rolling basis comprising annual cohorts. Enrollment processes will be initiated through multiple avenues including:

- a. By a data-analysis identifying addresses at high-risk of causing subsequent lead poisoning, where the party is enrolled in Medicaid, CHIP, or other forms of assistance;
- b. By targeting parties based on blood-level testing for elevated levels of blood; and
- c. By medical recommendation by a qualified physician.

An actuary will determine changes in the total cost-of-care for the target populations based on a matched comparison group. In this case, the matched comparison groups will specifically include matching criteria from administrative data sets beyond those found in medical histories and enrollments – specifically including data from the state and federal justice system participants, parallels from education, and other parties as available or necessary. The comparison groups will continue to contain the current standard of care, inclusive of other ongoing initiatives which what may or may not address the same target criteria. This will ensure only the marginal impact of running this program is attributed for determining appropriate compensation amounts.

Attribution of the nonmedical claims value will be based on the analysis performed by local academic institution, provided access to the administrative datasets. The matching of appropriate comparison groups will include elements of both data-analyses, which may not be used in determining payment for either set in isolation. For example, the medical analysis may include matching criteria such as taxable income levels, while the non-medical analysis would include indications of previous medical history issues. The program could leverage information and administrative data from similar jurisdictions where there is an interest in running the program, if proven successful, at a later date.

Many of the local health-related social-service providers were underfunded or even being disbanded to do a lack of funds. The local hospitals community needs assessment identified the built environment and deterioration of housing stock is a critical issue for the health of the local low-income community. While health-related social-services may be available, those services are underfunded respective of community need and operate in a

piecemeal fashion without the ability to provide comprehensive services, and certainly not a level that its local communities need. A HUD grant funded the local lead hazard control program, but the jurisdiction lost the grant and have been unable to provide services in the recent years. The local healthy-homes home-visiting and education program was also underfunded leaving a gap in the community needs assessment. The local managed care providers were prevented from undertaking similar programs due to adverse financial impacts associated with long-term investments in preventive programs.

The proposed late-stage integrated payment model addresses many of those concerns by allowing the publicly-funded healthcare system to function as an investment vehicle for broader government concerns of public health, early education, juvenile justice, and earnings potential. Managed care entities will now pay their subcontracted service providers for the value that their programs generate measured in cost savings and irrespective of the services delivered and other government agencies are now allowed to include the broader social value that programs have in the value-based payments to the service providers. Having a long-term payment arrangement option in place allows programs with a lead hazard control program to scale their staff to meet the local need rather than based on their award of Federal grants.

Attribution methods

The attribution methods used in late-stage projects are more complicated than those used in an early stage comprehensive intervention programs because of their dependence on multiple integrated data sets. In this case, the project assumes that jurisdictions are able to secure access to multiple data-silos and track parties between them. This allows the comparative analysis of the target and matched comparison group subpopulations to be an appropriate method. There will be two integrated analyses to determine the attribution of value:

1. A comparative medical claims analysis certified by an actuary to determine appropriate cost savings payments for the marginal impact at on the target population above the comparison; and
2. A comparative analysis of education outcomes between the target and an appropriately matched comparison group performed by local academic institution, used

to attribute the future educational, juvenile justice, and future earnings components of the outcome-based payment.

The barriers to the project are primarily those of data sharing between government agencies, which then requires sharing data with an external party. Additionally, these programs will need to actively share process-data regarding enrollments, needs assessments, delivery of services, and other issues.

The project's opportunities are far-reaching and include pioneering the first lead-poisoning prevention program targeted at using the societal benefit accruing to multiple parties to incent primary prevention. The implications, should the framework be scaled to other condition areas should not be understated.

Collective-impact expected

The collective impact of lead prevention is far reaching. The potential of such a project are well detailed by other parties.¹³ GHHI published a concept paper on the value and opportunity of primary prevention of childhood lead poisoning.¹⁴ The work details that the tangible monetizable benefits of lead-poisoning accruing to government agencies include

- Medical costs associated with:
 - a. Elevated blood-lead levels,
 - b. Attention deficit hyperactive disorder, and
 - c. Other reductions in the total cost of care.
- Non-medical costs:
 - a. Special education costs,
 - b. Direct costs of criminal activity,
 - c. Direct costs of incarceration, and
 - d. Reductions in lifetime-earning potential.

¹³ As earlier noted, Elise Gould provided a wonderful summation of research at the time (Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control 2009).

¹⁴ (Olson, Chan and McKnight, Concept Paper: Pay for Success for Lead Poisoning Prevention 2016)

While these are explicitly calculated, there are a number of additional non-economic factors that would also be program impact, beyond immediate measure. For example, the act of home-remediation requires a home-services provider. The spending on these programs and the associated employment have measurable economic development benefits that should not be ignored.

SECTION IV: Pediatric Measures

SECTION IV: PEDIATRIC MEASURES

As an organization that incorporates a variety of metrics in our work, from clinical tools such as the Childhood Asthma Severity Index, to measures of family stability, GHHI has significant experience in exploring how health-related social needs can be measured as part of an integrated model. In GHHI's ongoing HUD-supported cost-benefit analysis of comprehensive services for pediatric asthmatics, we are incorporating Medicaid claims data with school attendance and household energy consumption measures.

QUESTIONS

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

As part of the move to extend and coordinate the continuum of care beyond the clinic, there are a number of home visit intervention programs that effectively address indoor environmental quality and improve health outcomes while increasing patient-centered care, improving quality, and lowering costs for Medicaid. There is, however, a lack of adequate metrics for measuring and reporting quality improvement related to home visits including environmental health education, preventive medicine counseling, environ-

mental control measures care coordination, and care integration. As for recommendations, there is a need to have in place specific measures for environmental health conducted during home visit programs specifically related to home-based health education, environmental assessment, and home-based Intervention-related resources.

For example, when developing tailored strategies regarding environmental control measures for asthmatic children, an environmental history can be obtained to evaluate the key indoor environmental exposures that are known to trigger asthma symptoms and exacerbations, including both indoor pollutants and allergens.¹⁵ Environmental control strategies are tailored to each potentially relevant indoor exposure on the basis of knowledge of the patient's allergic sensitivities and relevant indoor exposures which necessitates home-based health education and environmental assessment.¹⁶ Measures of healthcare utilization and indirect impact of asthma morbidity on, for example, work absences, are generally surrogates for direct indicators of intervention efficacy and asthma control, but they are commonly used to assess clinical interventions and assign costs.

¹⁵ Matsui EC, Abramson SL, Sandel MT, AAP SECTION ON ALLERGY AND IMMUNOLOGY AAP COUNCIL ON ENVIRONMENTAL HEALTH. Indoor Environmental Control Practices and Asthma Management. *Pediatrics*. 2016;138(5):e20162589

¹⁶ Ibid

Lead Poisoning Prevention Education

Lead Poisoning Prevention education non-physician defines 30 minutes, one unit

Children's Health Maternal and Perinatal Health
Care Quality Measure Category

Measure Name	Environmental Health Education for maternal and perinatal lead poisoning prevention
Text Description	% of at risk mothers receiving health education and promotion to prevent lead poisoning exposure in at risk communities.
Technical Definition (Numerator and Denominator)	Num: Households receiving home-based lead poisoning prevention education and counseling. Den: All households with housing related lead hazard risk in specified area: zip code, county and state level
Inclusion Criteria	Pregnant mothers or mothers with children 0-6. If member had any claims/events, they included AT LEAST ONE claim/event for an inpatient, ED, urgent care facility visit or a doctor's visit with a diagnosis of toxic effects of lead or abnormal lead level in blood. ICD-9: Primary 984.9 Toxic effect of unspecified lead compound OR Other unspecified aplastic anemias Primary 284.89 and Secondary 984.9. ICD-10: R78.7* Abnormal level of lead in blood OR R78.8* Finding of other specified substances, not normally found in blood.
Data Source	Home & Community-Based Service Provider(s) report to health plans for reimbursement which reports to state Medicaid.
Frequency of Measurement	Quarterly
Limitations	Personnel time in administering home-based preventative interventions should be measured to help evaluate efficacy, required resources and cost. The method for measuring personnel time should be clearly justified and the limitations acknowledged.
Comments	Personnel time in administering home-based preventative interventions should be measured to help evaluate efficacy, required resources and cost. The method for measuring personnel time should be clearly justified and the limitations acknowledged.

Lead Risk Assessment – Home Environment

Lead risk assessment of the home environment, non-physician Maximum two times per year.

Children's Health Care Quality Measure Category	Maternal and Perinatal Health
Measure Name	Environmental Risk Assessment of home environment for lead poisoning prevention
Text Description	% of homes receiving lead risk assessment to reduce lead poisoning hazards in home environment
Technical Definition (Numerator and Denominator)	Num: Number of households receiving lead risk assessment Den: All households with housing related lead hazard risk in specified area: zip code, county and state level
Inclusion Criteria	Pregnant mothers or mothers with children 0-6. If member had any claims/events, they included AT LEAST ONE claim/event for an inpatient, ED, urgent care facility visit or a doctor's visit with a diagnosis of toxic effects of lead or abnormal lead level in blood. ICD-9: Primary 984.9 Toxic effect of unspecified lead compound OR Other unspecified aplastic anemias Primary 284.89 and Secondary 984.9. ICD-10: R78.7* Abnormal level of lead in blood OR R78.8* Finding of other specified substances, not normally found in blood
Data Source	Home & Community-Based Service Provider(s) report to health plans for reimbursement which reports to state Medicaid. American Housing Survey data used to provide information on number of households with lead risk due to housing conditions. Administrative Claims Data could be used to confirm service provision retrospectively.
Frequency of Measurement	Annually
Limitations	Home & Community-Based Service Provider(s) are limited by lack of technical capacity and information systems in place to track and report to health plans.
Comments	Personnel time should be reported as personnel time per member per year of intervention (or relevant duration period). Personnel time in administering home-based preventative interventions should be measured to help evaluate efficacy, required resources and cost. The method for measuring personnel time should be clearly justified and the limitations acknowledged.

Care of Acute and Chronic Conditions**Asthma Education**

- Asthma education non-physician defines 30 minutes, one unit
- Preventive medicine counseling, individual 15 or 30 minutes, one unit
- Self-management education using standardized effective curriculum, individually, either incident to a clinical encounter or as preventive service – defines 90 minutes, one unit

Asthma Environmental Assessments

- Asthma environmental assessment, non-physician Maximum two times per year per member meeting inclusion criteria.

Children's Health Care Quality Measure Category Care of Acute and Chronic Conditions

Measure Name	Environmental Control of home environment for asthma management
Text Description	% of homes receiving environmental control practices to reduce asthma-triggers
Technical Definition (Numerator and Denominator)	Num: Households receiving environmental assessment Den: All households with pediatric asthma in specified area: zip code, county and state level
Inclusion Criteria	Hospitalized or seen in ED or urgent care clinic with asthma as the first listed diagnosis ICD-9: Asthma 493.* OR Hospitalized or seen in ED or urgent care clinic with asthma as non-primary diagnosis and one of the below listed as the first diagnosis(Appendix B) from 1/1/12 to 12/31/14: <ul style="list-style-type: none"> ○ Pneumonia* ○ Bronchitis, bronchiolitis* ○ Upper respiratory tract infection* ○ Wheezing* ○ Reactive airways disease*
Data Source	Home & Community-Based Service Provider(s) report to health plans for reimbursement which reports to state Medicaid.
Frequency of Measurement	Quarterly
Limitations	Personnel time can be the largest component of intervention resources and costs, but it is often difficult to measure exactly. Home & Community-Based Service Provider(s) are limited by lack of technical capacity and information systems in place to track and report to health plans.
Comments	Personnel time in administering home-based preventative interventions should be measured to help evaluate efficacy, required resources and cost. The method for measuring personnel time should be clearly justified and the limitations acknowledged.

Asthma Intervention-related resources

Resource use related to the intervention (eg, personnel time, mite eradication, and equipment). Collecting and reporting data on resource use related to the intervention

enables comparisons among alternative interventions and full accounting of cost for the purposes of comprehensive comparative effectiveness research or meta-analyses.¹⁷

- **Medication**

Information on use of asthma medication is available from most data sources, although the extent of information will vary.¹⁸

Asthma medications used in an intervention may be categorized as long-term control or quick relief (or “rescue” or “relievers”). More specifically, asthma medications could be reported by drug class, such as inhaled corticosteroids, long-acting b-agonists, SABAs, leukotriene-modifying drugs, anti-IgE therapy, and systemic corticosteroids. The subcommittee recommends that records of asthma medications used in the study intervention should capture the drug name, dose, and duration.

- **Supplies**

Supplies, equipment, and other required materials can often be tracked through an accounting system or other tracking system. Many of these items will frequently produce a record as part of their purchase and should be included in calculating the costs of the intervention.

- **Patient costs**

In addition to the direct resource use and cost of the intervention, there may be patient costs of the intervention that can be captured (eg, time spent for treatment and travel).

- **Personnel time**

- Personnel time should be reported as personnel time per study participant per year of intervention (or relevant duration period).

¹⁷ 2011 Akinbami LJ, Sullivan SD, Campbell JD, Grundmeier RW, Hartert TV, Lee TA, and Smith RA. Asthma outcomes: Healthcare utilization and costs. *J Allergy Clin Immunol* 2012;129:S49-64

¹⁸ Reddel HK, Taylor DR, Bateman ED, Boulet LP, Boushey HA, Busse WW, et al. An official American Thoracic Society/European Respiratory Society statement: asthma control and exacerbations: standardizing endpoints for clinical asthma trials and clinical practice. *Am J Respir Crit Care Med* 2009;180(1):59-99, Epub 2009/06/19.

Health care events and resource utilization

Collecting and reporting asthma-related events and resource utilization make it possible to compare events and outcomes across studies and to achieve a more complete and standardized accounting of resource use.¹⁹ Healthcare events include:

- hospitalizations;
- ED visits;
- unscheduled outpatient visits;
- scheduled (preventive) outpatient visits;
- subspecialist care; and
- remote care.

For the purposes of measuring healthcare utilization and cost, each healthcare event and occurrence of resource use (eg, short course of systemic corticosteroids) is considered an independent contribution, in contrast with defining an asthma exacerbation or episode of care, in which multiple healthcare events may be combined.

Other asthma-related events

Events that occur outside the healthcare arena also can contribute to asthma costs. Indirect costs from such nonmedical events as quality of life, work and school absences are frequently used as indicators of asthma control and efficacy of interventions.²⁰ This section focuses on (1) work absence and productivity loss and (2) school absence and academic impact.

Patient- or family-reported data. The conventional survey data collection method is respondent self-report of asthma healthcare events, using interviews respondent completed questionnaires. Limitations of data collection instruments that rely on patient or caregiver self-report are subject to recall bias To minimize recall bias, recall periods

¹⁹ 2011 Akinbami LJ, Sullivan SD, Campbell JD, Grundmeier RW, Hartert TV, Lee TA, and Smith RA. Asthma outcomes: Healthcare utilization and costs. *J Allergy Clin Immunol* 2012;129:S49-64.

²⁰ Mattke S, Balakrishnan A, Bergamo G, Newberry SJ. A review of methods to measure health-related productivity loss. *Am J Manag Care* 2007;13(4):211-7, Epub 2007/04/06.

should be minimized, ideally 2 weeks for low-impact events, such as scheduled office visits, and 6 or fewer months for major events (hospitalizations).²¹

²¹ Cannell CF, Marquis KH, Laurent A. A summary of studies of interviewing methodology. *Vital Health Stat* 2 1977;(69):i-viii, 1-78. Epub 1977/01/01.

SECTION V: Other Comments

Question and answer

1. **What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?**

GHHI response:

GHHI has implemented cross-sector partnerships focusing on improving housing conditions for low-income families, primarily at the city/county level but also working with states such as Delaware, New York, and Rhode Island. One key aspect of implementing successful partnerships and producing positive outcomes for children is to have an entity or even person designated to advance the collaborative efforts of different partners. GHHI calls this entity the “outcomes broker”, and identifies the appropriate entity who can play this role in jurisdictions we work with.

Another key success factor is political will. Partnerships take effort, time, and there is some upfront opportunity cost as different stakeholders work together in either new ways or in expanding ways. Strong leadership from the top including public leaders can provide the energy and motivation for actors to advance partnerships. GHHI has utilized a non-legally binding compact to align stakeholders around a collaborative goal. This document explains the goals of the partnership, defines roles, outlines the work plan, and summarizes the resources of the members of the partnership. The compact is signed by the Mayor, County Executive, leaders from local healthcare and housing organizations, and other stakeholders such as philanthropy.

2. **As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.**

GHHI response:

There are two items that GHHI considers to be of the utmost importance. The first is the role of the publicly-financed healthcare system and the view taken on it. The second is the need for a collaborative model of addressing problems where a collective impact could more effectively deploy resources than any one actor going-it alone.

The Role of The Publicly-Financed Healthcare System

There are two predominant views of the publicly-financed healthcare system. How Medicaid and the associated programs are viewed determines what course through history healthcare will take. When viewed narrowly the system's role is to ensure that medical needs are provided for, as appropriate or necessary given a state's programs. In this paradigm, the focus is on governance and controls of a mechanistic system providing compensation to medical practitioners for care.

For comparison, the second view is that publicly-financed healthcare does not and cannot be seen as operating in a vacuum. This view holds that it is one part of a broader public-health system, which in and of itself plays a part in the overall well-being of the nation – intertwined with political, economic, social, and technological factors well beyond payment models.

Both views acknowledge a problem critical to the future of the publicly-financed healthcare system: sustainability. The system was unsustainable as noted by a large variety of parties and the realization led to a grand transition from volume to value. Both sides agreed that the system was ineffective at controlling costs with ever-increasing prices due in part longer life-spans, new life-saving but expensive technologies, or improvements in the standards of care among other issues. The sides, however, diverged on their approach. There is a growing body of research and real-world operations that are demonstrating that Medicaid and associated costs are controllable, but not through a myopic focus on more stringent controls, but rather by investing in public-health. People with better housing, better access

to resources, and higher disposable incomes have lower medical expenses. While it's not a simple linear relationship, the costs of inaction are substantially higher than the cost of addressing the underlying systemic issues that result in high costs to the publicly-financed healthcare system, departments health and human services, and beyond. Finding ways to leverage existing resources to make these investments is a practical necessity and CMMI should be applauded for moving in that direction.

The second major challenge really builds on the first. GHHI has taken head-on the of aligning, braiding, and coordinating funding flows into comprehensive solutions for meeting community needs for healthy and energy-efficient housing. Undoubtedly, other issue areas would benefit from the same issues being resolved, but our analysis indicates that it may be the result of the structure of the government. We would recommend that the issue be addressed in phases. For example, the publicly-financed healthcare system can be a phenomenal asset for investing the health of populations in ways that reduce the financial burden of medical expenditures while achieve other health-related goals, but creating collective-impact models requires a bit of creativity and a lot of collaboration between parties, even within departments responsible for health and human services at different levels of government. This will enable the most clearly advantageous path forward for most projects and the most likely to advance. Beyond that, a greater opportunity relies in deploying the sum total of governmental resources in coordinated fashions, which should be seen as an unattainable but desirable targeted end-state we can move towards. Including new modules of government collaboration on issues may be the most effective way forward and we believe we have provided a roadmap to begin this process in our model proposals covered in Section III.

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Greenville Health System

One simple change that would increase access for Medicaid patients would be to provide a mechanism by which faculty at teaching hospitals/clinics could bill based on medical student documentation. This would allow teaching physicians to spend less time documenting and more time seeing patients in what are largely Medicaid clinics. This would also have the added benefit of bringing medical students back into the medical team in a more meaningful way. The downstream consequences will be better trained physicians graduating from US medical schools. I suspect it will also improve moral and decrease burn out among physicians who work in teaching hospitals/clinics who are generally already overworked and underpaid in comparison to their colleagues who are in private practice.

Feel free to contact me if you would like to discuss this idea further.

Thank you

Harvard University

CMS should consider increased use of school based health centers and school based health promotion and prevention measures.

Specifically, school based delivery of dental care is an ideal way to provide preventive dental care on a large scale and alleviate barriers to accessing care. School based sealant programs are extremely efficient and effective in preventing dental disease and is cost effective.

School based care can be combined oral health, mental health, primary care and nutrition counseling.

Health Equity and Young Children Expert Advisory Panel to Child and Family Policy Center

The following is a general response to the overall RFI. The Health Equity and Young Children Initiative would be happy to provide further information on any of the points made in this response. Please feel free to contact me on behalf of the Initiative and the colleagues that prepared this response.



Health Equity and
Young Children Exp

CMMI RFI on Pediatric Alternative Payment Models and Young Children's Healthy Development

Charles Bruner, Ph.D., Principal Investigator, Health Equity and Young Children Initiative, Senior Policy Advisor, Center for the Study of Social Policy,

The following provides references to and excerpts from different seminal reports on the points made in the broader "Promoting Pediatric Alternative Payment Models and Practice Change to Improve Young Child Health Trajectories" sign-on letter and, in particular, to the following questions:

Sec. V. Question 1. What are the critical success factors and barriers to effective partnerships between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

Sec. V. Question 2. **As we consider a model to improve care and health outcomes for children and youth, are there other areas or concepts we should consider?**

Section II. Question 9. What other models of care beside ACOs and MCOs could be useful to implementation to improve the quality and reduce the cost of care for the pediatric population?

Section III. Question 1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth?

Section III. Question 5. In addition to Medicaid's mandatory benefits, what other services might be appropriate to incorporate in any new integrated care delivery model?

Before one designs payment systems, one has to have in mind the changes that these payment systems seek to produce. In the case of very young children, there is a growing recognition of the important role the primary care child health practitioners can play to respond to social as well as bio-medical determinants of health – and respond in ways that strengthen the capacity of parents to provide a safe, stable, and nurturing home environment. Fostering innovation and further development of practices in this area is needed to increase the impact that such practices can have AND to inform those financing primary care to ensure that this financing (whether fee-for-service, allowed administrative expenses, or ACO or MCO contractual arrangements) promotes and sustains such practice.

The following documents all speak to the opportunity to transform primary care young child pediatric practice – and the value of continuing to build this field of practice.

DOCUMENTS MAKING THE CASE FOR NEW ROLES AND FINANCING FOR YOUNG CHILD PRIMARY HEALTH CARE

Over the last thirty years, federal and state governments have made major strides to expand child health insurance coverage – particularly under Medicaid and CHIP – to all children in the United States. At the same time, however, leaders in the health field have recognized, while

insurance coverage is a vital starting point, it alone does not ensure healthy child development nor achieve health equity. The content, delivery, and financing of that care, and particularly primary care, are essential to ensuring children's healthy development. The following very brief excerpts are from much longer works from leaders in the child health field. The first report, *Transforming Young Child Primary Health Care Practice*, also provides descriptions of eleven evidenced-base programs which start with primary child health practitioner and, in the Appendix, longer summaries of each of these programs.

Bruner C, Dworkin P, Fine A, Hayes M, Johnson K, Sauia A, Schor E, Shah R, Shaw J, with Trefz, M and Cardenas, A (January, 2017). Transforming Young Child Primary Health Care Practice: Building Upon Evidence and Innovation. Policy Paper for the Learning Collaborative on Health Equity and Young Children, Des Moines, IA.

[A] new vision for primary child health care practice is emerging that focuses upon improving child health trajectories by responding to social, as well as bio-medical determinants of health. This vision holds potential to transform primary child health practice to move beyond treating illness and chronic physical health conditions to improving child health trajectories across physical, social, cognitive, and emotional dimensions of health.

[T]his new vision of primary child health care practice largely is reflected in an array of innovative, research-based programs established by pediatric practitioner champions. These programs have extended their responses to young children particularly in vulnerable and stressed households and neighborhoods, in ways that strengthen the safety, stability, and nurturing in the home environment – with impressive outcomes that include both improved family functioning and improved child (and often adult) social, emotional, cognitive, and physical health outcomes. While these programs have somewhat different emphases and ways of working within different practice settings, they share much in common, enough to be considered as representing a new approach, vision, and field of primary pediatric practice. They are building a research base as evidenced-based programs that impact healthy child development through strengthening families and the safety, stability, and nurturing in the child's home environment.

Realizing this vision for primary child health practice and building this field from the current array of exemplary programs into a standard of practice requires three levels of activity:

1. Expanding the evidence base on effective practice and its application to different practice settings, family populations and situations, and presenting concerns and issues.
2. Expanding the adoption and diffusion in the field to create a larger and more "critical mass" of such practice.
3. Developing financing and accountability structures, particularly within Medicaid and health reform's emphasis upon meeting the triple aim, that support and sustain such practice.

Berwick, D, Nolan, T, & Whittington, J (2008). The Triple Aim: Care, Health and Cost. *Health Affairs*.

Improving the U.S. health care system requires simultaneous pursuit of three aims: improving the experience of care, improving the health of populations, and reducing per capita costs of health care. ...

The components of the Triple Aim are not independent of each other. Changes pursuing any one goal can affect the other two, sometimes negatively and sometimes positively. ... The situation is made more complex by time delays among the effects of changes. **Good preventive care may take years to yield returns in cost or population health.**

[A]ny effective integrator will strengthen primary care for the population. To accomplish this, physicians might not be the sole, or even the principal, provider. **[The] expanded role includes establishing long-term relations between patients and their primary care team; developing shared plans of care; coordinating care; and providing innovative access to services through improved scheduling, connection to community resources, and new means of communication among individuals, families, and the primary care team.**

American Academy of Pediatrics Council on Community Pediatrics (March 2016). Policy Statement: Poverty and Child Health in the United States.

Children who experience poverty, particularly during early life or for an extended period, are at risk of a host of adverse health and developmental outcomes through their life. Child poverty influences genomic function and brain development by exposure to toxic stress. Children living in poverty are at increased risk of difficulties with self-regulation and executive function, such as inattention, impulsivity, defiance, and poor peer relationships. Poverty can make parenting difficult.

Although every family wants to provide the best resources and care to their children, economic barriers can stand in the way. **An enhanced medical home providing integrated care for families in poverty is informed by the understanding that emotional care of the family is within the scope of practice for community pediatricians and that the effects of toxic stress on children can be ameliorated by supportive, secure relational health during early childhood.**

American Enterprise Institute and Brookings Institution Working Group on Poverty and Opportunity (December 2015). *Opportunity, Responsibility, and Security: A Consensus Plan for Reducing Poverty and Restoring the American Dream*.

Chronic stress can cause substantial changes in children's brains. ... Low stress, high predictability, and strong, stable relationships with caring adults all help children become measurably better at self-regulating, delaying gratification, and controlling their impulses. ... If we want adult citizens who can exercise responsibility, we should do as much as we can to improve the security of childhood, especially among the poor. ...

[G]overnment can play a positive role by providing guidance, almost always through a third party receiving government funding, on the practices and skills that fit best with the high aspirations parents hold for their children. [T]he nation should use its universally available network of pediatric primary and preventive care practices to mount evidence-based parenting and early child development interventions. Thanks in large part to expansions of federal and state health insurance coverage of children, nearly all infants and toddlers have access to basic health care and are now taken to a schedule of 10–12 well-baby visits over the first three years of life. Consequently, pediatricians and other health service professionals have developed low-cost, evidence-based approaches to supplement pediatric visits with parent-child interventions that can promote early cognitive-language and social-emotional development.

Einhorn Family Charitable Trust, Ariadne Labs, and National Institute for Child Health Quality (2016). Promoting Young Children's (0-3) Socioemotional Development in Primary Care. Author.

Substantial literature highlights the importance of fostering socioemotional development in young children and the opportunity to do so within the context of pediatric well-visit care. [T]he quality of infants' early relationships and interactions shape the architecture of the brain and affect long term sensory, language, and cognitive development.

Pediatric primary care is a nearly-universal, de-stigmatized point of connection for families with young children, even in high-risk populations. Healthcare providers are in a unique position to address the intersection of physical and socioemotional health and development.

At the expert meeting, a broad range of experts identified 11 specific design elements for the pediatric well-child visits that incorporate the above principles:

1. Use well visits to assess bond between caregiver and child.
2. Model behaviors that promote socioemotional development during well visits.
3. Educate families about socioemotional development and age-appropriate expectations during visit.
4. Modify visit structure and timing to allow for meaningful interactions.
5. Provide access to extended care team members (i.e., in addition to the physician) during and between visits to continue family support and identify families requiring extra resources; build team unity so all care team members feel they are part of team (including parent supports and community supports).
6. Improve the quality of interaction between care team and caregivers.
7. Create an office culture that promotes openness and nurturing and fosters the bond between care team and caregiver, as well as caregiver and child.
8. Use the waiting room to foster and model pro-social interactions.
9. Provide all families with resources to promote socioemotional development and age-appropriate expectations between visits.
10. Connect families to tailored resources they can access during and between visits. Tier resources based on level of need. Use extended care team to help families navigate systems.
11. Use time between visits to strengthen bond between care team and caregivers.

Brundage, S (2016). *Seizing the Moment: Strengthening Children's Primary Care in New York*. United Hospital Fund (<https://www.uhfnyc.org/assets/1448>)

Below we lay out four steps that can help New York seize its present opportunity for an organized approach to strengthening pediatric primary care.

1. Defining an early childhood development framework for pediatric primary care. Most fundamentally, a framework is needed to identify the essential functions and parameters of a pediatric practice that encourages healthy early childhood development using the latest available science and techniques—and to promulgate an agreed-upon set of outcomes and associated measures for identifying interventions' success.

2. Determining how new value-based payment efforts can support effective early childhood development interventions in pediatric practices. [It is critical that consensus is developed around the articulation of the "value" sought from pediatric primary care settings, so that efforts to promote early childhood development can comfortably fit within Medicaid's accepted value-based payment approaches.

3. Specifying the measures and outcomes public and private payers will accept for monitoring investments in early childhood development services. It is important to understand which outcomes pediatric providers and payers will be willing to use and the timeframe in which those outcomes could be measured.

4. Identifying and resolving barriers that prevent pediatricians from using evidence-based approaches to promote healthy development. In giving pediatric providers greater latitude in responding to the needs of children and their families, key issues still need to be resolved, including how to pay for two-generational approaches, how to improve pediatric capacity to do that work, and how to engage other critical care providers, such as obstetricians, who can influence health outcomes for both child and parent.

**Center on the Developing Child at Harvard University (2016). *From Best Practices to Breakthrough Impacts: A Science-Based Approach to Building a More Promising Future for Young Children and Families*.
<http://www.developingchild.harvard.edu>**

Neuroscience is producing extensive evidence suggesting that the later we wait to support families with children who are at greatest risk, the more difficult (and likely more costly) it will be to achieve positive outcomes, particularly for those who experience the biological disruptions of toxic stress during the earliest years.

Although recent expansions in health insurance coverage in the United States have improved access to needed medical services, persistent racial, ethnic, and socioeconomic disparities in low birth weight, infant mortality rates, and many chronic diseases remain a serious challenge.

Many thought leaders in the early childhood arena point to primary health care as the most appropriate point of entry for a universally available, prevention-oriented system for promoting the development of young children and providing trusted information and support for their parents. With appropriate

training and incentives, a skilled and motivated team based in a “medical home” could play a more effective, coordinating role in dealing with the more complex challenges of developmental surveillance, early detection of concerns, and prompt referral to community-based services—a role that is not currently fulfilled successfully by most primary care settings.

Robert Wood Johnson Foundation Commission to Build a Healthier America (2014). *Time to Act: Investing in the Health of Our Children and Communities*. Executive Summary. Princeton: NJ.

The key to better health does not lie primarily in more effective health care, although that is both important and desirable. **To become healthier and reduce the growth of public spending on medical care, we must consider options that will improve opportunities for all, with special emphasis on lifting up low-income children and those who are in danger of being left behind.** We have come to agreement on three major strategies for improving America’s health that reach beyond medical care.

1. Make investing in America’s youngest children a priority. This will require a significant shift in spending priorities and major new initiatives to ensure that families and communities build a strong foundation in the early years for a lifetime of good health. ...
2. Fundamentally change how we revitalize neighborhoods, fully integrating health into community development.
3. **Broaden the mindset, mission, and incentives for health professionals and health care institutions beyond treating illness to helping people lead healthy lives.**

Two-Generation Outcomes Working Group (2016). *Making Tomorrow Better Together*. ASCEND: The Aspen Institute: Washington, DC.

There are outcomes that two-generation programs typically target across the child-focused, parent-focused and family-focused spectrum. Typically, two generation programs will consider the holistic needs of entire families in addition to the individual needs of children and adults, and these needs are always identified in close consultation with families themselves. As a program considers its intended outcomes, [t]able I offers a preliminary list of outcomes for field-wide discussion.

Educational Success Outcome Domain: Parents are empowered as their children’s first/primary teachers; Increased involvement in children’s learning activities; Improved parenting skills
Increased family literacy; Enhanced home learning environment; Increased family engagement.

Social Capital Outcome Domain: Improved emotional support skills; Development of warm and nurturing relationships with children; Increased knowledge and confidence to raise healthy and successful children; Increased family cohesion; Increased participation in community life;
Increased connection to other families

Health and Well-Being Outcome Domain: Decreased psychological distress; Decreased maternal depression; Increased confidence; Increased emotional well-being.

Wietecha M &, Bethell C (October, 2016). *The Case for Investing in Child Health as a Matter of Our Nation's Security, Economy and Well-Being*. Children's Hospital Association.

Many adult health problems we see today are rooted in childhood adversities we can prevent and address now. Thriving can be learned, and the negative impact of adversity can be healed. These essential results require more proactive approaches to cultivating healthy families and communities, and more proactive development of resilience, hope and positive health.

We're investing the vast majority of our federal dollars in the later life stages of our adult population, and a tiny fraction in the children who will be the future of our nation for decades to come. Now is our moment to step forward and invest in the critical elements of childhood we know support healthier and emotionally stronger children.

We must invest in smart and focused programs to ensure nurturance, teach mindfulness and improve coping skills, and better support children and families at home, in school, and in their neighborhoods. We must strengthen the behavioral health resources available to children, and better integrate behavioral and physical health in our training, research, and provision of care.

We cannot solve every socioeconomic problem, but we can do better. It's time we step up and strengthen our public policy and increase and protect national funding for children through proven programs such as Medicaid and CHIP.

Rosenbaum S, Riley T, Bradley A, Veghte B, & Rosenthal J (2017). *Strengthening Medicaid as a Critical Lever in Building a Culture of Health*. Washington, DC: National Academy of Social Insurance.

This report focuses on how Medicaid's effectiveness as an insurer and partner in broader health efforts could be strengthened through a series of policy reforms, [u]sing the Robert Wood Johnson Foundation's Culture of Health as the touchstone.

Medicaid can use its dominant role as a health funder to move the health care system in two basic directions. First, Medicaid can place greater emphasis on preventive services. Second, Medicaid can use its power as a health care funder to encourage the development of health care entities that both deliver and coordinate a fuller spectrum of health, educational, nutritional, and social services.

[N]o population stands to benefit more than the tens of millions of children who depend on Medicaid and its companion CHIP. Medicaid's unique pediatric coverage structure [EPSDT] enables states to create care systems that can address children's physical, mental, developmental, and oral health needs, and to effectively anchor and integrate broadly-defined pediatric services into community-based settings.

A more complete policy review of Medicaid's role in child and adolescent health would illustrate how Medicaid financing might be used to further an evidence-based approach to pediatric care. This would

include the use of research-based standards for preventive health care such as Bright Futures. Federal policy could incentivize Medicaid programs to use the Bright Futures protocol, which officially governs the preventive health benefit standard applicable to all insurance coverage sold in the individual and small group markets.

Along with promoting Bright Futures, a federal Medicaid child health policy modernization effort could elucidate policies that are achievable under federal law without additional amendments, such as states' ability to pay for evidence-based services furnished in home and community settings, states' ability to develop onsite service programs located in a range of settings, and states' flexibility to adopt "two-generation" approaches that can extend treatment to parents in situations where treatment is integral to children's health, such as anticipatory guidance, efforts to identify maternal depression, or family smoking cessation support to improve the health of children with asthma. Home visits to new parents and young families exist as coverage options today, and these services have been shown to be effective in ensuring that both mothers and children receive the services they need to thrive. The federal government could incentivize such interventions through comprehensive policy guidance that illustrates Medicaid's potential to work alongside other programs to promote access to health, nutritional, social, and educational services, as well as services aimed at reducing threats to child health.

DOCUMENTS AND SIGN-ON LETTERS MAKING SPECIFIC RECOMMENDATIONS TO STATE AND/OR FEDERAL POLICY MAKERS ON ADVANCING PRIMARY CARE PEDIATRIC RESPONSE

The previous documents all point to the importance of primary child health practice transformation to extend its reach to responding to social determinants of health. There also have been more specific recommendations on how the federal government and state governments – particularly through Medicaid – can accelerate such transformation and provide the financial support to sustain them. This has included specific reports, as well as sign-on letters to Congress or the Administration. While much of this work occurred prior to the federal legislation, it remains relevant today. In addition, there have been some documents regarding potential changes to Medicaid to become a block or capitated grant that deserve attention, as Congress and the Administration propose changes to federal health coverage and financing.

Documents Describing the Opportunities for States to Use Medicaid to Cover Primary Child Health Services and Address Social Determinants of Health

Bruner C., & Johnson, K, with Trefz M (September, 2016). Young Child Primary Pediatric Practice Transformation – Medicaid Financing to Improve Child Health and Development. Discussion Paper: Learning Collaborative on Health Equity and Young Children; Des Moines, IA.

Medicaid finances half of all US births and is the source of coverage for nearly half of the country's youngest children (birth to three).

There is a growing array of exemplary primary pediatric practices, largely financed through philanthropic or pilot funding, that has shown the ability, starting with the primary care visit, to strengthen the safety, stability, and nurturing in the home environment and raise the trajectory of child health – very much consonant with Bright Futures guidelines and often incorporating two-generation interventions that explicitly strengthen parent-child bonding and support.

These exemplary primary pediatric practices deserve further diffusion; but the diffusion and sustainability of the programs themselves requires that Medicaid covers at least a share of their costs.

The following offers a brief description of how Medicaid and its EPSDT provisions can finance much of what is provided within these exemplary primary pediatric practices. States have to be intentional and proactive in the following actions. These apply both to providing fee-for-service reimbursement and for incorporating primary care into managed or accountable care structures (where the contracts will have to specify these expectations and develop fiscal incentives for achieving them

Adopt the Bright Futures schedule for well-child visits. Under federal law, states must establish a periodic well child visit schedule. Many states have not updated well child visit schedules to reflect the American Academy of Pediatrics Bright Futures recommended schedule. Appropriate visit schedules help to incentivize providers to deliver appropriate services.

Increase Medicaid reimbursement for primary care. Reimbursement rates for EPSDT well-child visits in many states are very low and result in limited participation and acceptance of Medicaid patients, let alone providing the level of well-child care they desire. Because payments are often quite low, states have been reluctant to require more comprehensive activities or to set up external quality review, pay for performance incentives, or other structures to enhance the comprehensiveness of such visits.

Use administrative claiming and fulfill administrative obligations under EPSDT. Administrative claiming represents an opportunity for financing actions that may fall outside of direct billing for a distinct service to a specific client. Ensuring the diffusion of effective practices and fidelity to standards of care requires training and support in educating practitioners and their practices. Such training and support are not a direct, billable service to a particular patient, but can be covered under administrative claiming. Similarly, as providers make referrals to a broader array of services than those provided in clinical settings, there is a need for continual outreach to, identification of, and connection with such services within a community. While this is not a direct service, it also lends itself to administrative claiming.

Apply the EPSDT “medical necessity” standard to better address the developmental needs of children. Federal law for EPSDT sets a unique and broad standard for medical necessity decisions for children in Medicaid and therefore what services will be covered. Services are medically necessary to prevent, maintain, improve, ameliorate (to make more tolerable), or cure a health condition. Particularly for young children, applying a prevention standard necessitates that the state define “medical necessity” itself to include environmental/social determinants as well as child-specific medical diagnoses. States can clarify the definition for the range of medically necessary treatments to explicitly include family and

environmental factors influencing health, which is essential to covering two-generation responses that strengthen the safety, stability, and nurturing in the home environment. Medical necessity needs to be defined with specific reference to the developmental nature of children's health and well-being, and not on an adult basis for medical necessity.

Use reimbursement and managed care contracting approaches in Medicaid to finance screening for developmental, mental health, and social risks. More states have explicitly identified the billing codes providers should use for child developmental screening. Screening can include broader measures of family stress and functioning and safety in the home environment. Such screening does not have to occur within the practitioner's time during the well-child visit, but can be conducted in the waiting room, through web-based tools, or by someone other than the primary practitioner. The infrastructure for providing such screening (e.g. space and equipment such as touch pads for use in the office) can be built into the reimbursement. The level of reimbursement must provide sufficient financial incentives to ensure that practices provide that screening and integrate the results into subsequent actions.

Define how an array of personnel can work under the supervision of a licensed professional of the healing arts. Federal regulations allow states to cover services that are provided by someone (e.g., nutritionists, home visitors, community health workers) operating under the supervision of a licensed practitioner of the healing arts (which states themselves can define), even when such services would not otherwise be eligible. Such services as home visiting, parenting education, and group counseling and support sessions can be defined and covered under Medicaid as long as they meet definitions of medical necessity, appropriate scope of practice, and provide documentation that they are being used to address identified health issues.

Provide reimbursements and financial incentives for a more robust system of case management. Medicaid covers administrative case management and targeted (medical assistance) case management. Either case management or targeted case management can be part of effective care coordination to support referrals to specialty medical care or to education or other related services. Care coordination can help families navigate among health and other services or use available services more effectively. To do the latter, care coordinators need to establish some relationship of trust with families and to start where families are, serving at times as counselor, navigator, advocate, and support system. Defining and then commensurately reimbursing care coordination is essential – and likely is best achieved through some form of bundled payment that reflects the overall work and not the time segment units of service specifically designated and documented as meeting some identified clinical need.

Report on child health indicators, metrics, and outcomes. Federal law calls for creation of a core set of child health measures. Currently about half of the states have adopted one or more of the child core set, which includes 15 measures of perinatal and infant care, well child care, and/or adolescent well child care. These inform the nation's effort to improve child health under Medicaid and the Children's Health Insurance Program (CHIP). Measuring such health care utilization is important; however, more information is needed to understand child health and well-being. The Centers for Disease Control and Prevention and Healthy People 2020 both stress that ensuring healthy young child trajectories requires improving the safety, stability, and nurturing in the home environment. This represents a foundational outcome for young child health and needs to be part of the overall metrics used to assess child health, both to focus attention on addressing those issues and to track progress and assess effectiveness in doing so.

Bailit Health (2016). Value-Based Payment Models for Medicaid Child Health Services: Report to the Schuler Center for Analysis and Advocacy and the United Hospital Fund. New York.

Because of the impact of socioeconomic determinants, including ACEs, on the long-term health and well-being of children covered by Medicaid, a pediatric payment model should anticipate the need for pediatric practices to address these factors by 1) screening for them; 2) providing interventions, such as parental education and support and behavioral health services, when appropriate services are available within the practice, 3) establishing robust linkages to community-based behavioral health, educational, and social service organizations that can address more directly the social determinants that are beyond the scope of a pediatric practice, and 4) making and closing referrals to such community-based organizations.

Because pediatric care is predominantly focused on developmental screening, preventive care and anticipatory guidance, opportunities for short-term cost savings to fund and sustain a value-based pediatric payment model do not exist to the same level as they do for adults. ... For the vast majority of children covered by Medicaid, infrequent inpatient service use means that adult-driven value-based payment models cannot be expected to generate substantial annual savings.

To define appropriate value-based payment models for children's health care, it is necessary to first define the value sought through the purchase of health services for children. ... We recommend the following construct as the basis for defining value-based payment models: 1) Process: regular access to a primary care team; 2) Process: regular developmental screens and preventive care; 3) Process: regular screens for social determinants of health, with resource referral when needed; 4) Process: access to coordinated specialty care, when needed; 5) Process: family involvement in care; 6) Process: seamless integration of behavioral health and primary care; 7) Outcome: health is well-managed and the child is emotionally well; 8) Outcome: the child is able to appropriately and effectively function – e.g. at developmental milestones, performing activities of daily living, attending school, and achieving academically.

The most important consideration for implementing the proposed models is how to finance the primary care model. Our recommendations envision capitation rates that would be built to assume funding of some activities that are not always provided today, as well as care coordination payments and incentive bonus opportunities. We believe that cross-subsidization will be necessary to maintain an adequate investment in primary care services. ... This cross-subsidized investment will be most necessary for Medicaid. Children served by Medicaid are subject to many more adverse social determinants of health and have worse health status than higher-income children, and yet are funded at lower levels than commercially insured children.

Johnson K (December 2016). Using Medicaid to Finance Home Visiting Services: A Checklist for State Decision Makers. Johnson Group Consulting, Inc.

States have been using Medicaid to finance home visiting for more than 20 years. Currently, more than a dozen states are financing a portion of home visiting services to pregnant women, infants, and young children with Medicaid federal-state funds. A variety of approaches, benefit categories, and mechanisms

are being used. (For examples of how states use Medicaid:
(http://www.nashp.org/sites/default/files/medicaid.financing.home_.visiting.programs_0.pdf).

In March 2, 2016, the Centers for Medicare and Medicaid Services (CMS) and the Health Resources Joint Informational Bulletin regarding “Coverage of Maternal, Infant, and Early Childhood Home Visiting Programs. The Joint Informational Bulletin specifically says:

While there is no single dedicated funding source available for home visiting services, federal funding streams can be paired with state and local funds to support a full package of services for pregnant women, families, infants, and young children. States select and implement different home visiting models that may include services eligible for Medicaid coverage. (page 4)

Medicaid coverage authorities offer states the flexibility to provide services in the home... However, home visiting programs may include some component services, which do not meet Medicaid requirements, and may require support through other funding options. (page 5)

State agencies should work together to develop an appropriate package of services [which] may consist of Medicaid-coverable services in tandem with additional services available through other federal, state or privately funded programs. (page 10)

Reforming States Workgroup (December, 2016). Letter to the New Administration. Milbank Memorial Fund: New York, NY.

CMS should make it easier for states to combine Medicaid funding with public health funding for public health programs targeting chronic illnesses, by reducing policy and administrative barriers for Medicaid reimbursement. Traditional preventive services (such as immunizations and cancer screenings) are covered by Medicaid and other payers, but there is growing interest in adopting a broader model of health promotion. The Centers for Disease Control and Prevention is promoting a model that works with payers to target selected high-cost conditions combined with evidence-based interventions. Examples of public health services targeting specific chronic disease issues include community-based outreach and education addressing diabetes and hypertension, or housing and environmental remediation targeting asthma and water quality.

Generally, Medicaid will only pay for clinical or condition-related services that are (1) covered in the state’s Medicaid plan; (2) provided to a specific beneficiary; and (3) only for those eligible for Medicaid. However, public health and population health models require investments in services that cut across those traditional program boundaries serving targeted population segments (people at risk for or diagnosed with diabetes) or the whole community, regardless of their insurance coverage.

Given the significant fiscal impact of chronic disease on the Medicaid program, CMS should encourage states to develop and participate in population health models designed to prevent or better manage chronic disease that cut across insurance or payment sources. For example, CMS should allow state Medicaid funds to be used for health promotion, even if these are not traditional Medicaid-covered services or billed on a beneficiary specific basis.

Sign-on Letters Making Specific Recommendations for Federal Activity to Promote Innovation and Advancement of Holistic Responses to Children Under Medicaid and CMS

8 Member National Health Advisory Board of the Learning Collaborative on Health Equity and Young Children and 46 Health Leader Sign-On Letter to President Obama, Vice-President Biden, and Secretaries Sibellius and Vilsak (June 10, 2016). Proposal for a CMMI Grant Initiative for Young Children.

We are calling on your leadership again to take action, through the Center for Medicare and Medicaid Innovation, to catalyze further innovations to improve child health trajectories in the earliest years through responding to social, as well as biomedical determinants of health. We believe there is a critical need and opportunity to better respond to young children by strengthening the capacity of their parents to provide safe, stable, and nurturing home environments. We also believe that such responses hold the key to improving population health and reducing the prevalence of chronic health conditions that assume the great share of health costs. We believe they also will improve children's readiness for success in school and future success in life, thereby reducing poverty and its impacts over the next generation.

We recommend your administration establish a \$300 million Federal Opportunity Announcement for Young Children, through the existing funding for CMMI, to support primary child health practice innovations to improve child health trajectories. While children are not drivers of current health costs, improving their health trajectories is essential to reducing the presence of chronic conditions in adulthood that are and will continue to drive health costs in the future. Such an FOA will catalyze and activate additional child health champions, expand the knowledge base on effective child health practice and its integration into health payment systems, and provide guidance to further health transformations needed to achieve the triple aim.

27 Organization Sign-On Letter to Senate Finance and House Energy and Commerce Chairs and Ranking Members (September 27, 2016). Expansions and Improvements to Pediatric Quality Measurement Program (PQMP).

Congress should advance efforts not only to measure pediatric and maternal health care quality, but to improve it. A sophisticated quality measurement enterprise can lead to improved health outcomes and smarter spending, but first must leverage standardized data and appropriate metrics for the target populations. To address these priorities and realities, our organizations recommend the following actions:

- 1) Extend and expand the authority and funding provided under 42 USC 13206-9i.
- 2) Strengthen and extend funding for pediatric measurement science as follows:
 - a. Establish a publicly-reported, periodic review of pediatric measures available for use at the state, hospital, practice and plan level, including a rigorous, systematic gap analysis of available measures that drives further measure development as appropriate for inclusion in the Child Core Set and for additional public or private applications.

b. Extend funding in sufficient amount and duration to support a new round of competitive grants for pediatric Centers of Excellence, which are responsible for foundational research, measure development, testing, and implementation, and at least three years of stewardship of each measure to ensure measures remain valid and are included or retired as appropriate in the Child Core Set and other sets.

3) Promote improved alignment among public and private pediatric measure sets to reduce the reporting burden and create national consistency in measuring the quality of pediatric health care as follows:

a. Expand and evaluate efforts to spread the use of valid pediatric measures developed through the PQMP across different health care delivery and coverage systems, including both public and private payers.

b. Provide support for improved data collection and sharing between health systems, including CHIP, Medicaid, and other health insurance.

c. Modify the electronic health records incentive program to include CHIP in case mix calculations that allow for incentive payments under the HITECH Act.

4) Support and encourage state reporting on the Child Core Set as follows:

a. In consultation with the states and relevant medical provider organizations, ideally within one year of CHIP's extension, require states to report on all Child Core Set measures, and provide enhanced federal funding and technical assistance to states to achieve this goal.

b. Direct states to work with measure experts, such as developers and stewards as appropriate to maximize utilization of each measure.

c. Ensure that this renewed focus also includes attention to the impact that social determinants of health have on early childhood learning and the care needs of children and families.

5) Ensure that quality measurement leads to quality improvement for all children:

a. Establish a state incentive payment program for states that demonstrate marked improvement on Child Core Set measures, to ensure that quality measurement leads to quality improvement.

b. Provide funding to renew state demonstration projects that promote public-private partnerships to implement innovations in pediatric quality improvement nationwide.

c. Emphasize that pediatrics be examined, in systems reform funding, with a different lens regarding the need for fast and significant returns on investment (ROIs). Children are not the drivers of overall health costs today, but it is critical to improve their health trajectories to reduce the prevalence of chronic conditions that will drive health costs in the future. Pediatric innovations need to be developed that will assess their long-term health and related benefits in achieving the triple aim. Financing systems need to be designed to support primary, preventive, and developmental services for children that are based upon those long-term impacts.

Mental Health America and 31 Co-Signatory Sign-On Letter to Acting Administrator of Center for Medicare and Medicaid Services (October 28, 2016). Response to RFI Regarding Next Round of SIMS Grants.

The Forum on Promoting Children's Cognitive, Affective, and Behavioral Health of the National Academy of Medicine recently published a landmark perspective paper, *Unleashing the Power of Prevention*, which sought to operationalize the findings of the Board of Children, Youth, and Families since *From Neurons to Neighborhoods: The Science of Early Childhood Development* in 2000, to *Preventing Mental, Emotional, and Behavioral Disorders in Children: Progress and Possibilities* in 2009 and beyond. *Unleashing the Power of Prevention* stated:

Every day across America, behavioral health problems in childhood and adolescence, from anxiety to violence, take a heavy toll on millions of lives. For decades the approach to these problems has been to treat them only after they've been identified—at a high and ongoing cost to young people, families, entire communities, and our nation. Now we have a 30-year body of research and more than 50 programs showing that behavioral health problems can be prevented. This critical mass of prevention science is converging with growing interest in prevention across health care, education, child psychiatry, child welfare, and juvenile justice.

Out of this work, the Collaborative on Healthy Parenting in Primary Care was formed to act on one of the recommendations of this paper – implementing evidence-based family-focused interventions in primary care. As a recent article by many of the same authors stated:

A substantial body of research has demonstrated the positive effects of family-focused prevention programs offered in a variety of settings and across families with diverse structures and economic, cultural, and racial compositions. The positive effects of these programs indicate promise for broad public health impact on children's well-being. However, their full potential has yet to be realized because their reach has been limited. Their potential can be fulfilled by integrating them into primary healthcare settings, where most families already receive advice about child development and health. Primary care providers (e.g., pediatricians, family physicians, nurse practitioners, physicians' assistants) are often the first resource consulted when parents have concerns about their children's behavior.

The family-focused interventions provide behavioral supports for parents and children for every level of need, from building a strong foundation before the child is even born to helping youths with the greatest need after juvenile justice involvement. Economic modeling of the interventions finds that many are cost-effective, and hold the potential for reduced costs to health care in the long-term.

Given the goals of this next round of SIM funding, CMMI has the opportunity to further break down barriers to funding and support primary care providers in offering family-focused interventions.

Effective prevention and promotion will evolve with research, and an emphasis on outcomes and well-paced incentives are paramount in ensuring the rapid translation of prevention science to practice. Multi-state implementation of family-focused interventions in pediatric primary care does begin to demonstrate how larger investments in pediatric primary care lead to better health outcomes across the life-course, while increasing access to one of the most effective preventive interventions currently available.

CMMI could structure a multi-state SIM in a way that mirrors existing SIMs for ease of administration. CMMI could administer a Primary Care Plus model specific to healthy development. Family-focused interventions could be made available in areas where providers are engaged in the Primary Care Plus demonstration for healthy development, using a model similar to the Diabetes Prevention Program

(DPP), i.e. a Behavioral Health Promotion Program provided through primary care. Payment for the behavioral health promotion program could also be contingent on achieving certain outcomes on the provider-level developmental measures, which indicate that the intervention achieved certain levels of reductions in risk, or maintained wellness in the face of risk conditions.

Health Equity and Young Children Expert Advisory Panel to Child and Family Policy Center

The following response provides additional detail on the point made in the broader “Promoting Pediatric Alternative Payment Models and Practice Change to Improve Young Child Health Trajectories” sign-on letter on its 5th point, “Consider both vulnerable rural and urban geographies for emphasis from a public health and community-building framework,” which speaks to the third question in Section I of the RFI.



Health Equity and
Young Children Exp

CMMI RFI on Pediatric Alternative Payment Models and Geographic Settings for Specific Attention

Charles Bruner, Ph.D., Principal Investigator, Health Equity and Young Children Initiative, Senior Policy Advisor, Center for the Study of Social Policy,

The following response provides additional detail on the point made in the broader “Promoting Pediatric Alternative Payment Models and Practice Change to Improve Young Child Health Trajectories” sign-on letter on its 5th point, “Consider both vulnerable rural and urban geographies for emphasis from a public health and community-building framework,” which speaks to the third question in Section I of the RFI:

Sec. I. Question 3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

This is the only question in the RFI that speaks to the important issue of “place” in developing effective approaches to improving child health. It recognizes that “place” itself can be a critically important component that requires specific attention in the development of PAPMs. Clearly, there are very significant challenges in rural communities in terms of the availability of services – but there also are very significant challenges in high poverty urban communities of the availability of services that also require attention.

As analyses (see references below) very high poverty census tracts (where the child poverty rate is above 40 percent) largely are concentrated in metropolitan, and usually center city, neighborhoods. These tracts also have very high proportions of very young children and very high rates of racial segregation. These neighborhoods also generally have far fewer social, physical, educational, and recreational opportunities and higher rates of environmental hazards and risks to safety, as well as lack of access to nutritious and affordable food. Not only are they home to a very significant portion of all children in poverty (particularly children of color), they also are places where recreational, housing, educational, and other forms of social capital important to children’s healthy development are in short supply – which impacts their healthy development, regardless of whether they, themselves, are in poverty.

Developing PAPMs in these neighborhoods requires strategies that can build these other forms of social capital. In many instances, federally-qualified health centers and public hospitals have significant footprints in these neighborhoods and can play additional roles beyond medical care in providing or housing health-related social services and supports that otherwise are not present in the neighborhoods. While there are vulnerable children in all neighborhoods, in more affluent ones it often is a matter of connecting those children to existing services and supports -- but in high poverty neighborhoods it often requires constructing them.

Again, developing strategies in rural communities to bolster access to and availability of health and health-related services is important, but from a numbers perspective of children who are in “places” absent such support, the greatest need is to develop strategies for high poverty neighborhoods, which primarily are in center cities.

References providing such tract-level analysis and emphasizing the importance of designing strategies that address social capital in poor and disinvested neighborhoods:

Bruner, C et. al. (2007) *Village Building and School Readiness: Closing Opportunity Gaps in a Diverse Society*. State Early Childhood Policy Technical Assistance Network: Des Moines, IA. See especially Chapter 1.

Bruner, C (2015). *Where Place Matters Most: Young Children and Their Families*. Learning Collaborative on Health Equity and Young Children: Des Moines, IA.

Quillian, L & Redd, R (2008). Can social capital explain persistent racial poverty gaps? In: Lin, AC & Harris, D, eds. (2008). *The Colors of Poverty: Why Racial and Ethnic Disparities Exist*. Russell Sage Foundation: New York.

Health Services for Children with Special Needs, Inc.

See attachment



Health Services for
Children with Speci



THE HSC HEALTH CARE SYSTEM

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

CMS is interested in learning about pediatric alternative payment models (APM) (APM defined here as a payment model other than traditional fee-for-service) that emphasize both quality and multi-disciplinary service delivery, with consideration of the unique needs of children and youth covered by Medicaid and CHIP and the potential impacts on their health and well-being. In the model concept being explored, CMS proposes that pediatric health care systems and providers work with their states and tribes to take on accountability for the health and wellness of children and youth, with the families at the center of care planning, potentially sharing that accountability with health-related social service provider partners.

QUESTIONS:

- 1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.**

The HSC Health Care System (HSC), a non-profit health care organization committed to serving children and young adults with complex health care needs and eliminating barriers to health services, has been on the forefront of refining care coordination services that integrate the behavioral, social and emotional aspects of pediatric care management for those with special needs for over twenty years. HSC combines the resources of a health plan, community sub-acute hospital (HSC Pediatric Center), home health agency (HSC Home Care), and a nonprofit foundation to serve and empower patients and families. Health Services for Children with Special Needs (HSCSN), the health plan in HSC, is serving more than 5600 children and adults with disabilities across the District of Columbia providing an understanding of the complex needs of the Medicaid population. We have deep experience in developing broader networks that encompass services beyond traditional care management for pediatrics which include, the coordination of housing, nutritional programs, and respite care. As such, we strongly believe in the importance of creating a carve out for children with special needs. This allows for the system to focus on improving the quality of care and containing the costs for the children with the most intense needs.

We recommend developing separate payment strategies for very high-risk/high-cost children, whose service needs generate high costs and are generally addressed by

specialists. An effective payment model should promote—and pay for—screening and effective interventions to address critical psychosocial risks that are not currently widespread in primary care. The payment model must also take into account socio-economic risk and consider approaches that address parental/caregiver health and well-being. Families of children and young adults with disabilities spend significant portions of their family income for out-of-pocket expenses that impact the health of the individual with disabilities and future health outcomes and expenditures.

Given the increased recognition of how social determinants of health affect childhood development and adulthood health and social productivity, payment models should be designed in a way that motivates and support attention in this area. For children with very high costs—a very small percentage—generally have very complex medical conditions that require intensive use of health care services by specialists, calling for a distinct payment model for this group.

The District of Columbia (DC) is uniquely positioned to develop an effective payment model that integrates federal funding from multiple agencies that provide income, food, and housing assistance; early childhood and special education; child and family services; and juvenile justice funding. A blended funding stream would better enable to the city to address the social determinants that critically impact health outcomes and expenditures. To allow for the blending, CMS will need to work with its sister agencies on the federal level to better align reporting requirements both in the timing, as well as the respective agency's goals.

There is also an opportunity to build joint accountability by aligning areas of focus and financial incentives across health care and other sectors/agencies/programs that serve children. Joint accountability should also be explored with adult primary care providers for parental support activities, specifically tobacco use, substance use, maternal depression, and nutrition, which all influence child health and well-being. Such accountability could lead to better development and coordination of *parent educational and preventive activities*.

Tactical Challenges and Opportunities (Systems, Process, Technology):

Systems

Any successful program will need to have some prescriptive components that encourage collaboration and transparency between payers, providers and community constituents (schools for example). The correct funding mechanism will be critical in ensuring alignment.

Frequent communication across the continuum of multiple stakeholders regarding specific beneficiaries, as well as communication of program progress and sharing of best practices, promotes efficiencies, improves quality, and can strengthen outcomes.

Process

Need standardized tools and processes for population health analysis, early identification and intervention, and execution of the payment model. Medicaid will need to play a significant role in ensuring these tools are in place to maximize the benefits

for children and the ability to study the impact of the programs. The tools needed include:

- A methodology for understanding the costs associated with addressing social determinants of care.
- Data and a health risk appraisal and health and well-being assessment tool completed as part of Medicaid enrollment process.
- A standardized risk assessment used by all providers
- Common metrics for outreach, intervention, and engagement success
- Standardization of the full range of social services that must be made available by each managed care organization (MCO).
- Methodologies and capabilities for risk stratification
- Development of clinical scenarios for most common episodes of care, identifying social service interactions

Technology

There is a need for certified electronic health records (EHR) technology, standardized claims and enrollment datasets and a common Health Information Exchange (HIE) to be used by all constituents to map key quality measures, determine total costs for specific episodes of care, conduct population health analyses and ensure continuity of care and information-sharing. The EHR vendor community has been slow to date in creating the interfaces for successful information exchange without significant financial burden on the provider side.

- 2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?**

Health Services for Children with Special Needs (HSCSN), a division of The HSC Health Care System, has been providing case management for children with SSI for over twenty years. This experience provides several lessons learned that are relevant to share.

One significant lesson learned is that children with complex medical issues require comprehensive care management if there is any hope of changing clinical outcomes and managing the costs of care. This includes the development of care plans that meet the needs of patients and families, as well as providers and insurers. These care plans should acknowledge all of the clinical partners including schools and other agencies engaging in the patient's life. With a well-designed care plan, the insurer can start to better understand the utilization trends and consider how to more efficiently fill care gaps that are identified. It has the potential to shift the system to become a more proactive provider of care.

HSCSN has found that care management must occur in partnership with primary care to ensure that primary care providers have the accurate data to help inform their clinical decisions, as opposed to leaving the primary care provider in the dark about how their patients are actually using care. HSCSN is shifting to a model of embedded care management to ensure primary care providers have the information they require to make good clinical decisions.

Beyond care management, there are additional supports HSCSN provides to ensure its members can achieve successful outcomes and decrease the need for inpatient services. These include respite services to ensure that parent/care givers don't experience burn out providing care to their child. HSCSN also provides home modifications to ensure patients have access to their home and don't need to stay at an institution to be able to access care and services. Additionally, HSCSN provides transportation to members for medical visits given that access to public transportation may be limited and unreliable for individuals with disabilities.

HSCSN is able to determine the additional supports children and parents/caregivers need through a comprehensive engagement strategy facilitated by the Family and Community Development (FCD) team. The FCD team conducts home visits as part of the enrollment process. These visits serve to not only survey and gather necessary information to direct care and case management, but are designed to build a trusting partnership between HSCSN, the members, and their families. The visits help identify immediate and long term challenges the members and their families face in their day-to-day lives. These visits also inform the development of the types of programs and interventions needed to improve medical outcomes for our patients. The information gleaned from these interactions and surveys informed the three critical supports provided at virtually every meeting or program offered by HSCSN to members: transportation, food and child care. The information provided also informed the creation of vital parent support groups and inclusive recreational sports programs and activities that build confidence and engages the broader community.

In particular, the Male Caregivers Advocacy Support Group (MCAS) provides a safe, supportive environment, specifically for fathers and male caregivers of children with special needs. Primarily serving men of color, MCAS creates opportunities for the men to receive emotional support, exchange information about resources and practices the men use to manage and navigate the day-to-day aspects of caring for their child, and train with their peers to become effective advocates for their child. Over 100 men in the community participate consistently in the weekly meetings and monthly activities. The program is fairly unique, and serves as a model for programs across the country as part of the National Fatherhood Initiative. The MCAS group also participates in a service learning project with the Georgetown University Center for Child and Human Development to inform and train pediatric residents in the principles and practice of family engagement and cultural competency.

3. **What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?**

VISITING PROVIDERS:

In recent years, there has been an increased interest in concierge medicine for Americans who are able to afford it and willing to pay. In the District of Columbia for example, private pay patients are increasingly willing to pay more to have their providers offer home visits. There has been documented success with routine nurse home visits for newborns. As such, CMS should look into providing payment parity for physician providers who would provide in-home visits to underserved patients. Here in the District, many providers who provide preventative and urgent care services to high needs patients, are forced to overbook due to chronically high no-show rates in spite of the fact that the managed care organizations provide members with transportation to and from the visits. Many HSCSN members due to their complex medical, behavioral, and social needs, have persistent challenges when travelling to their provider's office. Connecting high needs patients to physician providers who will travel to their home will also allow the providers to assess environmental and social determinants that they otherwise have to rely on their patients to explain. Providers could then call off-site Social Workers or Care Managers to link their patients to solutions for their environmental and social needs.

TELEHEALTH/TELEMEDICINE:

HSCSN has several decades of experience working in the District of Columbia with our special needs population. By definition, our members are underserved due to their complex medical, behavioral, and social needs. Additionally, the overwhelming majority of our members live in the District's most underserved neighborhoods, Wards 7 and 8. Through our well-established community partnerships, we have developed a provider network that is dedicated to providing robust preventative care while also addressing urgent and emergent needs.

Telehealth and telemedicine modalities should be incorporated into future plans as a means to connect geographically disconnected communities with services. Here in the District, we currently utilize telehealth services through vendors such as the Child and Adolescent Mobile Psychiatric Service (CHAMPS) Program. Using this telehealth service, community providers are able call a hotline to obtain urgent assistance with mental health needs (for example, if a child is having increased mania but is unable to see his/her primary psychiatrist, a call can be made to the CHAMPS line and the provider can review the patient's history and current medications and receive advice from a Psychiatrist off site on the same day). HSCSN has been a leader in using these modalities through its historical partnerships with Children's National Health System.

Further enhancing existing telehealth modalities will have a far reaching impact. There are unlimited opportunities for the expansion of these services. For example, telehealth triage may become a vital service for our highest needs members, such as those who are home-bound due to technological dependence or immunosuppression. Providing virtual visits with specialists or even with their primary care providers has the potential

to increase historically low compliance with the Early Periodic Screening Diagnostic Testing (EPSDT) and decrease over-utilization of the emergency room. Additionally, utilizing technologies that enable providers to see their patients, such as by using computers and tablets, could allow for more flexibility with translation services.

There is an opportunity to develop an extended network and virtual interdisciplinary care team of specialists and non-clinical support services to be delivered via telehealth and telemedicine capabilities through the use of organizations like USAC (a Universal Broadband non-profit) to fund broadband access for beneficiaries and rural providers. As more technology is being developed, there is an opportunity to use telemedicine to provide clinical services that would decrease the need for expensive transportation for our most complex patients. The child on a ventilator should not need to come into the emergency room by ambulance every time they have a cold if we have the technology to allow the medical provider to listen to the lungs remotely. There are investments in technology as well as networks to ensure this can become a reality.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

CMS is exploring how the establishment of partnerships between child- and youth-focused health care and health-related social services providers might be structured and operate to integrate services.

Additionally, CMS understands that varying eligibility criteria and program requirements can be challenging for children, youth, families and providers to manage, resulting in both service gaps and implementation challenges, such as different case managers or navigators for each program. We are interested in innovative approaches to integrate child and youth services within these partnerships by lowering barriers to identifying, enrolling, and maintaining coverage.

QUESTIONS

- 1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health- related social services agencies)?**
 - a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.**

The HSC Health Care System is working to provide a continuum of services for individuals with disabilities and complex medical needs. There is a general shift in philosophy that patients and their families should be integrally involved in determining where and when the services should be provided. Patients and families may decide to receive therapy at a center or hospital, like the HSC Pediatric Center, or in their home with the assistance of a skilled nurse or aide

from a home care provider, like HSC Home Care. However, it may be that the patient or family has a preference to receive services in a child development center or day care, in conjunction with Head Start or Early Intervention, with providers from HSC Home Care or Pediatric Center. In addition, the HSCSN has data about where children are attending schools. The HSC Pediatric Center works to embed services into the school day, connected to the services the patient is receiving after school. The intent is to provide services that complement the Individualized Education Program designed for that patient so as not to duplicate services, but to augment them.

Coordination Plus in HSCSN, is a model to embed care management within primary care practices. This embedded care management will help primary care providers navigate the various agencies and funding streams, along with community based services, to build a plan of action that seeks to address the patients' needs beyond the traditional medical services.

As part of this care model, the HSC Health Care System is working in partnership with local agencies and programs including, DC and VA Early Intervention, District of Columbia and Prince George's County Public Schools and local health departments, as well as other disability serving organizations, to provide services in non-traditional settings. Through these partnerships, HSC goes into schools and Early Intervention sites to provide assistive technology support for children needing mobility or communication devices. HSC also provides trainings for the onsite therapy providers on how to maximize the use of the devices provided. In doing this, HSC provides this service where patients are and bills the *appropriate provider for this service*.

- 2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?**
 - a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?**

HSC Health Care System has four major components, including: HSCSN, the Medicaid insurer for individuals up to 26 years old with SSI in the District of Columbia, HSC Pediatric Center, a sub-acute pediatric hospital and outpatient therapy provider, HSC Home Care, a pediatric home care provider focused on serving individuals with disabilities, and HSC Foundation, a foundation that works collaboratively with regional and national disability-focused organizations who support special needs youth transitioning to independence, college and career.

As an integrated pediatric service provider, the organization shares a philosophy of creating independence in the patient and their family. Whether those services are provided at the HSC Pediatric Center or in a school or home, the clinicians are determined to support independence. This philosophy is different than many providers who are concerned about keeping the patient engaged in care as opposed to working towards discharge. HSC has integrated behavioral health, therapeutic services including speech, occupational, and physical therapy, assistive technology,

as well as home care and care management to help create a model that helps manage costs across the system. Beyond The HSC Health Care System, HSC has partnered with early intervention, schools, local health departments and local disability service organizations to ensure a full array of wraparound services for children and young adults with disabilities.

b. What potential exists for increased partnership for provision of home and community-based services?

The potential exists to better engage in schools and the broader community with either traditional in-person, or more innovative telemedicine care. The school provides a location where patients are already present. Schools are very focused on increasing attendance and medical providers have the opportunity to decrease the amount of time missed from school for medical care by coming to schools before or after school, or sometimes during the school day. The possibility also exists both in schools and at home, to serve patients with telemedicine care. This has the potential to reduce the need for transportation to clinics or ERs. To make these models successful, CMS will need to ensure that the care can be compensated by insurers. There are some jurisdictions that have begun to solve this dilemma, but it will allow providers to be more creative in how they are delivering care.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

Regionally, many Health Information Exchanges (HIE) were formed and have been operational for a few years. Comprehensive inter-operability between these disparate HIEs does not exist. In DC, the Department of Healthcare Finance (DHCF) created a roadmap for implementing the DC Health Information Exchange (DC-HIE) with a mission to facilitate and sustain the engagement of all stakeholders in the secure exchange of useful and usable health-related information to promote health equity, enhance care quality, and improve outcomes in the District of Columbia. DC-HIE has ongoing initiatives focused on facilitating HIE-to-HIE interoperability and user connectivity.

DC has participated in the Maryland HIE, Chesapeake Regional Information System for our Patients (CRISP), mostly through the sharing of inpatient information. In addition, five federally qualified health centers (FQHC) have created a HIE to share information across clinics. It does not include all the FQHCs in DC which limits its value to the broader medical community. Children's IQ Network is a system designed to allow information to be shared between Children's National Health System and community providers based on care received at Children's as well as some data elements from community providers.

In the current DC HIE landscape, many Health IT barriers are present that create significant challenges for providers to access timely member/patient information. Establishing multiple connectivity to various HIEs is not practical for many reasons. The

best opportunity is to partner with one IT vendor that offers an Enterprise Healthcare Platform that combines multiple data sources and offers full interoperability (with real-time interfaces) with operational HIEs. The healthcare platform will be vendor neutral.

- 4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.**
- 5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?**
- 6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?**

The major barrier is and will be the blending of funding streams beyond Medicaid to ensure patients are really receiving all the care they require. Many medical organizations struggle with understanding how to access funding from education or social services agencies and vice versa. Patients ultimately suffer with multiple care managers and care plans that provide mixed messages as to the priorities for care. Data sharing is also a significant obstacle for the success of integration. All of the various privacy regulations do not align and create a confusing landscape for busy providers and payers to navigate.

- 7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?**

Over the years, it has become clear to HSCSN that the level of case management need changes as the medical and social needs of a patient fluctuates. This partially needs to acknowledge the costs of care, but also needs to address the intensity of needs of patients. In 2012 HSCSN restructured its care management teams and internal acuity levels to reflect three case levels:

- a.** Low intensity - Enrollee requires minimal care coordination assistance and utilizes minimal services. These enrollees require minimal care coordination, historically using only basic EPSDT services, and whose service utilization costs are under approximately \$1,000 per year. (Level 1)
- b.** Moderate intensity - Care Manager provides ongoing assistance, but caregiver has some ability to make independent decisions, i.e. chronic medical cases that, from time to time, need assistance coping with urgent medical or social issues. (Level 2)
- c.** High intensity – Requires extensive case management intervention and follow-up, enrollee has acute medical/social needs, (i.e. discharge planning requiring coordination of multiple services, accessing specialized meds, receiving nursing home care services, etc.), in the custody of CFSA or DYRS, significant involvement of DHCF, or identified risk management issues. (Level 3)

The challenge surrounding the current acuity model is that it endeavors to place members in three categories based on information from claims data and the anticipated workload of the care manager. The three acuity levels do not mirror the levels of intensity reflected in

actuarial analysis that may result in a numeric acuity level with little communicative value to practitioners as to the severity of illness. While the current member acuity model does take into consideration some aspects of family and community support, it does not categorize the key social determinants in a consistent measurable manner.

The resulting RFP could serve as an opportunity to establish a process by which acuity levels are established in a manner that reflects 3M CRG levels combined with utilization and social determinant data overlays in order to paint a clearer current and predictive picture for practitioners, agencies and caregivers engaged in care planning and delivery. This approach would also support consistency with respect to value based payment arrangements and expectations.

There is a need for flexibility in Medicaid contracting to allow for innovation in care models and payment for non-medical needs. Through the State Plan Innovation Model, Department of Health Care Finance could convene sessions to serve as a focal point for evaluating trends, building commitment, priorities and efficiencies among stakeholders while testing innovative delivery and funding strategies in line with the District of Columbia's healthcare quality initiatives. The initiatives would be geared toward supporting the District of Columbia's efforts to:

- a. Make care safer by reducing harm caused in the delivery of care.
- b. Strengthen patient and family engagement as partners in their care.
- c. Promote effective communication and coordination of care.
- d. Promote effective prevention and treatment of chronic disease.
- e. Work with communities to promote best practices of healthy living.
- f. Make care affordable.

- 8. What role do models of care such as ACOs play in the pediatric environment?**
 - a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?
 - b. How are pediatric ACOs the same or different from adult-focused ACOs?
 - c. What opportunities do pediatric ACOs have for integration with community and health services systems?
 - d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?
- 9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?**

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

CMS recognizes that accessing the optimal combination of child and youth services to meet each child's unique needs presents a significant challenge for vulnerable children and youth in need of services, as well as for their families. In the draft model concept, we seek to improve coordination and alignment across programs and systems by supporting the establishment of robust health care and health-related social service provider partnerships to improve health, wellness, and total cost of care with the potential for sharing in cost savings for successful performance. We are interested in input on

innovative financial arrangements that combine or coordinate funding in an effort to integrate and streamline care for high- need and vulnerable children and adhere to current Medicaid and CHIP program integrity requirements. Since the Innovation Center seeks to test models that, when successful, can be scaled and spread, we seek comments on how current Medicaid and CHIP authorities and programs might be used to support reproducible state-based models to improve care for children and youth.

QUESTIONS

- 1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?**
 - a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?**

HSCSN has been providing comprehensive coverage for children and youth with SSI for over 20 years. In this model, HSCSN is the insurer for individuals with disabilities through 26 years old. There are several components that have been the pillars for HSCSN. First, the services provided include a broad scope of preventive, primary, acute, chronic and long-term care. HSCSN believes strongly in family-centered care management and as such is moving towards embedded care management in primary care practices to ensure care managers are more proximate to the members. The services and care management must be available to members when they need it, even if they are after hours. Beyond your traditional medical services, HSCSN provides additional outreach services that include respite services, transportation and medically necessary home modifications. These services help families manage the complexity of having a child or young adult with disabilities in their home. Finally, it has been critical for HSCSN to integrate the medical, behavioral health and social services of its members. This has allowed for adequate support for the full array of social determinants of health as well as the actual health needs of its members.

HSCSN believes strongly that a system that allows for specialization in caring for individuals with disabilities has allowed HSCSN to improve the quality of care for these individuals. As the system looks towards value based care arrangements, HSCSN knows that there will be better ways to start to control the costs for the children with the highest utilization of the health care system.

- b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?**

The recommendation by HSCSN is to provide a model that covers individuals up through 26 years old. Particularly for individuals with disabilities but for all young adults, the transition to adult care is not always smooth. It requires the ability of pediatric providers to effectively hand off care to adult providers that may not have previous experience in managing the specific conditions the transitioning patient has. Models that don't acknowledge that this transition is not complete at the 18th or 21st birthday, don't acknowledge there is additional care these individuals will need to ensure the care is adequately transitioned.

2. How could health care providers be encouraged to provide collaborative services with health- related social service providers for a designated pediatric population's health and social needs?

Although the District of Columbia does not have a Medicaid ACO, there is potential to create a "children's network" that could operate as an ACO-like network that receives capitated payments from the Medicaid MCOs in the District. The contractual arrangement would exist between the ACO and the MCO and not between the ACO and the DC Healthcare Finance. This contract would require participation in key aspects of the program, require standardized technology, datasets and reporting specs, identify key quality measures that would be derived from a well-known, nationally recognized organization such as AHRQ and would use population health analytics and predictive modeling to identify disease prevalence, allow for standardized risk identification and stratification methodologies.

a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

For a primary care payment model, we recommend a capitated model supplemented by a care coordination payment and a performance incentive bonus. For children with medical complexity, we recommend using a total cost of care model. Details on an initial recommended approach to pediatric VBP models are described below:

Value-Based Payment Model for all children **Except** for those who are considered high- risk:

- **Capitated Primary Care Payment:** This payment would cover most child health services delivered by pediatric and family medicine practices. The rate should be based on historical costs adjusted upwards, if necessary, to assume delivery of services consistent with well-established guidelines, screening for social determinants and other risk factors, including parental screening, and physician time for telephone calls. The rate should incorporate behavioral health services for practices with co-located and operationally integrated behavioral health care. The capitation payment

does not include vaccine costs, which would be paid on a fee-for-service basis. The rate should be adjusted downward for a given practice if the practice is making higher-than-expected use of emergency department, urgent care, or physician specialist services.

- Care Coordination Payment: This would be a risk-adjusted per-patient-per-month payment to fund care coordination for children within the practice with medical and social risk factors. The payment would cover care coordination activities such as coordinating specialist referrals, tracking tests and doing patient follow-up, as well as care coordination services with a robust network of community-based agencies and helping families connect to those agencies that can help with addressing social determinants.
- Performance Incentive Bonus: Explicit incentives and rewards for the delivery of high-quality and efficient care would account for at least 10% of total primary care practice compensation. Both excellence and improvement over time should be rewarded with measures adopted on a multi-payer basis.

Value-Based Payment for children with high medical risk:

Total Cost of Care: Providers caring for this subpopulation, estimated to be no more than 1 to 5% of the pediatric population, would be paid using a total cost of care model with the following characteristics:

- There would be a sufficiently large population to ensure an accurate assessment of financial performance.
- The model would evolve from shared savings to shared risk, but would not be full risk due to the impact of high-cost outliers.
- Eligibility for distribution of any earned savings would be predicated on accessible performance relative to a pre-negotiated measure set that addresses measures relevant to the health status of the target population, with increased distribution linked to higher performance.
- Care Coordination Payment: This would be a risk-adjusted per-patient-per month payment which recognizes the need for higher clinical credentials than would be needed for children without medical complexity and would reflect more intensive care coordination activities needed by this subpopulation.
- Episode-based payment is recommended for consideration for use with specialists who both operate within and outside of a total cost of care contract.
- Performance incentive and shared savings distribution methodologies measures associated with all payment methods would capture social determinants that are subject to health care provider influence. For example, consideration should be given to the following non-exclusive list of opportunities:
 - Parental depression and stress,
 - Kindergarten readiness (e.g., pre-reading skills),
 - Environmental triggers of asthma, and
 - Parental education and supports regarding adverse childhood experiences

Timeframe:

- A VBP program can take three years to be fully effective. In the first year, the goals are to establish trust with providers and align incentives for providers to make them responsible for quality outcomes, structure the provider agreements to clearly define a customized value proposition, and test different pay-for-performance models with different provider types to evaluate the effectiveness of the reimbursement models.
- The second year can focus heavily on the analytic framework of the program in order to perform and produce automated internal reporting, automated external reporting (CMS, HEDIS, etc.), and population management. This will yield impressive results that will improve outcomes, improve patient satisfaction, reduce waste, standardize care based on evidence based practices, lower operating costs, and allow a better understanding of the impact of the switch to value-based purchasing.
- The third year will allow for movement toward achieving the triple aim of reducing costs, improving outcomes and improving the overall care patient experience while maintaining the financial health of the program.
- The VBP program will succeed with the collaboration of healthcare providers, if the providers are confident that the business arrangement will benefit their practice financially.
- The VBP program will proactively pursue positive relationships and cultivate continued communication with the providers.
- Under the VBP program, providers will have access to technology solutions, useful information, and data comparing their outcomes to their peers in their community.
- There is also an opportunity to build joint accountability by aligning areas of focus and financial incentives across health care and other sectors serving children. Joint accountability should also be explored with adult primary care providers for parental activities, specifically tobacco use, substance use, maternal depression, and nutrition, which influence child health. Such accountability could lead to better coordination of parent educational and preventive activities. Cross-subsidization will be necessary to maintain an adequate investment in primary care services for children. Two likely sources for this cross-subsidization are:
 - Savings generated through better care for children with medical complexity, and
 - Savings generated through better care for chronically ill and medically complex adults.

b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

Risk models used today such as Milliman are calibrated for commercial pediatric populations and have poor predictive power for Medicaid populations. Adults comprise a larger proportion of the average population in these models, and as

a consequence, the disease states recognized in these methodologies were optimized with greater emphasis on adults.

An effective risk adjustment methodology should reflect the characteristics of the underlying patient population. There are fundamental differences in clinical profiles, patient mix, treatment options, and patient management needs between the pediatric population and the general population and also high-risk pediatric populations. A custom methodology will need to be developed for the District of Columbia in partnership with MCOs.

- c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.**

Risk reimbursement models should require adjusting for smaller provider entities and/or rural entities to account for different levels of care provided. This methodology would help reflect the medical care characteristics and needs of the underlying patient population. With a smaller panel of patients, providers may have a patient mix who have more chronic conditions and require more medically complex care. Otherwise, the provider could be at risk for providing medically complex care with inadequate reimbursement.

- d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.**

An effective risk adjustment model for children and youth populations (especially for chronic conditions including behavioral health and intellectually and/or developmentally disabled populations) should utilize weighting of social determinants along with utilization data to establish more actuarially sound rates and to better capture the true costs of integrated health systems.

- 3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?**

- a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.**

There are a couple of challenges that exist at the funding levels. State Medicaid offices will need to ensure that integrated health systems can effectively reward providers for managing care more effectively. This can be accomplished through shared savings opportunities with those participating providers. Providers will need to understand the value of

keeping children in-network to manage costs even for those complex children and youth. The plan will need to ensure the in-network providers can meet the needs of the vast majority of children in the plan.

State Medicaid offices and MCOs will also need assistance in ensuring that some non-traditional providers, services and products can be part of the plan. This is critical if the social determinants of health are going to be effectively addressed in this model.

In addition, there is a significant issue in some jurisdictions around billing for multiple services in a single day. While this may not impact capitated providers, it does impact those who are submitting fee-for-service claims. It leads to increased transportation costs for our most medically fragile populations.

b. What factors are essential to the success of this alignment?

As outlined above, the concerns will require some regulatory changes at the State level, but may require some clarity from CMS as to allowable expenses.

c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

The District of Columbia is in a unique position to accomplish this in that it is the recipient of the state funds for early intervention, special education, nutrition programs, housing programs and other social services. Many of the area hospitals have come together to complete their community benefit analysis, which means there is an opportunity to focus on similar issues. With the right metrics, DC could use the funding streams to ensure that the right incentives can be put in place. CMS would need to help play the role of decreasing some of the competing priorities and ensure alignment across federal funding streams on the reporting and priorities.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?

HSCSN has recognized that to serve patients and families with disabilities there are several additional services that are critical for ensuring high quality care. First, these families struggle with finding individuals who can help care for their children. It means their own care as well as other household tasks may not be able to happen without respite care. In addition, transporting children and young adults with disabilities can

be challenging for any parent as public transportation or other traditional methods may not be accessible. To ensure access to care, transportation is a critical link. Some of families also need modifications of their home to ensure that it is accessible to their child. Without these modifications, a child could be stuck in the hospital unable to return to the home.

Finally, as the social determinants of health become more apparent. It is clear there are communication needs that become a barrier to access. Families who cannot maintain a consistent phone number are unable to remain in close contact with medical providers. HSCSN is starting to consider how to address this issue through Wi-Fi access to communication modalities.

a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

There is a challenge in what is permissible as a qualified medical expense. This means that some of the new innovative modes of addressing social determinants of health cannot be addressed. States need some capacity to pilot new interventions that do not require going through an entire state plan amendment or waiver. Without this, States will implement before there is a thorough understanding of what the implications may be on care quality and expenditures.

b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?

c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular “bundles” of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

Health Home is a model that acknowledges the need to better coordinate care for the most complex patients. HSCSN has served this need in the District of Columbia for over 20 years. The issue is that there are patients who do not meet SSI eligibility criteria who have intensive medical needs and do not get the type of care coordination they need to achieve high quality clinical outcomes and manage the utilization. HSCSN believes there is a need to have a program that straddles across plans and allows the patients to receive the same level of embedded care management, without burdening providers with different reporting metrics for each plan. It is important for CMS to establish standardized reporting metrics and goals for this initiative.

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

HSCSN is embarking on a model to create an integrated care model with a value based care arrangement. To understand the savings, providers will still submit traditional claims

to ensure HSCSN can know the level of care that is being provided. It will allow us to learn what the savings are. In addition, it will help HSCSN develop future capitation rates that may need to be adjusted as patients and providers start utilizing different care patterns.

SECTION IV: PEDIATRIC MEASURES

CMS has worked with stakeholders to develop a core set of child health care quality measures that can be used to assess the quality of health care provided to children enrolled in Medicaid and CHIP.

States and tribes can use the child core set of measures to monitor and improve the quality of health care provided to Medicaid and CHIP enrollees; however, CMS notes that state and tribal reporting on the core set is voluntary. CMS is interested in learning from and, where appropriate, building upon its work on pediatric quality measures indicative of health outcomes. In particular, we are interested in short-to-medium term measures associated with both short- and long-term cost reductions and improved quality to both Medicaid and other public sector programs as healthy children become healthy adults. In addition, CMS is interested in learning how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health.

QUESTIONS

- 1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.**

HSCSN has integrated a robust understanding of quality measures that impact the lives of our members into the very fabric of our programs. A key component of our work focuses on ensuring that we are connecting our members to qualified providers that implement Early Periodic Screening, Diagnostic and Treatment (EPSDT) services. In each touch point with our members, we promote and encourage participation with EPSDT well child, dental, and laboratory components. We do this in every face to face visit, every outreach phone call, and in regular intervals through our mailings and member newsletters. By promoting EPSDT as one of our central tenets, we are able to ensure that our members meet many of the primary care access and preventative care quality measures set forth in past and current core set of children's health care quality measures for Medicaid and CHIP (Child Core Set) such as the weight assessment and nutritional assessment, childhood immunizations, and well child visits as prescribed by the American Academy of Pediatrics.

Beyond the Child Core Set, we use systems to measure compliance with EPSDT requirements as well as other expected care based on the complexity of the child's needs. In addition, the compliance of vendors providing wrap around care, such as transportation and respite, are measured to ensure members are receiving the necessary services.

Through our ongoing efforts on our interdisciplinary Perinatal Team, we ensure quality measures addressed in the maternal and perinatal health section of the Child Core Set are coordinated included but not limited to, providing routine behavioral health risk assessments, assisting with initiating and following up with routine prenatal care and as needed urgent prenatal care, and following the mothers through the first 6 weeks postpartum. Through our postpartum efforts, we are directly involved with hospital discharge, newborn home visits, and ongoing management of physical, mental, and social needs.

In addition to the Child Core Set measures, we also would add that participation with intensive pregnancy management programs may be helpful in providing predictive outcomes. For example, participation with the Women, Infant and Children's Program that provides additional resources to pregnant women and young children may help as a proxy measure for healthy pregnancy outcomes and may help prevent low birth weight infants. Our team currently monitors our members' participation with these programs.

HSCSN currently monitors Emergency Room and inpatient visits as part of our daily management. Management and Care Management staff receive daily Emergency Room and Inpatient Census Reports that highlight members seen in the ER or admitted, their chief complaint, how many other ER visits they have had over the last year, and other key internal indicators. We use the Census Reports to then highlight members to be presented at our interdisciplinary High Risk Rounds. Additionally, through our chronic disease management program that focuses on asthma, we address the Child Core Set indicators that focus on care of acute and chronic conditions. We perform regular reviews of high risk members who end up in the emergency department or inpatient due to asthma. Through our case reviews, we perform and document medication compliance reviews using the real-time data we receive from our partnership with CVS CareMark and this information is then shared with our Care Management Department and with the primary care providers. As an entity, HSCSN also tracks these measures in our quarterly collaborative reports that are submitted to Department of Health Care Finance.

Through our behavioral health program, we address many of the behavioral health care Child Core Set indicators. For example, we have an ongoing program that coordinates and tracks 7 and 30 day follow-up after hospitalization for mental health illness. In addition to the Child Core Set indicators, measures that assess school attendance may help as a proxy for mental health status. HSCSN coordinates with members' schools by providing additional copies of District-mandated Asthma Action Plans. Measures that address employment or participation with employment readiness programs may also be indicative of near-term health and long-term outcomes. HSCSN Care Managers regularly review employment and participation with employment

readiness programs and document participation in our Information Technology System.

- 2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.**

Yes. However, some of the data may be collected by other agencies. As previously stated, there are privacy regulations that may impact the ease to which the sharing can happen. CMS will play a vital role in working with other government agencies to provide clarity in navigating the various privacy regulations to decrease the administrative burden in sharing information.

SECTION V: OTHER COMMENTS

- 1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth? Standardized toolsets and techniques across all stakeholders and constituents**
- 2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible. Developing a standardized model of care e.g. SNP MoC that requires basic elements and capabilities regarding early identification, risk stratification, level of severity, and metrics for intervention such as outreach on or within 48 hours of hospital discharge.**

Healthcare Nutrition Council

Good Evening,

Please find attached the Healthcare Nutrition Council's comments in response to the Centers for Medicare and Medicaid Services' (CMS) Request for Information (RFI) on Pediatric Alternative Payment Model Concepts. If you have any questions or concerns, please feel free to contact me. Thank you for the opportunity to comment on this RFI.

Best.



Healthcare
Nutrition Council.pc

Healthcare Nutrition Council

March 27, 2017

Ms. Seema Verma
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information (RFI) on Pediatric Alternative Payment Model Concepts

Dear Administrator Verma:

The Healthcare Nutrition Council (HNC), representing manufacturers of enteral and parenteral nutrition formulas, parenteral nutritional formulas, supplies, and equipment, submits these comments on the Request for Information (RFI) on pediatric care modeling to improve the health of children and adolescents covered by Medicaid and the Children's Health Insurance Program (CHIP). Investing in the health of our nation's children is critically important, and we applaud the Agency for its attention to ways in which healthcare provided under Medicaid and CHIP may be further improved. Issuance of this RFI and review of stakeholder feedback is an important step to ensuring healthier children in America.

Our primary recommendation to the Centers for Medicare & Medicaid Services (CMS) can be summarized as follows:

Nutrition is fundamental to the successful growth and development of all children. Children suffering from acute and chronic conditions can be particularly at risk for malnutrition which can impact both the course and treatment of their disease as well as their long-term health outcomes. Thus, we urge CMS to include cross-cutting measures related to nutrition and malnutrition in its development of successful alternative and value-based payment model concepts for Medicaid and CHIP.

Good Nutrition's Role in Child Health

The importance of good nutrition begins well before birth. This is underscored in Healthy People 2020's description of the physical determinants of infant and child health: "The cognitive and physical development of infants and children is influenced by the health, nutrition, and behaviors of their mothers during pregnancy and early childhood."¹ Good nutrition continues to play a vital role throughout childhood. The CDC confirms "Healthy eating in childhood and adolescence is important for proper growth and development and to prevent various health conditions."²

CMS also recognizes this, as "Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents" is one of the Pediatric Recommended Core Measures.³ Further, in this RFI, it was identified that "An individual's health needs extend beyond preventive and therapeutic health care services to include access to health-related social supports, and this is especially true during childhood when factors such as sound **nutrition**, safe living environments, responsive adult caregivers, and nurturing social relationships are critical for healthy growth and development."⁴

Increased Risk for Malnutrition with Disease and Hospitalization

While nutrition is viewed as fundamental, what is commonly overlooked is the equally critical role of nutrition during acute and chronic disease, when a child's nutrition needs are often elevated beyond the basic requirements for growth and development. Illness-related factors such as multiple medications and the stress of frequent medical treatments and hospitalizations can influence dietary intake, which further impacts nutritional status. As a result children with acute and chronic conditions are often at increased risk for malnutrition, yet the importance of nutrition is frequently side-lined as medical care takes precedence.

Pediatric malnutrition, is generally defined as “an imbalance between nutrient requirement and intake, resulting in cumulative deficits of energy, protein, or micronutrients that may negatively affect growth, development, and other relevant outcomes.” Unfortunately, disease-related malnutrition is common in hospitalized children but is likely under recognized and inadequately documented.⁵ A special report by the Metha et al. and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors reveals that reported rates of disease-related malnutrition range from 6 percent to 51 percent in hospitalized children. However, it is believed that these statistics inaccurately depict the nutritional status of this patient population due to “lack of uniform definitions, heterogeneous nutrition screening practices, and failure to prioritize nutrition as part of patient care.”⁵

Hospitalization and its outcomes are important considerations for children and adolescents enrolled in Medicaid. According to the Healthcare Cost and Utilization Project (HCUP) Statistical Brief, the number of hospital stays for Medicaid insured children increased 33 percent while hospital stays for privately insured children declined 21 percent between 2000 and 2012. In 2012, Medicaid covered 51.6 percent of all nonneonatal and nonmaternal hospital stays for children. HCUP identified respiratory illnesses and digestive illnesses as the top two most common reasons for pediatric hospitalizations accounting for 22 percent and 12 percent of hospital stays, respectively. Illnesses of the nervous system, musculoskeletal system, endocrine, nutritional, and metabolic system, and mental diseases and disorders are also among the top 10 most common reasons for pediatric hospitalization.⁶ Many acute and chronic illnesses which would be classified under these diagnostic categories have important nutritional implications and can contribute to malnutrition through starvation (related to disease or behavior), hypermetabolism, malabsorption, or inability to use/assimilate nutrients.⁶

Malnutrition Linked to Poor Health Outcomes

Malnutrition--when not diagnosed and treated--impacts more than growth and development. It also increases the cost of care and likelihood of poor health outcomes, including increased complications, longer hospitalizations, more readmissions, and increased mortality. In one recent prospective study of 400 Pediatric Intensive Care Unit patients on the effect of malnutrition on mortality, severe malnutrition was identified as independently associated with higher mortality even among patients with similar pediatric risk of mortality scores.⁷ In the pediatric population, diagnosing and treating malnutrition is especially important to ensure that children have the opportunity for a timely recovery and are able to grow and thrive following diagnosis and treatment, particularly when they suffer from complex or multiple chronic conditions. Between 2004 and 2009, children with multiple chronic conditions were more likely to be covered by Medicaid than were those without a chronic condition.⁸

The focus on the important role of nutrition in child health should not be lost because a child is ill. Therefore, to reduce complications, promote shorter hospital stays, decrease hospitalizations, reduced hospital readmissions and health care savings, it is critical to monitor for disease-related malnutrition and ensure timely diagnosis and treatment with appropriate clinical nutrition therapies that will improve or maintain children’s nutritional status and overall health.

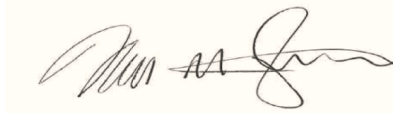
Including Malnutrition in Successful Alternative Payment Model Concepts

HNC proposes that just as there is a pediatric core measure for nutrition and healthy children, there should be a pediatric core measure or measures for malnutrition for children diagnosed with acute or chronic conditions. HNC has previously commented on “Quality Measure Development and Maintenance for CMS Programs Serving Medicare-Medicaid Enrollees and Medicaid-Only Enrollees” urging CMS to promote quality measures that identify untreated malnutrition and implement policies and procedures that encourage malnutrition screening, assessment, diagnosis, and appropriate nutrition intervention including the provision of oral nutrition supplements, enteral or parenteral nutrition. While these previous comments were directed toward adult and geriatric populations, the concepts of malnutrition screening, assessment, diagnosis, and intervention are applicable to pediatric populations as well. This is because whether among pediatric or adult patients, it is widely recognized that nutritional status plays a significant role in health outcomes and healthcare costs.

As CMS continues to consider ways to improve the health of children and adolescents covered by Medicaid and CHIP, we urge the prioritization of prevention, diagnosis, and treatment of malnutrition that includes access to appropriate clinical nutrition therapies across the continuum of care. Diagnosis and treatment of malnutrition in this population will result in better growth and development, improved outcomes, increased quality of life, higher quality of care and, ultimately, lower healthcare costs.

Thank you for the opportunity to comment on this RFI. If you have any questions or would like additional information, please contact me at

Sincerely,

A handwritten signature in black ink, appearing to read 'Nick Gardner', on a light yellow rectangular background.

Nicholas Gardner
Executive Director
Healthcare Nutrition Council

References:

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8. Berry JG, Hall M, Hall DE, et al. Inpatient growth and resource use in 28 children's hospitals. *JAMA Pediatrics.* 2013;167(2):170–7.



Comments - Medicaid & Alternative Payment Models for kids

Hi,

Just want to let you know that the earlier today the Milbank Memorial Fund released the below report:

New Report

Behavioral Health Integration in Pediatric Primary Care:

Considerations and Opportunities for Policymakers, Planners, and Providers

https://www.milbank.org/publications/behavioral-health-integration-in-pediatric-primary-care-considerations-and-opportunities-for-policymakers-planners-and-providers/?utm_source=Milbank+Email+List&utm_campaign=09313671b3-New_Report_Behavioral_Health_Integration_3_15_2017&utm_medium=email&utm_term=0_dbce9df54c-09313671b3-3882125False

Hofstra Northwell School of Medicine

To Whom It May Concern:

We are writing to add our endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28. Our hospital's investment in General Pediatric Palliative Care, including Pediatric Hematology Oncology Palliative care has led to major improvement in outcomes for patients, families and our hospital. Cohen Children's Medical Center has created the infrastructure with its forward thinking administrative unit and its award winning Quality program including Magnet status to put innovations into place that are either initiated or discovered through the CMS process.

We believe a Pediatric Alternative Payment Model Concepts program would lead to dramatic steps forward for the quality and value of the care we provide to very ill children and their families.

Horizon Blue Cross Blue Shield of New Jersey

RE: Pediatric Care Improvement Request for Information (RFI) Horizon Blue Cross Blue Shield of New Jersey would like to put forth the following recommendations for a state-driven integrated model to improve the quality and reduce the cost of care for children in Medicaid and the Children's Health Insurance Program (CHIP).

Breastfeeding is beneficial for the newborn as well as for the mother's health. Breastfeeding not only reduces the incidence of infections in the newborn, but also reduces the baby's risk of developing Type 1 diabetes, and gastrointestinal diseases such as celiac and Crohn's disease. Breastfeeding is also known to reduce the incidences of pediatric obesity. Therefore, it would be beneficial to encourage and educate new mothers about the importance of breastfeeding during the 2-week and 1-month newborn office visit with a pediatric provider. This could be accomplished by active partnering of the pediatric provider with organizations such as La Leche League and other social service providers to provide lactation education, nutrition counseling, obesity education etc. to the new mothers. Additionally, the 4-week newborn office visit could be coupled with a postpartum office visit for the new mother within the same visit. Federally Qualified Health Centers (FQHCs) have the ability to integrate the care for both the newborn and the mother in a single office visit. A mechanism of incentivizing the FQHCs for integrating pediatric and maternal health services could be established. The integration of a postpartum care within a newborn visit will improve the Healthcare Effectiveness Data and Information Set (HEDIS) measure for postpartum care in Medicaid populations for all health plans across-the-board. This integrated and collaborative approach would ultimately improve the quality of care and would result in cost savings in both the short and long term.



Horizon Blue Cross
Blue Shield of New .

RESUBMISSION

April 7, 2017

RE: Pediatric Care Improvement Request for Information (RFI)

Horizon Blue Cross Blue Shield of New Jersey would like to put forth the following recommendations for a state-driven integrated model to improve the quality and reduce the cost of care for children in Medicaid and the Children's Health Insurance Program (CHIP).

Breastfeeding is beneficial for the newborn as well as for the mother's health. Breastfeeding not only reduces the incidence of infections in the newborn, but also reduces the baby's risk of developing Type 1 diabetes, and gastrointestinal diseases such as celiac and Crohn's disease. Breastfeeding is also known to reduce the incidences of pediatric obesity. Therefore, it would be beneficial to encourage and educate new mothers about the importance of breastfeeding during the 2-week and 1-month newborn office visit with a pediatric provider. This could be accomplished by active partnering of the pediatric provider with organizations such as La Leche League and other social service providers to provide lactation education, nutrition counseling, obesity education etc. to the new mothers. Additionally, the 4-week newborn office visit could be coupled with a postpartum office visit for the new mother within the same visit. Federally Qualified Health Centers (FQHCs) have the ability to integrate the care for both the newborn and the mother in a single office visit. A mechanism of incentivizing the FQHCs for integrating pediatric and maternal health services could be established. The integration of a postpartum care within a newborn visit will improve the Healthcare Effectiveness Data and Information Set (HEDIS) measure for postpartum care in Medicaid populations for all health plans across-the-board. This integrated and collaborative approach would ultimately improve the quality of care and would result in cost savings in both the short and long term.



Paul G Alexander, MD, MPH
Vice President Horizon Blue Cross Blue Shield NJ
Chief Medical Officer Government Programs

Horizon Blue Cross Blue Shield of New Jersey

Hello,

Please see attached. Thank you for the opportunity to provide input.

Horizon Blue Cross and Blue Shield of New Jersey would like to put forth the following recommendations for a state-driven integrated model incorporating shared accountability and cost savings.

The importance of physician and school based partnerships supporting a comprehensive wellness program which would include the following:

- Annual wellness visits
- EPSDT screening and lead education
- Making sure all immunizations are given in a timely manner, capturing the immunization data, and working with providers to make sure NJIIS is updated
- Asthma and Diabetes chronic condition management and medication adherence for beneficiaries
- Pediatricians, state and health plan collaboration on adolescent obesity screening, education and counseling to be facilitated in the school partnership and include incentives (gym membership)

These partnerships would ultimately improve the quality of care for this population. The availability of school based programs supports early identification and prevention of childhood disease. Positive outcomes include lead screening, obesity prevention, better understanding of chronic disease management with improved control for asthma and diabetes. Incentives for both the provider and member would provide impetus to participate in school based programs. Cost savings would be enabled as reductions in illness and hospitalization would be realized in both the short and long-term.

Additional recommendations include strategies regarding high need, high risk beneficiaries including those members with developmental disabilities and mental health issues. The model could include outreach protocol including field based clinical staff interventions to support care coordination. Partnerships between the state, health plan and mental health providers would support an integrated model for cost savings to ensure timely follow-up care. The shared accountability could be established between the health plan and the mental health provider for the most vulnerable developmentally challenged beneficiaries.

Hospice and Palliative Care Center of Alamance Caswell

Dear Sir or Madam:

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Thank you

InquisitHealth

To Whom it May Concern,

Attached are comments in response to the RFI. Albeit being late, we hope they are useful.

The comments focus on how prior research has demonstrated how 1-on-1 parent coaching can reduce pediatric asthma-related hospitalizations & ED visits. The coaching is offered by "Parent Mentors" a type of community health worker with personal experience with asthma.

As new payment models are developed, incorporating flexibility to allow payments towards trained, Parent Mentors for telephonic and digital coaching would be valuable to help better integrate and scale this evidence-based approach.

Happy to discuss in more detail at any point.

Thanks,



InquisitHealth.pdf

Pediatric Care Improvement Request: Response to RFI

Background: According to the CDC, the pediatric asthma rate in the United States is currently 8.4% (1). In 2010, there were an estimated 629,000 ED visits for pediatric asthma in the Medicaid/CHIP population – costing \$272 million (2). Recent studies have demonstrated the efficacy of trained peer mentors in reducing hospitalizations for children with asthma. A 2-year randomized clinical trial by Fisher et al. (2009) showed that parent coaching can be effective in reducing hospitalizations for asthmatic children from 59.1% to 36.5% ($p < 0.01$). Garbutt et al. (2015) found significant improvements from an asthma coach intervention, many of which were sustained up to 24 months after the intervention's start. Of note, Garbutt et al.'s asthma coaching intervention resulted in 42% fewer ED visits and 62% fewer hospitalizations in the Medicaid subgroup. Similarly, Flores et al. (2009)'s peer mentor intervention reduced its 3 main measured outcomes (rapid-breathing episodes, asthma exacerbations, and ED visits) by 30%.

Parent Mentoring Program: Based on this data, the teams at InquisitHealth (Ashwin Patel, MD PhD), Montefiore Health System (Deepa Rastogi, MD), Washington University School of Medicine (Jane Garbutt, MD; late Bob Strunk, MD), University of North Carolina (Edwin Fisher, PhD), & Medica Research Institute (Glenn Flores, MD) have developed a 1-year, phone- and smartphone-based mentoring intervention to help parents better manage their child's asthma to prevent ED visits and hospitalizations. The program is delivered by 'parent mentors' who (a) have a child with well-controlled asthma, (b) successfully complete a robust training program, (c) pass a background check, and (d) are employed and managed by InquisitHealth. Mentoring focuses on 5 key asthma behaviors: asthma monitoring, medications, asthma action plan, doctor visits, and reducing triggers. Mentoring also helps connect parents identified by primary care providers to health-related social services.

We have developed a technology platform (Mentor1to1™) that facilitates the following:

- (a) **Parent Mentor Management:** Parent mentors can create a profile, accept mentee requests, schedule calls, document interactions with mentees, and share content with mentees.
- (b) **Mentee Letter Mailing:** Send automated, customized letters to potential parent mentees from the platform.

- (c) **Mentor-Mentee Matching:** Match mentees with parent mentors based on characteristics like preferred language, availability, age of child, etc.
- (d) **Web-based Mentoring:** Parent mentors can make secure phone calls to parents, send SMS/messages, share smartphone-based mini-modules, document goal progress, organize key behaviors, and select talking points to guide conversations.
- (e) **Program Oversight:** Administrators track and support interactions by reviewing call recordings, tracking mentee progress, checking in on mentor activity, etc.

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- (2) Pearson WS, Goates SA, Harrykisson SD, Miller SA. State-Based Medicaid Costs for Pediatric Asthma Emergency Department Visits. *Prev Chronic Dis.* 2014; 11:140139. doi: 10.5888/pcd11.140139.
- (3) Garbutt JM, Yan Y, Highstein G, Strunk RC. A cluster-randomized trial shows telephone peer coaching for parents reduces children's asthma morbidity. *J Allergy Clin Immunol.* 2015;135(5):1163-70-2. doi:10.1016/j.jaci.2014.09.033.
- (4) Flores G, Bridon C, Torres S, et al. Improving asthma outcomes in minority children: a randomized, controlled trial of parent mentors. *diatrics.* 2009;124(6):1522-1532..
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Jefferson Health Homecare and Hospice

I endorse the 3/28 comment letter submitted by CAPC.

Johns Hopkins School of Medicine, Division of General Pediatrics & Adolescent Medicine

To Whom It May Concern:

Attached is an UPDATED submission in response to the RFI on pediatric alternative payment model concepts. The responses reflect input from faculty at the Johns Hopkins School of Medicine and Johns Hopkins Bloomberg School of Public Health with expertise in general pediatrics, adolescent medicine, child psychiatry, health policy and health economics. Those who contributed to these comments are engaged in clinical care and research at two academic pediatric primary care clinics affiliated with the Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center. Please do not hesitate to contact me should you have any questions about the comments submitted.

Thank you for your work on this important issue and for the opportunity to provide input.

Best,



Johns Hopkins
School of Medicine_

Section I: Integrated pediatric health care and health-related social service delivery model

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.
2. **Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?**

RESPONSE:

- In recent years, primary care practices have redesigned systems of care to focus on team-based interdisciplinary care to improve child health outcomes through direct impacts on individual patients as well as impacts on families and communities. Using frameworks like the chronic care model and the patient-centered medical home (PCMH), practices are better equipped to address the greater medical complexity of pediatric patient populations who will become adults with ongoing health needs. These efforts also seek to address racial/ethnic and socioeconomic disparities in child health outcomes and health care quality.
- Redesign initiatives have included conducting health risk assessments, implementing health literacy and cultural competency trainings, and using geospatial analysis to identify social determinants of health and address health equity. While these efforts are promising, disparities related to race, ethnicity, and socioeconomic status continue to challenge the U.S. healthcare system, and despite increased attention, most have not improved.
- Insuring that all children have access to a medical home that provides family-centered care using a team approach is a critical ingredient for achieving health equity. In isolation, however, access to a family-centered medical home is inadequate for optimizing child health outcomes. Reducing disparities and achieving health equity requires an increased awareness of, appreciation for, and an ongoing commitment to addressing the many upstream factors, or social determinants, that directly impact health at the population level.
- Social determinants of health are the “conditions in the environments in which people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” (Healthy People 2020). To improve population health in the U.S., Healthy People 2020 uses five key “place-based”

determinants in their organizing framework: economic stability, education, social and community context, health and health care, and neighborhood and built environment.

- Social determinants of health that are associated with documented negative impacts on health include poverty, lack of access to high-quality education and employment opportunities, poor quality housing, and unfavorable neighborhood conditions including exposure to neighborhood violence (Braverman et al). In particular, we know that early life adversity and disadvantage has lasting consequences for health and can produce cumulative deleterious effects on biology and neurocognitive development in childhood that reverberate in adulthood (Shonkoff et al 2009). Social determinants of health including neighborhood environments can also affect behavior such that they can either facilitate healthy lifestyles or constrain them, thus making healthier choices more difficult (Showell et al 2016, RWJF Commission to Build a Healthier American 2014). Given the impacts of social determinants of health on biology and behavior, it is estimated that the social determinants of health may account for approximately 70% of avoidable mortality in the United States. (McGinnis et al, 2002).
- In fact, pediatricians widely acknowledge the importance of addressing the social determinants of health to optimize child health and development. And, the American Academy of Pediatrics (AAP) has recently called for pediatricians to create medical homes **“adapted to the needs of families in poverty”** (Council on Community Pediatrics 2016). To this end, recent data demonstrates that caregivers at primary care clinics that recognize and address social needs report greater improvement in their child’s health (Gottlieb LM et al 2016).
- As such, practices have integrated home visitation and community health worker programs into their settings, while others have co-located behavioral health specialists and care coordinators to assist families with myriad behavioral and social resource needs. Addressing social determinants of health in primary care is very much aligned with existing Bright Futures and American Academy of Pediatrics (AAP) recommendations, which emphasize the need to view the child in the context of his or her family and community.
- One specific example of an early childhood program that incorporates home visitation and focuses on children within their family context is the Nurse Family Partnership, has been implemented in 41 states (www.nursefamilypartnership.org/communities/state-profiles). The health benefits to mothers and children of implementing this program are well documented, as are its economic benefits, which cut across multiple sectors. Specifically, a 2008 reports from Washington State Policy Institute showed that this program yielded an estimated \$18,054 net benefit per participant. The economic return on investment is thought to result from positive impacts on outcomes that cut across multiple sectors, including reductions in crime rates among participants that lead to reduced costs to the criminal justice system (Lee S et al 2008). The program is also associated with improved maternal health outcomes and child health and developmental outcomes, but the significant impact of the program on costs in other sectors illustrates the challenges in tracking and implementing such comprehensive approaches to improving child health and the challenges in capturing costs savings if all the economic impacts are assumed to be contained within the health care sector.

- Primary care offers a prime opportunity to conduct such screening efforts and better coordinate medical and public health approaches to improving health outcomes. (Sweeney 2012; Garg et al, 2012). Strong and successful partnerships between medicine and social service programs may also increase the ability of healthcare settings to both identify social needs of patients and play a more active role in addressing the social determinants of health. Without these connections, providers may not feel equipped to address these needs, and thus, may not assess whether patients are experiencing them. For example, systematic efforts to identify social needs of children and families during routine healthcare within general pediatrics have improved screening and child health outcomes in some settings.
- For example, Since 2006, Johns Hopkins Harriet Lane Clinic and Johns Hopkins Bayview Medical Center Children's Medical Practice have partnered Health Leads®, an innovative practice-level model to address the social determinants of health currently operating in 22 pediatric and adult primary care settings in 7 cities. Health Leads® enlists a workforce of mostly undergraduate volunteers to help physicians and clinic staff screen for and connect individuals with basic resource needs, including food, employment, child care, housing, linkage to health insurance, and an array of public benefits. In our two pediatric primary care clinics, Health Leads © Advocates sit in an office/desk area accessible to patients and families and families with 11 categories of resource needs that are all important social needs that affect the health and well-being of children/youth and families. The 11 areas (and specific needs most often addressed) are as follows:
 - Child-related: childcare voucher/subsidy, childcare program enrollment/preschool, (Early) Head Start, out of school time programs, child-related: special education support, other
 - Commodities: household goods/furniture, baby supplies, clothing, other
 - Food: food stamps/SNAP, pantries and soup kitchens, WIC, other
 - Utilities: electric, gas and oil discount rates, shut off protection, energy assistance/subsidies, other
 - Employment: job placement services
 - Housing: shelter, housing condition complaint
 - Adult Education: college, English as a second language, Graduate equivalency degree/adult basic education, other
 - Health: health insurance, dental care, access to primary care, fitness and/or nutrition for both children and adults, prescription assistance, home health aide, other
 - Financial: cash assistance, emergency cash/grant/charity money, SS(D)I, other
 - Legal: benefits denial, housing conditions, birth certificate, other
 - Transportation: medical transport assistance, public transit assistance
- Initial work implementing and evaluating a family needs screener and referral to Health Leads® at the Johns Hopkins Harriet Lane Clinic demonstrated high patient engagement, close-follow-up and feedback to referring providers (Garg et al, 2010). Patients and families at both the Harriet Lane Clinic and the Children's Medical Practice have significant resource and social needs. The Children's Medical Practice serves a

patient population that includes a large number of children (65-85% of the practice) whose parents/primary caregivers have limited English proficiency in addition to experiencing poverty at very high rates. Predominant areas of need that produce referrals to the Health Leads © desks at these sites include a need for assistance in accessing government benefit programs such as nutrition assistance programs (e.g. Supplemental Nutrition Assistance Program, access to food pantries and other food-related resources).

- Of note, while the Health Leads© advocates are volunteers, there is a cost associated with becoming a Health Leads© partner given the need for strong program management and oversight of the volunteer workforce. In addition, currently, Health Leads© primarily collaborates with academic medical centers limiting access to this type of program to those seeking care at other healthcare facilities. There should be an effort to incentivize partnerships between providers and state Medicaid/Medicare programs to invest in centralized Health Leads – type resource desks where advocates are can address patient and family psychosocial/social needs (in-person or remotely) across multiple sites. This would likely increase the ability of community-based pediatric primary care practices to assess social needs, since it would provide them a mechanism for insuring patients and families are connected to social service programs, something that can be challenging for families to navigate on their own. Use of community health workers and patient navigators could serve as another model to link patients and families with social resource needs.
 - Given the legal underpinning of some social determinants (e.g. unsafe housing, denial of public benefits, inadequate educational accommodations), the medical-legal partnership (MLP) model has been successfully integrated into nearly 300 hospitals and health centers nationally. In these clinical settings, a core objective of MLP is to provide direct legal services to families in need. The [National Center for MLP](#) oversees implementation of new and existing programs, encourages interdisciplinary education and assesses program effectiveness (Sandel et al, 2010). Promising outcomes have been seen with MLP, including reduced stress and improving legal problem-solving skills, healthcare utilization, and self-reported health and well-being (Cohen et al, 2010; Beeson et al, 2013; Welker & Northrip, 2014).
3. What policies or standards should CMS consider adopting to ensure that children, youth, and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

Section II: Operation of integrated service model

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g., State Medicaid agencies and health related social services agencies)?

- a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children’s Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.
2. **Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?**
 - a. **Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?**

RESPONSE:

- Nationally there is a call to provide access to care and to redesign pediatric primary care systems to more effectively address the needs of children and families. The concept of the patient-centered medical home (PCMH) promotes care delivery that is population-based and patient and family-centered. The PCMH is an approach to providing comprehensive primary care that utilizes a team of health professionals in a primary care practice setting to improve health care quality and cost effectiveness, while better integrating patient care into the overall health care system and increasing patient satisfaction. The American Academy of Pediatrics (AAP), Centers for Disease Control and Prevention (CDC) and Grantmakers in Health have recommended strategies that integrate critical services into primary care emphasizing mental health services and culturally competent care. Integration of mental health services in primary care is a proven strategy to improve engagement in mental health care and mental health outcomes, particularly for minority populations (Interian et al 2008).
- In fact, youth and their parents who are identified and referred to outside mental health providers often do not attend mental health appointments, and even fewer continue to receive ongoing mental health services (Wissow et al 2013). Barriers to accessing high quality mental health care include social stigma, lack of clinicians and poverty with its array of associated risk factors (Kolko et al 2014).
- At the Johns Hopkins Children’s Medical Practice, it is estimated that 30-50% of Spanish speaking families need some type of mental health support. In addition to the stresses of poverty and living in distressed urban neighborhoods experienced by the majority of Children’s Medical Practice families, Latino immigrant families report immigration-related stresses, such as acculturation, fear of deportation, family separations as well as family reunifications. The literature supports this local experience that both children and adults in immigrant families have a particularly high risk of mental health problems, including depression, anxiety disorders and Post Traumatic Stress Disorders (Pumariega et al 2010). Despite this high risk, Latino children and families have a lower rate of mental health care utilization compared to Caucasian children. The reasons are multifactorial and include sociocultural beliefs about cause of illness and preferred methods of recovery, shortage of Spanish speaking clinicians, limited practitioner

understanding of patient culture, lack of insurance and inflexible work schedules (Lopez et al 2008).

- Addition of full-time mental health providers to primary care practice to address child mental health needs and overcome barriers to care among low-income population living in neighborhoods with high violent crime rates and significant history of trauma. A recent meta-analysis found integrated care interventions within the primary care setting to have a significant advantage over usual care on behavioral health outcomes in children and adolescents (Asarnow et al 2015). Reduces barriers to mental health care. Currently funded via philanthropic investment, but merits further examination as potential cost saving strategy/strategy to increase access. Co-location of multidisciplinary services and programs in the HLC, including on-site mental health providers, is associated with improved caregiver satisfaction and a stronger perception of the practice as a medical home. (Vasan & Solomon, 2015).
- A high proportion of Children's Medical Practice patients, approximately 75%, are Latino children in immigrant families. A small percentage of Children's Medical Practice patients are immigrants themselves, often having travelled to the US unaccompanied by an adult to reunite with a parent. Personal or household exposure to trauma is highly prevalent. Spanish-speaking mental health professionals are very rare in Baltimore. As a result, mental health care is often unavailable even for children who are U.S. citizens and permanent residents, have insurance, and themselves speak English. This is in part due to reticence on the part of mental health providers to provide therapeutic services involving communication with primary caregivers who have limited English proficiency. In response, the Children's Medical Practice has embedded a mental health therapist in the practice and introduced several therapeutic groups to maximize available resources. There is weekly meeting for recently immigrated children (parents and children meet in parallel) and twice weekly parenting groups. In addition, inspired in part by the CMP experience, Centro SOL (the Johns Hopkins Center for Salud/Health and Opportunity for Latinos) has established weekly stress reduction groups for adults at a community site as well as cognitive behavioral therapy groups at 10 area middle and high schools for trauma-exposed, Spanish-speaking, newly arrived immigrant students. Yet these services are largely funded with grant dollars as significant obstacles exist to developing a system for billing that would adequately cover the cost of the care provided.
- The Children's Medical Practice and the Harriet Lane Clinic also have social workers on staff to address the complex resource and family support needs of patients. Almost all patients served by these two primary care clinics (90%) are insured through medical assistance.
- In an effort to extend the scope of these services to fill a need more recently recognized, the Harriet Lane Clinic recently established the Financial Futures for Families (FFF) initiative, to address childhood poverty for families through direct financial services and programming. This program was developed using findings from a needs assessment of over 200 caregivers and adolescent patients to assess clinic families' financial needs and interests. We found that 36% of families served do not have any earned income, and of those with income, more than a quarter make less than \$12,000 per year. Two thirds believe it is challenging to reach financial goals, and worry about paying monthly

expenses. At the same time, more than two thirds believe that the clinic should provide financial services. Specifically, there is an interest in a computer workspace to apply for jobs, and job training and resume workshops. Qualitative telephone interviews suggest transportation costs, inconvenient scheduling, and limited access to online resources are barriers to receiving employment services elsewhere. Thus, the Financial Futures for Families initiative now has a cadre of volunteer staff intent on addressing these barriers directly while connecting HLC families to robust, Baltimore-based employment agencies.

- The Children's Medical Practice at Johns Hopkins Bayview Medical Center is a primary care, teaching clinic that sees 12,000 visits per year and serves approximately 5,000 children. The patient population at this site is 75% percent Latino, 10% African American, and 10% white. Most of the Latino patients served by the Children's Medical Practice come from mixed status families, where one or both parents are undocumented. Patients' parents are diverse in nationality, but most have limited education and limited English proficiency. Common traumas experienced by patients include poverty, community violence, fear of deportation, acculturative stress, personal immigration journeys and family separations.
- At the Johns Hopkins Bayview Center for Addiction and Pregnancy Pediatric Clinic, the pediatric patient population consists primarily of high risk and vulnerable children born to parents with addiction disorders. Two pediatricians and a nurse practitioner, trained in care of infants/children/adolescents born to substance using mothers, provide primary care to the infants with neonatal abstinence syndrome as well as children and adolescents in the context of maternal addiction and associated complex social challenges, including kinship and foster care. Center for Addiction and Pregnancy pediatric patients are usually from low-income, inner city neighborhoods and from families with multigenerational psychiatric and addiction problems. As the parents of the children in the clinic struggle with their myriad psychosocial and medical conditions, trauma-informed primary care is tailored for a high risk social environment that includes consideration of ongoing maternal and family mental health issues. This requires close contact with mental health services for the mother and child when needed. There is a strong link to the Johns Hopkins Bayview Pediatric and Community Psychiatry and Addiction Therapy Services for the Center for Addiction and Pregnancy pediatric patients and families.

b. What potential exists for increased partnership for provisions of home and community-based services?

RESPONSE:

- School-based services reduce barriers to care for contraception/reproductive health and can be a platform for improving access to mental health and preventive care services, and chronic disease management. For example, partnering with schools to provide directly observed therapy for asthma controller medications shows improvement in utilization of healthcare, school attendance, academic performance, and quality of life (Findley SE, Thomas G, Madera-Reese R, et al., 2010).

- Integrating the family centered medical home (FCMH) and public health home visitation programs (HV) is vital to maximizing child health outcomes. The goals of the FCMH model of care and HV programs are synergistic, including promoting the health and development of children. Both link to community resources and provide children and their families with social support and anticipatory guidance (ex. development and safety). The systems should be integrated whenever possible to capitalize on these synergies and prioritize the particular strengths of each service and needs of the family (Tschudy, Toomey & Cheng, 2013).
- The Children's Medical Practice has one mental health therapist and two social workers on-site and partners with Community Mental Health at Johns Hopkins Bayview Medical Center for additional mental health resources. Clinicians use the BHIPP hotline for psychiatry consultations as well (Behavioral Health in Pediatric Primary Care).
- Integrating maternal mental health services and parenting programs into pediatric primary care settings have also demonstrated positive child and parent outcomes. In pilot work conducted in the HLC, maternal engagement in mental health treatment is higher than national estimates. Engagement in care was strongly associated with access to a case manager and social support system (Kimmel et al, 2016).
Reproductive health and women's health are other important areas of active partnerships. In particular, The Baltimore City Health Department has a long history of providing reproductive health services, including contraception, within school based health centers. These services have also involved long standing collaboration between the Health Department and Adolescent Medicine physicians in the Johns Hopkins Adolescent Medicine Clinic. Another more recent partnership designed to improve birth outcomes among teen mothers, is co-location of a Nurse Family Partnership home visitor in the Harriet Lane Clinic. This co-location facilitates referrals into the program for eligible adolescents and communication and care coordination between the primary care clinicians and public health programs.
- Given the known adverse effects of maternal depression on an array of child outcomes (Weiss-Laxer et al, 2016), and that only a fraction of mothers attend postpartum obstetric visits or see a primary care provider within a year of the birth of a child (Bennet et al 2014), the pediatric provider may be a mother's primary point of access to the health care system. This is especially true in the case of recent immigrant parents, many of whom lack access to their own source of care (Sommers 2013). Thus, the Children's Medical Practice has established a set of groups, including parenting classes and "testimonios" groups for parents focused on addressing parental trauma. Some of these groups are held in collaboration with local organizing serving recent immigrants. These include:
 - Teen Testimonios, which was established in Fall 2015 to prevent mental health problems in trauma-exposed, newly arrived immigrant Latino/a teens in Baltimore City. Since then, this unique program continues to serve minors who live in poverty, have had multiple traumatic experiences including family separation, physical and emotional hardship. Connecting these youth to community resources is crucial for social support and well-being. During the 2016-2017 school year, the program increased from 4 to 14 groups in 11

Baltimore City Public schools. Bilingual social workers lead groups sessions in which they teach students coping skills to address trauma-induced stress, problem-solving skills, self-awareness strategies, mutual aid strategies to enable them to serve as a resource and a leader for their peers as well as increase their knowledge of available resources to manage ongoing stressors in their lives. Group attendance has been consistently high, 75% overall.

- In 2016, a summer extension was added to the program in order to reinforce, develop and enrich the Teen Testimonios program. This was established because of a recognition that youth participating in Teen Testimonios needed psychosocial support during the summer when they did not have access to school-based supports and could not participate in other youth. Summer program activities were concentrated on strengthening coping skills, establishing social ties and imparting information regarding community programs for youth.
3. What infrastructure development (electronic medical records (EMRs)), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?
 4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.
 5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?
 6. **What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?**

RESPONSE:

- Laws around protection of privacy are siloed in the health system and social service system, including education system. For example, Health Insurance Portability and Accountability Act (HIPAA) and the Family Education Rights and Privacy Act (FERPA) create challenges to sharing information across the school and health sectors. School achievement is a determinant of health and linked to long-term health, economic, and financial outcomes. Achievement depends on school attendance and care coordination of child-serving systems, especially the education and health sectors.
- With regard to mental health services, there are many areas of the country where access to child psychiatrists is severely limited (Straus and Sarvet 2014). Many (>30) states have developed telephone “Child Psychiatry Access Programs” through which

primary care providers may consult directly with a mental health provider over the phone in “real-time”. Funding for these programs is variable, often tied to state legislatures and therefore uncertain.

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?
8. What role do models of care such as ACOs play in the pediatric environment?
 - a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e., shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?
 - b. How are pediatric ACOs the same or different from adult-focused ACOs?
 - c. What opportunities do pediatric ACOs have for integration with community and health services systems?
 - d. Are states interested in having MCOs be part of an ACO and vice versa?

RESPONSE:

- Many adult accountable care organizations (ACOs) have been successful at managing care for vulnerable populations (e.g., duals/low income, disabled) – in this way, pediatric ACOs could be similar
 - Unlike adult ACOs, the baseline population for a pediatric ACO is likely to be healthier, so it would be important to think differently about quality measurement, using the ACO to shift from a treatment focus to a focus on prevention and wellness.
9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

RESPONSE:

- Bundled payments for Patient Centered Medical Homes (PCHM) could be worth considering.

Section III: Integrated pediatric service model payment and incentive arrangements

1. **What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?**
 - a. **Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?**

RESPONSE:

- Child health is dependent on family health. The pediatric primary care setting offers a unique access point for novel family-centered approaches to reduce health care disparities and improve overall health for children and their families. Pediatric clinicians are often the primary source of contact with the health system for women of childbearing age. These clinicians see both adolescent girls and mothers, who are between pregnancies, bringing their children to well child visits. Pediatric visits provide a unique access point for counseling to improve maternal health, birth outcomes, and family health.
 - Among the specific high-need and high-risk populations that should be cared for within an integrated care model, we would suggest the following populations be included. Additional justification for inclusion of children of parents with limited English proficiency that is specific to the local context in Baltimore, MD follows:
 - Families where parents and/or children have mental health problems including substance use
 - Families living in extreme poverty
 - Children with developmental disabilities and children of parents with developmental disabilities
 - Children with complex medical needs and special healthcare needs requiring frequent specialty visits
 - Children of young parents and children of first-time parents from extremely impoverished backgrounds or who come from other marginalized groups
 - Children with chronic diseases
 - Children of limited English proficiency parents
 - Children of undocumented parents
 - The proportion of Baltimore City births occurring among Latina mothers has more than tripled since 2000. The percentage of births to Hispanic mothers less than 18 years old and unmarried in Maryland from 2007-2011 was higher when compared to that of Caucasian women. All children born in Baltimore are United States citizens with access to insurance. Many low-income Latina mothers lack legal status, however, and thereby are and will remain uninsurable, actively excluded from the Affordable Care Act (ACA). A recent needs assessment found that Latino CMP mothers (n=67) were significantly more likely to be uninsured, of lower education level and to report delaying seeking medical care than mothers at the Johns Hopkins Hospital Harriet Lane Clinic (HLC, N=75). Addressing maternal and family health has great potential to interrupt the intergenerational cycle of disadvantage by addressing health needs, reducing unintended pregnancies, rapid repeat births and family risk factors.
- b. What specific age ranges of CMS beneficiaries should be included in an integrated care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?
 - a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate ramp-up" periods relative to the payment models.

RESPONSE:

- There may be two types of potential models for pediatric ACOs: (1) population health-based approach and (2) focus on a smaller number of children with particular needs (e.g., chronic disease, behavioral health, disability). For each model, the payment system is likely to be different. For example, a global budget may make sense for a larger population-based pediatric ACO, which could then have flexibility to create alternative payment methodologies for providers including incentive payments for meeting quality targets. For an ACO that focuses on a smaller, costlier group of pediatric beneficiaries, a shared savings approach may be more appropriate (where achieving shared savings is similarly dependent on meeting quality thresholds). In this setting, it is likely that a "ramp-up" period where providers have a choice of upside only or upside + downside risk is likely to be needed to ensure participation and give providers a change to adjust to managing their ACO population.
 - The appropriate number of patients for an ACO would also likely vary with type (i.e., the standard 5,000 patients in a Medicare ACO may be too small for a population-based ACO and much too big for a focused ACO).
 - Flexibility will be needed since Medicaid structures vary across states. Ideally, pediatric ACO models would allow for the testing of a variety of payment models, including shared savings, global capitation, and others.
 - Because of the focus on integrated care, a capitated payment per member per month (PMPM) could be distributed to various ACO "team members" (e.g., pediatrician or other PCP, overall coordinating body, hospital). This is the approach taken in Colorado's Regional Care Collaborative Organizations initiative. Over time, a certain amount of PMPM payment is withheld in an incentive pool, which providers can earn back for meeting performance benchmarks.
 - Other programs have used a shared savings approach, where each provider (e.g., individual or group practice, hospital clinics or outpatient departments, community health centers) has a contract with Medicaid, which pays providers a risk-adjusted capitated payment. There are opportunities for shared savings payments and incentive payments for meeting quality metrics.
- b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

RESPONSE:

- Appropriate risk-adjustment will be critical in the pediatric setting to ensure that providers are not unfairly penalized for factors beyond their control and to encourage inclusion of children with complex health and other needs in ACO models (especially since these children are likely to benefit most from the coordination of care in an ACO).
 - Specifically, CMS should consider inclusion of social risk factors in any risk-adjustment scheme. This is especially important in the case of pediatric ACOs since social risk factors play a significant role in health outcomes (McGinnis et al 2002, Thornton et al 2016, Shonkoff et al 2009).
 - Benchmark calculation following the model of the Medicare Shared Savings Program, where benchmarks are calculated separately for different populations within an ACO, may also be useful in the pediatric ACO setting depending on whether the ACO is broadly or narrowly focused (e.g., on population health or a specific group of children). For example, in a population health-focused ACO, benchmarks may be calculated separately for disabled and non-disabled children, and/or children with certain medical conditions appropriate to the context. For example, in Baltimore city, it could be useful to calculate benchmarks separately for children with sickle-cell and without to encourage inclusion of this population in an ACO. This may also be true for children with exposures to certain sets of social or neighborhood conditions (e.g., parental substance use disorder, residence in a neighborhood with excessively high violent crime rates).
- c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

RESPONSE:

- A geographic model may make sense in rural areas. In this type of model, a group or network of providers takes responsibility for children in their geographic area, and partners with social service organizations to provide health care across various sites (e.g., in homes, at rural clinics, and, if needed, referrals to tertiary care) as well as needed social support services.
- d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.
- 3. To What extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?**

RESPONSE:

- Alignment across funding streams is a major obstacle to addressing social determinants of health such as housing quality through the health care system. Though there are examples of programs that have shown some positive impacts on health care costs associated with improving housing conditions through partnerships with hospitals, the data in children are limited. A study conducted by the Center for Outcomes Research and Education in partnership with Enterprise Community Partners, Inc. suggests that affordable housing investments may reduce health care costs and Medicaid expenditures (See:). While these results were strongest for housing tailored to elderly populations and those with disabilities, a similar relationship was found for families with children, though it did not achieve statistical significance. Similarly, they found increases in primary care utilization and decreases in emergency department utilization for residents in all housing types (See: <http://www.enterprisecommunity.org/download?fid=10081&nid=13387>. Last accessed 03/28/2017). One implication of this type of work may be to identify mechanisms by which health care sector savings can be reinvested in programs that improve access to affordable housing and other investments that produce improvements in neighborhood environments. These types of changes may be particularly important to children's health trajectories over time, though the lag time between investments and cost savings may be decades.
 - a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.
 - b. What factors are essential to the success of this alignment?
 - c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.
4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?
 5. In addition to Medicaid's mandatory benefits (including services and support required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?
 - a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?
 - b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?
 - c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?
 6. How might CMS, states, and tribes, and health care and health-related social service providers calculate savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

Section IV: Pediatric measures

- 1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.**

RESPONSE:

- Measures relevant to women's reproductive health developed by the U.S. Department of Health and Human Services Office of Population Affairs and endorsed by the National Quality Forum should be considered as important additional measures among adolescents. (See: <https://www.hhs.gov/opa/sites/default/files/clinical-performance-measures.pdf>). Other important measures of reproductive health could include the Healthcare Effectiveness Data and Information Set (HEDIS) measures focused on appropriate chlamydia screening among adolescents (see below for more discussion of HEDIS measures in pediatrics).
 - Measures related to access to care are especially important given that pediatric providers rely heavily on Medicaid as a payer.
- 2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.**

RESPONSE:

- The most widely used pediatric metrics for health insurance plans are the HEDIS (Healthcare Effectiveness Data and Information Set) measures. Reimbursements (Value Based Payments) at the practice level are often linked to meeting these measures.
- Other measures may be indicative of long-term outcomes, but are impacted by a variety of social, familial, and environmental factors outside the health care delivery system. These may include school attendance/absence, school achievement/educational attainment, high school graduation, planned pregnancies, perceived health, other measures of well-being. Still such measures may be critically important in predicting health trajectories and adult health status. Another example could be enrollment in high quality early childhood education, parenting and preschool programs which have been associated with improved health behaviors, lower risk behaviors, and some improvements in economic and health outcomes. This is particularly true of evaluations conducted of the North Carolina Abecedarian Project, the Perry Preschool Project, and the Nurse Family Partnership (Thornton et al 2016).

Section V: Other comments

- 1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?**

RESPONSE:

- Shared mission across providers. From the vantage point of pediatricians, the shared mission is optimizing children's health trajectories across the life course. It is not just about preventing/treating disease. Family functioning and well-being may also be critically important as cited above.
- 2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.**

RESPONSE:

- A life course perspective is key, and one that views children's health as more than the absence of disease. Embedding this concept into future work to optimize the structure, organization and delivery and health care including preventive services, treatments, and social services is critical and necessitates a more inclusive operationalization of child health. This operationalization has at its core an inclusive conception of child health as one that recognizes children's potential to contribute productively to society as adults (Cheng et al 2014).
- The Johns Hopkins Harriet Lane Clinic and Johns Hopkins Bayview Children's Medical Practice are pediatric primary care models that have incorporated family needs/social determinants screening into practice and provide comprehensive family centered services noted above.

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Kaiser Permanente

To Whom it May Concern,

Please accept this endorsement of the CAPC letter of 3/28/17 urging support for children who need palliative care.

Thank you.

Kentucky Children's Hospital

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

La Rabida Children's Hospital

There is a great deal of interest in integration of health care and social service programs among the Chicago area agencies that we collaborate with as part of our operations. This comes from two primary motivations, first is ensuring we have connections to outside organizations that offer services that we don't offer ourselves but are a need among our patient population, autism and developmental disability services being one example of clinical services, housing assistance being an example of a resource services. Having open channels for referrals and being able to provide adequate information for families about services at outside agencies would represent a significant improvement in service quality and program efficiency and likely improve families' adherence and follow through on both clinical and non-clinical recommendations.

Second is having appropriate collaboration about services provided by two different organizations, as the interventions of one provider may impact the services of another, such as a physician who is prescribing medications for ADHD for a patient who is seen at a different agency for behavioral therapy. Information and feedback loops that are instituted across separate agencies and institutions would allow for improved health related decision making for both providers and families. For this to be effective, it must be efficient. Having channels of communication that allow easy access of information between organizations, which may include access to written materials as well as direct verbal communication is essential. Currently there is no standardized process or set of expectations which often makes communication ineffective and highly inefficient, with providers needing to commit a great deal of time to this activity.

Challenges in operating with multiple state agencies are manifold. One of the most significant challenges is that each requires their own set of administrative tasks and activities, and each has a group of staff with specific functions, leading agencies to have complex systems to navigate and significant administrative costs. Part of the challenge in working with the Medicaid population in underserved communities is having sufficient clinical staffing to meet the population's need, the greater amount of resources, especially salary, that are necessary for administrative functions, the less resources are available for staff who provide clinical care.

With few options for sharing of information other than the platform of phone calls, collaboration with outside social service agencies is very challenging. With providers who have the greatest need to collaborate under ever increasing expectations to provide more care to more children, finding a window of opportunity to collaborate about clinical care is very difficult. Being able to access an outside EMR would provide for significant improvements in efficiencies, but with providers using different EMR's and with the necessary HIPPA guidelines to be followed, this represents a significant barrier to treatment and value based outcomes. Systems that would promote ease of sharing information electronically, while at the same time ensuring no compromise in patient confidentiality would be highly beneficial.

SECTION III AND IV: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS & PEDIATRIC MEASURES

Being able to evaluate the effectiveness of a given program or agency is very difficult, even formal research with very tight controls is never absolutely perfect in evaluation. Just as the move to integration appreciates the interconnectedness of various types of service needs patients and their families have, the same needs to be considered for evaluation. As an example, if a patient is in care for

behavioral health, and suffers a significant physical injury, which leads to a worsening of mood, that contextual aspect (the physical injury) is not something that behavioral health measures capture or factor, the measure may indicate that the person is not receiving value from their care, when they in fact may be receiving great benefit from their care. This type of contextual influence on outcomes is highly magnified in the areas that La Rabida serves, as our communities suffer from chronic and severe poverty, high levels of community violence, underperforming schools, and live in food deserts, all of which play an impact on the patient's well being, although not being a part of clinical measures. Program evaluations which don't allow for the whole picture of a patient's well being, medical, emotional, and contextual, likely fail to accurately capture the actual value of services provided.

In terms of pay models, one of the struggles that occurs in social services, especially in behavioral health, is having a robust and talented pool of clinicians on staff. Because of reimbursement rates, salaries for staff are often low, resulting in talented staff leaving quickly after achieving licensure. This results in frequent staff turnover, and a staffing pattern that is predominantly on the lower end of years of experience. Being able to provide high quality, value based care with more inexperienced clinicians represents another hurdle in providing value based care. A system that allowed for improved reimbursement of experienced clinicians to allow their retention would benefit the goal of improved, value based outcomes.

Finally, the broad diversity of insurers and payers also adds a significant level of administrative costs, including salaries, which makes both ensuring that any given program is operating in compliance with all payer requirements very difficult as well as reducing the overall amount of resources available to provide clinical care. The State of Illinois is working to reduce the total number of MCO's because of these concerns, but greater commonalities among payers' expectations, a system that would allow for MCO's to access shared credentialing systems (some of which I believe to use a clearinghouse) to reduce the time and expense of credentialing and increase collaboration would be highly beneficial to reducing overall costs of operations.

Lamaze International

Dear Colleagues:

Lamaze International appreciates the opportunity to provide the Center for Medicare & Medicaid Innovation (CMMI) information about the role that evidence-based childbirth education—as part of comprehensive prenatal care—has in successful pediatric alternative payment models (APMs). Childbirth education plays a critical role in helping women understand the importance of prenatal health—and how their lifestyle choices and birth preferences can permanently impact their children’s health.

Lamaze commends CMMI for working closely with the Healthy Start Program and echoes its mission to advocate for initiatives that “...improve birth outcomes and family wellbeing.” As the nation’s leading childbirth education organization, Lamaze contributes to this initiative by advocating for comprehensive childbirth education for every woman at every stage of their childbirth journeys. Childbirth education helps women recognize the tremendous role that they have in their children’s health, and build skills to more effectively engage in shared decision making. Choices made during pregnancy and birth can significantly influence infant mortality, premature birth, and childhood morbidity. Steps such as avoiding elective deliveries before 39 weeks, letting labor begin on its own, and discussing birth preferences with prenatal care providers can significantly impact children’s health outcomes.

Many pediatric APMs recognize the critical role that prenatal care has in children’s health, but often overlook a critical prenatal care component: comprehensive, evidence-based childbirth education. Lamaze can attest to the critical role that high-value support services, such as evidence-based childbirth education, have in consistent prenatal care. In accordance with its mission, Lamaze seeks to advance safe and healthy pregnancy, birth, and early parenting through evidence-based education and advocacy on the federal, state, and local levels. In doing so, offers the following recommendations for CMMI’s pediatric APM initiative.

1. Incorporate Prenatal Care that Includes Evidence-Based Childbirth Education into APMs

Effective pediatric APMs should not only encompass prenatal care, but include evidence-based childbirth education as an essential component to prenatal care. Without adequate prenatal care, women and their children face many short- and long-term setbacks that lead to life-long disadvantages. Comprehensive prenatal care is the cornerstone to children’s health and standardizing best practices, such as evidence-based childbirth education, facilitate improved health outcomes.

2. Develop a Plan for Measuring the Effect that Specific Interventions have within an APM

Lamaze agrees that pediatric APMs help facilitate a continuum of care for children, but recommends that CMMI develop a mechanism for measuring the effect that specific interventions have within an APM. Systematic change requires data. And while APMs strive to increase efficiency and lower costs, they cannot always assess how each component within the model affects the process and outcome. Successful pediatric APMs may increase childbirth education access and utilization, but without a means to measure the value of its inclusion, APMs cannot identify and safeguard the influential components within a model.

3. Go to the Frontlines to See What’s Successful Within Communities: Two Examples of Success

North Carolina

In 2016, North Carolina released its Perinatal Health Strategic Plan to reduce infant mortality and improve the health of women and men of childbearing age. Key strategies included increasing perinatal health literacy by ensuring that families receive educational resources, support, and evidence-informed childbirth education. The Strategic Plan based its childbirth education recommendations on the Lamaze Six Healthy Birth Practices. North Carolina has long recognized the role that evidence-based childbirth education has in improving the health outcomes of mothers and children by ensuring that its Medicaid beneficiaries have access to these resources.

Ohio

Once ranked second-to-last in the country for infant mortality or the death of a living baby before his/her first birthday, Ohio founded Moms2B to help women at risk for infant mortality make healthier lifestyle choices and deliver healthy, full-term infants. Piloted in 2010 as a research-driven, 10-week nutrition course, Moms2B has since expanded across the state into a service-oriented, comprehensive prenatal education program. Using both short- and long-term goals, Moms2B provides education about maternal and infant health; improves food security, social support, housing stability, and breastfeeding rates; and reduces pre-term births, neonatal intensive-care stays, and infant mortality rates. Lamaze appreciates the opportunity respond to CMMI's request for information about developing and implementing pediatric APMs. CMMI's commitment to developing and implementing processes that help our most vulnerable population is laudable and Lamaze stands by as a resource, advocate, and partner in improving health outcomes for children.

Sincerely,



Lamaze
International.pdf

March 29, 2017

Center for Medicare & Medicaid Innovation
Healthy Children and Youth

Re: Request for Information on Pediatric Alternative Payment Model Concepts

To:

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3. Go to the Frontlines to See What's Successful Within Communities: Two Examples of Success

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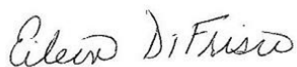
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Lamaze appreciates the opportunity respond to CMMI's request for information about developing and implementing pediatric APMs. CMMI's commitment to developing and implementing processes that help our most vulnerable population is laudable and Lamaze stands by as a resource, advocate, and partner in improving health outcomes for children.

Sincerely,



Eileen DiFrisco, MA, RN, IBCLC, LCCE, FACCE
Lamaze International President

Le Bonheur Children's Hospital

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Lucile Packard Foundation for Children's Health

I would like to submit the attached document in response to the Request for Information on Pediatric Alternative Payment Models.



Lucile Packard
Foundation for Chil



Lucile Packard
Foundation for Chil

Thank you for the opportunity to respond to the Request for Information regarding Pediatric Alternative Payment Models. I have identified a number of issues and opportunities below.

1. A persistent payment barrier to improving children's care has been the need to bill services for individual enrollees when services are provided in a congregate setting, e.g., child care centers and schools. Similarly, centralized services that are made available to multiple providers, such as the Vermont Blueprint or the Massachusetts Child Psychiatry Access Program need to be facilitated by new payment schemes.
2. Coordination of services can be accomplished in a number of ways, each of which has its own payment issues:
 - Co-location of services should be encouraged by provision of incentives or removal of disincentives such as restrictions to two bills being submitted on the same day from the same facility.
 - Shared care coordination across practices or agencies, not all of which are medical or Medicaid providers
 - Risk-adjusted care coordination
 - Care coordination for children in families with social circumstances that interfere with obtaining or benefiting from medical care
 - The time necessary to complete an appropriate referral/consultation, to monitor its completion, and to integrate consequent new information into ongoing care is generally not a service for which there is reimbursement. Experience from the Help Me Grow program found that it takes, on average, 7-9 calls to complete a referral; few practices can afford to provide that services.
3. Incentives have been provided for creating medical homes for adults, but rarely have the same incentives been provided to child health care providers.
4. The health of children, their use of health care, and their compliance with health care recommendations are strongly influenced by the physical and mental health of their families. Efforts should be made to insure parents and children together and policies should be adopted that recognize the interdependence of both generations, e.g., cover maternal depression screening as part of children's preventive care services.

5. Incentives should be provided to promote the adoption of family electronic medical records, so health care providers for any family member can access key information about other family members whose health may impact the care of the index patient.
6. Payment policies should strive for Medicare parity of Medicaid reimbursement.
7. Cognitive services, e.g., primary care, mental health, should be reimbursed at higher rates.
8. Current payment does not encourage or enable providers to address health care issues that arise due to social issues being experienced by the family. Social risk adjustment procedures should be identified and linked to enhanced payment.
9. Medicaid should consider earmarking a small percentage, probably a fraction of a percent, of federal dollars going to states for child health quality improvement and assurance activities.

Sincerely,

A handwritten signature in blue ink, appearing to read "Edward L. Schor", with a long horizontal flourish extending to the right.

Edward L. Schor, MD

Assessing Patient Experience as a Vehicle to Integrate Services

Edward L. Schor, MD

Quality measurement of health services has been narrowly focused on medical care. This is in large part a function of an almost exclusive reliance on what can be gleaned from administrative data, largely registration/enrollment information and claims. Efforts to benefit optimally from those information sources and to begin integrating health and other human services has been hampered by the frequent absence of some patient demographic data such as race and income and from billing patterns that are intended to maximize reimbursement rather than information. On occasion, chart audits are done that provide additional data, but this approach is usually intended to validate billing claims rather than to broaden the picture of the patients' health and its determinants. There is some optimism that widespread adoption of electronic medical records will allow much more detail about clinical presentation and management, though in the foreseeable future, use of this capacity for quality assessment is likely to be limited to large health care systems with interoperable information technology. Some are beginning to collect and integrate indicators of social factors into their quality assurance activities.

Since the health and health care of children is inextricably linked to their families' physical, emotional and social health, social circumstances, and child-rearing practices, the design and payment for their health care needs to factor in these exigencies. This need is especially apparent when measuring the quality of care for children with chronic or complex health conditions, where the heterogeneity of their conditions generally precludes use of disease-specific quality measures. Instead, population health measures that assess functional health status, family health and well-being, health-related behaviors, integration into communities and achievement of health-related goals are more feasible and better represent influences on children's health than do traditional measures. Such data on patient experiences is viewed by some as the most valuable information by which to assess quality, and its collection forces consideration of the other human services (e.g., social, behavioral, educational) that have health outcomes, but that data can be difficult to obtain. The difficulty is usually described in terms of the additional costs involved in surveying patients. Consequently, patient experience and social determinants data is most often collected as part of special projects rather than as a routine component of quality assurance activities. It is time for that "special status" of these measures to change, and for its assessment to become an integral part of health care services.

Patients' and families' experiences and related data can be ascertained through consumer advisory committees, focus groups, discharge interviews, and surveys done in real time or retrospectively using a variety of media. The choice of modality may reflect the questions being asked and the entity asking, e.g., government programs, insurers, health plans, hospitals or health

care providers. Regardless of the approach, the costs of assessing patients' experience and collecting more comprehensive personal-social data should be treated as just another cost of routine health care, not as something special that is added onto usual costs. Patients and families should come to expect to give feedback and expect for it to be it to be thoughtfully considered. If the goal of CMS is to achieve good health for children, and it is known that social factors, especially those that reside in or are a function of families, are the dominant influence on children's health, then quality measurement must routinely include family and social determinants of children's health.

Lurie Childrens Hospital

I endorse the 3/28 comment letter submitted by CAPC.

Main St. Counseling

I'm responding to your recent request for input on alternative healthcare payment models for children. I know my submission is late, but I'm still hoping it's helpful.

One suggestion I have with respect to integrative health and Medicaid is if wellness clinics for children under 5 can also include comprehensive psychological assessments.

We need to understand the impacts of secondhand smoke, inappropriate attachment levels to parents, inadequate parenting skill levels, and the level of chaos versus soothing that children receive at home. These impacts, plus the traumatic experiences the children already encountered before entering school (domestic violence, parental verbal abuse, parental incarceration), would be important indicators for future success when these children first engage the outside school and community environment.

I'm suggesting more of a preventive service than intervention, and would like to explore if Medicaid would cover this service. If they are already, can it be expanded? If not, can the service be included despite any other changes on a federal level that may be coming.

Massachusetts Health Quality Partners

See attached.



Massachusetts
Health Quality Partn

April 7, 2017

To: The Center for Medicare and Medicaid Innovation
Re: RFI on Pediatric Payment Model Concepts

Dear CMMI Colleagues,

MHQP is pleased to see your on-going interest in pediatric health, expressed in the RFI on Pediatric Payment Model Concepts. We are commenting here one component: pediatric measures. As quality measurement leaders in Massachusetts and nationally, we recommend advancing important measurement work that were initiated with support from CMS.

Supported by CHIPRA funds, MHQP and Massachusetts' Mass Health led a coalition of providers, payers, families and researchers engaged in the development and use of a robust set of pediatric quality measures to improve care coordination for children. A Measure Development Workgroup, identified gaps in existing quality measures, then developed, tested, and recommended new pediatric quality measures. The work included measuring care for children with behavioral health needs and focusing on care coordination, including coordination with schools and community-based services.

Based on a gap analysis research, the workgroup focused its efforts on developing quality measures related to care coordination for children with behavioral health needs. Staff at Boston Children's Hospital tested six of the [eight new measures](#) recommended or developed by the workgroup. Overall, they reported that the pilot was successful. It would be worthwhile to expand testing to a larger group of providers to assess broad based use of the measures to assess providers' success in determining the need for and providing care coordination for children with behavioral health needs.

The link above brings you to the summary of the development effort, and we would like to highlight the importance of measures for the transition to adult care. Our colleagues at Boston Children's Hospital Center of Excellence for Pediatric Quality Measurement <http://www.childrenshospital.org/research-and-innovation/research/centers/center-of-excellence-for-pediatric-quality-measurement-cepqm> have been advancing this work. This Center of Excellence collaborated with the coalition mentioned above as advisers, and we were pleased to support their efforts to develop the portfolio of evidence-based, consensus-approved pediatric quality measures available to public and private payers, providers, and consumers.

Going forward, there is tremendous need to continue advancing the development, testing, and use of pediatric quality measures related to outcomes and processes of care. We are pleased at this focused interest, as measures for children differ in several significant respects from adult quality measures. Although the coalition ceased operations in 2015, additional information about its work and recommendations is still available on the coalition's website <http://www.masschildhealthquality.org/>

Thank you for this opportunity to support improved health for children.

Sincerely yours,


Barbra G. Rabson

Massachusetts Neuropsychological Society

Attached is a response to your RFI on pediatric APM's, from the Massachusetts Neuropsychological Society.

Thank you for your consideration. I am available to provide further information as needed.



Massachusetts
Neuropsychological

PRESIDENT

MARY COAKLEY-WELCH, PH.D.

PRESIDENT-ELECT & SECRETARY

LORI AZZARA, PSY.D.

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STEPHANIE MONAGHAN-BLOUT, PSY.D.

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JEFFREY B. SHEER, PH.D., ABPP/CN

EMILY K. WILNER, PSY.D.

STUDENT BOARD MEMBERS

ERICA APPLEMAN, M.A.

SAGAR LAD, M.S.

March 28, 2017

Centers for Medicare and Medicaid Services

RE: Center for Medicare and Medicaid Innovation

Request for Information on Pediatric Alternative Payment Model Concepts

Dear CMS,

Thank you for the opportunity to give input regarding integrating pediatric healthcare and social services for Medicaid and CHIP enrollees. Our input is below, embedded in the relevant excerpted sections of the RFI.

The Massachusetts Neuropsychological Society (MNS) supports integrated care and service delivery to improve access to care and to improve efficacy and cost-effectiveness of interventions. MNS is the largest statewide professional organization of neuropsychologists in the US. As doctoral-level, licensed psychologists with advanced, specialized fellowship training, neuropsychologists are uniquely skilled at developing a holistic and integrated understanding of individuals, and communicating and working with other professionals so that the information can guide the most appropriately targeted and effective treatment interventions, (and educational interventions for some children). They use norm-referenced, evidence-based measures, combined with careful interviewing and history-gathering to develop this understanding. Our RFI responses follow:

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

1.To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?

RESPONSE: *In Massachusetts, service integration for pediatric care is not widespread. It is occurring in some settings and locations, but not in most. We strongly support coordination of services. We see the need for greater*

integration of behavioral health (BH) services into medical, educational and social services for young children and their families, by having those services available (at least 1 or 2/week) within the familiar and accessible settings, e.g., the child's school or day care, pediatric clinic, etc. This makes it more possible for necessary information to be shared and the opportunity to work more collaboratively vs. one agency blaming the other. This also allows for BH professionals to share knowledge and experience with others, which can be integrated into their programs. Providing mental health services within the schools makes it possible to identify and treat children and families, who might not otherwise be identified (or be willing to come to a clinic) and receive the necessary services.

One of our members who worked in a community health center writes: Before we were in the same building as Pediatrics, there were very few referrals to Mental Health. Moreover, when we located in the Mental Health Center, children, especially adolescents, (and their families) were not eager to engage in services.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?

RESPONSE: *Schools need to be included in any coordinated care models for children. Including the state's child protection agency – in MA, that is DCF – the Department of Children and Families -- is also necessary in order to meet the needs of some children.*

From one of our members who worked at a community health clinic: We provided approximately 40 hours/week of mental health services to the nearest school, where we also had a part time pediatric clinic. We also had monthly meetings with Pediatrics to discuss the most challenging cases that we shared. In addition we had a weekly Diagnostic Team that included children and families and sometimes Pediatrics, DCF and school personnel. The coordinated meetings made it possible to create meaningful treatment programs that could be monitored by the Team. Funding was largely through Medicaid, with small contribution from the school system, but never really covered the costs since multiple professionals were involved in the meetings.

While respecting confidentiality and with permission of the parents/guardians, it has often been helpful to include DCF in clinic (BH) evaluations, especially when 51A's (MA mandatory reporting forms) have been filed in an effort to support the family, help DCF workers to appreciate the case in a different light and reduce the frequently adversarial

nature of the relationship.

Many of the Medicaid patients who are seen in the school could benefit greatly from a comprehensive neuropsychological evaluation, especially those children with comorbid problems, e.g., ADHD, learning disabilities, head injuries, seizures, autism spectrum disorders, psychiatric disorders such anxiety or depression, trauma history, and/or emotional dysregulation. There are long waiting lists for evaluations at clinics that accept Mass Health (since so many private practitioners do not). Some of these children cannot get approval for a comprehensive neuropsychological evaluation from their insurers and instead get an educational evaluation from one person in school, a cognitive evaluation from another and may get a speech and language from another and sometimes, if available, may be referred for a psychological evaluation. While the schools make an effort to pull all this information together, most often the child would be better served by a comprehensive evaluation administered by a highly trained neuropsychologist, who then communicates that information to the school team and assists in the development of interventions. This would reduce redundancy, and ease the burden on the child -- who would then not have to adapt to multiple evaluators. Funding needs to cover consultation and coordination time with the team at school, in addition to time for completing the evaluation.

b. What potential exists for increased partnership for provision of home and community-based services?

RESPONSE: *Psychotherapy services have also been delivered in the home under MassHealth (MA Medicaid), especially when there are several young siblings involved or when the identified patient is medically compromised. This permits clinicians to set up behavioral treatment plans in the setting where the family will be trying to implement them and gives the clinicians the opportunity to demonstrate other more effective ways of dealing with the children's behavioral problems in the home setting*

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers?

RESPONSE: *Behavioral health (BH) providers who are not designated as "medical" providers or "physicians" (including doctoral-level psychologists) were not included in CMS incentives or timelines for adopting EHR's and therefore lag behind other healthcare "medical" providers in adopting EHR's. Including BH providers in incentive plans will enhance communication and coordination of care. Privacy safeguards for BH records need to be in*

place. In Massachusetts, a multidisciplinary task force has worked on developing guidelines for BH EHR's. Implementation dates for use of EHR's in BH has been postponed so that appropriate systems and regulations will be in place before requiring EHR use.

One of our members who is dually trained, licensed, and credentialed as a doctoral-level psychologist and psychiatric nurse practitioner states: Access to EHR's has been particularly helpful where pediatricians and child psychiatrists/child psychiatric nurses are both prescribing for a child. Parents are often not aware of changes in doses and do not often appreciate problems of drug interactions.

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

RESPONSE: *Reimbursement for providing BH services or consultation in alternative, community-based settings can be limited or non-existent. Requiring coverage for these services would remove this obstacle. Reimbursement for time spent coordinating care in general is limited or non-existent.*

Social Service providers might identify BH treatment and evaluation needs, but they cannot then find a BH Medicaid provider who can see the child in a timely way, or within a reasonable geographic area, or at all. BH Medicaid provider networks are insufficient to meet the BH needs statewide. The mismatch between need and lack of available providers is greatest in more remote and rural areas of the state, such as western MA. Please see Section III, response to Question 2 below, for further discussion of this network insufficiency.

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1. a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?

RESPONSE: *Yes. All of the above.*

b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

RESPONSE: *Birth to 21*

2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

RESPONSE: Assurance that services and coordination needed and provided will be reimbursed without unnecessary procedural hoops to gain authorization for all Medicaid (in MA, Medicaid is called MassHealth) recipients -- regardless of which health plan administers their BH benefits -- would encourage collaboration. Many of our members do not see pediatric Medicaid patients, or see those who have BH coverage administered by some, but not other, health plans. They have given up on some Medicaid BH carve out health plans and MCO's because of reimbursement problems; onerous authorization procedures; and arbitrary limits on care. This concerns us because some of the most complex patients who need the most comprehensive and coordinated evaluations and treatment get splintered services and see less qualified and less experienced clinicians. This results in more economically advantaged families getting the health care (including behavioral health) services they and their children need, while the poorer patients whose families often do not have the education or clout to navigate the system, receive less than they need. Prevention and education are important components of a health delivery system, especially for disadvantaged populations, but are most often not compensated, so fall by the wayside.

A. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

RESPONSE: Investment in care and services at earlier ages save costs long term by promoting better-adjusted, healthier, educated, and self-sufficient adults who can function at their highest level of independence possible and with optimal physical and mental health. Interventions with children are of primary importance since many risk factors observed in adults can be detected in childhood. Early intervention can change the trajectory of those symptoms. The Behavioral Health Integration Task Force 2013 report to the MA Legislature and Health Policy Commission states on Page 11:

"...Children are not "cost drivers" when compared to some groups of adults, such as adults eligible for both Medicaid and Medicare. However, both childhood physical and mental health problems result in poorer adult health. Furthermore, childhood mental health problems have much larger impacts than do childhood physical health problems on four critical areas of socioeconomic status as an adult: education, weeks worked in a year, individual earnings, and family income. Without

intervention, child and adolescent psychiatric disorders frequently continue and worsen into adulthood and are increasingly associated with disability and increased medical costs. For example, mental health problems in childhood are associated with a 37 percent decline in family income, three times greater than the decline related to having physical health problems.”
(Delaney L and Smith J. *Childhood health: trends and consequences over the life course. Future Child. Vol. 22, No 1, Spring 2012.*)

While cost is involved to reimburse for collaboration and coordination of services, in the long run, it is cost-saving, since the services will be more effectively targeted and delivered and there will be less redundancy.

Routine and mandatory BH screenings and follow-up for comprehensive evaluations when indicated are critical for improved health and social outcomes for children. Early identification and intervention keep problems from escalating and improve outcomes. For example, earliest childhood detection and treatment for autism can result in significantly better short-term and long-term symptom reduction. (Anderson, Liang, and Lord: J of Child Psychology and Psychiatry. 2014 55(5) Predicting young adult outcome among more and less cognitively able individuals with autism spectrum disorders ; Fein, Barton, Eigsti, Kelley, et al.: J of Child Psychology and Psychiatry. 2013 54(2) Optimal outcome in individuals with a history of autism; Fernell, Eriksson, & Gillberg: Clinical Epidemiology. 2013 5, 33-43 Early Diagnosis of autism and impact on prognosis: a narrative review.)

SECTION IV: PEDIATRIC MEASURES

1.What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

RESPONSE: *Several norm-referenced, well-standardized rating scales of emotional, social, and behavioral functioning and symptoms are widely used in clinical and school settings and are essential in measuring baseline symptoms and tracking progress over time. These include the BASC-3, the CBCL Checklist, the Social Responsiveness Scale 2, CARS2 – Childhood Autism Rating Scale Second Edition.*

SECTION V: OTHER COMMENTS

1.What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

RESPONSE: *Children spend most of their time in school (including pre-school) and many payment and delivery systems prevent provision of needed BH consultation, evaluation, and treatment services within the educational system. An exception: Safe Schools Healthy Students initiative: <https://www.samhsa.gov/safe-schools-healthy-students>.*

A partnership between the Department of Education, Special Education, HHS/CMS, behavioral health/medical providers, DCF, early childhood agencies, and third party payers is needed to truly address the complex needs of many children enrolled in Medicaid and CHIP.

2.As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

RESPONSE: *We propose a partnership among the entities named above to fund comprehensive neuropsychological evaluations in order to provide: accurate diagnosis; an integrated and holistic understanding of the child including identification of all contributing factors needing intervention (eg, family situation, peer relationships, emotional regulation, psychiatric symptoms, and learning deficits and strengths); and develop – in consultation with the child's clinical and school team -- a comprehensive and coordinated plan for healthcare, social services, and school staff to meet needs and put each child on path toward healthy and self-sufficient adulthood. This partnership would eliminate one of the current major barriers to population-wide integrated BH healthcare and social services. That major barrier is: Medicaid/MassHealth BH provider network insufficiency. This plan should include not only behavioral symptom checklists at the outset, but also at various points along the way to help evaluate the efficacy of treatment.*

With their training in research, statistics, and program evaluation, neuropsychologists and psychologists could help design programs to evaluate best practices and determine efficacy of programs in improving health and reducing long-term costs.

Thank you for considering our input. Please contact me if you have questions.

Sincerely,



Mary Coakley-Welch, PhD

President, Massachusetts Neuropsychological Society (My direct line

Medica Research Institute

To Whom It May Concern,

Kids' HELP (Kid's Health Insurance by Educating Lots of Parents) is an innovative, evidence-base intervention that has been shown to improve the quality and reduce the cost of care for children and youth enrolled in Medicaid and CHIP. A rigorous study documented that the Kids' HELP Parent Mentor (PM) intervention results in multiple benefits: more children are insured faster, children's access to healthcare and parental satisfaction improve, quality of well-child care is enhanced, thousands of dollars are saved per child, jobs are created, disparities are eliminated, and the intervention potentially could save our nation billions of dollars. Here is a summary of the findings:

METHODS: We conducted a randomized trial of the effects of parent mentors (PMs) on insuring uninsured minority children. PMs were experienced parents with ?1 Medicaid/CHIP-covered child who received 2 days of training, then assisted families for 1 year with insurance applications, retaining coverage, medical homes, and social needs; controls received traditional Medicaid/CHIP outreach. The primary outcome was obtaining health insurance 1 year after enrollment.

RESULTS: We enrolled 237 participants (114 controls and 123 in the PM group). PMs were more effective than traditional Medicaid/CHIP methods in insuring children (95% vs. 68%, $P<0.001$), and achieving faster coverage (median=62 vs. 140 days, $P<0.001$), high parental satisfaction (84% vs. 62%, $P<0.001$) and coverage renewal (85% vs. 60%, $P<0.001$). The PM group was less likely to have no primary-care provider (15% vs. 39%, $P<0.001$), problems getting specialty care (11% vs. 46%, $P=0.03$) unmet preventive (4% vs. 22%, $P<0.001$) or dental (18% vs. 31%, $P=0.03$) care needs, dissatisfaction with doctors (6% vs. 16%, $P=0.01$), and needed additional income for medical expenses (6% vs. 13%, $P=0.04$). Two years post-PM cessation, more PM children were insured (100% vs. 76%; $P<0.001$). PMs cost \$53.05/child/month, but saved \$6,045.22/child insured/year.

CONCLUSIONS: PMs are more effective than traditional Medicaid/CHIP methods in insuring uninsured minority children, improving healthcare access, and achieving parental satisfaction, but are inexpensive and highly cost-effective.

This would be an outstanding, evidence-based approach for CMS to adopt in states and nationally.

A reprint of articles describing this trial are attached, and here is the train-the-trainer web site:
<http://www.medicaresearchinstitute.org/health-tools/kidshelp>

Thank you!



Medica Research
Institute 1.pdf



Medica Research
Institute 2.pdf

A Successful Program for Training Parent Mentors to Provide Assistance With Obtaining Health Insurance for Uninsured Children



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The authors declare that they have no conflict of interest.

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ABSTRACT

OBJECTIVE: Seven million US children lack health insurance. Community health workers are effective in insuring uninsured children, and parent mentors (PMs) in improving asthmatic children's outcomes. It is unknown, however, whether a training program can result in PMs acquiring knowledge/skills to insure uninsured children. The study aim was to determine whether a PM training program results in improved knowledge/skills regarding insuring uninsured minority children.

METHODS: Minority parents in a primary-care clinic who already had Medicaid/Children's Health Insurance Program (CHIP)-covered children were selected as PMs, attending a 2-day training session addressing 9 topics. A 33-item pretraining test assessed knowledge/skills regarding Medicaid/CHIP, the application process, and medical homes. A 46-item posttest contained the same 33 pretest items (ordered differently) and 13 Likert-scale questions on training satisfaction.

RESULTS: All 15 PMs were female and nonwhite, 60% were unemployed, and the mean annual income was \$20,913. After training, overall test scores (0–100 scale) significantly

increased, from a mean of 62 (range 39–82) to 88 (range 67–100) ($P < .01$), and the number of wrong answers decreased (mean reduction 8; $P < .01$). Significant improvements occurred in 6 of 9 topics, and 100% of PMs reported being very satisfied (86%) or satisfied (14%) with the training. Preliminary data indicate PMs are significantly more effective than traditional Medicaid/CHIP outreach/enrollment in insuring uninsured minority children.

CONCLUSIONS: A PM training program resulted in significant improvements in knowledge and skills regarding outreach to and enrollment of uninsured, Medicaid/CHIP-eligible children, with high levels of satisfaction with the training. This PM training program might be a useful model for training Patient Protection and Affordable Care Act navigators.

KEYWORDS: adolescent; child; community health workers; medically uninsured; mentors

ACADEMIC PEDIATRICS 2015;15:275–281

WHAT'S NEW

A parent mentor training program resulted in significant improvements in knowledge and skills regarding outreach to and enrollment of uninsured, Medicaid/CHIP-eligible children, with high participant satisfaction with the training. This program might be a useful model for training Patient Protection and Affordable Care Act navigators.

COMMUNITY HEALTH WORKERS (CHWs) are highly effective in improving the health and health care of children by reducing or eliminating numerous barriers and threats via education, connecting children and families with needed resources, providing social support, removing language barriers, and empowering parents.^{1–3} Studies document the effectiveness of CHWs in insuring uninsured children, managing childhood asthma, reducing miscarriages and low birth weight rates,

enhancing breast-feeding, creating home environments more supportive of children's early learning for mothers with low psychological resources, obtaining early-intervention services for young children, achieving high immunization rates, identifying childhood food insecurity in border households, and increasing childhood pesticide poisoning knowledge and safe home-storage practices in farm-worker families.^{1–3} A randomized, controlled trial (RCT) of CHWs demonstrated that they are substantially more effective in insuring uninsured children than traditional Medicaid and Children's Health Insurance Program (CHIP) outreach and enrollment, and resulted in children obtaining insurance coverage significantly quicker, more continuously, and with greater parental satisfaction.⁴

Parent mentors (PMs) are a specialized form of CHWs for children in which parents who already have children with a particular health condition or risk leverage this relevant experience, along with additional training, to assist

and counsel other parents of children with the same health condition/risk. An RCT of PMs for minority children with asthma documented that PMs are substantially more effective than traditional care in reducing wheezing episodes, asthma exacerbations, emergency department visits, and missed parental workdays, while improving parental self-efficacy in knowing when a serious breathing problem can be controlled at home, at a reasonable cost of approximately \$60 per patient per month, and with net cost savings of \$597 per patient per asthma-exacerbation-free day gained.⁵ A 2½-day training session for PMs in this RCT resulted in a significant improvement in PMs' scores on a test evaluating knowledge and skills, from a mean pretest score of 78% of answers correct to a mean posttest score of 90% of answers correct.⁵ To our knowledge, however, no other RCTs have been conducted on the effectiveness of PMs, and PMs have not been evaluated as a potentially efficacious means of providing Medicaid and CHIP outreach to and enrollment of uninsured children.

The study aims, therefore, were to determine whether a PM training program results in 1) improved knowledge/skills regarding insuring uninsured minority children, 2) high levels of participant satisfaction with training sessions, and 3) preliminary data showing higher rates than traditional Medicaid/CHIP outreach/enrollment of insuring uninsured children.

METHODS

THEORETICAL FRAMEWORK

PMs are experienced parents with at least one child covered by Medicaid/CHIP. The guiding theoretical principle is that PMs bring a wealth of experience from successfully insuring their own children, can provide social support, and with proper training, can be highly effective in educating and assisting other parents of uninsured children in obtaining health insurance. PMs thus distinctly differ from other types of CHWs, because unlike other CHWs, all PMs: 1) are parents (not a requirement for other CHWs); 2) already have ≥ 1 child covered by Medicaid/CHIP, so that PMs bring relevant, direct experiences of successfully applying for, obtaining, and maintaining Medicaid/CHIP coverage for their child; 3) receive specific, in-depth training on obtaining insurance, being a successful PM, and assisting parents with obtaining medical homes for children; 4) are provided ongoing coaching by a program coordinator and staff, including regular in-person and telephone meetings; 5) are trained to provide parents with information on and referrals to nonmedical assistance for families, including food, clothing, affordable housing, TANF, and WIC; and 6) are available by phone 24 hours a day to provide assistance.

In this study, PM functions originate from 1) a patient- and family-centered approach derived from prior qualitative work on parents of uninsured children and what they identified as insurance barriers and how they would best be overcome⁶; 2) an RCT of CHWs who were significantly more successful at insuring uninsured Latino children than

traditional Medicaid/CHIP outreach/enrollment⁴; and 3) prior research on a highly effective PM intervention for minority children with asthma.⁵

PM training in the current study focused on knowledge and skills regarding the following: 1) providing information on types of insurance programs (Medicaid and CHIP) available to eligible, uninsured children, and the application process; 2) furnishing information and assistance on program eligibility requirements; 3) completing the child's insurance application together with the parent, and submitting the application with the family; 4) expediting final coverage decisions by early and frequent contact with program representatives for Texas Medicaid/CHIP; 5) acting as a family advocate by being the liaison between the family and Medicaid/CHIP programs; 6) contacting Medicaid/CHIP program representatives to rectify situations in which a child inappropriately was deemed ineligible for insurance or had coverage inappropriately discontinued; and 7) assisting with completion and submission of applications for renewal of coverage. A special emphasis of the PM training was how to overcome system barriers to and difficulties in Medicaid/CHIP enrollment which have been documented by our team locally⁷ and nationally,⁶ including lack of knowledge about the application process and eligibility (especially misconceptions about work, welfare, and immigration), language barriers, immigration issues, income, hassles, pending decisions, family mobility, misinformation from insurance representatives (being told insurance is too expensive and parents must work), and system problems (including lost applications, discrimination, and excessive waits).

The PM training was part of a RCT called Kids' HELP (Kids' Health Insurance by Educating Lots of Parents), which compared the effectiveness of PMs to traditional Medicaid/CHIP outreach and enrollment in insuring uninsured minority children.

STUDY DESIGN AND HUMAN SUBJECTS

This study used a pretest/posttest study design. The study protocol was approved by the institutional review board of the University of Texas Southwestern Medical Center, and all participants provided written consent.

PM ELIGIBILITY CRITERIA, RECRUITMENT, AND SELECTION

PM eligibility criteria included: 1) Latino or African-American race/ethnicity; 2) primary caregiver for ≥ 1 child covered by Medicaid/CHIP for ≥ 1 year; 3) residing in or near a zip code within 1 of 5 Dallas regions with the highest proportion of uninsured and low-income children; 4) English proficiency, and if Latino, bilingually fluent in English and Spanish; 5) has a phone; 6) available time/commitment to assist families with obtaining Medicaid/CHIP for their uninsured children (therefore, not employed or attending school full time, and no children ≤ 2 years old); and 7) able to attend a one-time 2-day training session. PM candidates were excluded if they were not Latino or African American, not a primary caregiver for ≥ 1 child covered by Medicaid/CHIP for ≥ 1 year, resided outside

target zip codes, had limited English proficiency, were Latino but not bilingual, had no phone, had insufficient time/commitment to assist families with insuring children, or were unable to attend training sessions.

PM candidates were recruited from June 2011 through August 2013 from the Continuity of Care Clinic at Children's Medical Center Dallas, which experiences approximately 11,000 visits annually, predominantly by Latino and African American children covered by Medicaid/CHIP. Most PM candidates were screened and identified by one of the authors (ML) who has been in practice in the clinic for 2 decades. One PM was recruited through RCT participant-recruitment activities at a charter school, and 4 others were recruited on the recommendation of established PMs. PMs were recruited over 2 years because of the rigorous screening process and time needed to accrue study families.

The protocol for PM selection began with the screening physician (ML) interviewing each candidate to assess her/his desire to help families with uninsured children. Additional screening criteria included on-time arrival to clinic appointments and having a trusting and long-term relationship with clinic staff (<https://vimeo.com/95286928>). These interviews were followed by a discussion with the program coordinator (CW) about specific tasks and expectations, including questions to probe the candidate's reliability, timeliness, dependability, persistence, and interest in helping others (<https://vimeo.com/95286930>).

TRAINING

PMs participated in a 2-day intensive training session (<https://vimeo.com/95286929>). The sessions began with introductions to the training team and each team member's role. PMs were provided with a training manual in English (98 pages) and Spanish (104 pages, for bilingual PMs), consisting of 10 sections, including 9 that corresponded to the training sections and a 10th on sharing experiences. The 9 training sections were: 1) why health insurance is such an important issue for American children; 2) the Kids' HELP program; 3) being a successful PM; 4) PM responsibilities; 5) Medicaid and CHIP; 6) the application process; 7) next steps after obtaining Medicaid/CHIP coverage; 8) medical homes; 9) and study paperwork.

EVALUATION

All participants completed a brief 8-question survey about demographic characteristics of the PM and her or his children. A 33-item pretest then was administered before the training session to assess PM knowledge and skills regarding Medicaid/CHIP, the application process, medical homes, and the other 6 topics addressed in the session ([Online Appendix 1](#)). The first 15 questions were structured as true/false statements, and the remaining 18 consisted of multiple-choice options. The pretest was designed to evaluate knowledge and skills for all 9 sections of the training session. Tests were scored on a scale of 0 to 100 points.

A 46-item posttest contained the same 33 pretest items (ordered differently) and 13 Likert-scale questions on

training satisfaction ([Online Appendix 2](#)). The latter 13 questions addressed satisfaction with: 1) the training program overall; 2) the relevance of topics with respect to the participant's needs; 3) the materials received and their value in preparation for session participation; 4) skill-based training emphasizing interaction and participation; 5) the participant's ability to apply the knowledge and skills from the session to help parents obtain insurance for their children; 6) learning at least one specific thing that enabled greater effectiveness in helping families of uninsured children; 7) sufficient time to cover session content; 8) relevance of the information to the participant's learning needs; 9) the materials increase efficiency in obtaining health insurance for children; 10) comfort addressing the problems of target families; 11) the knowledge and professionalism of the session instructors; and 12) the session instructors stimulating an interest in the material.

To provide constructive feedback on the session, participants also were asked to answer 4 open-ended questions after completing training: 1) What could be done to improve the training? 2) What did you like best about the training? 3) What did you like least about the training? And 4) Please provide us with any other comments or suggestions.

The Kids' HELP RCT is evaluating the effectiveness of the PM intervention in obtaining insurance coverage for uninsured minority children who are eligible for but not enrolled in Medicaid/CHIP. The control group receives current outreach and enrollment efforts available to all children in Texas. Participants are uninsured Latino and African-American children residing in the 5 Dallas regions with the highest proportions of minority and uninsured children. Recruitment occurs in a wide variety of community settings, including supermarkets, public libraries, food banks, health fairs, and housing projects. Interim analyses of the ongoing RCT used chi-square and *t* tests to examine intergroup differences in insurance rates, time to insurance acquisition, and parental satisfaction.

ANALYSIS

Statistically significant differences between the posttest and pretest scores were identified using the nonparametric Wilcoxon test. A 2-tailed $P < .05$ was considered statistically significant. Proportions of responses were calculated for each Likert-scale response option for the satisfaction questions. Complete responses to open-ended feedback questions were compiled and organized thematically.

RESULTS

Out of a total of 31 PM candidates who were interviewed, 15 were chosen to be PMs, and all 15 participated in the training sessions. All PMs were women, 60% were African-American, and 40% were Latino ([Table 1](#)). Over one third of PMs were single parents, almost two thirds were unemployed, and most had attended at least some college. PMs had a mean of 3 children and a mean annual combined family income of approximately \$21,000.

Table 1. Selected Sociodemographic Characteristics of Parent Mentors (n = 15)

Characteristic	Proportion or Mean
Female	100%
Race/ethnicity	
African-American	60%
Latino	40%
Marital status	
Married	33%
Widowed	27%
Single	40%
Employment status	
Part-time	40%
Unemployed	60%
Educational attainment	
Never completed high school	13%
High-school diploma or GED	7%
At least some college	53%
College graduate	27%
Mean number of children (range)	3 (1–7)
Annual combined family income (range)	\$20,913 (\$2,400–\$75,000)

PERFORMANCE ON TESTS EVALUATING PM KNOWLEDGE AND SKILLS

After training, PMs significantly improved their scores on tests evaluating PM knowledge and skills (Table 2). The mean pretraining score was 62, with a range of from 39 to 82. After training, the mean score improved to 88, with a range of from 67 to 100, and 2 PMs received perfect 100 scores. This change of 26 points in mean test scores represents a statistically significant improvement ($P < .01$). There also was a significant posttraining reduction in the mean number of wrong answers, from 12 to 4. By test section, significantly posttraining improvements were noted in 6 of 9 sections. The greatest magnitudes of increase in section scores were noted for the Medicaid and CHIP (57% increase), importance of health insurance (33%), and Kids' HELP (29%) sections.

RESULTS OF PM SATISFACTION SURVEY

PM reported high levels of satisfaction with all 12 components of the training sessions (Table 3), with the propor-

tions “very satisfied” or “satisfied” ranging from 85% to 100%, including 100% for satisfaction with the overall program. The lowest proportion of very satisfied/satisfied responses (85%) was for comfort addressing the problems of families with whom the PMs work. In contrast, 100% of PMs were very satisfied/satisfied with the remaining 11 training components. The highest proportions of “very satisfied” responses were seen for the overall training program, value of materials received, and skill-based training.

FEEDBACK ON PM TRAINING SESSIONS

Feedback on areas for improvement of the PM training included more attention to copays, and the training materials (Table 4). PMs cited the training effectiveness, the tools and materials, and the small groups as the best features of the training. Regarding what was liked least about the training, one PM suggested more hands-on “show-and-tell,” to get a better feel for what the PMs were going to be doing.

PM EFFECTIVENESS

Although the RCT of the effectiveness of Kids' HELP PMs is still ongoing (completion is anticipated in early 2015), interim published¹ and unpublished data indicate that the PM intervention is significantly more effective in insuring uninsured minority children than traditional Medicaid/CHIP outreach and enrollment. To date, for children who have completed the 12-month outcomes follow-up, health-insurance coverage has been obtained by 94% of the children in the PM intervention group ($n = 99$), compared with only 58% of the control group ($n = 90$) ($P < .01$). The median time to obtain insurance coverage is substantially faster for children in the PM intervention group, at 58 vs 111 days ($P < .01$), respectively. In addition, regardless of whether or not the child has obtained insurance, parents in the PM intervention group were significantly more likely than those in the control group to be very satisfied or satisfied with the process of obtaining insurance, at 84% vs 54% ($P < .01$), and significantly less likely to be very dissatisfied or dissatisfied with the

Table 2. Comparison of Pre- and Posttraining Performance of Parent Mentors on Tests Evaluating Knowledge and Skills Regarding Outreach to and Enrollment of Uninsured Minority Children

Performance Measure	Mean, Number, or Mean % Correct		P
	Pretraining	Posttraining	
Total score (range)*	62 (39, 82)	88 (67, 100)	<.01
Number of wrong answers (range)†	12 (6, 20)	4 (0, 11)	<.01
Mean % correct on Section 1: Why health insurance is such an important issue for American children	48%	81%	<.01
Mean % correct on Section 3: Kids' HELP‡	68%	97%	<.01
Mean % correct on Section 4: Being a successful parent mentor	87%	92%	.25
Mean % correct on Section 5: Parent mentor responsibilities	96%	99%	.36
Mean % correct on Section 6: Medicaid and CHIP	12%	69%	<.01
Mean % correct on Section 7: The application	71%	89%	.01
Mean % correct on Section 8: Next steps	97%	100%	.17
Mean % correct on Section 9: Medical home	87%	95%	.04
Mean % correct on Section 10: Study paperwork	84%	99%	<.01

*Maximum possible score = 100 points.

†Out of a total of 33 questions.

‡Section 2 consisted only of sharing experiences, so there was no test for this training unit.

Table 3. Results of the Parent Mentor Satisfaction Survey

How satisfied are you with...	Proportion of Parent Mentors Choosing Response*		
	Very Satisfied	Satisfied	Neutral
Training program overall?	86%	14%	...
Relevance of topics with respect to your needs?	71%	29%	...
Materials you received and their value in preparing you to participate in the sessions?	86%	14%	...
"Skill-based" training which emphasized interaction and participation?	86%	14%	...
Your ability to apply the knowledge and skills from the session to helping parents and children obtain health insurance?	71%	29%	...
Learning at least one specific thing that enabled you to be more effective in helping the families you work with?	71%	29%	...
There being sufficient time to cover the content during the training sessions?	71%	29%	...
Receiving information that was relevant to your learning needs?	57%	43%	...
Materials increasing your efficiency in getting children health insurance?	57%	43%	...
Your comfort addressing problems of families you are working with?†	71%	14%	14%
Training personnel's knowledge and professionalism?	57%	43%	...
Training personnel stimulating an interest in the material?	57%	43%	...

*The other 2 response options for each question were "dissatisfied" or "very dissatisfied," but no parent mentor chose these responses for any survey item.

†Total does not sum to 100% due to rounding.

process, at 10% vs 19% ($P < .01$). PMs also have been highly successful in engaging the target population, with a total of 485 home visits (mean = 19.8 per family) and 3,196 phone, e-mail, and text-message contacts (mean = 161.4 per family) documented with the intervention-group families enrolled to date.

DISCUSSION

The Kids' HELP PM training program resulted in significant improvements in PM knowledge and skills regarding outreach to and enrollment of uninsured, Medicaid/CHIP-eligible children. The training sessions produced a statistically significant 26-point increase in the mean PM test scores, from a pretraining mean score of 62 to a posttraining mean of 88, equivalent to a 42% increase. In comparison, in the only other published evaluation of a PM training program, training sessions for PMs for minority families with children with asthma resulted in a statistically significant but more modest 12-point increase, from a mean pretest score of 78 to a mean posttest score of 90, equivalent to

a 15% increase.⁵ It is possible that the Kids' HELP training resulted in a higher relative score increase because our research team carefully identified the lessons learned from the asthma PM training, integrated these learning points into the Kids' HELP training manual, and applied these lessons learned to the Kids' HELP training session. In addition, it is possible that PMs in the asthma training session had less room for improvement, as they had a higher mean pretraining score of 78, compared with a mean pretraining score of 62 for the Kids' HELP PMs.

PMs reported high levels of satisfaction with the training sessions, with 100% reporting being very satisfied or satisfied overall and with 10 of the 11 training components. Several aspects of the training might account for these high levels of satisfaction. The PM candidate screening process assiduously emphasized selection of only the most committed, reliable, punctual, dependable, persistent individuals who explicitly articulated an interest in helping others. The physician screening PM candidates carefully assessed candidates' desire to help families with uninsured children, track record for on-time arrival to clinic

Table 4. Responses of Parent Mentors to Open-Ended Questions on Training Sessions

Question	Response
What could be done to improve the training?	<ul style="list-style-type: none"> •+More on the copay for medical clients with a primary insurance •+The training was really great, and all in all, I felt and still feel good with what I learned. •+Nothing •+Training materials •+Training is great the way it is
What did you like best about the training?	<ul style="list-style-type: none"> •+Effectiveness •+What we were given, all the tools that were going to be needed, material wise and knowledge wise •+enjoyed all! •+Everything •+The small groups
What did you like least about the training?	<ul style="list-style-type: none"> •+Maybe we could have had show-and-tell a few more times, to get the feel of what we're going to do
Please provide us with any other comments or suggestions.	<ul style="list-style-type: none"> •+I'm joining ya in June

appointments, and having a trusting and long-term relationship with clinic staff. PM candidates closely matched the background and shared experiences of the target study families, including minority race/ethnicity, already having children covered by Medicaid/CHIP, residence in the same underserved regions, and low mean family income. Almost two-thirds of the PMs were unemployed, so an added benefit was part-time employment through the Kids' HELP Program, as those completing the training were then paid a monthly stipend for each family whom they assisted as a PM. The training sessions emphasized interactive, small-group formats. PM feedback was integrated after each session, so that there was an ongoing quality-improvement process. An emphasis was placed on instruction that was stimulating and enjoyable, including role-playing exercises. Our team also leveraged key past experiences in educating asthma PMs⁵ to maximize success in the Kids' HELP training sessions.

In addition to improving knowledge and skills and achieving high levels of PM satisfaction, it is critical that the Kids' HELP PM training sessions produce PMs who are effective in insuring uninsured children. Although the Kids' HELP RCT is not yet complete, both published¹ and unpublished interim analyses document that the PMs trained in this study are significantly more effective than traditional Medicaid/CHIP outreach and enrollment in insuring uninsured minority children, and insuring them faster and with higher parental satisfaction. A forthcoming article will detail the final Kids' HELP RCT results, including rates of insurance coverage, time to coverage, parental satisfaction, health status, access to health care, unmet health-care needs, use of health services, parental satisfaction, financial burden, missed work/school days, and costs.

LIMITATIONS

Certain study limitations should be noted. PMs were recruited from the greater Dallas area, so findings may not necessarily generalize to PM trainees residing in other regions or in rural or suburban areas. PMs unexpectedly were found to have a relatively high educational attainment; the reasons for this finding are unclear, but it might possibly reflect a greater willingness among those with a more extensive formal education to undergo the didactic sessions and training required to become a PM. Given the PMs' 100% overall satisfaction rate with the PM training, it is possible that the high unemployment rate among PM candidates, coupled with the subsequent employment of PMs who completed the training, may have biased the satisfaction responses. Although pre-post improvements in scores on the knowledge and skills test were statistically significant, the final sample size of 15 participants is relatively small, and additional evaluation of the training with a larger sample would be useful.

IMPLICATIONS

Trained PMs have the potential to be a powerful tool for outreach to and enrollment of uninsured children who are eligible for but not enrolled in Medicaid and CHIP. PMs

are a highly patient-centered intervention, given that PMs already have successfully obtained Medicaid and CHIP for their own children, and therefore have a deep appreciation and understanding of the process, which can be leveraged with target families of uninsured children. Nine percent of US children—equivalent to 6.6 million—are uninsured,⁸ and 65% of uninsured US children are eligible for but not enrolled in Medicaid or CHIP.⁹ Kids' HELP training sessions therefore have the capacity to supply knowledgeable and skilled PMs who can provide trained outreach to the 4.3 million uninsured American children who are eligible for but not enrolled in Medicaid or CHIP.

This PM training program might also be a useful model for training knowledgeable and skilled Affordable Care Act (ACA) navigators. Section 1311(i) of the ACA requires the state insurance exchanges to establish a navigator program; under the law, these navigators have 5 duties, which are to 1) conduct public education about the availability of qualified health plans; 2) distribute fair, impartial information regarding enrollment in qualified health plans and availability of premium tax credits and cost-sharing assistance in the exchange; 3) facilitate enrollment in qualified plans; 4) refer people who need help resolving a problem with their health plan or with their premium assistance to a consumer assistance or ombudsman program or to another appropriate agency that can help with a grievance or appeal; and 5) provide information in a culturally and linguistically appropriate manner to populations served by an exchange.¹⁰ Because PMs completing Kids' HELP training obtain considerable knowledge and skills in each of these 5 domains, the Kids' HELP training sessions may prove to be a useful model for training effective ACA navigators.

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SUPPLEMENTARY DATA

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.acap.2014.09.011>.

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Parent Mentors and Insuring Uninsured Children: A Randomized Controlled Trial

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abstract

BACKGROUND: Six million US children are uninsured, despite two-thirds being eligible for Medicaid/Children's Health Insurance Program (CHIP), and minority children are at especially high risk. The most effective way to insure uninsured children, however, is unclear.

METHODS: We conducted a randomized trial of the effects of parent mentors (PMs) on insuring uninsured minority children. PMs were experienced parents with ≥ 1 Medicaid/CHIP-covered child who received 2 days of training, then assisted families for 1 year with insurance applications, retaining coverage, medical homes, and social needs; controls received traditional Medicaid/CHIP outreach. The primary outcome was obtaining insurance 1 year post-enrollment.

RESULTS: We enrolled 237 participants (114 controls; 123 in PM group). PMs were more effective ($P < .05$ for all comparisons) than traditional methods in insuring children (95% vs 68%), and achieving faster coverage (median = 62 vs 140 days), high parental satisfaction (84% vs 62%), and coverage renewal (85% vs 60%). PM children were less likely to have no primary care provider (15% vs 39%), problems getting specialty care (11% vs 46%), unmet preventive (4% vs 22%) or dental (18% vs 31%) care needs, dissatisfaction with doctors (6% vs 16%), and needed additional income for medical expenses (6% vs 13%). Two years post-PM cessation, more PM children were insured (100% vs 76%). PMs cost \$53.05 per child per month, but saved \$6045.22 per child insured per year.

CONCLUSIONS: PMs are more effective than traditional Medicaid/CHIP methods in insuring uninsured minority children, improving health care access, and achieving parental satisfaction, but are inexpensive and highly cost-effective. □



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Dr Flores conceptualized and designed the study; designed the data-collection instruments; drafted the initial manuscript; provided administrative, technical, and material support; provided study supervision; and reviewed and revised the manuscript. Drs Lin, Walker, and Currie conceptualized and designed the study, designed the data-collection instruments, drafted the initial manuscript, and reviewed and revised the manuscript. Drs Lee and Allgeyer, Misters Fierro, Portillo, and Massey, and Ms Henry participated in the acquisition, analysis, and interpretation

WHAT'S KNOWN ON THIS SUBJECT: Six million US children are uninsured, despite two-thirds being Medicaid/CHIP eligible; minority children are at high risk. Few trials have evaluated interventions to insure uninsured children, and none has assessed the effectiveness of parent mentors in insuring uninsured minority children.

WHAT THIS STUDY ADDS: Parent mentors are more effective and faster than traditional methods in insuring uninsured minority children, renewing coverage, improving health care and dental access, reducing unmet needs, and achieving parental satisfaction, but are inexpensive and highly cost-effective, saving \$6045 per child.

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Over 5.9 million American children (8%) lack health insurance.¹ Among uninsured US children, 62% to 72% (3.7–4.3 million) are eligible for but not enrolled in Medicaid or the Children's Health Insurance Program (CHIP).^{2–5} For uninsured, low-income children (with family incomes <200% of federal poverty threshold), 84% are eligible for but not enrolled in Medicaid/CHIP.⁶

Racial/ethnic disparities exist in insurance coverage for US children. Compared with an uninsured rate of 5% for white children, 12% of Latino, 8% of African-American, and 8% of Asian/Pacific Islander children are uninsured.¹ Latino and African-American children comprise 57% of uninsured children, although constituting only 42% of US children.⁷

Although millions of US children continue to be uninsured, not enough is known about the most effective interventions for insuring uninsured children. Parent mentors (PMs) are a special category of community health workers for children in which parents who have children with particular health conditions/risks leverage their relevant experience, along with additional training, to assist, counsel, and support other parents of children with the same health conditions/risks. Although PMs have been found to be effective in improving outcomes for minority asthmatic children,⁸ they have not been evaluated as an intervention to insure uninsured children. We therefore conducted a randomized controlled trial (RCT) of the effects of PMs on insuring uninsured minority children.

METHODS

Trial Design

The Kids' Health Insurance by Educating Lots of Parents (Kids' HELP) RCT was conducted from June 2011 to April 2015 in Dallas

County, TX, communities with high proportions of uninsured minority and low-income children. The study design/rationale are described in detail elsewhere.⁹

Informed written consent was obtained in English or Spanish from primary caregivers by using protocols approved by the UT Southwestern Institutional Review Board.

Recruitment

Eligibility criteria included the primary caregiver had ≥ 1 child 0 to 18 years old who lacked health insurance but was Medicaid/CHIP eligible (only 1 child/family was enrolled, to avoid clustering in analyses), and the primary caregiver self-identified the child as Latino/Hispanic or African-American. Using information from caregivers, researchers verified children's Medicaid/CHIP eligibility, based on Texas criteria.¹⁰

Participants were recruited from Dallas communities with the highest proportions of low-income, minority families with uninsured children.¹¹ Bilingual researchers recruited participants at 97 community sites, including supermarkets, department stores, Goodwill stores, restaurants, libraries, community centers, food banks, health fairs, YMCAs, churches, schools, community clinics, day-care establishments, laundromats, apartment complexes, homeless shelters, and Special Supplemental Nutrition Program for Women, Infants, and Children centers. Participants received honoraria of \$50 at enrollment, \$5 for monthly follow-ups, and \$10 for 6- and 12-month surveys.

Intervention

PMs were parents with ≥ 1 child covered by Medicaid/CHIP for ≥ 1 year. PMs were recruited from June 2011 to August 2013 at a hospital-based Resident Continuity Clinic, charter school, and via established

PM referrals (see <https://vimeo.com/95286928>). Interviews were conducted to identify optimal candidates, characterized by reliability, timeliness, persistence, and desire to help families with uninsured children. From 31 candidates interviewed, 15 PMs were chosen. PMs received monthly stipends for each family mentored. PMs and intervention participants were matched by race/ethnicity and zip code (whenever possible). Latino families were matched with fluently bilingual Latino PMs.

PMs participated in 2-day training sessions (see: <https://vimeo.com/95286929>). Session content was based on training provided to community case managers in the research team's previous successful RCT,¹² and addressed 9 topics: Why health insurance is so important for US children; the Kids' HELP trial; being a successful PM; PM responsibilities; Medicaid and CHIP programs; Medicaid/CHIP application process; next steps after obtaining Medicaid/CHIP; importance of medical homes and taking an active role in pediatric care; and study paperwork. Training session content was detailed in the PM's manual (available in English and Spanish), which PMs carried in the field. Post-training, overall test scores (0–100 scale) significantly increased, from a mean = 62 (range: 39–82) to 88 (67–100; $P < .01$), and wrong answers decreased (mean reduction = 8; $P < .01$). Significant improvements occurred in 6 of 9 topics, and 100% of PMs reported being very satisfied (86%) or satisfied (14%) with the training. Full details on the manual and training session outcomes are available elsewhere.¹³

PMs performed the following functions for intervention-group children and families: (1) education about insurance programs and application processes; (2) education/assistance regarding Medicaid/

CHIP eligibility; (3) completing insurance applications together with caregivers and submission assistance; (4) expediting coverage decisions by early, frequent contact with Medicaid/CHIP representatives; (5) advocating for families by liaising between families and Medicaid/CHIP programs; (6) contacting Medicaid/CHIP representatives to remedy situations in which children incorrectly were deemed ineligible or had insurance inappropriately discontinued; (7) assistance with renewal application completion/submission; and (8) teaching caregivers how to renew Medicaid/CHIP or reapply after losing coverage. PMs followed up to 10 families at a time. Data document high levels of PM engagement with families, with means of 19.8 home visits and 161.4 phone/e-mail/text-message contacts/family. Complete details on PM functions are available elsewhere.^{9,13}

Control Group

Controls received no intervention, given access to standard-of-care outreach/enrollment by Texas Medicaid/CHIP. The Texas Health and Human Services Commission (HHSC), which oversees Texas Medicaid/CHIP, launched a 2006–2007 outreach/education campaign to raise families' CHIP/Medicaid awareness and "...emphasize the importance of health insurance and regular preventive care, explain how to apply for coverage and encourage families to complete the renewal process on time to avoid gaps in coverage for their children."¹⁴ This campaign included bilingual radio, television, and newspaper advertisements; bus and bus-bench messages; Web sites with application links and order forms/materials for community-based organizations; and daycare-center outreach.¹⁴

Randomization

Computer-generated randomization was performed to allocate eligible

participants in a 1:1 ratio to the intervention or control group. Randomization was performed by using permuted blocks stratified by child race/ethnicity.

Outcomes

The primary outcome was the child obtaining health insurance. Parents initially reported when children obtained coverage, with verification by parents providing copies or photos of insurance cards or HHSC letters documenting coverage and the effective date. HHSC provided second verifications for all participants. Other insurance-related outcomes included the number of days from study enrollment to obtaining insurance, sporadic coverage (obtained but then lost insurance), insurance renewal, insurance coverage 1 and 2 years post-intervention cessation, and parental satisfaction with the process of obtaining coverage.

Secondary outcomes were evaluated for all children (whether or not they obtained insurance) by using validated questions derived from national, state, and regional surveys and previously published work,^{12,15–27} and included health status, health-related quality of life, health care access, unmet medical and dental needs, use of health services, out-of-pocket costs, parental ratings of quality of the child's health care, parental satisfaction with care, family financial burden, and missed school and work days because of the child's illness. Outcomes and survey items are described in detail elsewhere.⁹

Data Collection

Outcomes were monitored by a researcher blinded to group allocation. The primary outcome and other insurance-related outcomes were assessed monthly; other outcomes were evaluated 6 and 12 months post-enrollment, except parental satisfaction with the coverage process, which was

assessed 12 months post-enrollment. For participants agreeing to long-term follow-up after completing the 12-month follow-up, we administered questionnaires every 3 months for up to 2 years.

Analysis

The sample size was calculated by using a power of 80% to detect an intergroup difference of 20 percentage points in children's insurance rates, at an $\alpha = 0.05$. Accounting for up to 40% attrition, at least 216 participants (108 in each group) needed to be enrolled. Intention-to-treat intergroup comparisons were performed by using the Wilcoxon test, Pearson's χ^2 test, analysis of variance, stepwise multivariable logistic regression with generalized estimating equations, and an adjusted cumulative incidence curve; all tests were 2-sided. The trial's clinicaltrials.gov identifier is NCT01264718.

Cost-Effectiveness Analysis

The cost-effectiveness analysis (CEA) used methodological principles detailed by the US Public Health Services Panel on Cost-Effectiveness in Health and Medicine.^{28,29} Cost items monitored and evaluated included direct health care costs, health insurance enrollment fees, intervention costs, and indirect costs.

Direct health care costs were calculated by using monthly parental reports (given access to medical records from multiple facilities was not feasible) of out-of-pocket costs and health services use in the past month, consistent with validated methods used in a recent CEA.³⁰ Costs of health services (including emergency department [ED] visits, hospitalizations, and ICU stays) were derived from mean Texas Medicaid/CHIP reimbursements for specific services in the year of receipt.

Insurance enrollment fees were assessed by collecting information

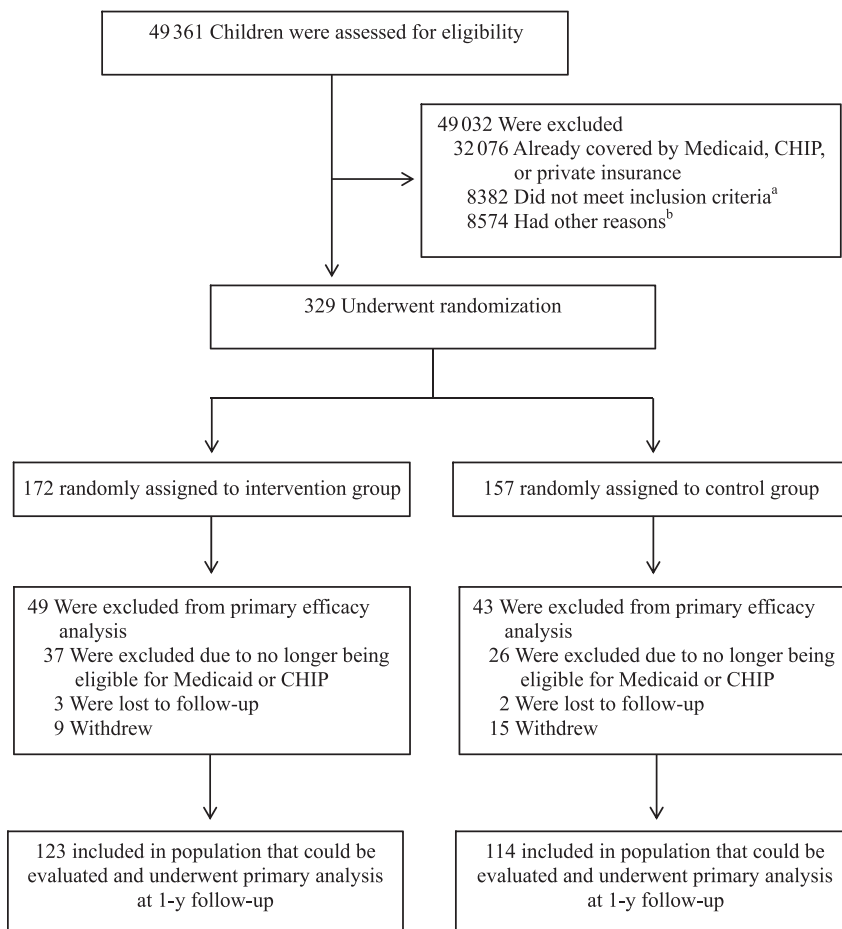


FIGURE 1

Enrollment, randomization, and follow-up. ^aIncluding had no child, child > 18 years old, did not reside in target community, and family income above qualifying threshold for Medicaid/CHIP. ^bIncluding not interested, took information without further follow-up, legal custody issues, and language barrier.

about coverage obtained and any associated enrollment fee.

Intervention costs were calculated by summing all intervention program costs, including PM payments, supplies, honoraria, and travel. PMs maintained detailed activity and time logs, permitting assessment of both total time spent per family and per activity.

Indirect costs included missed parental work days and parental time costs while seeking health insurance. Parents reported time spent seeking insurance information, completing paperwork, and calling/visiting state offices or private insurers. Time costs were converted to dollars by using wage rates. For employed parents,

actual self-reported wage rates were used.

The incremental cost-effectiveness ratio (ICER) was calculated by using standard methods^{28,29}; the difference in total costs between the intervention group and controls was divided by the intergroup difference in the proportion of insured children.

RESULTS

Participants

A total of 329 participants were randomly assigned to the PM intervention ($N = 172$) or control group ($N = 157$; Fig 1). After exclusions for subsequent Medicaid/CHIP ineligibility, losses to follow-up,

and withdrawals, 123 PM-group participants and 114 controls comprised the final evaluable populations. These groups had similar characteristics (Table 1), except gender, for which adjustments were made in multivariable analyses. The median child age was 7 years old; approximately two-thirds of participants were Latino and one-third were African-American. The median annual family income was approximately \$21 000, and children had been uninsured for a median of 7 months.

Primary Outcome

At 1-year follow-up, the PM group was more likely than controls to obtain health insurance, at 95% vs 68% ($P < .001$; Table 2). After adjustment, the PM group had 1.30 times the relative risk (95% confidence interval [CI]: 1.21–1.32) and 2.93 times the odds (95% CI: 2.14–4.00) of controls of obtaining insurance. An adjusted incidence curve revealed a marked intergroup difference in coverage emerging by the 100th day of follow-up and sustained over the 1-year follow-up period (Fig 2).

Secondary Outcomes

The PM group obtained insurance quicker (median = 62 vs 140 days; $P < .001$) than controls, and was more likely to renew coverage (Table 2) and be insured both 1 year and 2 years after intervention cessation. PM group caregivers were more likely to be very satisfied with the process of trying to obtain children's insurance, and less likely to be dissatisfied or very dissatisfied. The PM group was less likely to have no primary care provider (PCP), no usual source of preventive care, different sources of sick and preventive care, to never/sometimes get immediate care from the PCP, and to have problems getting specialist care. PM children were less likely to delay/not obtain needed health care, and to not

TABLE 1 Baseline Characteristics of Participants

Characteristic ^a	Control Group (N = 114)	PM Group (N = 123)
Selected sociodemographic characteristics		
Median child age (IQR), y	7 (4–12)	7 (3–10)
Female child gender, n (%) ^b	47 (41)	72 (58)
Child race/ethnicity, n (%) ^c		
Latino	75 (66)	80 (65)
African-American	39 (34)	43 (35)
Mean caregiver age, y	37.5 ± 10.9	35.7 ± 9.4
Female caregiver gender, n (%)	110 (96)	117 (95)
Primary caregiver's relationship to child, n (%)		
Biological mother	101 (89)	114 (93)
Biological father	3 (3)	5 (4)
Other	10 (9)	4 (3)
Caregiver not high-school graduate	36 (32)	49 (40)
Caregiver unemployed	82 (72)	97 (79)
Primary caregiver born in US	51 (45)	63 (51)
Primary caregiver US citizen	59 (52)	64 (52)
Median annual combined family income (IQR)	\$21 300 (\$13 100–\$29 000)	\$20 800 (\$14 000–\$30 000)
Median months child uninsured (IQR)	8 (3–24)	6 (4–12)
Health status and health-related quality of life		
Child's health status not excellent or very good, n (%) ^c	50 (44)	43 (35)
PedsQL total score	89.7 ± 11.6	88.3 ± 14.6
Access to care and unmet needs, n (%)		
Child has no PCP	75 (66)	75 (61)
Child has no usual source of preventive care	52 (46)	43 (35)
Child has no usual source of sick care	20 (18)	21 (17)
Different source of sick care and preventive care	65 (57)	62 (50)
Never/sometimes gets immediate care from PCP	13 (27)	9 (16)
Has problems getting care from specialists ^d	12 (46)	7 (41)
Delayed or did not get needed health care in past year	85 (75)	85 (69)
Did not receive all needed preventive care in past year	44 (54)	44 (50)
Did not receive all needed acute care in past year	43 (81)	62 (82)
Did not receive all needed dental care in past year	57 (63)	60 (59)
Did not receive all needed prescription medications in past year	15 (24)	9 (13)
Use of health services and out-of-pocket costs ^e		
Doctor visits in past year	3.2 ± 0.4	3.0 ± 0.2
Out-of-pocket cost per doctor visit	\$161.31 ± 71.3	\$121.90 ± 27.7
Preventive-care visits in past year	1.0 ± 0.1	0.9 ± 0.1
Out-of-pocket cost per preventive-care visit	\$64.32 ± 26.8	\$29.11 ± 7.8
Sick visits in past year	1.7 ± 0.3	1.6 ± 0.2
Out-of-pocket cost per sick visit	\$201.39 ± 99.7	\$188.84 ± 61.2
ED visits in past year	1.0 ± 0.3	0.7 ± 0.1
Out-of-pocket cost per ED visit	\$351.19 ± 194.4	\$499.58 ± 163.3
Hospitalizations in past year	0.2 ± 0.1	0.1 ± 0.1
Out-of-pocket cost per hospitalization	\$1500 ± 1250	\$633 ± 535.20
Quality of care ^f		
Quality rating of child's well-child care	8.2 ± 2.1	8.5 ± 1.9
Quality rating of child's PCP	8.7 ± 2.2	9.1 ± 1.6
Quality rating of child's acute care	8.7 ± 2.2	8.6 ± 2.0
Quality rating of child's specialty care	8.6 ± 0.5	7.7 ± 4.0
Parental satisfaction with care, n (%)		
Doctor never/sometimes takes time to understand child's specific needs	25 (22)	27 (22)
Doctor never/sometimes respects you are expert on your child	17 (15)	20 (16)
Doctor never/sometimes understands how you prefer to raise child	34 (30)	34 (28)
Doctor did not spend enough time with child	17 (15)	19 (16)
Did not ask all questions I wanted to ask	16 (17)	14 (14)
Would not recommend child's health care provider to friends	32 (28)	23 (19)
Family financial burden and missed school and work days due to child's illness, n (%)		
Need additional income to cover child's medical expenses	51 (45)	51 (42)
Child's health caused financial problems for family	40 (35)	44 (36)
Family cut down on work hours to obtain health care for child	26 (23)	25 (21)
Median no. of missed school days in past year (IQR)	2 (1–5)	2 (1–5)
Median no. of missed work days in past year due to child's illness (IQR)	0 (0–1)	0 (0–2)

TABLE 1 Continued

Characteristic ^a	Control Group (N = 114)	PM Group (N = 123)
Median caregiver wage loss due to missed work days to care for sick child (IQR)	\$155 (\$75–\$276)	\$208 (\$100–\$324)
Median other costs related to taking care of sick child (IQR)	\$70 (\$20–\$200)	\$45 (\$25–\$87.50)

IQR, interquartile range; PedsQL, Pediatric Quality of Life Inventory Version 4.0 Generic Core Scales.

baseline characteristics, except where noted.

^a Plus-minus values are means \pm SD, except where noted. There were no significant intergroup differences in

^b $P = .02$.

^c By caregiver report.

^d Among those who reported that their child needed specialty care.

^e Plus-minus values are means \pm SE.

^f By caregiver report, using a scale of 0 to 10, in which 0 = worst possible rating and 10 = best possible rating.

receive needed preventive, acute, or dental care.

The mean number of preventive care visits was higher for PM than control children (Table 2). Mean out-of-pocket costs were lower for PM children for doctor visits and sick visits. PM-group parents rated the quality of their children's well-child care higher, and were less likely to report dissatisfaction with their child's health care for several measures: the doctor never/only sometimes takes time to understand the child's specific needs, respects you are the expert on your child, and understands how you prefer to raise your child, and the parent would not recommend the child's health care provider to friends.

Costs/CEA

The mean monthly cost (\pm SD) per participant of the PM intervention was \$53.05 \pm 10.41. The most expensive item was PM stipends (\$33.20 [\pm 3.50]), followed by program personnel (\$15.60 [\pm 9.10], to identify/recruit uninsured children), PM travel (\$2.13 [\pm 1.42]), supplies (\$1.07 [\pm 0.35]), PM training sessions (\$0.70 [\pm 0.20]), and PM-program personnel meetings (\$0.35 [\pm 0.02]).

Controls had higher total costs than the PM group for ED visits, hospitalizations, ICU stays, and wage loss/other costs of caring for sick children (Table 3). Most subjects (98% in each group) experienced at least 1 of these events, but no specific event/condition accounted for

intergroup cost differences. Overall costs were \$454 647 for controls and \$291 426 for PM-group children. ICERs revealed the PM intervention saved \$6045.22 per child insured per year and \$4185.15 for each percent increase in children obtaining insurance per year (Table 3).

DISCUSSION

In the Kids' HELP trial, the PM intervention was more effective than traditional outreach/enrollment in insuring uninsured minority children, resulting in 95% of children obtaining insurance, versus 68% of controls. The PM intervention also insured children faster, and was more effective in renewing coverage, improving access to medical and dental care, reducing out-of-pocket costs, achieving parental satisfaction and quality of care, and sustaining insurance after intervention cessation. This is the first RCT, to our knowledge, to evaluate the effectiveness of PMs in insuring uninsured children. Two systematic reviews^{31,32} revealed only one previous RCT (by our team) of an intervention to insure uninsured children, which revealed that community-based case managers were more effective than traditional outreach/enrollment in insuring uninsured Latino children. This RCT, in contrast to Kids' HELP, used case managers, focused only on Latinos, and did not examine health, health care outcomes, or cost-effectiveness.¹²

PMs were relatively inexpensive, at \$53.05 per child per month, and saved \$6045.22 per year per child insured. The relatively low mean monthly costs of approximately \$33 for PM stipends and \$16 for personnel to screen, identify, and assign uninsured children to PMs indicate that the costs of implementing Kids' HELP on a larger scale would be reasonable. The relatively low overall cost of \$53 per month for Kids' HELP may also be attractive to hospitals and health systems, given that the higher rate of insuring previously uninsured children in Kids' HELP has the potential to translate into Medicaid/CHIP revenue for ED visits and hospitalizations, rather than write-offs of charity-care losses.

One could hypothesize that cost savings might have accrued for Kids' HELP children via greater access to early, timely outpatient care and medical homes, thereby potentially reducing the number, duration, and severity of preventable illnesses and concomitant sick visits, ED visits, and hospitalizations, but further research would be needed to confirm this. Although the cost findings are suggestive, given that additional research is needed on the effectiveness of the intervention in other settings and populations, the study results would seem to indicate that implementing PM interventions in health plans, state Medicaid and CHIP programs, or nationally might potentially result in considerable cost savings. For example, hypothesizing PM interventions might have a

TABLE 2 Study Outcomes at 1-Year Follow-Up and for Long-Term Insurance Coverage

Outcome ^a	Control Group (n = 114)	PM Group (n = 123)	P
Primary outcome: child obtained health insurance, n (%)	78 (68)	117 (95)	<.001
Adjusted relative risk (95% CI) ^b	Referent	1.30 (1.21–1.32)	<.001
Adjusted odds ratio (95% CI) ^b	Referent	2.93 (2.14–4.00)	<.001
Median number of days to obtaining insurance (IQR)	140 (61–236)	62 (33–112)	<.001
Sporadic insurance coverage, n (%) ^c	39 (34)	32 (26)	.21
Renewed insurance, n (%) ^d	42 (60)	80 (85)	<.001
Health-insurance coverage 1 y after cessation of PM intervention, n (%) ^e	62 (76)	73 (95)	<.001
Health-insurance coverage 2 y after cessation of PM intervention, n (%) ^f	32 (76)	39 (100)	<.001
Parental satisfaction with process of trying to obtain health insurance for child, n (%)			<.001
Very satisfied	28 (25)	69 (57)	
Satisfied	45 (40)	33 (27)	
Uncertain	17 (15)	12 (10)	
Dissatisfied	10 (9)	5 (4)	
Very dissatisfied	13 (12)	2 (2)	
Health status and health-related quality of life			
Health status not excellent/very good, n (%) ^g	41 (36)	31 (25)	.07
PedsQL total score	94.3 ± 9.3	94.0 ± 9.7	.84
Access to health care, n (%)			
Child has no PCP	45 (40)	19 (16)	<.001
Child has no usual source of preventive care	8 (7)	1 (1)	.013
Child has no usual source of sick care	8 (7)	3 (2)	.09
Different source of sick care and preventive care	31 (27)	19 (16)	.03
Never/sometimes gets immediate care from PCP	5 (19)	0 (0)	.03
Has problems getting care from specialists ^h	6 (46)	2 (11)	.03
Delayed or did not get needed health care in past year	29 (25)	16 (13)	.02
Did not receive all needed preventive care in past year	16 (22)	4 (4)	<.001
Did not receive all needed acute care in past year	5 (20)	1 (3)	.04
Did not receive all needed dental care in past year	27 (31)	18 (18)	.03
Did not receive all needed prescription medications in past year	2 (4)	1 (2)	.42
Use of health services and out-of-pocket costs ⁱ			
Doctor visits in past year	2.6 ± 0.3	2.9 ± 0.3	.24
Out-of-pocket cost per doctor visit	\$37.24 ± 7.5	\$32.87 ± 24.0	<.001
Preventive-care visits in past year	0.9 ± 0.1	1.3 ± 0.1	.01
Out-of-pocket cost per preventive-care visit	\$27.49 ± 9.0	\$4.63 ± 1.5	.09
Sick visits in past year	1.6 ± 0.3	1.4 ± 0.2	.64
Out-of-pocket cost per sick visit	\$42.74 ± 9.4	\$9.38 ± 3.1	<.001
ED visits in past year	0.34 ± 0.1	0.33 ± 0.1	.59
Out-of-pocket cost per ED visit	\$94.04 ± 92.5	\$80.74 ± 33.0	.22
Hospitalizations in past year	0.03 ± 0.02	0.02 ± 0.03	.35
Out-of-pocket cost per hospitalization	\$25.00 ± 22.5	\$0 ± 0	.25
Quality of care ^j			
Quality rating of child's well-child care	8.6 ± 1.5	8.9 ± 1.4	.03
Quality rating of child's PCP	9.0 ± 1.7	9.2 ± 1.3	.55
Quality rating of child's acute care	8.8 ± 1.6	9.2 ± 1.2	.07
Quality rating of child's specialty care	8.1 ± 2.5	8.8 ± 1.7	.22
Parental satisfaction with care, n (%)			
Doctor never/sometimes takes time to understand child's specific needs	27 (24)	15 (12)	.02
Doctor never/sometimes respects you are expert on your child	26 (23)	13 (11)	.01
Doctor never/sometimes understands how you prefer to raise child	42 (37)	31 (25)	.04
Doctor did not spend enough time with child	12 (11)	11 (9)	.68
Did not ask all questions I wanted to ask	9 (8)	6 (5)	.34
Would not recommend child's health care provider to friends	18 (16)	7 (6)	.01
Family financial burden and missed school and work days due to child's illness, n (%)			
Need additional income to cover child's medical expenses	15 (13)	7 (6)	.04
Child's health caused financial problems for family	16 (14)	9 (7)	.09
Family cut down on work hours to obtain health care for child	9 (8)	6 (5)	.34
Median caregiver wage loss due to missed work days to care for sick child (IQR)	\$200 (\$135–300)	\$240 (\$125–408)	.18
Median other costs related to taking care of sick child (IQR)	\$324 (\$30–600)	\$150 (\$80–1344)	.58
Median number of missed school days in past year (IQR)	2.0 (0–3)	2.0 (0–4)	.83
Median number of missed work days in past year due to child's illness (IQR)	0 (0–0)	0 (0–0)	.65

IQR, interquartile range; PedsQL, Pediatric Quality of Life Inventory Version 4.0 Generic Core Scales.

combined income below the federal poverty threshold.

CHIP in Texas require annual renewal).

TABLE 2 Continued

control group and 77 in the PM group could be evaluated and were assessed for health-insurance coverage. the control group and 39 in the PM group could be evaluated and were assessed for health-insurance coverage.

^a Plus-minus values are means \pm SD, except where indicated.

^b Adjusted for child gender and age, citizenship and employment status of primary caregiver, and an annual

^c Child was insured but then lost health insurance at some point during the 1-y follow-up interval.

^d Among children covered by Medicaid who were required to renew coverage after 6 mo (children covered by

^e At the 2-y follow-up assessment, 1 y after cessation of the PM intervention, when a total of 82 children in the

^f At the 3-y follow-up assessment, 2 y after cessation of the PM intervention, when a total of 42 children in

^g By caregiver report.

^h Among those who reported that their child needed specialty care.

ⁱ Plus-minus values are means \pm SE.

^j By caregiver report, using a scale of 0 to 10, in which 0 = worst possible rating and 10 = best possible rating.

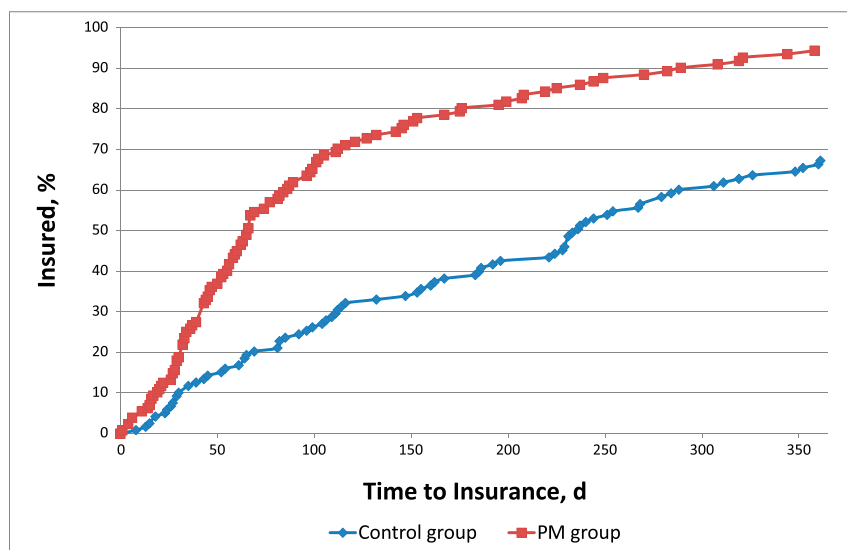


FIGURE 2

Adjusted incidence curve of insurance coverage for study participants. Covariates adjusted for include child's age and gender; parental citizenship and employment, and family income.

TABLE 3 Analysis of Costs and Cost Effectiveness of PM Intervention

Item ^a	Control Group	PM Group
PM stipends—total cost	—	\$53 838
PM travel and supplies—total cost	—	\$5195
PM training sessions and meetings—total cost	—	\$1411.61
Program coordinator salary—total cost	—	\$25 350
ED visits ^a —total cost	\$62 730	\$60 885
Hospitalizations ^b —total cost	\$81 234	\$58 431
ICU stays ^c —total cost	\$277 094	\$74 742
Wage loss and other costs related to taking care of sick child ^d —total cost	\$33 589	\$12 985
Total for all costs	\$454 647	\$291 426
ICER per child insured ^e	—	−\$6045.22
ICER per each percent increase in children insured ^e	—	−\$4185.15

Intervention parents (98.4%) experienced a total of 75 missed work days due to their child's illness. —, N/A.

^a N = 39 ED visits for controls and 40 for the intervention group.

^b N = 2 hospitalizations for controls and 2 for the intervention group.

^c N = 4 ICU stays for controls and 1 for the intervention group.

^d N = 112 control parents (98.2%) experienced a total of 83.5 missed work days due to their child's illness; N = 121

^e A negative value represents cost savings per year.

but not enrolled in Medicaid/CHIP^{2-5]} $\times 0.57$ [proportion of uninsured Latino or African-American children^{7]} $\times \$6045.22$ [savings per child insured by Kids' HELP] $\times 0.95$ [proportion of PM group children obtaining insurance]). Conditionally assuming that PMs could also potentially be effective for uninsured children of all races/ethnicities, similar calculations suggest that national implementation of PM interventions to insure all Medicaid/CHIP-eligible uninsured children might possibly save \$21.2 to \$24.7 billion.

PMs were more effective in improving access to primary, dental, and specialty care; reducing unmet needs; achieving parental satisfaction with care; and sustaining long-term coverage. We hypothesize that these benefits resulted from PM training specifically emphasizing educating parents on the importance of medical homes, how to obtain children's dental and specialty care, taking an active role in pediatric care, and how to maintain and renew Medicaid/CHIP.

PMs resulted in lower out-of-pocket costs for doctor and sick visits, higher well-child care quality ratings, and higher levels of parental satisfaction and respect from children's physicians. We hypothesize these benefits accrued from a combination of PM children being more likely to have medical homes (evidenced by their greater likelihood of having a PCP, usual source of preventive care, and same

similar efficacy when implemented on a larger scale and in other regions, national implementation of Kids'

HELP could possibly save \$12.1 to \$14.1 billion (3 700 000–4 300 000 [uninsured US children eligible for

source of sick and preventive care) and the ability to get immediate care from the PCP, along with PM training emphasizing educating parents on the importance of medical homes and taking an active role in pediatric care. Higher out-of-pocket costs for control parents may also have occurred because their children were less likely to be insured, thereby requiring parents to pay larger out-of-pocket shares for doctor and sick visits for their uninsured children.

Certain study limitations should be noted. This trial was conducted in urban populations of Latinos and African-Americans in Texas, so findings may not necessarily generalize to non-urban populations or other regions or racial/ethnic groups. Parental-reported service use was not verified via health records, although research documents high correlations between parental reports and health records.³⁰ Some cost differences were driven by high costs of ICU care, and only 4 controls and 1 PM group child had ICU admissions, so caution in interpretation is warranted. The study protocol may have resulted in control children attaining higher rates of insurance coverage than in the general population in non-research settings, as monthly contacts by research staff to assess outcomes may have regularly prompted parents to seek insurance for their children.

The results suggest several potential implications for policy and practice. First, the largely passive mechanisms of traditional Medicaid/CHIP outreach and enrollment (such as media and public transportation advertisements and posting toll-free telephone numbers) appear to be less effective than a PM intervention that is interactive, provides social support, connects parents of uninsured children with other parents who successfully insured their own children and come from the same neighborhoods and similar racial/ethnic backgrounds, and includes PM training on providing assistance with obtaining pediatric care and addressing social determinants of health. Second, evidence suggests that PMs result in multiple benefits, including insuring more uninsured children, reducing families' out-of-pocket costs of care, employing parents seeking work, increasing earnings in low-income minority communities, and saving money. Third, PMs and analogous peer mentors for adults might prove to be highly cost-effective interventions for reducing or eliminating insurance disparities and insuring all Americans.

CONCLUSIONS

PMs were more effective than traditional methods in insuring uninsured minority children; obtaining insurance faster; renewing

coverage; improving access to primary, dental, and specialty care; reducing unmet needs and out-of-pocket costs; achieving parental satisfaction and care quality; and sustaining long-term coverage. The PM intervention was inexpensive, and saved \$6045.22 per insured child. These findings suggest that PMs and analogous peer mentors for adults might prove to be highly cost-effective interventions for reducing or eliminating insurance disparities and insuring all Americans.

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ABBREVIATIONS

CEA: cost-effectiveness analysis
CHIP: Children's Health Insurance Program
CI: confidence interval
ED: emergency department
HHSC: Texas Health and Human Services Commission
ICER: incremental cost-effectiveness ratio
Kids' HELP: Kids' Health Insurance by Educating Lots of Parents
PCP: primary care provider
PM: parent mentors
RCT: randomized, controlled trial

of data; drafted the initial manuscript; and critically reviewed the manuscript for important intellectual content. All authors approved the final manuscript as submitted.

The funding organization had no role in study design; data collection, analysis, or interpretation; or writing of the report. The corresponding author had full access to all study data and final responsibility for the decision to submit for publication. The views expressed in this article are solely those of the authors and do not represent the official views of the Eunice Kennedy Shriver National Institute of Child Health and Human Development or the National Institutes of Health.

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Parent Mentors and Insuring Uninsured Children: A Randomized Controlled Trial

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Please find attached the Medicaid Health Plans of America (MHPA) response to the CMMI RFI.



Medicaid Health
Plans of America (MI

April 7th, 2017

Seema Verma
Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services

Submitted electronically via

Re: Pediatric Alternative Payment Model (APM) Request for Information

Dear Administrator Verma,

Medicaid Health Plans of America (MHPA) applauds the Centers for Medicare and Medicaid Services' (CMS) continued efforts to ensure access to comprehensive care for vulnerable beneficiaries—including high-risk, high-need children. MHPA is the national trade association representing 126 private-sector health plans that contract with state Medicaid agencies in 34 states plus DC to provide comprehensive, high-quality health care to more than 24 million Medicaid enrollees in a coordinated and cost-effective way. Further, according to a recent analysis by PWC, 70 percent of all Medicaid enrollees received their care through a private Medicaid health plan in 2015 (up from 66 percent in 2014),¹ and we expect this number to rise as more states turn to the expertise of managed care plans to help manage health care for a growing number of Medicaid enrollees with diverse needs.

Our member plans have extensive experience providing high-quality, comprehensive care to high-cost, high-need populations such as the target populations discussed in the Pediatric Alternative Payment Model (APM) Request for Information (RFI). Our experience includes serving children with behavioral health challenges, physical or intellectual disabilities, and/or those with other complex or chronic health conditions and providing comprehensive, coordinated care that spans the care continuum. This broad-based experience positions us well to provide a unique perspective on the key issues critical for the development and implementation of a pediatric APM.

MHPA respectfully submits this letter in response to CMS's solicitation. We continue to believe that managed care provides the best locus of care for medically complex children and our comments specifically focus on ensuring that any pediatric APM – or other innovation effort – addresses the following principles and build on the best practices advanced by MHPA member plans. Hence, why as a matter of public policy, MHPA remains strongly opposed to any pediatric model of care that is not required to meet the same standards required of Medicaid managed care plans that treat medically complex children. Moreover, MHPA also opposes any proposed models that encourage States to delegate children with complex medical needs to a model that carves out special populations of children from that State's comprehensive managed care program.

¹ Gottlieb, Ari, *The Still Expanding State of Medicaid in the United States The trend towards Private Medicaid Health Plans continues, but how much more growth remains?*, PWC, November 2015.

Medicaid MCOs are required to meet extensive network adequacy, quality measurement, and provider screening requirements, among others. We strongly recommend that any pediatric APM model should be required to meet these standards and MHPA offers the following principles based on the experience of our member plans. Pediatric APM's should:

- **Build off existing systems and infrastructure to ensure a comprehensive model.** MHPA member plans have extensive experience providing services to the populations included in the RFI (including children with behavioral health challenges, physical or intellectual disabilities, and other complex or chronic health conditions) as well as experience designing and testing—often in partnership with states—alternative payment models (APMs). Lessons learned and best practices based on Medicaid managed care plan's experience with value-based payments should be leveraged in the development of a pediatric APM.
- **Integrate value-based payments and quality measurement.** Any pediatric APM should aim to improve health care quality and lower costs through the use of value-based payment design and practical, uniform quality measurement. We also encourage that as CMS designs Medicaid APMs—which may meet Other-Payer Advanced APM criteria as established under MACRA—it evaluates opportunities to build on current models and programs, many of which incorporate health information technology, quality measurement, and risk as key components. We recommend that CMS work with MCOs and states to identify and build upon lessons learned from existing partnerships between MCOs and states.
- **Include actuarially-sound payment rates.** CMS should ensure that payment rates in a pediatric APM are actuarially-sound to guarantee plan contract sustainability and reasonable and appropriate rate setting. Payment rates should be appropriately risk-adjusted, taking into account the resources needed to provide high-quality care to the target populations. Risk-adjustment measures should consider social determinants of health, drug utilization, and other key factors, and build on existing models that have proved to be effective. States and CMS should partner with plans to assess the appropriate considerations when developing actuarially sound rates for the target population.
- **Programs should develop population health-focused approaches to care management, address social determinants of health, and incorporate home and community-based services.** To achieve these goals, it will be important for programs advanced through the pediatric APM to coordinate with appropriate state programs, such as housing and foster care entities and juvenile services. Children with complex or chronic health care needs may also need the support of social services to guarantee fully coordinated and effective care. Additionally, any pediatric APM should manage care across settings – including home and community-based services or other alternative settings – so long as they are cost effective and provide medically appropriate care. Medicaid MCOs already have partnerships in place that span services and providers outside of the MCOs network. States and CMS can leverage existing partnerships and approaches to care coordination that have been designed and implemented by MCOs.
- **Ensure appropriate access to care by developing adequate networks that address the complex needs of high-need children and allow flexibilities for rural providers, such as telehealth services.** Any pediatric APM should ensure adequate network design to allow high-need children the appropriate access to care, particularly in the case of some pediatric subspecialties (e.g., neurologists, psychiatrists, dermatologists) that may prove vital to successful health outcomes. CMS should also consider integrating telehealth services into

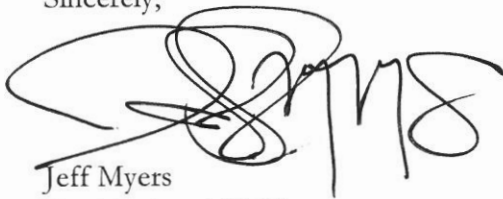
any pediatric APM to improve access to care for rural beneficiaries. Medicaid MCOs must adhere to robust network adequacy requirements, which well positions our member plans to support APMs targeting individuals with complex health care and social service needs.

- **Support states and health plans in the development of infrastructure to promote robust data collection and quality measurement.** Any pediatric APM should include resources and guidance for states and plans to develop the appropriate mechanisms or tools for data collection to promote effective model evaluation across states and plans. Medicaid MCOs currently collect and report an extensive amount of data ranging from detailed patient encounter data, annual audits, utilization data and quality outcomes. Development of infrastructure to support data collection and quality measurement should build off of and streamline current requirements to ensure appropriate measurement without creating unnecessary administrative burdens.
- **Allow state flexibility to address unique state needs, such as demographics, population health goals, and resource challenges.** State flexibility is a key component for success for any potential pediatric APM, given the variation in geographic distribution of providers, population demographics, political climate, and availability of resources across states. States and MCOs partner to serve a wide range of Medicaid beneficiaries and states should have flexibility to build on this experience. States working with plans should design APMs that best suit the unique needs of their Medicaid beneficiaries.

Finally, MHPA encourages CMS to ensure that all stakeholders, including Medicaid managed care organizations, are consulted in the development and refinement of any pediatric APMs developed at the state and/or Federal levels.

We would welcome the opportunity for continued dialogue and collaboration with you to develop programs and models addressing the needs of these vulnerable beneficiaries. Thank you for the opportunity to comment on the potential development of a pediatric APM.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Myers', with a large, stylized flourish at the end.

Jeff Myers
President and CEO
Medicaid Health Plans of America

Medicaid Strategies and Programs

Good Day,

Please see the attached response to the Center for Medicare and Medicaid Innovation's Request for Information on Pediatric Alternative Payment Model Concepts.

If there are any questions or follow-up regarding the attached response, please contact me using the information below. Thank you for the opportunity to submit this information.

Best Regards,



Medicaid Strategies
and Programs.pdf



Children's Hospital Colorado

www.childrenscolorado.org

Children's Hospital Colorado appreciates the opportunity to respond to the Center for Medicare and Medicaid Innovation's (CMMI) Request for Information (RFI) on Pediatric Alternative Payment Model Concepts. Due to the interrelated nature of many of the questions within the RFI, please note that the following response merges together some of the inquiries in the sections of the RFI.

The mission of Children's Hospital Colorado (Children's Colorado), established in 1908, is to improve the health of children through the provision of high-quality, coordinated programs of patient care, education, research and advocacy. We carry that mission forward through our vision: "Children's Colorado will be the leader in providing the best health care outcomes for children. We will be the driving force, in partnership with others, in providing children and their families with an integrated pediatric health care delivery system. We will be a national leader in pediatric research and education." This vision is reflected throughout our response to the RFI.

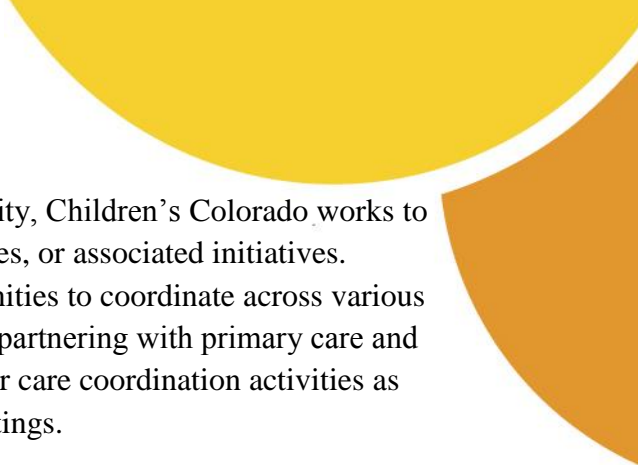
By way of background, with more than 3,000 pediatric specialists and more than 7,000 full-time employees, Children's Colorado is home to a number of nationally and internationally recognized medical programs. Children's Hospital Colorado has been ranked for more than a decade as one of the best children's hospitals nationally in *U.S. News & World Report*, and as the consistent choice eight years in a row by area physicians for the care of their loved ones. Children's Colorado see over 700,000 patient encounters a year, and cares for more children than any other hospital in the region, which extends beyond Colorado to neighboring states like Montana, South Dakota, Nebraska, New Mexico, Wyoming and Kansas.

Moreover, Children's Colorado has urgent, emergency and specialty care locations throughout Colorado, as well as the full spectrum of pediatric specialties located at our main facility on the Anschutz Medical Campus in Aurora, Colorado. Children's Colorado also operates primary care clinics that serve over 11,000 children.

Section I. Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

Given the increasing appreciation and understanding of the crucial connections between health care outcomes and the social determinants of health, there is great interest in a child and youth-focused care delivery model that combines and coordinates health care and health-related social services. However, most coordination between health care settings and organizations that provide health-related social services occur through informal agreements independent of Medicaid program support. These arrangements would benefit from linkages strengthened through a payment model that supports and formalizes coordination between settings. Formalizing the partnerships through payment should also include aligning of incentives, and allow for consistent data sharing for both communication and program evaluation.

In Colorado, Medicaid reimburses fee-for-service for physical health services, while the Accountable Care Collaborative (ACC) provides some limited funding to support care coordination for primary care medical providers, some of which can be used to work with health-related social service organizations. Because these



resources are specifically aimed at the primary care provider community, Children's Colorado works to track these efforts, but does not have direct connections to the resources, or associated initiatives. Recognizing the need for the primary care and other provider communities to coordinate across various settings that children and families will access, Children's Colorado is partnering with primary care and other Medicaid providers to help streamline communications and other care coordination activities as children and families transition between hospital and primary care settings.

Challenges and Opportunities within Integrated Service Delivery Models

Notably, Children's Colorado is one of ten Children's Hospitals participating in the Coordinating All Resources Effectively (CARE) project for children with medical complexity, which is supported by one of CMMI's Health Care Innovation Awards. Participation in this work has underscored the need for Children's Colorado to engage further in partnering closely with health-related social service organizations, as well as families and primary care physicians.

It is clear that the health care system, as experienced by Children's Hospitals serving children and families on Medicaid within the CARE project, is in need of models, culture and infrastructure that support integration of health care and health-related social services. New models, like those initiated by the hospitals involved in the CARE project, require significant support from multiple levels of the health care system (federal, state, primary care providers, hospitals), and the support must take numerous forms, as funding, policies, and cultural and infrastructure changes must be aligned and coordinated.

In addition, through the work of Children's Colorado's Child Health Advocacy Institute (CHAI), the organization has invested in a multitude of partnerships to boost how communities in which many of Children's patients and families live can address certain public health and health-related social needs. While these partnerships do not have direct financial or data sharing ties with Children's Colorado's work with Medicaid, the great majority of the children and families impacted by the supported programs are covered by, or eligible for, Medicaid.

If these partnerships with community organizations were supported by Medicaid funding, and therefore better integrated in a health neighborhood that goes beyond health care settings, primary prevention efforts led by community organizations would allow for children and families on Medicaid to avoid seeking costly health care. Without a direct link between social service organizations and Medicaid programs and policies, neither health care providers nor the health-related service organizations are able to realize (or maximize) the potential of coordination that holistically addresses the needs of children and families—which ultimately curbs health care spending, drives toward improved health outcomes, and helps optimize both the patient and provider experience.

A summary of some of the partnerships in which Children's Colorado has invested are listed below. Again, although these partnerships are part of CHAI's continuing work to support Colorado

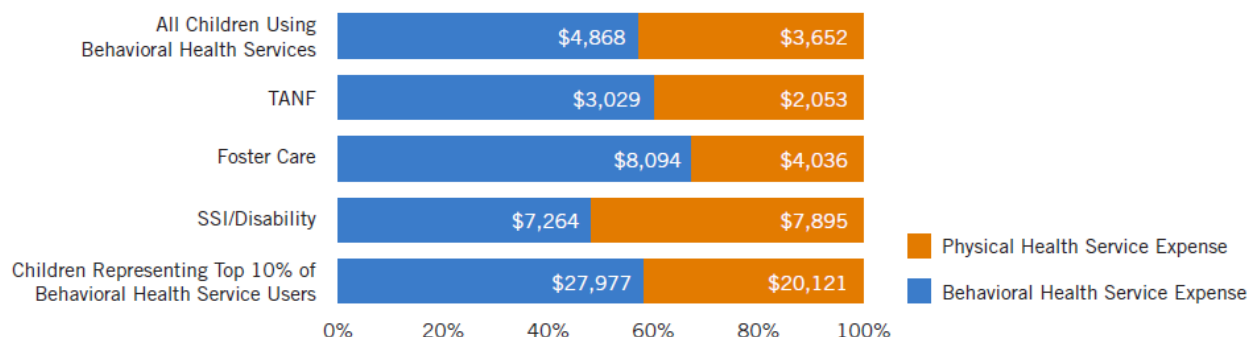
communities, Medicaid policies that allow for funding support and data exchanges that further the potential of these arrangements would significantly improve their penetration rates, effectiveness and sustainability:

- **Women, Infants and Children (WIC):** Work with WIC clients referred from Tri-County Health Department, through which child passenger safety education and subsidized-cost car seats to new and expectant parents are provided. Integrate Community Health Workers in community settings to increase the number of families who have a medical home and facilitate resource referrals to clients.
- **School districts:** Integrate school-based asthma program, conduct asthma home visit program, develop a school-based resource center to address healthy lifestyles, oral health disparities, and to provide resources on safe teen driving.
- **Colfax Community Network:** Collaborate with social work staff at CCN to conduct infant safe sleep trainings, whereupon CCN staff then message safe sleep education to motel residents and provide families with a portable crib, infant sleep sacks, and additional protective measures to low income families.
- **Habitat for Humanity:** Conduct home inspections to ensure safe/injury-free environments for children.
- **Hunger Free Colorado and Nurse Family Partnership:** Refer patients and families seen at one of Children's Colorado locations.
- **Pikes Peak YMCA:** Collaborate on implementation of Camp Champions, a Children's Hospital Colorado program to address accelerated summer weight gain in youth. Program goals include engaging youth in healthy lifestyle activities in a fun way that builds knowledge about healthy lifestyles and emphasizes goal setting, confidence, and fun.
- **United HealthCare and Boys and Girls Clubs:** Distribute bikes to overweight/obese children using the Bikes for Life model program. This program promotes increased and sustained physical activity, positions bicycling as a healthy and safe activity for children to engage in as a regular form of exercise and promotes shared commitment to fostering healthy communities by impacting the health of children.
- **Street-Smart, Inc.:** Train part-time jobs for Street-Smart, whose members conduct child passenger safety outreach and distribute subsidized-cost car seats to entitlement-eligible residents of these low-income communities of color.
- **Head Start:** Provide community based dental disease prevention and oral health promotion for preschool children and their families, as well as support for programs to meet Federal program performance standards for childhood health and wellness.

Perhaps the most significant challenges and opportunities that exist in integrating pediatric health care and health-related social services are found in coordinating the mental and physical health needs of children—particularly for children with complex medical needs, and/or are involved in multiple systems (e.g. Child Welfare, Juvenile Justice).

According to a Medicaid data brief published by the Center for Health Care Strategies, Inc., children utilizing behavioral health services represent under 10% of the overall Medicaid child population, but approximately 38% of total spending for children in Medicaid. Also, 38% of children using behavioral health services also had a chronic physical health condition, but behavioral health costs accounted for the majority of Medicaid expenditures. The figure below is pulled from the same report¹.

Figure 3: MEAN ANNUAL EXPENSE FOR CHILDREN IN MEDICAID USING BEHAVIORAL HEALTH SERVICES*




Significant savings have been shown to come from Care Management Entities (CMEs) that are set up to coordinate care across systems for and with youth and families, and are supported by funding and an integrated model that allow providers to consider all potential solutions to addressing the physical, behavioral and social needs of youth and families. The per member per month (PMPM) payments provided to CMEs provide flexibility for providers to reach out to a diversity of community-based resources to offer a range of solutions that can include mentoring and tutoring to assistance with paying utility bills or accessing legal help.

The CME's goals are to: (1) improve clinical and functional outcomes; (2) enhance system efficiencies, and control costs; and (3) foster resiliency in families and youth. To achieve these objectives, a CME works to:

- Improve access to appropriate services and supports;
- Reduce unnecessary use of costly services (e.g., out-of-home placements and lengths of stay);
- Employ health information technology to support service decision making; and
- Engage youth and their families as partners in care decisions to improve their experience with care.

The CME model, which has delivered substantial savings (for health care, human services, and corrections agencies), offers flexibility for providers to work with an interdisciplinary team to look across communities to find effective solutions for complex issues, and should be examined as a model that features best practices worth implementing more broadly within Medicaid programs across the country. Specifically, in addition to patient and family engagement and cross-agency/system coordination that minimizes administrative waste, the CME model sanctions partnerships with community organizations and resources that may have little to no direct connection to the health care

¹ Full report available at <http://www.chcs.org/media/Identifying-Opportunities-to-Improve-Childrens-Behavioral-Health-Care2.pdf>.



system. Colorado-specific details are discussed in the next sections on the operation of integrated service models, and related payment and incentive arrangements.

Fostering healthy physical and behavioral development of children goes far beyond well-child visits and other health care-focused services supported by Medicaid. In a 2012 publication, the Institute of Medicine examined how integrating primary care and public health could drive improvements in population health², and noted opportunities for the Health Resources and Services Administration (HRSA) and the Centers for Disease Control (CDC) to coordinate their efforts in maternal and child health (specifically the Maternal, Infant, and Early Childhood Home Visiting Program).

Integrated service models should begin with, among other steps, an assessment and recognition of how large federal agencies' work overlaps with one another, and how the relevant agencies can support, and/or inform, integrated service models at state and local levels. For instance, the aforementioned IOM publication highlighted opportunities for the Home Visiting Program to integrate primary care and public health, especially "because the health care service delivered is not based on an illness or in response to a person seeking care, but instead is aimed at prevention and wellness for all members of a community." The report goes further to state that the Home Visiting Program's survival "depends on converting its elements into a sustainable practice and financing model, which means building interest and engagement on the part of state Medicaid programs, the overwhelming source of health care financing in the highest-risk communities. In fostering this engagement, HRSA and CDC could educate payers, namely the Centers for Medicare & Medicaid Services (CMS) and state Medicaid programs, on the health and financial effects of home visiting, particularly those that allow state programs to begin to reduce costs." The report's recommendations around the Home Visiting Program have broad application to other services that are similarly aimed at prevention occurring in community settings.

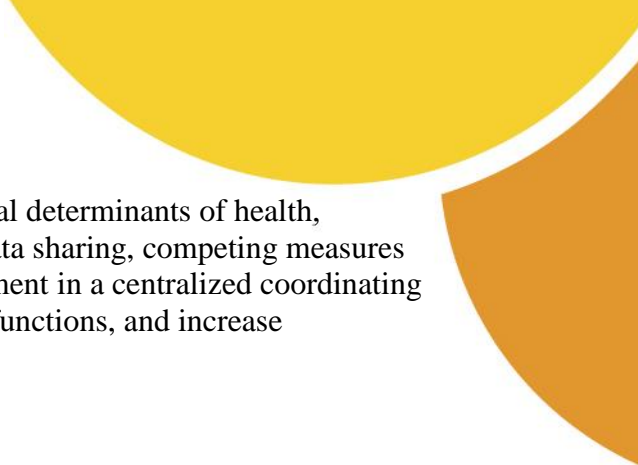
Section II. Operation of Integrated Service Model

When considering future models, priority should be placed on partnerships that enable work across urban and rural geographies. There is great potential for increased utilization of telemedicine, telepsychology and other efforts that build virtual capacities to connect pediatric specialty care with allied health and community providers in rural settings and health care centers.

Furthermore, to support the development of necessary infrastructure building, integration of services across Medicaid-enrolled providers and health-related social service providers will likely require clarification of HIPAA regulations. Sharing information in a meaningful way to better coordinate care in pediatrics usually involves small numbers of children and families and often in a non-electronic format. Sharing information is hampered by differing interpretations of what is allowable. For an electronic exchange of information related to social services, electronic structures for a standard core set of elements relevant to care management for the pediatric population will be required.

Among the key challenges in addressing infrastructure and other needs related to the operation of an integrated service model is that savings, spending, and costs do not always rise and fall in direct relation; increased Medicaid spending may cause savings to accrue in other child-serving systems.

² Available at <http://www.nationalacademies.org/hmd/Reports/2012/Primary-Care-and-Public-Health.aspx>.



Obstacles include: lack of payment or risk-adjusted payments for social determinants of health, differing eligibility requirements, restrictions (real or perceived) on data sharing, competing measures of success, and regulatory limitations for innovative solutions. Investment in a centralized coordinating function may decrease duplication of services, and care coordination functions, and increase information sharing.

Additional obstacles to integration include:

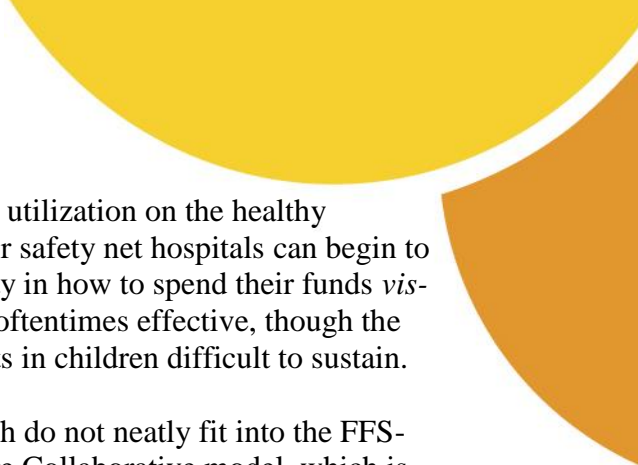
- IT incompatibility or restrictions on sharing data on common beneficiaries across programs to effectively manage interventions and/or evaluate outcomes of these interventions.
- Specific barriers to data sharing FERPA, HIPAA and mental/behavioral health data restrictions.
- Differing measures, despite aligned goals.
- Mismatch in cultures typical to health care and social sectors.
- Capacities, expertise and infrastructure needed for successful service and payment integration (such as braided financing).
- Wide variations in interpretation of what is allowable.
- Having to demonstrate ROI over a shorter time period. Dynamic scoring with a ROI and “scoring.”
- Competing goals, agendas and measures of success across service sectors with overlapping beneficiaries.

Challenges that are not specific to integration with social service providers, but further complicate the evolution of service and payment models for population health, include:

- An appreciation for the unique aspects of the pediatric and maternal population within broader populations.
- Gaps in data management and analytic capabilities.
- Payment for social determinants of health.
- Unclear patient attribution year over year.
- Cultural transformation for large systems of care.
- Sustainable funding with decreasing rates once savings are recognized.

Every type of delivery system, including ACOs and MCOs, has strengths and weaknesses when it comes to serving the pediatric population. The benefits and downsides of each are different from those found in their adult-serving counterparts.

MCOs benefit from flexibility in terms of the kinds of services they can reimburse outside of the strictly-medical service array that might be more common in fee-for-service systems. This allows them to spend proactively on services that exist in the space between traditional health care and other non-medical services for children and youth. However, traditional capitated managed care entities also tend to have short time horizons for seeking a return on investment or a change in health status. Investing in children and youth frequently pay outside dividends over the course of their lives. Yet avoided costs over the lifetime of a child do not necessarily translate into an MCO's decision-making time horizon. Short contract terms, churning of beneficiaries on and off of Medicaid, and the tendency of savings to accrue to non-Medicaid systems all contribute to short-term decision-making which favor



intensive care management for older high-utilizers and lower resource utilization on the healthy younger population. ACOs with a larger number of providers or major safety net hospitals can begin to compensate for some of these effects, yet often have reduced flexibility in how to spend their funds *vis-à-vis* MCOs. Fee-for-service models with quality-based overlays are oftentimes effective, though the relatively small proportion of flexible funding makes early investments in children difficult to sustain.

It is also important for CMMI to consider other delivery systems which do not neatly fit into the FFS-ACO-MCO spectrum. Examples include Colorado's Accountable Care Collaborative model, which is an iterative, value-based primary care case management model. Though this model is ACO-like, it does not yet deeply integrate hospitals into the delivery system in the way that a traditional ACO would.

A model with exceptional promise for the pediatric population with behavioral health needs is the CME model. The CME model is most-frequently associated with Wraparound – an intensive, individualized care planning and management process based on a series of family-centric, strengths-based principles. The CME model is particularly useful because the Wraparound and SAMHSA have identified high fidelity wraparound as a promising practice for serving children with serious behavioral health issues. A CME works in large part because it serves to knit together disparate child-serving systems for those populations who most need coordinated care and services.

Finally, we wish to call attention to the model proposed in the ACE Kids Act. Children with medical complexity served by Medicaid would be the population served by the bill. This model is structured in such a way as to push financial risk and accountability for outcomes to the providers and facilities most-closely associated with the care of an individual child. Because this population does not see much churn on and off of Medicaid, providers and facilities can be held to longer-term quality metrics and these providers' decision-making time horizons will be longer.

Section III: Integrated Pediatric Service Model Payment and Incentive Arrangements

Multisystem-involved children and youth present the greatest opportunities for savings and improved outcomes – both because there is duplication of services, and also because these children have some of the most complex needs which are often insufficiently met by agencies acting on their own.

Colorado has done extensive research into the state's population of Medicaid-enrolled, multisystem-served children and youth – particularly those with serious behavioral health needs. From Colorado's 2014 whitepaper on a system of care for children and youth:

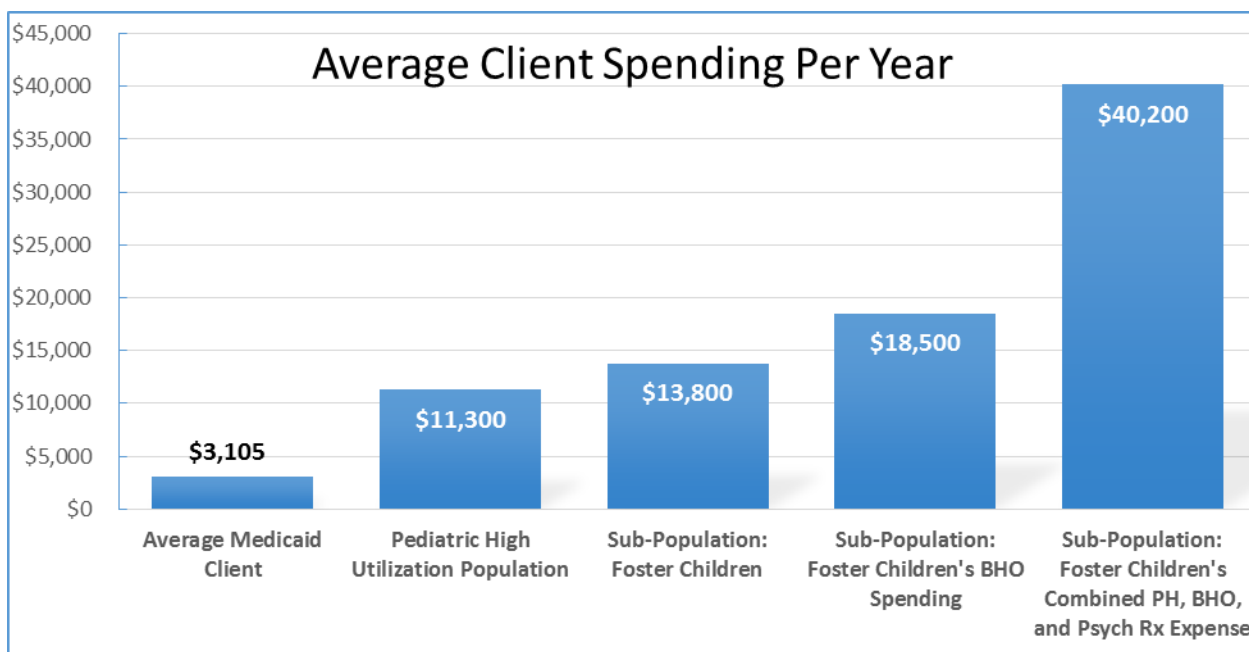
“For children who need a high level of behavioral health care, the current system is very fragmented. Care coordination and arrangement takes place across multiple domains: Medicaid, Colorado's Office of Behavioral Health, systems serving children with developmental or intellectual disabilities, child welfare, etc. A recent study found that of Colorado children in child welfare who generated the 20% highest expenditures, only 6.3% did not overlap with at least one other child serving agency and 68% of those children were under the age of 10. The majority of children 92% overlapped with mental health and 46.4% overlapped with juvenile

justice and 20% with substance abuse. Fourteen percent of the children overlapped with all four systems.”

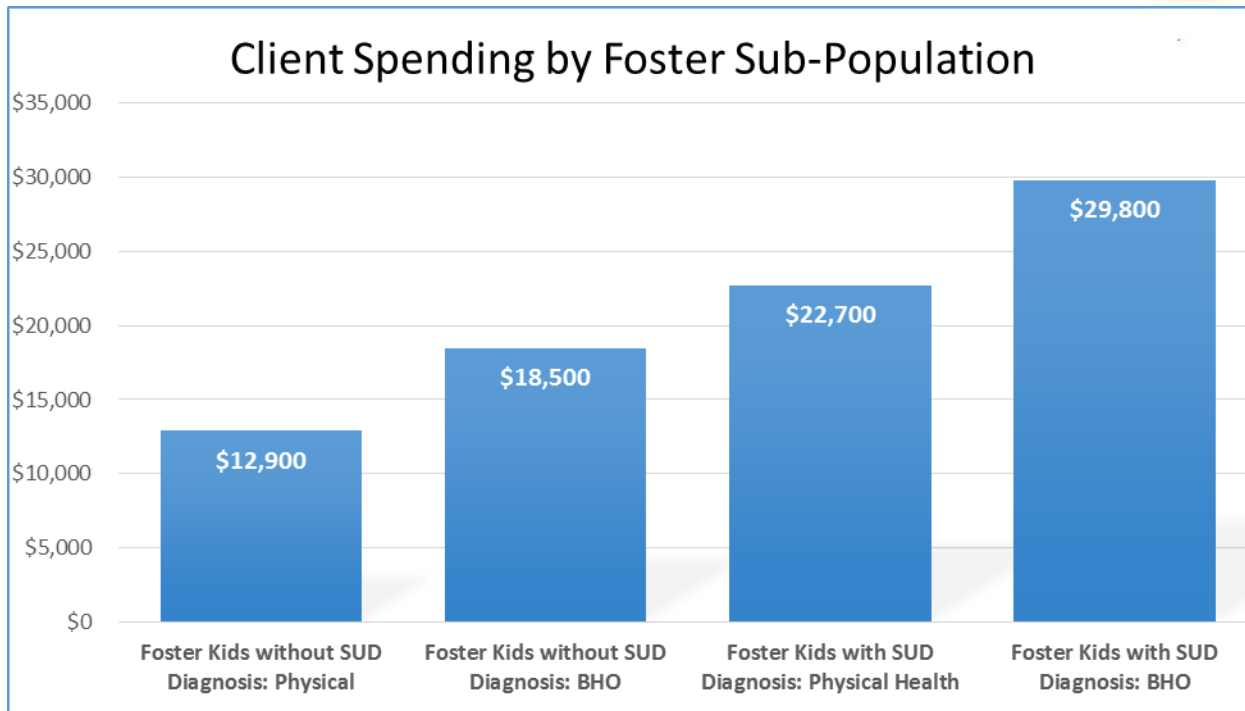
Old models of managed care have done an excellent job of reducing costs in the Medicaid system. It may be, however, that the costs have been shifted to other child-serving systems.

Because a small percentage of children are driving a majority of the overall health care costs, it makes sense to begin with this population. As Estes, et al, notes in *Disrupting the Pathway: A Prevention Approach to Medical High Utilization*, “high utilization is frequently the result of the synergistic comorbidities of multiple medical conditions where the total impact is greater than the sum of its parts. Further, high utilization leads to and at the same time is exacerbated by unstable social factors (e.g. housing, employment, social isolation, etc.)”. The system and services that are built can easily accommodate the rest of the child population over time. The target population could be described as having the following characteristics:

- Children with severe behavioral health challenges (perhaps also including a co-occurring Developmental Disability or Substance Abuse identified by a standardized tool such as the CANS)
- In (or at-risk of being placed in) psychiatric residential treatment facilities
- In other out-of-home settings such as therapeutic group homes
- Youth in detention or detention diversion
- On multiple psychotropic medications
- In child welfare; and or
- With frequent emergency room visits or admissions to psychiatric hospitals



Comparison of child high utilizers with general Medicaid client spending



Comparison of different foster care populations

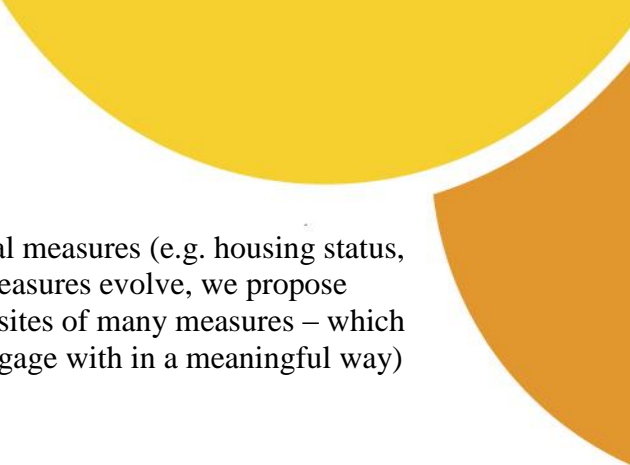
Given the current challenges and opportunities outlined herein, Children’s Colorado respectfully recommends that CMS / CMMI take steps to make the blending or braiding of funding easier, which would allow each state to make appropriate "upstream" investments—even if savings accrue across child-serving agencies (including but not limited to Medicaid).

Section IV: Pediatric Measures

Consistent with feedback and recommendations throughout this response, Children’s Colorado supports pediatric measures that allow for integration of the health care system with communities. For instance, using measures that are not specific to the health care system, but have relevance for public schools, would allow for the community, inclusive of health care and education, to collaborate on driving toward aligned goals and outcomes.

Accordingly, approaches to risk stratification should facilitate pathways to integrate health care into communities by making the data that inform risk stratification relevant to families and health-related social service organizations. An example of an approach that demonstrates how questions and data can be made relevant to multiple community organizations is found at the Floating Hospital for Children at Tufts Medical Center, with the Survey of Well-being of Young Children³. The survey includes questions in three domains, behavioral, developmental and family, which include questions that pertain to parents’ concerns and observations, as well as preschool pediatric symptom checklist and developmental milestones. Children’s Colorado is in the process of incorporating answers from a psycho-social screening tool into its risk stratification methodology.

³ Information available at <https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Parts-of-the-SWYC.aspx>.



Moreover, there appears to be value in moving over time towards social measures (e.g. housing status, food security, etc.) and clinical outcomes-based measures. As these measures evolve, we propose continuing to identify measures that are specific (as opposed to composites of many measures – which clinicians and providers of social services may find very difficult to engage with in a meaningful way) and that are developmentally-relevant and age-appropriate.

MEDNAX Health Solutions Partner

Dear CMS Associates;

MEDNAX Health Solutions Partner is pleased to present our response to the Centers for Medicare and Medicaid Services ("CMS") Request for Information on Pediatric Alternative Payment Model Concepts. MEDNAX Health Solutions Partner is a physician-led and trusted provider of comprehensive, customized health solutions designed to improve clinical, operational and financial performance. As a physician-led company, founded more than 35 years ago by physicians, our national network includes more than 370 group practices and 3,600 physicians collaborating with over 3,000 facilities across 50 states to offer a wide range of clinical services including neonatal care in more than 360 NICUs across 35 states. Through our family of companies, we provide outsourced physician services, revenue cycle management and performance and perioperative improvement consulting. Impassioned performance is the cornerstone of our efforts to PRACTICE EXCELLENCE in everything we do.

As a national provider of women and children's health care services through our affiliate, Pediatrix Medical Group, Inc. ("Pediatrix"), MEDNAX Health Solutions Partner is uniquely qualified to provide a sound perspective on the health care delivery system for children. We understand the many issues facing CMS today in caring for our most fragile population of children and are committed to working together to find affordable health solutions. Our clinical and business infrastructure and expertise, which includes a Product Development & Risk Division, affords us the ability to provide multiple solutions for pediatric acute care payment methods throughout this document for your consideration.

Thank you in advance for your consideration of our proposal. We are committed to the future of children's health and welcome the opportunity to work collaboratively with CMS to improve population health through comprehensive, quality-driven women and children's services.

Respectfully submitted on behalf of MEDNAX,



MEDNAX Health
Solutions Partner.pc



Response to Request for Information

**PEDIATRIC ALTERNATIVE PAYMENT MODEL
CONCEPTS**

April 7, 2017

Presented to:

**Centers for Medicare & Medicaid Services (CMS)
and
Health and Human Services (HHS)**



Introduction to Proposal

Submitted electronically to:

Subject: RFI for [Pediatric Alternative Payment Model Concepts](#)

Dear CMS Associates;

MEDNAX Health Solutions Partner is pleased to present our response to the Centers for Medicare and Medicaid Services (“CMS”)’ Request for Information on Pediatric Alternative Payment Model Concepts.

MEDNAX Health Solutions Partner is a physician-led and trusted provider of comprehensive, customized health solutions designed to improve clinical, operational and financial performance. As a physician-led company, founded more than 35 years ago by physicians, our national network includes more than 370 group practices and 3,600 physicians collaborating with over 3,000 facilities across 50 states to offer a wide range of clinical services including neonatal care in more than 360 NICUs across 35 states. Through our family of companies, we provide outsourced physician services, revenue cycle management and performance and perioperative improvement consulting. Impassioned performance is the cornerstone of our efforts to PRACTICE EXCELLENCE in everything we do.

As a national provider of women and children’s health care services through our affiliate, Pediatrix Medical Group, Inc. (“Pediatrix”), MEDNAX Health Solutions Partner is uniquely qualified to provide a sound perspective on the health care delivery system for children. We understand the many issues facing CMS today in caring for our most fragile population of children and are committed to working together to find affordable health solutions. Our clinical and business infrastructure and expertise, which includes a Product Development & Risk Division, affords us the ability to provide multiple solutions for pediatric acute care payment methods throughout this document for your consideration.

Thank you in advance for your consideration of our proposal. We are committed to the future of children’s health and welcome the opportunity to work collaboratively with CMS to improve population health through comprehensive, quality-driven women and children’s services.

Respectfully submitted on behalf of MEDNAX,



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SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

CMS is interested in learning about pediatric alternative payment models (APM) (APM defined here as a payment model other than traditional fee-for-service) that emphasize both quality and multi-disciplinary service delivery, with consideration of the unique needs of children and youth covered by Medicaid and CHIP and the potential impacts on their health and well-being. In the model concept being explored, CMS proposes that pediatric health care systems and providers work with their states and tribes to take on accountability for the health and wellness of children and youth, with the families at the center of care planning, potentially sharing that accountability with health-related social service provider partners.

QUESTIONS:

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

There is a tremendous interest and need for states to design, implement and monitor child and youth focused models that are comprehensive in nature, including preventive services, acute and post-acute care. In the pediatric care models, social services constitute an essential component of all care delivery phases, as their potential impact on morbidity and mortality is exponential. Based on our experience, there is a high need for targeted interventions for premature infants, an increased need for screening optimization to detect preventable pediatric conditions that cause lifelong morbidity and mortality, as well as a need for an integrated approach for monitoring care delivery. Additionally, many children with treatable conditions do not receive timely or appropriate care due to system deficiencies that could be addressed by engaging medical practitioners, school- and community-based providers.

The major challenges are: disjointed care, poor care coordination, poor compliance, and the inability of various healthcare providers to share protected health information (PHI).

Recently implemented Medicaid innovation programs across several states have aimed to incentivize comprehensive care coordination, which include clinical and social services needs for the population. However, there continues to be a need and opportunity for services that would specifically address complex and or chronic conditions of high-risk infants. MEDNAX Health Solutions Partner has developed comprehensive care delivery models that address these complex/chronic conditions and would be accomplished via a neonatal or pediatric population health technological platform. This would ensure national standardized best practices, risk-adjusted benchmarks and quality metrics uniquely suited to improve outcomes.

See Appendix A for a recent publication from the journal *Pediatrics* that outlines our Pediatrix CQI program, the 100,000 Babies Campaign, demonstrating significant improvements in major clinical outcomes that translated into improved outcomes over a 5-year period, reduction in mortality of 1,885 infants and an estimated cost savings of \$58,000,000 from reductions in central line infections alone¹.

In addition to our internal 100,000 Babies Campaign, our Pediatrix affiliated practices participate in many state-led initiatives to improve the care of premature and critically-ill newborns. One example is the Tennessee Initiative for Perinatal Care (TIPQC), which seeks to improve health outcomes for mothers and infants in Tennessee through a perinatal quality collaborative that identifies opportunities to optimize birth outcomes and implement performance improvement initiatives. Clinicians from all 27 NICUs in Tennessee, as well as obstetrical and pediatric practices, participate in evidence based, data-driven projects to improve prenatal care, reduce infant mortality and reduce complications of preterm birth. Pediatrix supports TIPQC through its maternal-fetal medicine practice and neonatal practices representing six of these NICUs with active involvement in every aspect of the program, supporting sustainable projects including Golden Hour and Central Line Associated Blood Stream Infections and active projects including Neonatal Abstinence Syndrome (NAS). See Appendix B for a print publication in the *New England Journal of Medicine*, featuring data compiled by Pediatrix to help address NAS, one of the major concerns in modern neonatal medicine².

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

MEDNAX Health Solutions Partner views partnering with pediatric social service providers an integral aspect in managing the patient population. The social service providers assist patient families in navigating care coordination with multi-specialty providers and treatment planning or providing increased access to resources (such as donor breast milk, appropriate infant care, monitoring devices, etc.). Some examples of high risk populations that could be targeted are: premature infants, infants with opioid withdrawal symptoms, infants who are lost to follow up after positive hearing or vision screening, or those with complex congenital malformations.

¹ Ellsbury D, et al. A Multifaceted Approach to Improving Outcomes in the NICU. The Pediatrix 100,000 Babies Campaign. *Pediatrics*. 2016;137(4):e20150389.

² Tolia V, et al. Increasing Incidence of the Neonatal Abstinence Syndrome in U.S. Neonatal ICUs *N Engl J Med* 2015;372:2118-26.DOI: 10.1056/NEJMsa1500439.

In addition to the programs highlighted in our response to Question1, Pediatrix affiliated practices support many state-led patient care initiatives including the West Virginia Perinatal Partnerships, Drug Free Moms and Babies Program, the Maryland Patient Safety Center's Neonatal Abstinence Syndrome and Improving Sepsis Survival projects, and the California Perinatal Quality Care Collaborative's (CPQCC) High Risk Infant Follow-up Quality of Care Initiative.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

Our recommendation would be to use a school-based telehealth enhanced approach, combined with a population health payment model.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

CMS is exploring how the establishment of partnerships between child- and youth-focused health care and health-related social services providers might be structured and operate to integrate services.

Additionally, CMS understands that varying eligibility criteria and program requirements can be challenging for children, youth, families and providers to manage, resulting in both service gaps and implementation challenges, such as different case managers or navigators for each program. We are interested in innovative approaches to integrate child and youth services within these partnerships by lowering barriers to identifying, enrolling, and maintaining coverage.

QUESTIONS

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health related social services agencies)?

The level of service integration in states remains suboptimal, despite support received through accelerator programs, such as Long-Term Services and Supports (LTSS) programs, Dual Eligible Special Needs plans and other services tailored for specific conditions through government, private or institutional support and funding. With multiple agencies or service agencies or providers, the “whole health” of a patient or family is not always effectively managed, leading to ongoing support needs.

The challenges experienced with multiple state agencies operating these programs are often related to different budget restrictions or variability, difference in policies or SOPs regarding implementation and monitoring, and totally different committees regulating these programs without a synergistic alignment in desired outcomes.

a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children’s Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

Programs listed above have similar provisions but are not necessarily integrated. For example, The Maternal, Infant and Early Childhood Home Visiting Program measures pediatric health from preterm birth through education. There is some overlap with the Head Start Program as they both address development and education from birth to age five but there is no obvious integration and coordination at this time. Since one of the focus areas for MEDNAX Health Solutions Partner is on maternal-fetal, neonatal and pediatric care programs that encompass and integrate maternal care from pregnancy and delivery through newborn to age two as a more relevant area of focus.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

There often is an intermediary agency or organization that is a catalyst for linking patients, providers and various social service providers. The intermediary services as the conduit for ensuring the needs of the patient and family are addressed and as seamless as possible despite limited direct integration.

a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?

Pediatric social services include or should include individuals who are in the inpatient and outpatient settings specifically for children who are experiencing chronic and or severe medical conditions. The services would cover navigating the medical system, pediatric care coordination, assisting families with connecting to counseling, community resources and other pediatric specialist medical services.

b. What potential exists for increased partnership for provision of home and community-based services?

Stronger alignment between home and community-based services can allow for a wider breadth of the population to be attended to, as well as help provide a more holistic approach to providing the resources to the patient and family.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

With minimal or no integration between the various EMR systems used by medical providers and different systems used by social services providers and payers, the HIE has helped facilitate data integration using a data warehouse and reporting tools. This has required non-disclosure agreements, secure means of delivering data and understanding of developing required reporting for each of the constituents in caring for the patient and family. Most of the data is generally housed by medical providers or payers and as a result they are usually intimately engaged and expend the most resources in developing the infrastructure needed.

Developing this infrastructure can take up to one year depending on the number of providers, payers and social worker organizations involved. Cost can range to north of \$500,000 for initial implementation, however, developing a multi-state collaborative could reduce some of the overhead expenses. The overall experience and implementation can be improved by establishing requirements and standards for data sharing, specifically both cost and clinical data, streamlining the required non-disclosure language and data retention and comingling requirements.

MEDNAX Health Solutions Partner believes in the value of engaging multiple stakeholders in designing a new infrastructure for a comprehensive pediatric care delivery model. We are taking a proactive approach to develop a national pediatric population health platform that would be EHR agnostic, address the sub-populations at highest risk and allow all providers across state lines to share access to a universal pediatric medical record. This would ensure optimal resource allocation, facilitate the development of accepted standardized, risk-adjusted national benchmarks, as well as hopefully promote implementation of established best-practice care delivery models, similar to some of the national QCDRs developed for the adult population.

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

Our Arizona pediatric cardiology practice had a positive experience with the Children's Rehabilitative Services (CRS) program through one CRS Contractor, United Healthcare Community Plan (UCCP). CRS is an acute care program for eligible Arizona Health Care Cost Containment System (AHCCCS) members which requires one contractor/payer to assume responsibility for the delivery and payment of multiple services (i.e., services related specifically to CRS conditions as well as services related to primary care and, potentially, other needs like behavioral health). It has the following as its goals:

- ✓ improved member outcomes and satisfaction
- ✓ reduced member confusion
- ✓ improved care coordination
- ✓ streamlined administration

Streamlining of eligibility specific to the CRS program was achieved through the collaborative efforts of UCCP and CRS in developing four different coverage types for individuals qualified for the CRS program. Prior to these categories being implemented, the patients, depending upon their diagnosis, would be covered by either Medicaid or the CRS program. This challenged the operations of our practices when submitting claims to the responsible entity at the time of service, and led to increased administrative time spent on correcting and rebilling claims that had originally been submitted to the incorrect entity – i.e., Medicaid instead of CRS and vice versa. The new categories remove the Medicaid component from the billing and collections standpoint as all CRS eligible patients' bills are submitted directly to CRS.

An additional efficiency created through the collaboration between UCCP and CRS was a change in the timing of eligibility determinations. Historically, enrollment would occur at the first outpatient office visit after the patient's discharge from the hospital, even though a CRS eligible condition had been identified during the hospital stay. This eligibility process has now become the responsibility of the hospital at the point of diagnosis of a CRS eligible condition, leading to more timely enrollment and eligibility determinations.

In Tennessee, our regional management and neonatal practice leadership teams are actively involved in the Neonatal Episodes of Care Program, a Tennessee State Medicaid Initiative. Our team began working on this program last summer through participation in the Technical Advisory Group, reviewing existing care payment models and discussing alternatives. The data gathering phase of the program starts in May. Pediatrix manages six NICUs throughout the state and will continue to play an active supporting role in the program to better serve Tennessee's babies.

5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

States that have not implemented Shared Governance models and strategies provide the greatest potential for improving outcomes and reducing costs.

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

The gap between social services and health care delivery needs to be closed since social factors such as economic stability, housing, education, relationships, neighborhood, and other environmental influences impact health status. Models that stop with health care delivery miss opportunities to make significant improvements for patients and their families. There are practical approaches that state agencies can implement to effectively integrate social services and health care delivery. These include strategies ranging from shared governance structures to procurement efforts.

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

In states where MCOs are the primary administrator of Medicaid, the MCOs have employed resources to fill the gap between health care delivery and social service needs. In many cases, MCOs work with providers to determine how division of responsibilities will be allocated to avoid duplication and effectively reach the patients that most need services.

These models have required shared governance and accountability and closer cooperation between the MCO and provider. MCOs and provider partners have encountered challenges in contacting and engaging patients after they are contacted. In many instances, case managers have to physically go out to the patients' homes where social challenges are uncovered. This process poses resource challenges that limit the number of patients and families that can be reached.

8. What role do models of care such as ACOs play in the pediatric environment?

Currently, ACO models focus on adult primary care and not on neonatal or pediatric care. MEDNAX Health Solutions Partner believes a total cost of care approach would address most of the challenges encountered in this population by developing specialized care pathways and offering hybrid (medical-social) case management models in order to achieve an optimal cost/quality ratio.

a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e., shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?

Both.

b. How are pediatric ACOs the same or different from adult-focused ACOs?

Key differences between pediatric and adult ACOs would be:

- ✓ Different demographic determinants
- ✓ Different risk adjustment methods
- ✓ Different risk tiers
- ✓ Different resource allocation methods
- ✓ Different morbidity impact
- ✓ Access to care and prevention are predominant
- ✓ More complexity in selecting key drivers that lower cost and improve outcomes

c. What opportunities do pediatric ACOs have for integration with community and health services systems?

Pediatric value based care models can be used as a vehicle to engage the full spectrum of providers that provide services to this population. Using telehealth and virtual case management in schools and community healthcare systems can have a major impact on outcomes and lower costs.

d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

We have seen states include MCOs as the lead entity in some scenarios to manage administrative aspects while ACOs focus on delivery of care within a clinically integrated delivery network (CIDN). States will increasingly look to alternative models of care with shared saving programs that include quality measures and cost targets. The speed at which some states shift to value based care will depend on funding, provider engagement and population demographics.

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

We believe that through a multi-state effort, a state-of-the-art national neonatal value-based registry could be developed, incorporating claims data and clinical data from all neonatology providers on a national level to develop national neonatal benchmarks, validated optimal neonatal care pathways and truly have a large-scale impact infant mortality and morbidity.

The following graphs are just a few examples of large-scale quality improvement efforts measured at a national level across Pediatrix units demonstrate improved clinical outcomes and cost savings.

Figures 1- 3 – As an example of quality impacting cost of care: increased use of breast milk (a Joint Commission Performance Metric), reduced exposure to empiric antibiotics, and decreased use of H2 blockers has been associated with a decreased incidence of NEC (case cost estimate \$80k per medical NEC case, and \$190k per surgical NEC case as noted in ncbi.nlm.nih.gov/pubmed/21718117). MEDNAX CQI has demonstrated effective improvements.

Figure 1

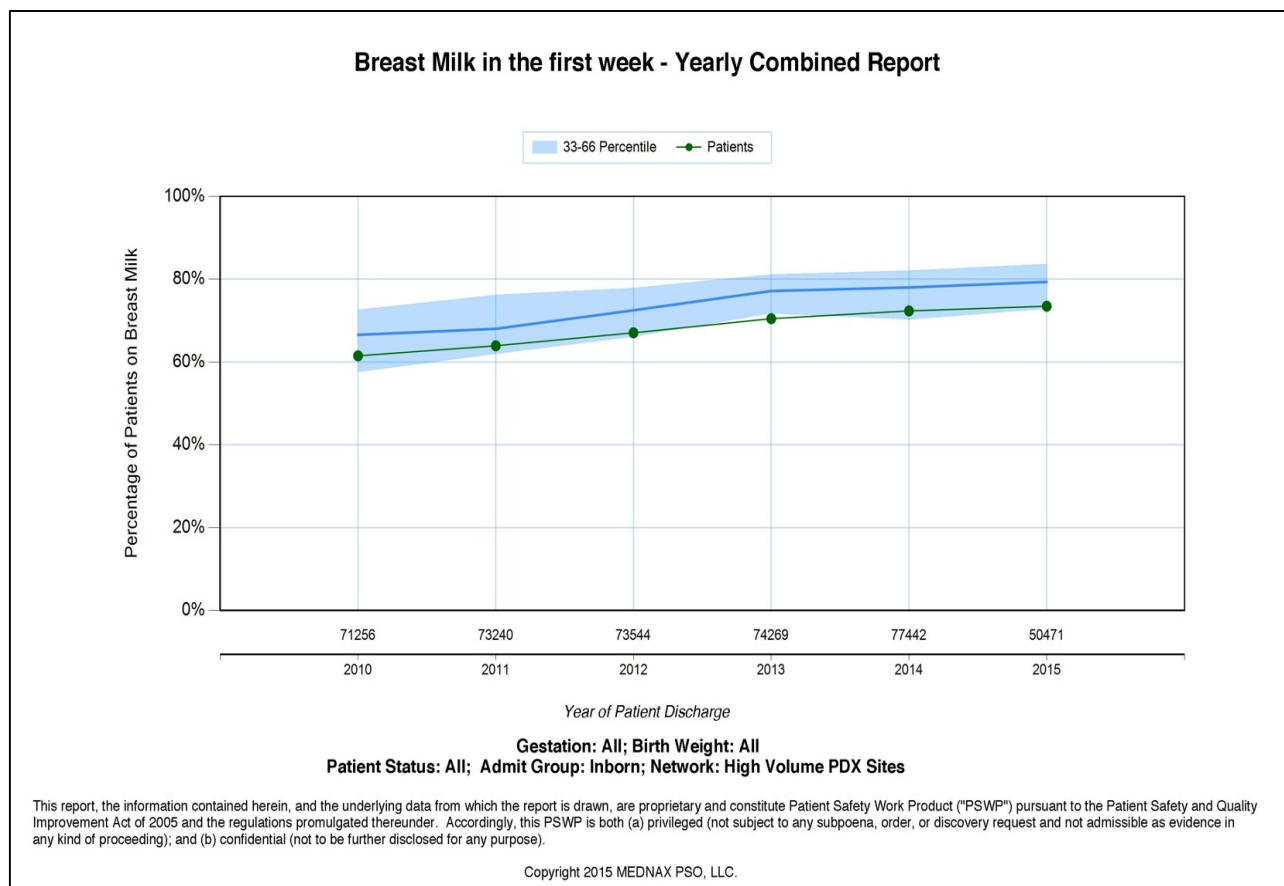


Figure 2

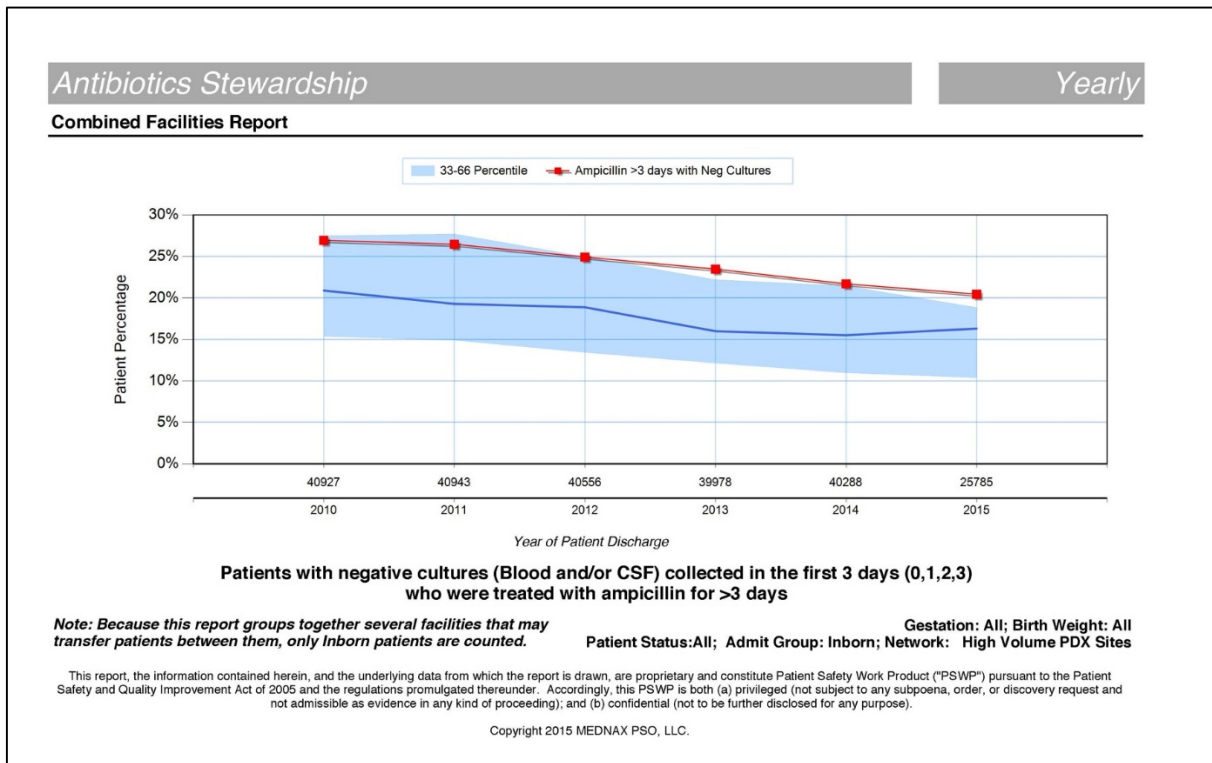
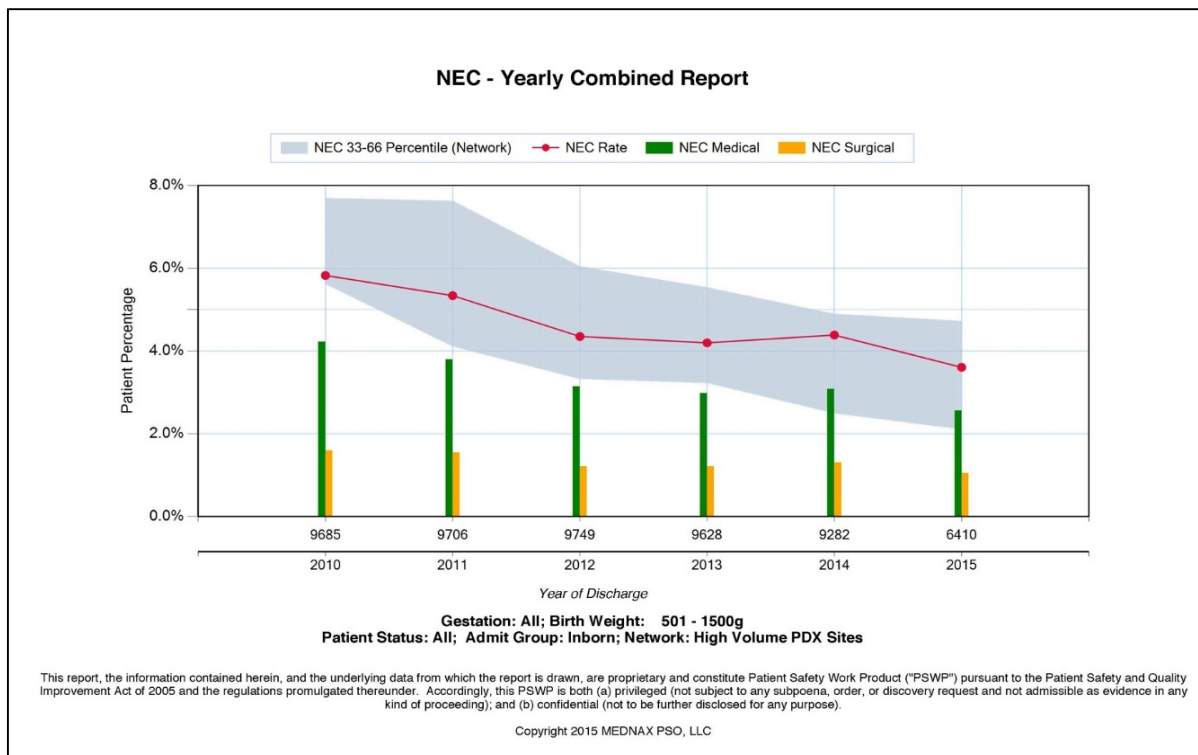


Figure 3



SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

CMS recognizes that accessing the optimal combination of child and youth services to meet each child's unique needs presents a significant challenge for vulnerable children and youth in need of services, as well as for their families. In the draft model concept, we seek to improve coordination and alignment across programs and systems by supporting the establishment of robust health care and health-related social service provider partnerships to improve health, wellness, and total cost of care with the potential for sharing in cost savings for successful performance. We are interested in input on innovative financial arrangements that combine or coordinate funding in an effort to integrate and streamline care for high need and vulnerable children and adhere to current Medicaid and CHIP program integrity requirements. Since the Innovation Center seeks to test models that, when successful, can be scaled and spread, we seek comments on how current Medicaid and CHIP authorities and programs might be used to support reproducible state-based models to improve care for children and youth.

QUESTIONS

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?

Medicaid and CHIP beneficiary populations that offer the greatest opportunity for generating savings and improved outcomes are those that are at risk for prematurity, those identified as positive during screening processes and lost to follow up, those with fully treatable conditions, or those with poorly coordinated multi-specialty care where unnecessary services are rendered. One example of the lost to follow up dilemma on a national level can be demonstrated in the diagram below, which details our Pediatrix Newborn Hearing Screen Program's 2016 results for lost to follow up in comparison to the CDC.

National Data	2014 CDC*	2016 Pediatrix NHSP (31 States)
Capture rate	97.9% (n=3,877,851)	99.86% (n=861,857)
Refer rate	1.6% (n=63,341)	1.14% (n=9,825)
True incidence rate (babies with diagnosed hearing loss)	1.6 per 1,000 screened	1.33 per 1,000 screened
Lost to follow-up/lost to documentation rate	34.4% (n=21,819)	5.41% (n= 524)

*Centers for Disease Control and Prevention (CDC) Summary National Early Hearing Detection and Intervention (EHDI). Please note Pediatrix NHSP data corresponds to the most current CDC data available.

a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?

Premature infants, infants with opioid withdrawal and infants with complex malformations should be included in an integrated care model.

b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

Our recommendations would be to consider three possible models:

- i. Perinatal integrated healthcare model (prenatal care, birth, 6-months post-partum)
- ii. Neonatology only (birth to 1 year of life)
- iii. Pediatric integrated healthcare model (2-6 years old)

2. How could health care providers be encouraged to provide collaborative services with health related social service providers for a designated pediatric population's health and social needs?

This can be accomplished through the development of outcome-based protocols that include social services as an integral component and related incentives for selected specialties.

a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

A risk sharing approach or a medical home bundled payment approach could be considered along with population health management

Risk Sharing Approach – As in most current value-based models, under a risk sharing approach the hospitals, providers and payers would bear a portion of any risk or gain with the first year being a baseline year with upside gain or incentives earned only on established savings and by meeting quality metrics. Attribution should be based on the population of child bearing age and related potential newborns based on historical data (last 2 - 3 years). Savings or deficit distributions could flow to the primary payer first, followed by distributions based on percentage of total allowed or paid to each participating provider adjusted for quality metrics and risk.

Bundled Payment Approach – Establishes a medical home with a fixed priced reimbursement structure for all providers, such as the Pediatrician, OB, Hospital, Radiologist, Anesthesiologist, Social Services, Pharmacist, etc., and adds incentives for meeting quality measures and delivering services in aggregate below the set pricing. Corridors can also be established to mitigate risk for providers.

b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

Attribution model should include Age, Weight and Risk Scores to help support balanced attribution across providers. RVU may be adjusted for providers with a population with higher risk scores.

c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

Attribution using the above factors along with adjustment of RVU based on the Risk Scores of the population will help ensure providers are keeping practices open for these patients and are also incentivized to provide the care required by these high-risk patients. Increasing RVUs obviously impacts the cost; however, this can be mitigated by the alternative payment models suggested above.

d. Are different payment models appropriate for different potential health care and health related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

Payment models need to be aligned based on the approaches suggested to ensure consistency and cooperation among the delivery system as well as the payer.

Neonatology has unique attribution-, risk scoring- and payment methodology, therefore payment tiers need to be correlated with various risk tiers.

Alternative payment models that include multi-specialty pediatric providers need to have a carefully weighted payment methodology, which includes complex variables such as frequency, timing and intensity of services delivered.

3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?

Financial incentives and funding streams are currently not optimally aligned. On the contrary, for specific episodes of care the provider-, hospital- and payer incentives are sometimes misaligned. More importantly, all stakeholders are currently dis-incentivized to use social services. Access to specialty care and funding in rural areas for neonatal or pediatric care remain deficient.

a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.

Disparate or nonexistent standards and incentives are disruptive. For example, states have different policies, guidelines, funding streams and budgetary constraints. In addition, the fundamental challenges are socioeconomic, such as when a parent-to-be or parent cannot access care easily and is not provided with the resources to sustain a healthy lifestyle that is passed down to the next generation.

b. What factors are essential to the success of this alignment?

Factors required for appropriate alignment include agreement on goals to be accomplished, metrics to be utilized to measure performance, designation of benchmarks, multi-state data sharing agreements, shared resources and appropriate care coordination among all stakeholders by using technological platforms such as telehealth, clinical data registries, mobile health devices, etc.

c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

Infrastructure required includes implementing interfaces or a Health Information Exchange (HIE) to share clinical data on a real-time basis helping avoid duplicative services or other waste. In addition, a secure data warehouse and data exchange needs to be established to share claims and other actuarial data. Analytical team needs to be established to support ongoing reporting and corrective action plans. Reporting for outcomes by patient, provider and risk pool along with tracking fund flow needs to be established as well.

Financial data could be shared directly or via a data intermediary. Only paid claims data, in order to protect proprietary information, would be shared and performance compared to peers could be provided in aggregate form just as for clinical outcomes data. Information going through a data intermediary may be replaced by values based on actuarial formulae to protect any specific contracted reimbursement.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

A defined "Funds Flow" would be the starting point for coordinating incentives, grants or other funding. Once the funding pool that includes all sources of funding is established:

- i. Funds could be split between Administrative & Health Care Allocation with no more than X% going to administration
- ii. X% of the funds could be withheld for incentive payments
- iii. The remaining funds could be allocated for FFS, bundle or another agreed upon payment methodology

The payment methodology selected would drive how payment is made to each provider for each patient episode of care.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?

- i. Expanded newborn and maternal screening and support for high risk pregnancies as part of the EPSDT benefit
- ii. Review of social environment and provision of necessary support as indicated by the review

iii. Engagement of specialists within X weeks of a diagnosed high-risk pregnancy

a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

Barriers include education, transportation, access to specialty providers and poor follow up.

b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?

Alignment and consistency is critical to recognizing key benefits by combining a subset of authorities to help with oversight, compliance, resource allocation, standardization of methods, streamlined implementation and realization of cost savings.

b. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular “bundles” of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

Use telehealth:

- ✓ to increase timely access to care
- ✓ to increase access to pediatric sub-specialty providers
- ✓ as a triage tool for referral to an appropriate care provider
- ✓ to monitor high-risk cases in lower level NICUs
- ✓ as a consulting service that could prevent ER visits

Innovative pediatric bundles that could lower costs would be:

- ✓ pediatric-mental health bundles
- ✓ pediatric-neuro bundles
- ✓ pediatric-cardiac bundles
- ✓ neo-maternity care bundles
- ✓ neo-genetics-neuro services bundles
- ✓ pediatric-anesthesia bundles

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

By establishing baselines and adjusting for risk factors and CPI, savings can be calculated opposite prior year performance either against each participant or against national or regional benchmarks. Savings at each provider level or group of providers should be calculated in a similar manner ideally separating facility, ancillary and professional components.

Savings can be calculated by risk tiers and by stakeholder (provider, facility, region, etc.) based on algorithms that take frequency, intensity and optimal cost/quality ratio into account.

SECTION IV: PEDIATRIC MEASURES

CMS has worked with stakeholders to develop a core set of child health care quality measures that can be used to assess the quality of health care provided to children enrolled in Medicaid and CHIP. States and tribes can use the child core set of measures to monitor and improve the quality of health care provided to Medicaid and CHIP enrollees; however, CMS notes that state and tribal reporting on the core set is voluntary. CMS is interested in learning from and, where appropriate, building upon its work on pediatric quality measures indicative of health outcomes. In particular, we are interested in short-to-medium term measures associated with both short- and long-term cost reductions and improved quality to both Medicaid and other public sector programs as healthy children become healthy adults. In addition, CMS is interested in learning how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health.

QUESTIONS

Current metrics are only partially addressing the pediatric population need. We would propose that instead of new specific metrics that do not always correlate with better outcomes, perhaps a total cost of care model would emphasize a comprehensive approach, with different weights assigned to various aspects within the care continuum (e.g., physician rendered care, facility services, in home services, telehealth services.)

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

- ✓ Genetic testing and mandatory follow up for specific conditions
- ✓ Developmental milestones
- ✓ Nutrition education scores

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

Current metrics are only partially addressing the pediatric population need. We would propose that instead of new specific metrics that do not always correlate with better outcomes, perhaps a total cost of care model would emphasize a comprehensive approach, with different weights assigned to various aspects within the care continuum (e.g., physician rendered care, facility services, in home services, telehealth services).

SECTION V: OTHER COMMENTS

1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

Critical success factors include incentives, budgets, policies and resources such as transportation, human capital and technology.

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

One universal health-card and one universal medical record for each child via one single technological platform would allow providers from any specialty delivering care within the integrated care delivery model to have unrestricted access to all data required and to appropriately monitor care access, compliance, outcomes, and utilization of services. It would also allow for an automated-funds attribution model to the children with the highest need.

APPENDIX A: Pediatrix 100,000 Babies Campaign Print Publication in *Pediatrics*

A Multifaceted Approach to Improving Outcomes in the NICU: The Pediatrix 100 000 Babies Campaign

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BACKGROUND AND OBJECTIVE: Despite advances in neonatal medicine, infants requiring neonatal intensive care continue to experience substantial morbidity and mortality. The purpose of this initiative was to generate large-scale simultaneous improvements in multiple domains of care in a large neonatal network through a program called the “100,000 Babies Campaign.”

METHODS: Key drivers of neonatal morbidity and mortality were identified. A system for retrospective morbidity and mortality review was used to identify problem areas for project prioritization. NICU system analysis and staff surveys were used to facilitate reengineering of NICU systems in 5 key driver areas. Electronic health record–based automated data collection and reporting were used. A quality improvement infrastructure using the Kotter organizational change model was developed to support the program.

RESULTS: From 2007 to 2013, data on 422 877 infants, including a subset with birth weight of 501 to 1500 g ($n = 58\,555$) were analyzed. Key driver processes (human milk feeding, medication use, ventilator days, admission temperature) all improved ($P < .0001$). Mortality, necrotizing enterocolitis, retinopathy of prematurity, bacteremia after 3 days of life, and catheter-associated infection decreased. Survival without significant morbidity (necrotizing enterocolitis, severe intraventricular hemorrhage, severe retinopathy of prematurity, oxygen use at 36 weeks' gestation) improved.

CONCLUSIONS: Implementation of a multifaceted quality improvement program that incorporated organizational change theory and automated electronic health record–based data collection and reporting program resulted in major simultaneous improvements in key neonatal processes and outcomes.

Despite advances in neonatal medicine, infants requiring neonatal intensive care continue to incur substantial morbidity and mortality.^{1,2} Unexplained variations in outcome between individual NICUs remain a dilemma for neonatal networks seeking to uniformly improve outcomes.³ Single-center and collaborative quality improvement (QI) initiatives have sought to decrease

variation and improve outcomes, but results have been mixed.^{4–6}

QI collaboratives commonly focus on a single clinical problem, rather than the most common group of problems that drive poor health outcomes.^{5,7,8} Such collaboratives often require expensive data collection and reporting systems that may not be readily available. These limitations create significant

abstract



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Dr Ellsburly contributed to the conception and design of the study and leads our quality programs, wrote the first draft of the article, and wrote and edited the first to final draft with the help of his co-authors who offered suggestions for improvement; Dr Clark contributed to the conception and design of the study as well as the final approval of the version to be published, and provided extensive editorial input to the writing of the final article; Dr Ursprung contributed to the conception and design of the study as well as the final approval of the version to be published, is the associate director of our quality programs, and provided extensive editorial input to the writing of the final article; Mrs Dodd played a pivotal role in helping our medical directors access and review their quality reports and to set up quality improvement projects in their NICUs, and provided editorial input to the writing of the final article; Mr Handler is the lead developer who updates and improves our clinical data warehouse reporting system, which supports all of our quality improvement efforts, and provided editorial input to the writing of the final article; Dr Spitzer contributed to the conception and design of the study, analysis and interpretation of data, and critical revisions for important intellectual content, and all authors approved the final manuscript as submitted.

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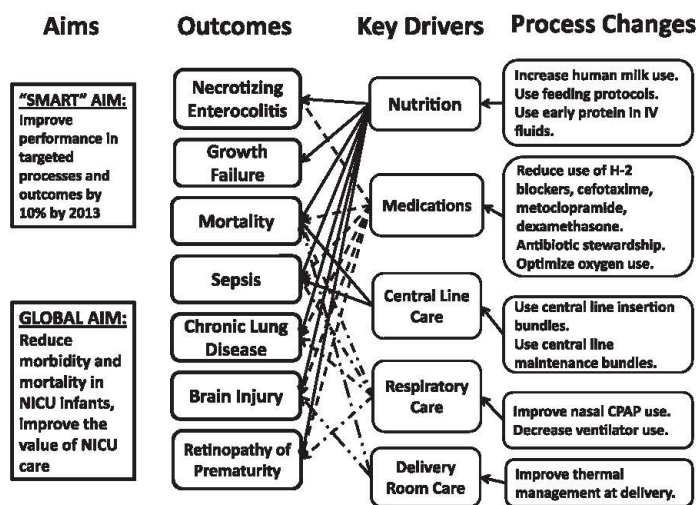


FIGURE 1
Driver diagram of the 100 000 Babies Campaign identifying the aims, outcomes, key drivers, and process changes targeted in the program. CPAP, continuous positive airway pressure; IV, intravenous.

barriers to large-scale improvement in neonatal care and outcomes.

The objective of this initiative was to pragmatically reengineer the delivery of neonatal intensive care in a large neonatal network with the goal of simultaneous multidimensional improvements in process and outcome. We hypothesized that a structured approach to system evaluation and reengineering of neonatal intensive care in multiple key process areas would yield sustained improvement in neonatal morbidity and mortality.

METHODS

Setting

Pediatrics Medical Group (PDX) is a national group of clinicians that provides neonatal intensive care services for ~20% of the newborns in the United States who require intensive care. These clinicians practice in a diverse group of settings, from small community hospitals to large children's hospitals,

and reside in 34 states plus Puerto Rico.

Ethics and Data Collection

This analysis is a descriptive review of data from infants in the PDX network, composed of 330 NICUs that feed data into the PDX Clinical Data Warehouse (CDW). PDX clinicians used a proprietary software system (BabySteps; MEDNAX, Inc, Sunrise, FL). Infant data are added and modified by providers in BabySteps during their daily assessments. These data are used to generate the medical documentation (eg, admission, progress, and discharge notes), billing worksheets, and the CDW data set. To maximize validity, data for the CDW are extracted at the end of the infant's NICU stay, so providers have multiple opportunities to review and verify the documentation. These data are deidentified, stored in a consolidated national data set, and are compliant with the Health Insurance Portability and Accountability Act

of 1996 regulations.⁹ The Western Institutional Review Board approved the use of this deidentified data warehouse for this study.

Model Development

From 2007 to 2009, the authors defined key driver processes based on literature review and use of nominal group technique methods.¹⁰ Emphasis was placed on identifying clinical processes that were modifiable and had substantial impact on the primary drivers of poor health outcomes^{8,11–20} (Fig 1).

John Kotter's 8-step model for leading organizational change was used for the design and implementation of our campaign (Fig 2).^{21,22} The term "100 000 Babies Campaign" was used because of its similarity to the Institute for Healthcare Improvement's "100 000 Lives Campaign," which successfully targeted key problem areas in care with the goal of saving 100 000 lives.^{23,24} We sought to reengineer the care of 100 000 infants with the hope that the simultaneous targeting of key driver processes would translate into improved outcomes.

Intervention

Engagement of Practices

Various aspects of the 100 000 Babies Campaign were introduced informally from 2007 to 2009, with formal launch of the program in 2009. The program built on our previous QI successes in improving growth and reducing retinopathy of prematurity (ROP).^{25,26} Participation was not mandated, but was strongly encouraged. A key theme of the intervention was a flexible and adaptable approach to improving care within the context of the individual NICU's microsystem. A variety of approaches to problems were provided, with the expectation that each NICU would adapt the interventions to their specific environment. Reliance on automated

central data collection via the electronic health record (EHR) rather than extensive local data collection was emphasized to remove barriers to participation in the program and to ensure the most reliable and reproducible outcome information.

Outcome Review

NICUs were asked to review their outcomes for several years to assess their performance in the driver areas and in clinical outcomes. The CDW was used for NICU self-assessment and for comparison with PDX network benchmarks.

System Analysis

NICUs were provided with a system analysis worksheet to guide analysis of their system's ability to support the targeted project goals.

Staff Survey

NICUs were provided with a survey to assess the attitudes, knowledge base, and biases of their clinical staff. Comparison of responses from physicians, nurse practitioners, and NICU nurses was emphasized to detect variation in knowledge gaps and attitudes within a NICU. These knowledge gaps and variations were used to inform their specific educational needs and project strategies.

Project Prioritization

After review of surveys, outcomes, and system analysis, the NICU team used a project prioritization matrix to determine specific target areas for ongoing improvement efforts. Multidisciplinary project teams were then designated, with preference for multiple small teams rather than 1 large team that did all projects.

Implementation

A project management tool (QualitySteps™ MEDNAX, Sunrise, FL) was used to facilitate tracking of each project, to help

Concept	Kotter's 8-Step Process	100,000 Babies Campaign Steps
Prepare	1. Create Urgency	Provide outcome data and benchmarking Highlight quality chasm in neonatology Maintenance of certification
	2. Create a Guiding Coalition	Quality Improvement leadership team Regional and local improvement champions
	3. Create a Vision	Build on previous success Emphasis on pragmatic and meaningful improvement
Implement	4. Communicate Vision	Quality Summits
	5. Remove Obstacles	Flexibility in participation Automated data collection and reports
	6. Enable Short-Term Wins	Include simple projects with immediate results
Manage	7. Build on Change	Center presentations to peers Spread of success
	8. Embed Change in Culture	Ongoing emphasis and recognition of improvement activity Ongoing infrastructure to support improvement work

FIGURE 2

Adaption of the Kotter organizational change model to the structure of the 100,000 Babies Campaign.

coordinate the QI team efforts, and to enable documentation that allow participants to obtain American Board of Pediatrics Part 4 Maintenance of Certification (MOC) credit. It contained project progress notes, educational materials, and templates.

QI Culture

To facilitate a culture of improvement and to provide peer support, PDX provided "Quality Summit" conferences 3 times per year. The curriculum covered project selection, Pareto charts, root cause analysis, multidisciplinary team building, change concepts, plan-do-study-act cycles, basic data analysis, and use of run charts. Workshops included small group exercises that provided opportunity to apply QI methods to specific clinical problems and emphasized shared problem solving with clinicians from diverse backgrounds.^{27,28} QI project presentations were a major feature of the program, and were used to show multiple approaches

to clinical problems and to create a setting that highlighted the work of high-performing NICUs. To remove barriers to participation and to emphasize the organization's commitment to improving patient care, funding for travel and meeting costs was provided by PDX with the expectation that participants would take the acquired skills back to their practices and apply them within their own NICU's QI infrastructure.

CDW

The CDW was used as the primary mechanism for project data reporting at the local level. Data from the BabySteps EHR system were automatically extracted and transformed into near real-time clinical quality reports of multiple processes and outcomes. Data reports included network level comparisons to NICUs of similar volume. These reports did not require any specific data collection or extraction.

Definitions

Demographic Data

Estimated gestational age (EGA) was defined as the best estimate of the neonatologist of EGA, based on obstetric history, prenatal ultrasound, and postnatal physical examinations.

Process Measures

For each medication reported in all tables, we defined exposure to that specific medication as any report at any time during the NICU stay. Early ampicillin was defined as exposure to ampicillin on the day of birth (day 0) or day 1 or 2 after birth. Ampicillin duration of >3 days with negative cultures was the proportion of infants in whom the blood culture was negative who were treated with ampicillin for >3 days' duration.

Daily data on nutrition were captured by using a nutritional support pick list. Any report of human milk (donor or maternal) during the hospital stay was considered exposure to human milk. Human milk at discharge was any report of human milk in the day of discharge feedings.

The care provider is required to report the degree of oxygen support and the type of support each day. We counted the total number of days each patient was on a ventilator and calculated the median days of ventilatory support for each year. Hypothermia was defined as a NICU admission temperature of >36°C.

Outcome Measures

In infants who had head imaging reported, we calculated the proportion of infants who had a grade 3 or 4 intraventricular hemorrhage (IVH). The highest degree of severity was based on the following: grade 3, ventricles are enlarged by the accumulated blood; and grade 4, bleeding extends into the brain tissue around the ventricles. In infants with a report of

an eye examination, we calculated the proportion with severe (stage 3, 4, or 5) ROP. The highest degree of severity was used based on the following: stage 3, severely abnormal blood vessel growth; stage 4, partially detached retina; stage 5 completely detached retina.

The guidance definition for necrotizing enterocolitis (NEC) is that infants with NEC should have ≥ 1 of the following clinical signs: bilious gastric aspirate or emesis, abdominal distention, or blood in stool without evidence of a rectal fissure; and had ≥ 1 of the following radiographic findings: pneumatosis intestinalis, hepatobiliary gas, or pneumoperitoneum. NEC-medical is treatment with antibiotics, bowel rest, and supportive care and NEC-surgical is when surgery is also required. Chronic lung disease (CLD) was defined as being on more than room air at 36 weeks postmenstrual age (PMA). The rates of NEC and CLD were based on the denominator of all infants (survived to discharge or died). We defined late-onset sepsis as any positive blood culture reported after 3 days of age. Infants were considered to have survived with no morbidity if they were discharged from the hospital with no report of severe IVH (grade 3 or 4), severe ROP (stages 3, 4, or 5), NEC (medical or surgical), or CLD. Weight gain (g/day) over the hospital stay was calculated (discharge minus birth weight divided by the age at discharge for survivors).

Data Analysis

Infants were categorized by year of discharge for the descriptive tables. The *P* values reported in the tables are based on trend analyses over the entire time period and are not simple comparisons of 2007 with 2013. For discrete categorical variables, we used Cochran-Armitage trend tests to determine if there were significant changes over time.

Continuous variables (EGA, birth weight, maternal age, ventilator days, age at discharge) were evaluated by using a 1-way analysis of variance (ANOVA) and linear regression to determine if there were significant changes over time. If the *P* value was <.01, we compared each year to 2007 (control) by using Dunnett's method in JMP. Nonparametric data were assessed with Kruskal-Wallis ANOVA. Statistical analyses were performed by using JMP 11 (SAS Institute, Cary, NC).

For catheter-associated bloodstream infection calculations, an algorithm that is similar to the 2012 Centers for Disease Control and Prevention definition for central line-associated bloodstream infection (CLABSI) was developed and applied to the entire data set for consistent description of CLABSI over the study period. This algorithm did not include provider-driven interpretation of the algorithm, but was based on objective data components, such as culture results, timing, and presence of a central line relative to time of positive cultures. This model likely overestimates the CLABSI rate to a small degree, as other primary causes of infection may not have been identified and could be misattributed as a CLABSI.²⁹

A statistical process control chart analysis was done by using standard rules to detect special cause variation. The mean (center line) and upper and lower control limits were calculated and displayed as ± 3 SD of the mean by using QI Macros for Excel (KnowWare International, Inc, Denver, CO).^{30,31}

RESULTS

Between January 1, 2007, and December 31, 2013, we provided care to 574 158 infants admitted for neonatal intensive care; 490 539 (85%) were inborn and 422 877 (74%) were cared for at a single hospital. Tables 1 and 2 report on

TABLE 1 Results for Process Measures for Infants With Birth Weight of 501–1500 g

	2007	2008	2009	2010	2011	2012	2013	P
Any human milk, <i>n</i> (%) ^a	6217 (77.3)	6648 (78.5)	6910 (82.3)	7184 (85.2)	7239 (85.9)	7326 (86.9)	7351 (87.9)	<.0001
Any human milk at discharge in survivors, <i>n</i> (%) ^a	3057 (42.5)	3199 (42)	3477 (45.4)	3712 (48.4)	3779 (49)	3889 (50.3)	4043 (52.7)	<.0001
Dexamethasone, <i>n</i> (%) ^a	645 (8)	644 (7.6)	612 (7.3)	571 (6.8)	576 (6.8)	568 (6.7)	562 (6.7)	.0055
H2 blockers, <i>n</i> (%) ^a	1386 (17.2)	1286 (15.2)	1199 (14.3)	932 (11.1)	885 (10.5)	694 (8.2)	589 (7)	<.0001
Metoclopramide, <i>n</i> (%) ^a	1880 (20.6)	1415 (16.7)	1097 (13.1)	411 (4.9)	181 (2.1)	142 (1.7)	90 (1.1)	<.0001
Cefotaxime, <i>n</i> (%) ^a	1152 (14.3)	940 (11.1)	769 (9.2)	692 (8.2)	679 (8.1)	677 (8)	599 (7.2)	<.0001
Patients receiving early (on day 0, 1, 2) ampicillin, <i>n</i> (%) ^a	6452 (80)	6745 (79.7)	6803 (78.7)	6702 (79.5)	6404 (76)	6361 (75.4)	6197 (74.1)	<.0001
Early ampicillin duration of >3 d with negative cultures, <i>n</i> (%) ^a	2138 (6076 (55.2)	2226 (6398 (54.8)	2110 (6272 (53.6)	2096 (6391 (52.8)	1968 (6111 (52.2)	1832 (6065 (50.2)	1671 (5893 (28.4)	<.0001
Patients ventilated in first 3 d after birth, <i>n</i> (%) ^a	4851 (60.1)	4875 (57.6)	4577 (55.7)	4625 (54.9)	4400 (52.2)	4280 (50.7)	3899 (46.6)	<.0001
Ventilator days in ventilated patients, median (10–90th) ^b	6 (1–46)	6 (1–45)	6 (1–45)	5 (1–42)	5 (1–41)	5 (1–40)	5 (1–42)	<.0001
Hypothermia (admit temperature <36°C), <i>n</i> (%) ^a	1889 (23.2)	1762 (20.8)	1619 (19.3)	1446 (17.2)	1180 (14)	1070 (12.7)	968 (11.6)	<.0001

H2 blocker (famotidine, cimetidine, ranitidine).

^a Discrete categorical variables were evaluated by using a Cochran-Armitage trend test to determine if there were significant changes over time.

^b Continuous variables were evaluated by using a 1-way ANOVA and linear regression to determine if there were significant changes over time.

the subset of this population that had birth weights between 501 and 1500 g (*n* = 58 555, 14%). A data table on the entire population is in the Supplemental Information.

Results for Infants 501 to 1500 g

Demographics

There was no change over time in median gestational age (29 weeks), birth weight (1.1 kg), proportion of male infants (50%), delivery by cesarean (76%), or multiple gestations (28%). There was a slight increase in median maternal age from 27 to 28 years old (*P* < .001). Antenatal corticosteroid use significantly increased over time from a 2007 baseline of 78.8% to 85.0% in 2013 (*P* < .001).

Process Measures

Exposure to human milk and use of human milk use at discharge increased (Table 1). Exposure to medications that were targeted for reduction (dexamethasone, H2 blockers, metoclopramide, and cefotaxime) was decreased. The total proportion of infants treated with early empirical ampicillin and the proportion of infants with negative cultures who were treated for >3 days decreased. The proportion of infants treated with mechanical ventilation decreased as did the median days of ventilator support. Hypothermia at admission to the NICU decreased.

Outcome Measures

Mortality, NEC, severe and surgical ROP, and bacteremia after 3 days of life decreased (Table 2). Use of more than room air support at 36 weeks' PMA decreased slightly. Severe IVH showed a nonsignificant decrease. Survival without significant morbidity (NEC, severe IVH, severe ROP, oxygen use at 36 weeks) improved. The weight at time of discharge and growth velocity birth to discharge was slightly increased.

TABLE 2 Results for Outcome Measures for Infants With Birth Weight of 501–1500 g

	2007	2008	2009	2010	2011	2012	2013	P
Died, n (%) ^a	836 (10.4)	838 (9.9)	728 (8.7)	750 (8.9)	714 (8.5)	702 (8.3)	681 (8.1)	<.0001
IVH grade 3 or 4 in patients with neuroimaging, n (%) ^a	471 (7.2)	466 (6.5)	495 (6.9)	474 (6.6)	471 (6.6)	452 (6.3)	422 (5.8)	.1
NEC medical for surgical/All, n (%) ^a	529 (6.6)	542 (6.4)	454 (5.4)	463 (5.5)	410 (4.9)	338 (4)	323 (3.9)	<.0001
Medical NEC/All, n (%) ^a	351 (4.4)	365 (4.3)	301 (3.6)	329 (3.9)	296 (3.5)	236 (2.8)	220 (2.6)	<.0001
Surgical NEC/All, n (%) ^a	178 (2.2)	179 (2.1)	153 (1.8)	134 (1.6)	114 (1.4)	102 (1.2)	105 (1.2)	<.0001
ROP 3, 4, or 5 in patients with an eye examination reported, n (%) ^a	346 (6.9)	373 (5.8)	373 (5.7)	353 (5.3)	304 (4.6)	295 (4.4)	272 (4.1)	<.0001
ROP treated (laser or Avastin)/All, n (%) ^a	236 (2.9)	237 (2.8)	224 (2.7)	193 (2.3)	162 (1.9)	175 (2.1)	153 (1.8)	<.0001
cLD (alive on > room air at 36 wk PMA)/All, n (%) ^a	1816 (22.6)	1803 (21.3)	1756 (20.9)	1742 (20.7)	1744 (20.7)	1760 (20.9)	1680 (20.1)	.01
Late-onset sepsis (positive blood culture obtained >3 d after birth)/All, n (%) ^a	1579 (19.6)	1499 (17.7)	1366 (16.2)	1150 (13.6)	983 (11.7)	888 (10.5)	754 (9)	<.0001
Survived with no morbidity/All, n (%) ^a	5092 (63.3)	5491 (64.9)	5545 (66.1)	5553 (66)	5651 (67.1)	5674 (67.3)	5733 (68.3)	<.0001
Age at discharge in survivors, median (10–90th) ^b	52 (35–98)	52 (26–100)	54 (27–102)	55 (27–103)	55 (28–103)	56 (28–105)	55 (28–104)	<.0001
Discharge weight, kg in survivors, median (10–90th) ^b	2.25 (1.82–3.08)	2.25 (1.83–3.16)	2.30 (1.85–3.25)	2.34 (1.88–3.31)	2.37 (1.88–3.32)	2.38 (1.89–3.41)	2.39 (1.89–3.4)	<.0001
Weight gain (g/d) in survivors, median (10–90th) ^b	21 (16–27)	22 (18–27)	22 (16–28)	22 (17–28)	23 (17–28)	23 (17–28)	23 (18–28)	<.0001

^a Discrete categorical variables were evaluated by using a Cochran-Armitage trend test to determine if there were significant changes over time.

^b Continuous variables were evaluated by using a 1-way ANOVA and linear regression to determine if there were significant changes over time.

Age at discharge of survivors was increased.

Results for All Infants, All Weights

Human milk use increased, and use of targeted medications decreased (Supplemental Table 4). Early use of ampicillin decreased. Treatment with ampicillin for more than 3 days in infants with negative blood cultures decreased. Fewer infants were treated with mechanical ventilation. Admission hypothermia, late onset sepsis, mortality, and NEC decreased.

Statistical process control chart analysis (Fig 3) showed a continued decrease in CLABSI rate from a baseline of 6 CLABSI/1000 line days to 2.6 CLABSI/1000 line days. The continued improvement triggered special cause variation and recalculation of control limits 2 additional times, indicating continued improvement throughout the study period.³¹

DISCUSSION

In this large network of NICUs, the implementation of the 100 000 Babies Campaign was associated with simultaneous improvement in the key driver processes and outcomes. Late onset sepsis, catheter associated infections, ROP, NEC, and mortality decreased. Survival without morbidity increased. Growth, severe IVH, and oxygen use at 36 weeks' PMA were stable or slightly improved.

Our findings are similar to previous analyses of NICU networks. Stoll et al³² showed an increase in antenatal corticosteroid use and decreased use of intubation and surfactant in similar subgroups of premature infants from 2003 to 2007. Horbar et al² showed a decrease in morbidity and mortality in infants weighing 501 to 1500 g in the Vermont Oxford Network from 2000 to 2009. It is possible our

improvements mirror improvements seen in non-Pediatrics NICUs; however, we targeted and showed sustained improvement in multiple key process measures.

Our findings are consistent with NICU QI collaboratives that report improvement when a systemwide application of evidence-based practices is enacted and supported over time.^{4,5,7,8,14,33,34} The 100 000 Babies Campaign was unique in that it was successfully conducted within a large neonatal network with automated data collection, and improved multiple processes and outcomes simultaneously, rather than targeting a single process or morbidity.

The structure of our campaign has limitations. No contemporaneous control group was used. We acknowledge that statistical associations are not equivalent to establishing causality. The pragmatic approach to our patient population limited the ability to directly collect some data, such as central line maintenance bundle compliance. The details of project selection, prioritization, modification, and implementation were left to the discretion of the individual practices and may have been suboptimal. Some clinical results could have been affected by inconsistent electronic documentation. To combat this deficiency, educational sessions were provided to standardize documentation and BabySteps was enhanced to include reminders and forced functions to enhance accurate documentation.

Multiple factors contributed to the success of our campaign. Use of Kotter's model²¹ for leading change was an important determinant of successfully changing behavior in a diverse neonatal network. An important step to creating

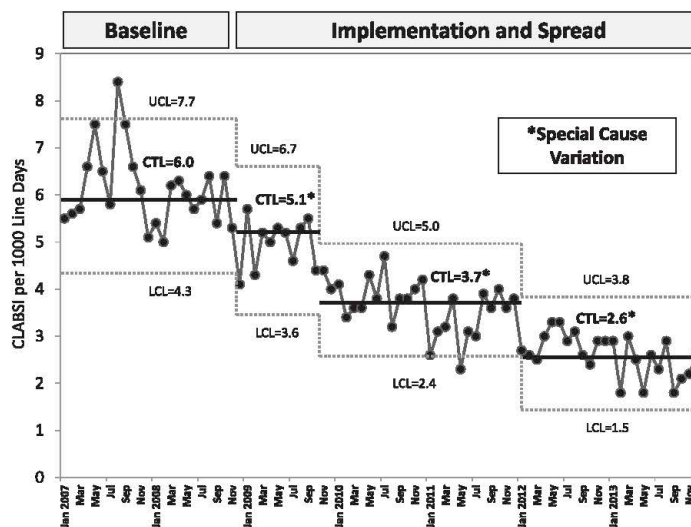


FIGURE 3
Statistical process control chart, CLABSI per 1000 line days, monthly data from 2007 through 2013. Sustained decrease in CLABSI rate with special cause variation shown over 3 time periods after implementation of the initiative. Control limits were adjusted with each special cause event. CTL, center line (mean); LCL, lower control limit; UCL, upper control limit.

TABLE 3 Quality Summit Attendance and CDW Utilization

Activity	2007	2008	2009	2010	2011	2012	2013
Quality summit attendance	263	331	447	414	425	456	468
CDW unique visitors	391	513	547	648	690	638	659
CDW visits	1626	2568	3274	4190	4094	4049	4579
CDW reports viewed	6511	10 132	12 859	15 326	15 443	16 148	17 522

transformative change is to “create urgency.” We produced this environment through the provision of a CDW that enabled clinicians to objectively see and compare their outcomes against other NICUs. Large, collaborative quality conferences were used to highlight these differences and create peer groups. Clinical practices that demonstrated the “quality chasm” in neonatology were emphasized, to show evidence-based practices that were not being fully implemented. Attendance at the Quality Summit (Table 3) demonstrates increasing participation in the meetings and use of the CDW during the study period. The American

Board of Pediatrics’ requirement to complete QI projects for MOC created additional urgency. From March 2011 to December 2013, American Board of Pediatrics MOC credit for QI work was given for 414 projects.

We speculate that our campaign will have downstream positive effects on general health outcomes. The improvements in human milk utilization and antibiotic stewardship have important ramifications for public health and disease prevention. Unneeded drug exposure increases the risk of adverse drug events, opportunities for error, and consumes additional nursing and pharmacy resources.³⁵ Compared

with baseline utilization in 2007, ~1 000 000 fewer doses of ampicillin, metoclopramide, and H2 blockers were given than expected. We estimate a cumulative cost savings of \$58 000 000 associated with the reduction in catheter-associated blood stream infection.³⁶ Based on changes in mortality, we estimate that over the course of our campaign there were 1885 fewer deaths than expected.

CONCLUSIONS

Implementation of the 100 000 Babies Campaign resulted in major

improvements in key processes and outcomes. The structured reengineering of NICU care, with a supportive infrastructure to affect large scale organizational change was successfully used in a large and diverse neonatal network. We speculate that use of organizational change theory, targeting of key drivers of adverse health outcomes, automated data collection, and reporting by using a specialty-specific EHR system could be widely used in health care to enable large scale improvements in patient health and improve the value of clinical care.

ABBREVIATIONS

ANOVA: analysis of variance
CDW: Clinical Data Warehouse
CLABSI: central line-associated bloodstream infection
CLD: chronic lung disease
EGA: estimated gestational age
EHR: electronic health record
IVH: intraventricular hemorrhage
MOC: maintenance of certification
NEC: necrotizing enterocolitis
PDX: Pediatrix Medical Group
PMA: postmenstrual age
QI: quality improvement
ROP: retinopathy of prematurity

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POTENTIAL CONFLICT OF INTEREST: All authors are employed by Pediatrix and work within The Center for Research, Education and Quality. Dr Ursprung also reports he serves as a member of the Vermont Oxford Network Database Advisory Committee.

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**A Multifaceted Approach to Improving Outcomes in the NICU: The Pediatrix
100 000 Babies Campaign**

Dan L. Ellsbury, Reese H. Clark, Robert Ursprung, Darren L. Handler, Elizabeth D.
Dodd and Alan R. Spitzer
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The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

Increasing Incidence of the Neonatal Abstinence Syndrome in U.S. Neonatal ICUs

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ABSTRACT

BACKGROUND

From the Division of Neonatology, Department of Pediatrics, Baylor University Medical Center, Pediatrix Medical Group (V.N.T.), and the Office of the Chief Quality Officer, Baylor Scott and White Health (M.M.B.) — all in Dallas; the Mildred Stahlman Division of Neonatology, Department of Pediatrics, and the Vanderbilt Center for Health Services Research and Department of Health Policy, Vanderbilt University School of Medicine, Nashville (S.W.P.); the Division of Neonatology, Department of Pediatrics, Feinberg School of Medicine, Northwestern University, and Ann and Robert H. Lurie Children's Hospital of Chicago — both in Chicago (K.M.); the Department of Biomedical Sciences, Charles E. Schmidt College of Medicine, Florida Atlantic University, Boca Raton (J.S.), and the Center for Research, Education, and Quality, Mednax, Sunrise (R.H.C., A.R.S.) — both in Florida; the Department of Pediatrics, Duke University School of Medicine, Durham, NC (P.B.S.); and Pediatrix Medical Group, Greenville Memorial Hospital, Greenville, SC (R.H.C.). Address reprint requests to Dr. Tolia at Baylor University Medical Center, 3500 Gaston Ave., 3 Hoblitzelle Hospital, Dallas, TX 75246, or at veeral.tolia@baylorhealth.edu.

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The incidence of the neonatal abstinence syndrome, a drug-withdrawal syndrome that most commonly occurs after in utero exposure to opioids, is known to have increased during the past decade. However, recent trends in the incidence of the syndrome and changes in demographic characteristics and hospital treatment of these infants have not been well characterized.

METHODS

Using multiple cross-sectional analyses and a deidentified data set, we analyzed data from infants with the neonatal abstinence syndrome from 2004 through 2013 in 299 neonatal intensive care units (NICUs) across the United States. We evaluated trends in incidence and health care utilization and changes in infant and maternal clinical characteristics.

RESULTS

Among 674,845 infants admitted to NICUs, we identified 10,327 with the neonatal abstinence syndrome. From 2004 through 2013, the rate of NICU admissions for the neonatal abstinence syndrome increased from 7 cases per 1000 admissions to 27 cases per 1000 admissions; the median length of stay increased from 13 days to 19 days ($P<0.001$ for both trends). The total percentage of NICU days nationwide that were attributed to the neonatal abstinence syndrome increased from 0.6% to 4.0% ($P<0.001$ for trend), with eight centers reporting that more than 20% of all NICU days were attributed to the care of these infants in 2013. Infants increasingly received pharmacotherapy (74% in 2004–2005 vs. 87% in 2012–2013, $P<0.001$ for trend), with morphine the most commonly used drug (49% in 2004 vs. 72% in 2013, $P<0.001$ for trend).

CONCLUSIONS

From 2004 through 2013, the neonatal abstinence syndrome was responsible for a substantial and growing portion of resources dedicated to critically ill neonates in NICUs nationwide.

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The New England Journal of Medicine

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THE NEONATAL ABSTINENCE SYNDROME is a drug-withdrawal syndrome that most commonly occurs after in utero exposure to opioids. It typically manifests in the first few days of life as hypertonia, autonomic instability, irritability, poor sucking reflex, impaired weight gain, and less commonly, seizures.¹ From 2000 through 2009, the incidence of the neonatal abstinence syndrome in the United States nearly tripled,² with several states reporting even larger recent increases.^{3,4} This rise occurred in association with an increase in the use of opioids by pregnant women.⁵⁻⁸ Despite the increased incidence of the neonatal abstinence syndrome, data on changes in the utilization of neonatal intensive care unit (NICU) resources or the treatment of affected infants are lacking.

Previous population-based studies of the neonatal abstinence syndrome have relied on hospital billing records for cohort identification and have not had access to infant-specific clinical information.⁷ Other studies of treatment for the neonatal abstinence syndrome have been limited largely to provider surveys,^{9,10} have involved populations restricted to specific geographic areas,^{11,12} or have represented only a partial sample of children's hospital NICUs.¹³ Moreover, reports describing maternal characteristics have been limited by small sample sizes^{14,15} and the inclusion of data from only a single center¹⁶ or a single region.^{3,17}

Understanding the changes in health care utilization and clinical treatment of these infants is critical for defining research priorities and aiding in the design of public health programs to improve health care delivery for the infants and their mothers. Our objective was to analyze these factors using data from a cohort of infants hospitalized with the neonatal abstinence syndrome in NICUs throughout the United States from 2004 through 2013.

METHODS

DATA SOURCE

Data were obtained from the Pediatrix Clinical Data Warehouse (CDW), a large, multicenter, deidentified data set¹⁸ that has been used by the National Institutes of Health,¹⁹ the Food and Drug Administration,²⁰ the Eunice Kennedy Shriver National Institute of Child Health and Human Development Pediatric Trials Network,^{21,22} and inde-

pendent investigators^{23,24} to define and evaluate national trends in NICU diagnoses and therapies. The CDW is generated from BabySteps (Pediatrix), a standardized documentation and billing software tool used by participating NICUs in 33 states and Puerto Rico that captures information on approximately 20% of infants admitted to NICUs in the United States.¹⁸ Data regarding the infants are added and modified by providers in BabySteps as they make their daily assessments. These data are used to generate the medical documentation (e.g., admission, progress, and discharge notes), billing worksheets, and the CDW data set. To maximize validity, data for the CDW are extracted at the end of the infant's NICU stay, so providers have had multiple opportunities to review and verify the documentation.¹⁸ Because the analysis used deidentified data, this study was reviewed and considered by the institutional review board at the Baylor Research Institute to be exempt from requirements for informed consent and was approved by the research advisory committee at Mednax.

COHORT SELECTION

All the infants discharged from 2004 through 2013 were eligible for inclusion in the study. Infants born with major congenital anomalies were excluded. To construct a cohort of infants with the neonatal abstinence syndrome, we queried the data set for the following diagnostic phrases: "neonatal abstinence syndrome," "drug withdrawal," or "drug withdrawal syndrome." Clinical diagnosis of the syndrome is typically made with the use of a standardized scale that scores the infant on the presence and severity of common withdrawal symptoms, such as central nervous system, vasomotor, or gastrointestinal disturbances. To further select infants in whom drug withdrawal was the primary reason for NICU admission, we classified infants as having the neonatal abstinence syndrome only if the queried phrase was assigned in the first 7 days of life. Infants who were admitted for suspected cases or for "rule out" of the neonatal abstinence syndrome and those who had had exposure through their mothers to narcotics but did not have a confirmed diagnosis were excluded. As was the case in a prior study, infants born before 34 weeks of gestation were excluded in order to avoid the inclusion of infants with iatrogenic drug withdrawal.²

Data on infant birth characteristics were collected, including birth weight, gestational age (best estimate by the infant's health care provider), sex, delivery type, and location of birth. The status of being small for gestational age was defined by normative curves for infants with birth weight below the 10th percentile.²³ Birth between 34 and 36 weeks of gestation was defined as late preterm birth.²⁵

We collected data on the age of the infants at diagnosis of the neonatal abstinence syndrome, the length of stay in the NICU, age at NICU discharge, use of any respiratory support during NICU stay, use of breast milk, diagnoses of clinical seizures or feeding problems, and death while in the NICU. As in a prior study,¹³ receipt of any of the following medications while in the NICU was considered to indicate pharmacologic treatment of the neonatal abstinence syndrome: benzodiazepines (clonazepam, diazepam, lorazepam, or midazolam), buprenorphine, clonidine, dilute tincture of opium, methadone, morphine, or phenobarbital. As was the case in a previous study, when the relevant data from discharge summaries were not available, receipt of these medications on the day of discharge served as a proxy for infants being discharged home while receiving the medications.¹³

Maternal characteristics that were considered were age, gravidity and parity, race or ethnic group, and history of at least one prenatal care visit. Information was also collected from infants' records regarding maternal smoking, substance abuse, and use of specific medications during pregnancy; these data were ascertained by the infant's health care provider from a review of obstetrical records or from maternal self-report.

STATISTICAL ANALYSIS

Infants were categorized according to the year of discharge and were grouped into 1-year periods for all trend analyses. To perform the multiple cross-sectional analyses, we used linear contrasts within a general linear regression model for continuous variables to determine whether there was a significant positive or negative yearly trend. For ordinal and discrete count data, we used Kendall's rank correlation to assess trends; for categorical variables, we used Cochran–Armitage trend tests. A chi-square test was used for race and ethnic-group categories; we used a Poisson gen-

eralized linear regression model to compare the incidence of diagnoses in two time periods.

To ensure that our results were robust, we performed sensitivity analyses to assess whether changes in the composition of participating NICUs or in provider coding of the neonatal abstinence syndrome during the study period may have influenced our results (see the Supplementary Appendix, available with the full text of this article at NEJM.org). We report the P values for trends from 2004 through 2013. For the descriptive tables, infants were grouped into 2-year periods, and reported changes were calculated from the first 2-year period to the last 2-year period. Analyses were performed with the use of SAS software, version 9.3 (SAS Institute).

RESULTS

INCIDENCE OF THE NEONATAL ABSTINENCE SYNDROME

From 2004 through 2013, a total of 674,845 infants from 299 clinical centers were eligible for inclusion in our study, among whom 10,327 infants (2%) met our criteria for the neonatal abstinence syndrome. From 2004 through 2013, the frequency of NICU admissions for infants with the neonatal abstinence syndrome increased from 7 cases per 1000 admissions to 27 cases per 1000 admissions; the rate of increase was significantly higher from 2009 through 2013 than from 2004 through 2008 ($P<0.001$ for trend and for post hoc comparison of slopes) (Fig. 1A). The median length of stay for these infants rose from 13 days in 2004 to 19 days in 2013 ($P<0.001$ for trend) (Fig. 1B), with wide variation across centers in this measure.

Among the participating NICUs, the percentage of total NICU days attributed to infants with the neonatal abstinence syndrome increased from 0.6% in 2004 to 4.0% in 2013 ($P<0.001$ for trend) (Fig. 2A). In 2004, among 157 NICUs with more than 100 admissions per year, only 1 center had more than 10% of NICU days attributed to infants with the neonatal abstinence syndrome. By 2013, among 213 NICUs with more than 100 admissions per year, infants with the neonatal abstinence syndrome accounted for more than 10% of NICU days at 23 centers, for more than 20% of NICU days at 8 centers, and for more than 40% of NICU days at 2 centers (Fig. 2B).

CHANGES IN DEMOGRAPHIC CHARACTERISTICS AT BIRTH AND TREATMENT CHARACTERISTICS

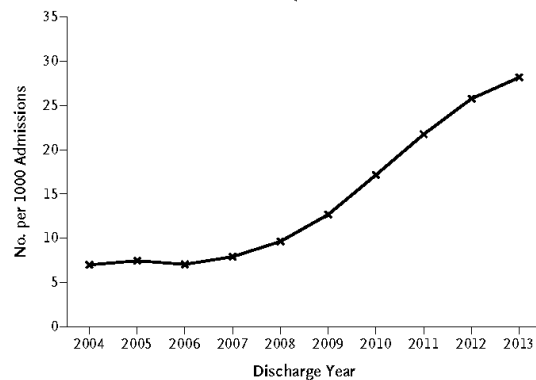
From the 2004–2005 period through the 2012–2013 period, the median gestational age at birth increased among infants with the neonatal abstinence syndrome, concurrent with decreases in the percentages of infants with the syndrome who were born by means of cesarean section, who were late preterm, or who required any respiratory support ($P<0.001$ for trend for each variable) (Table 1). From the 2004–2005 period through the 2012–2013 period, there was an increase of 9 percentage points in the proportion of infants referred from another center after birth ($P<0.001$ for trend). During the study period, there were no significant changes in the proportion of infants who were male (range, 53 to 56%) or who were born small for gestational age (range, 15 to 17%). Few infants were affected by seizures (range, 1 to 2%; $P=0.98$ for trend). Four infants died in the NICU over the course of the study period, all of whom had received a diagnosis of sepsis. The percentage of infants receiving breast milk increased from 20% in the 2004–2005 period to 35% in the 2012–2013 period ($P<0.001$ for trend).

PHARMACOLOGIC TREATMENT OF INFANTS WITH THE NEONATAL ABSTINENCE SYNDROME

From the 2004–2005 period through the 2012–2013 period, the proportion of infants with the neonatal abstinence syndrome who received pharmacotherapy increased significantly, from 74% to 87% ($P<0.001$ for trend) (Table 1), as did the mean duration of therapy ($P<0.001$ for trend) and the ratio of days of therapy to NICU days ($P=0.004$ for trend). However, the proportion of infants who were discharged while receiving medications decreased (4% in 2004–2005 vs. 2% in 2012–2013, $P<0.001$ for trend).

The percentage of infants who received multiple medications did not change significantly during our study period. Morphine was the most commonly used medication; the proportion of infants treated with this agent increased from 49% in 2004 to 72% in 2013 ($P<0.001$ for trend) (Fig. 3). In 2013, clonidine was used in 9% of infants and methadone was used in 15% (representing an increase from 2004 for clonidine and a decrease from 2011 for methadone). Buprenorphine and dilute tincture of opium were used only rarely (in <1% of infants).

A Admissions for the Neonatal Abstinence Syndrome



B Length of Stay

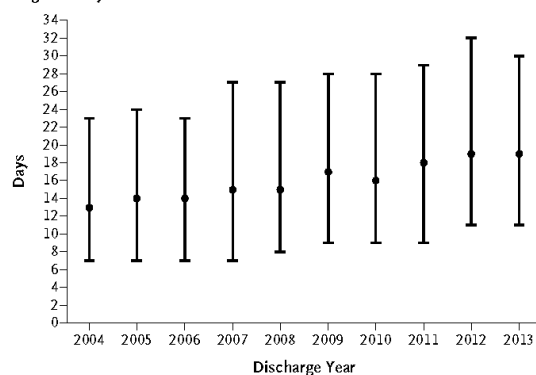
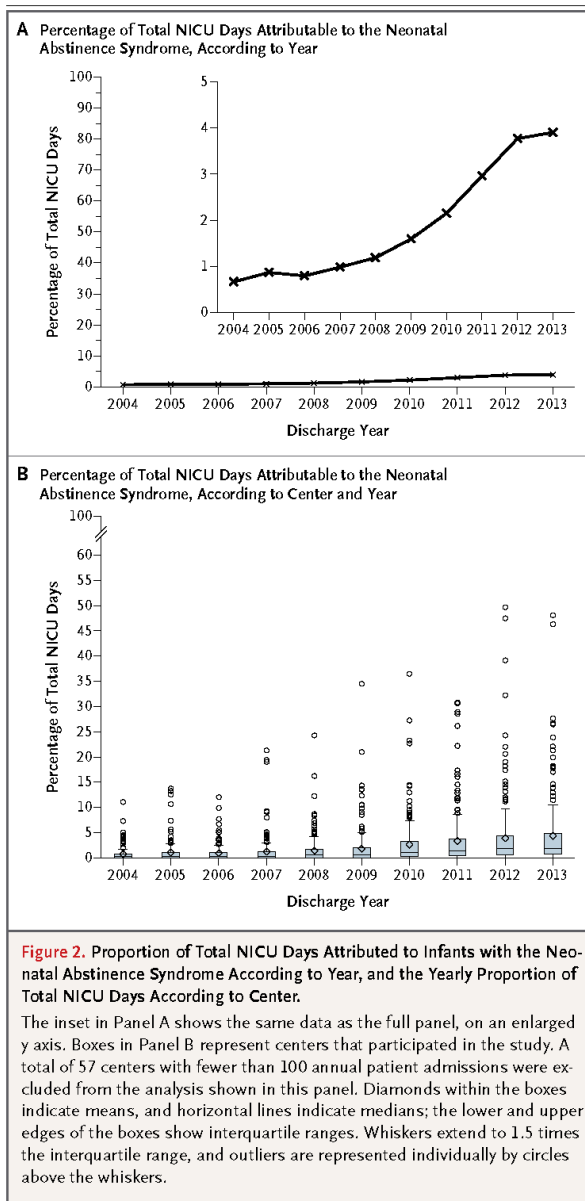


Figure 1. Annualized NICU Admission Rates for the Neonatal Abstinence Syndrome and Median Length of Stay, According to Year.

I bars in Panel B represent interquartile ranges. NICU denotes neonatal intensive care unit.

MATERNAL CHARACTERISTICS OF INFANTS WITH THE NEONATAL ABSTINENCE SYNDROME

Maternal age, gravidity, parity, and the percentage of mothers who received prenatal care did not change significantly from 2004–2005 through 2012–2013. There were changes in the distribution of race and ethnic-group categories, with an increasing proportion of mothers of white race (from 64% in 2004–2005 to 76% in 2012–2013) and a corresponding decrease during the study period in the proportions of mothers of black race and Hispanic ethnic group ($P<0.001$ for chi-square test of distribution). In the period from



2012 through 2013, commonly reported maternal medication exposures included exposure to methadone (in the mothers of 31% of infants with the neonatal abstinence syndrome), opioid pain relievers (24%), buprenorphine (15%), antidepressants (9%), and benzodiazepines (8%).

Maternal characteristics and exposures are described, with attention to potential limitations in these data, in Tables S1 and S2 in the Supplementary Appendix.

SENSITIVITY ANALYSES

In a post hoc analysis that was limited to infants who received treatment at the 143 centers that provided data throughout the entire study period, we found significant increases in the rate of admissions, the length of NICU stay, and the proportion of NICU days attributed to infants with the neonatal abstinence syndrome (Table S3 in the Supplementary Appendix), findings that were consistent with our main findings. During the study period, there were no significant changes in provider coding of the neonatal abstinence syndrome (see the Supplementary Appendix).

DISCUSSION

In this cohort of infants admitted to nearly 300 NICUs, we found large increases from 2004 through 2013 in the health care burden of infants with the neonatal abstinence syndrome, including rising admission rates for this diagnosis and increasing length of stay. In 2013, a total of 4% of all NICU hospital days nationwide were attributed to the care of infants with the neonatal abstinence syndrome, representing an increase of 6 to 7 times from 2004. This increase in NICU utilization is consistent with multiple reports²⁻⁴ of the increasing incidence of the neonatal abstinence syndrome in the United States. In this large study, 23 of 213 centers reported that more than 10% of their NICU days were attributable to these infants in 2013, as compared with 1 of 157 centers in 2004.

Whereas the neonatal abstinence syndrome was first described in infants born to mothers who used illicit drugs, we found that, in the period from 2012 through 2013, many affected infants were born to mothers who used opioid pain relievers. Our data are limited by variability in the adequacy of the obstetrical history and maternal self-reporting but are consistent with reports suggesting that the rising incidence of the neonatal abstinence syndrome is due in part to increasing opioid use among pregnant women,^{2,3} which is a component of the current epidemic of opioid use and abuse in the United States.²⁶ Federal and

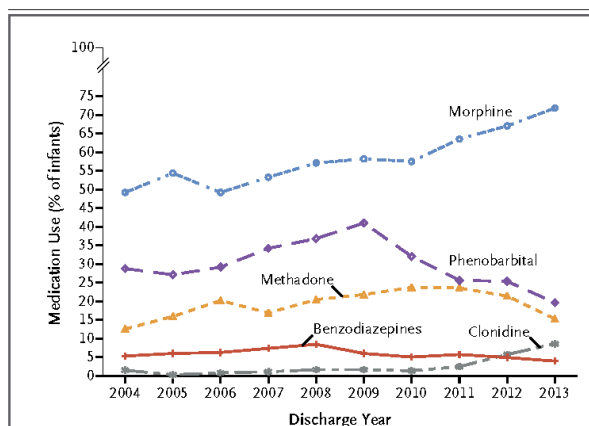


Figure 3. Medication Use in Infants with the Neonatal Abstinence Syndrome.

state policymakers have begun to address this problem with strategies such as prescription-drug monitoring programs, the elimination of “pill mills,”²⁷ and more recently a change in the class scheduling for hydrocodone.²⁸ Our findings support the need for such approaches to reduce opioid use among pregnant women.

We also found that the use of pharmacotherapy overall in these infants increased over time, with changes in the frequencies of the use of specific medications. In the absence of large, randomized trials comparing medical therapies for the neonatal abstinence syndrome, consensus is lacking regarding effective regimens¹; none of the medications used or recommended for use¹ in the management of the neonatal abstinence syndrome are approved by the Food and Drug Administration for this indication. Our results in this national sample show increases in the use of clonidine and decreases in the use of methadone; in small studies, both agents have been associated with a shorter length of stay than that associated with the use of morphine.^{13,29,30}

The increase in the use of the mother’s breast milk over time in infants with the neonatal abstinence syndrome may have occurred in response to updated guidelines from the American College of Obstetricians and Gynecologists,³¹ the American Academy of Pediatrics,³² and the Academy of Breastfeeding Medicine.³³ These guidelines encourage the selective use of breast milk in some infants because of growing evidence that breast

milk can reduce infants’ symptoms and minimize pharmacologic treatment,³³ outweighing the harm of some drug transmission, which is typically minimal when mothers are in treatment programs. Still, only approximately one third of the infants in our study received breast milk in the period from 2012 through 2013, an observation that supports the notion that breast-feeding remains an important target for intervention. As in most studies of the neonatal abstinence syndrome, we do not have information on the use of nonpharmacologic measures to care for these infants.¹

We found that the length of stay in the NICU increased over time, despite fewer infants being born late preterm or requiring respiratory support. The increased ratio of days of pharmacotherapy to NICU days over time suggests that social issues were not a primary determinant of this increase. These findings are especially worrisome in the context of the high costs of NICU care³⁴ and of increasing inpatient costs for infants with the neonatal abstinence syndrome, in particular.² Furthermore, we found substantial variability among centers in length of stay. Recent studies that have adjusted the analyses for case mix and infant-level risk factors have suggested that length of stay may be influenced by a lack of adherence to a treatment protocol and by variability in clinical management.^{11,13}

This analysis has several limitations. First, the precise criteria used for the diagnosis of the syndrome are not captured in the CDW, and it is possible that there were changes in providers’ awareness of the syndrome or coding of the syndrome during the study period. However, the diagnosis of the neonatal abstinence syndrome is based on a widely used scoring tool⁹ that was introduced in 1975,³⁵ the condition is well established from American Academy of Pediatrics Policy Statements published in 1983,³⁶ 1998,³⁷ and 2012,¹ and the diagnosis has been validated in a previous study.³⁸ There have been no changes to the *International Classification of Diseases, 9th Revision*, diagnostic code for the condition (779.5), and the results of our sensitivity analysis suggest that the diagnosis and coding by the provider were consistent over time. Moreover, if the observed increases in NICU utilization for the neonatal abstinence syndrome were driven by increasing awareness on the part of the provider, one would expect the diagnosis to be made in infants with

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Mental Health America

Dear Administrator Verma:

Mental Health America, in collaboration with the American Institutes for Research, the American Psychological Association, the Campaign for Trauma Informed Policy and Practice, the Center for Autism and Related Disorders, Child Care Aware, the Child and Family Policy Center, the Depression & Bipolar Support Alliance, the Eugene S. Farley, Jr. Health Policy Center at University of Colorado School of Medicine, the National Alliance on Mental Illness, the National Head Start Association, and ZERO TO THREE, and a number of experts in pediatrics, prevention science, and human development applaud the Centers for Medicare & Medicaid Services (CMS) for undertaking such an important initiative. Pediatric alternative payment models (APMs) offer the opportunity for better aligned incentives that promote life-course health and reduce long-term costs, and the undersigned look forward to partnering with CMS to support local innovation in this area.

While many of the undersigned may be writing separately to address Sections I and II, and provide greater details on Sections III and IV, the undersigned wish to collectively advocate for a common approach to payment in answering Section III (1, 2, and 6) and Section IV. The questions are answered out of order to create the most coherent narrative for a payment structure, but the question being answered is labeled in each instance.

The following recommendations are both new and complex and, as such, are not meant as proposed requirements for sites. Rather, CMS should provide these recommendations as options for sites to receive larger payments when they are able to demonstrate long-term savings to CMS, and steps taken in any of the areas outlined below would dramatically advance pediatric payment. CMS should support sites in these efforts and use this opportunity to illuminate a variety of paths forward.



Mental Health
America.pdf

April 7, 2017

The Honorable Seema Verma
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services

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Mental Health America, in collaboration with the American Institutes for Research, the American Psychological Association, the Campaign for Trauma Informed Policy and Practice, the Center for Autism and Related Disorders, Child Care Aware, the Child and Family Policy Center, the Depression & Bipolar Support Alliance, the Eugene S. Farley, Jr. Health Policy Center at University of Colorado School of Medicine, the National Alliance on Mental Illness, the National Head Start Association, and ZERO TO THREE, and a number of experts in pediatrics, prevention science, and human development applaud the Centers for Medicare & Medicaid Services (CMS) for undertaking such an important initiative. Pediatric alternative payment models (APMs) offer the opportunity for better aligned incentives that promote life-course health and reduce long-term costs, and the undersigned look forward to partnering with CMS to support local innovation in this area.

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III. 1. CMS should avoid targeting a specific population of children based on type or degree of health care need; instead, CMS should use risk-stratification to address the diverse needs of all children in delimited geographic regions. Unlike adult alternative payment models (APMs), the goal of a pediatric APM should not be to reduce total costs during an episode or attribution period but rather improve health trajectories, which result in reduced likelihood of incurring

avoidable costs in future episodes or attribution periods. The pediatric accountable care organization (ACO) should not be evaluated based solely on saving money in its own budget but rather on its savings to the pediatric ACO *and* to the adult ACO. There are limited opportunities for cost-saving efficiencies for most of the pediatric population,¹ but large savings are available for acting in young children and throughout pediatrics to prevent chronic conditions later in the life-course.^{2,3,4} CMS should not miss this opportunity to fundamentally transform health care and more meaningfully pursue the triple aim. As the American Enterprise Institute and Brookings Institution Working Group on Poverty and Opportunity noted, “[T]he nation should use its universally available network of pediatric primary and preventive care practices to mount evidence-based parenting and early child development interventions.”⁵

Although the greatest potential comes from promoting life-course health, there are areas for savings in pediatrics that can expedite the rate at which the model achieves cost-neutrality. A pediatric health home with stepped behavioral health services and integrated community-based supports for children and families that are commensurate with their risk of complex health needs can reduce costs in a five to seven-year timeframe. For example, Dr. Michael Yogman found that by integrating a licensed clinical social worker and a parent partner/care coordinator into a pediatric primary care practice, costs savings averaged \$336 per member per month (pmpm) for the total patient population and \$716pmpm for patients with behavioral health conditions across the two-year period.⁶ Across pediatrics, comorbid physical and behavioral health conditions increase costs,⁷ and there is strong evidence that an overall integrated family-focused early intervention and prevention model for behavioral health will reduce costs for otherwise high-need children.^{8,9} These short-term savings in high-need populations can help the model achieve cost-neutrality more quickly while the rest of the overall model reduces lifetime risk of health conditions across the attributed population.

¹ Bui, A. L., Dieleman, J. L., Hamavid, H., Birger, M., Chapin, A., Duber, H. C., ... & Murray, C. J. (2016). Spending on children’s personal health care in the United States, 1996-2013. *JAMA pediatrics*.

² McGinnis, J. M., Diaz, A., & Halfon, N. (2016). Systems strategies for health throughout the life course. *JAMA*, 316(16), 1639-1640.

³ Caspi, A., Houts, R. M., Belsky, D. W., Harrington, H., Hogan, S., Ramrakha, S., ... & Moffitt, T. E. (2016). Childhood forecasting of a small segment of the population with large economic burden. *Nature Human Behaviour*, 1, 1-10.

⁴ Conti, G., & Heckman, J. J. (2013). The developmental approach to child and adult health. *Pediatrics*, 131(Supplement 2), S133-S141.

⁵ American Enterprise Institute and Brookings Institution Working Group on Poverty and Opportunity (December 2015). *Opportunity, Responsibility, and Security: A Consensus Plan for Reducing Poverty and Restoring the American Dream*.

⁶ http://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_176141.pdf

⁷ Doupnik, S. K., Lawlor, J., Zima, B. T., Coker, T. R., Bardach, N. S., Hall, M., & Berry, J. G. (2016). Mental Health Conditions and Medical and Surgical Hospital Utilization. *Pediatrics*, 138(6), e2016-2416.

⁸ Page, T. F., Pelham III, W. E., Fabiano, G. A., Greiner, A. R., Gnagy, E. M., Hart, K. C., ... & Pelham Jr, W. E. (2016). Comparative cost analysis of sequential, adaptive, behavioral, pharmacological, and combined treatments for childhood ADHD. *Journal of Clinical Child & Adolescent Psychology*, 45(4), 416-427.

⁹ Stewart, S. M., Rao, U., Emslie, G. J., Klein, D., & White, P. C. (2005). Depressive symptoms predict hospitalization for adolescents with type 1 diabetes mellitus. *Pediatrics*, 115(5), 1315-1319.

III. 6 / IV. 1. Payment should be designed around a series of measures that track development from the prenatal period through young adulthood and for which there is evidence of predicted later savings to CMS (including changes in life trajectory that allow the individual to gain access to commercial health insurance). CMS should ensure that sites are reimbursed an amount that is approximately equal to the predicted long-term savings the pilot site creates for CMS (both in enhanced base rates and incentive payments), as indicated by the system's performance on the measures – allowing the pilot sites to share in these long-term savings.

To accomplish this, we propose the following three-tiered measurement system that can target proper incentive payments while ensuring cost-neutrality for CMS:

(1) measures that track relatively consistent, foundational constructs throughout each individual's cognitive, affective, and behavioral (CAB) development, along with key risk and protective factors that influence it (recognizing that, particularly for young children, healthy development is integrally tied to family safety, consistency, and nurturing). The measures should both indicate risk and be sensitive to intervention effects to mitigate this risk in a short period of time, allowing providers to use these measures to determine an appropriate level of care and evaluate the success of interventions;

(2) measures that track points along an individual's developmental cascade, indicating how the first-tier measures affected age-appropriate developmental tasks (i.e. development prenatally to twenty-four months in attachment, bonding, and limitations on adversity and unmitigated stress; to kindergarten readiness at age five; to grade-level reading at age eight; to social, psychological, and cognitive development through high school), using a mix of clinical data, claims data, and integrated data from community-based sources. The measures should indicate how the progress over time on the first-tier measures have culminated in effects that have normative meaning (such as grade-level reading) at each level of development and allow for an interpretable indication of population health; and

(3) measures that are reported to CMS to determine quality and payment, which may be selected from first- and second-tier measures for which evidence exists that changes in these measures predict future savings to CMS. If a population-level approach were taken, as with the Vermont All-Payer ACO Model, the third-tier measures could also include measures of changes in community-wide risk and protective factors where feasible, as with the Communities That Care Youth Survey¹⁰ or the Early/Middle Development Index.¹¹

¹⁰ Arthur, M. W., Briney, J. S., Hawkins, J. D., Abbott, R. D., Brooke-Weiss, B. L., & Catalano, R. F. (2007). Measuring risk and protection in communities using the Communities That Care Youth Survey. *Evaluation and program planning*, 30(2), 197-211.

¹¹ Curtin, M., Browne, J., Staines, A., & Perry, I. J. (2016). The Early Development Instrument: an evaluation of its five domains using Rasch analysis. *BMC pediatrics*, 16(1), 10.

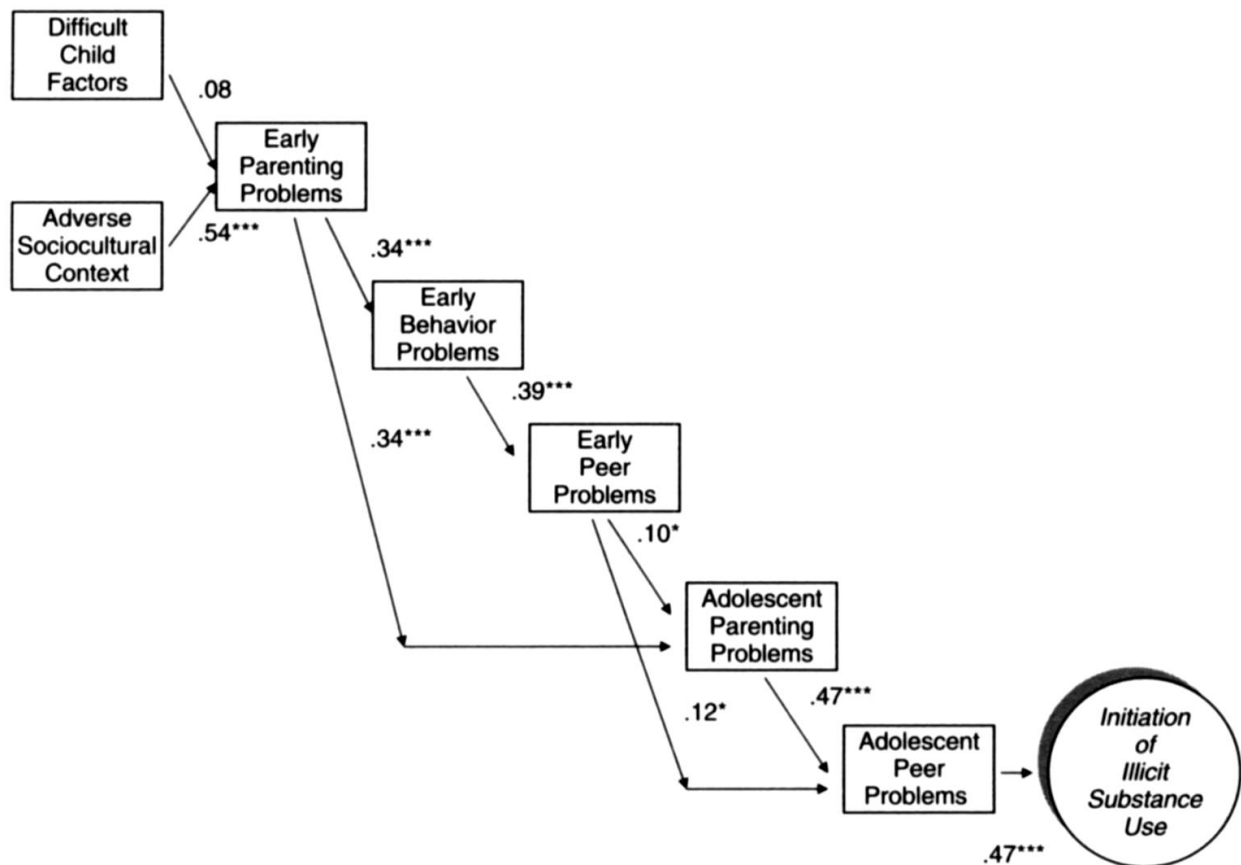
For the first-level measures, the undersigned propose that sites select and use standardized measurement tools, such as the Safe Environment for Every Kid (SEEK) Parent Screening Questionnaire (PSQ), for risk and protective factors, and the Strengths and Difficulties Questionnaire (SDQ)/the Pediatric Symptom Checklist (PSC)/the Ages and States Questionnaire – Social and Emotional Edition (ASQ-SE) as a dimensional measure of CAB development (rather than as a binary screen), or the Survey of Wellbeing of Young Children (SWYC) as an integration of both risk and protective factors and CAB development. The Well Visit Planner offers further opportunities for moving toward more patient-driven approaches to promoting healthy child development and also provides a strategy for practitioners and families to better respond to children’s developmental concerns.¹² To the extent possible, measures should be integrated into electronic health records and made available across sectors to promote alignment and coordination, as well as made available to families for pre-visit preparation and ongoing monitoring of progress.

For the second-tier measures, sites should select measures that track cascades of development for pediatric populations in their local and cultural context based on information that is available to the system, and that are relevant to the theories of change for the interventions implemented by the system. The measures collected at each step of the proposed developmental cascade could then be evaluated as predictors/significant mediators for one another, and health systems could better understand the pathways that children follow from birth to later health outcomes, as well as how to intervene appropriately to maximize health outcomes and associated future savings. There are a number of empirically validated developmental cascades, and additional ones can be constructed in some instances from available data.

Below is an example of one such developmental cascade between early childhood and substance use initiation that collapsed thirty-five measures into the seven indices used to construct a cascade:¹³

¹² Mimila, N. A., Chung, P. J., Elliott, M. N., Bethell, C. D., Chacon, S., Biely, C., ... & Coker, T. R. (2017). Well-Child Care Redesign: A Mixed Methods Analysis of Parent Experiences in the PARENT Trial. *Academic Pediatrics*, doi: 10.1016/j.acap.2017.02.004.

¹³ Dodge, K.A., Malone, P.S., Lansford, J.E., Miller, S., Pettit, G.S., Bates, J.E., Collins, W.A., Schulenberg, J.E., & Maslowsky, J. (2009). A dynamic cascade model of the development of substance-use onset. *Monogr. Soc. Res. Child Dev.*, 74(3).

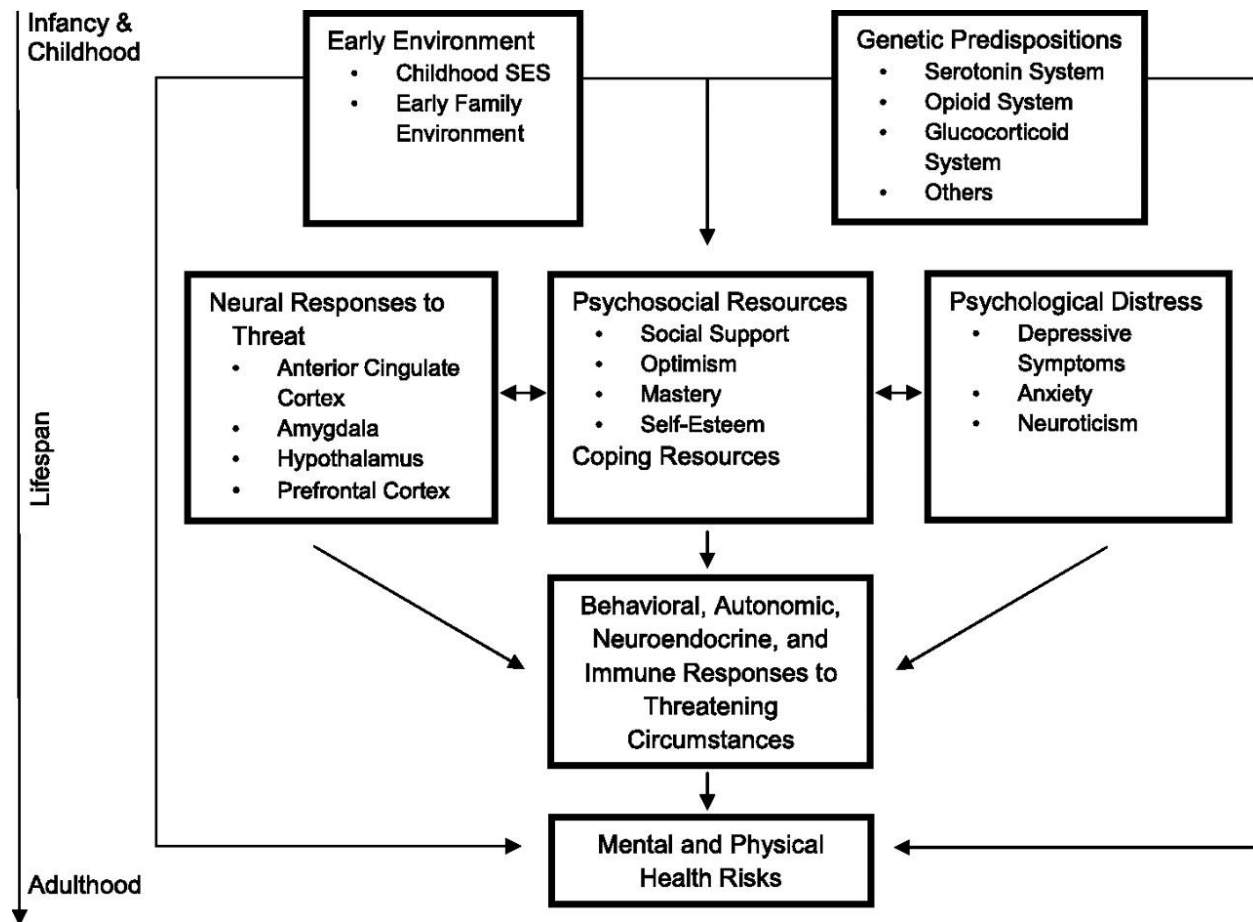


Dodge, K.A., Malone, P.S., Lansford, J.E., Miller, S., Pettit, G.S., Bates, J.E., Collins, W.A., Schulenberg, J.E., & Maslowsky, J. (2009). A dynamic cascade model of the development of substance-use onset. *Monogr Soc Res Child Dev*, 74(3).

This cascade shows that, in addition to child-specific measures of development and risk, family factors (e.g. early parenting problems and adolescent parenting problems) contribute very significantly to developmental trajectories and deserve measures in their own right. This is consistent with the growing P.A.R.E.N.T.S. Science (Protective factors, Adverse child experiences, Resiliency, Epigenetics, Neurobiology, Toxic stress, and Social determinants of health), which emphasizes that improving child health requires actions that extend well beyond traditional medical care and treatment of disease and injury.¹⁴ At any point along the cascade, when a health system demonstrates that it intervened successfully and bent the likely trajectory and associated future health outcomes, CMS could offer an incentive payment that is approximately equal to the future savings produced by the improved life-course health.

¹⁴ Bruner C, Dworkin P, Fine A, Hayes M, Johnson K, Sauia A, Schor E, Shah R, Shaw J, with Trefz, M and Cardenas, A (January, 2017). Transforming Young Child Primary Health Care Practice: Building Upon Evidence and Innovation. Policy Paper for the Learning Collaborative on Health Equity and Young Children, Des Moines, IA.

Below is another developmental cascade that summarizes a body of research on early risk factors and later in life health outcomes,¹⁵ such as metabolic functioning,¹⁶ coronary heart disease,¹⁷ and high blood pressure,¹⁸ with measurable mediators that could be health system outcomes, such as social support¹⁹ and optimism, mastery, and self-esteem.²⁰



Taylor, S. E. (2010). Mechanisms linking early life stress to adult health outcomes. *Proceedings of the National Academy of Sciences*, 107(19), 8507-8512

¹⁵ Taylor, S. E. (2010). Mechanisms linking early life stress to adult health outcomes. *Proceedings of the National Academy of Sciences*, 107(19), 8507-8512.

¹⁶ Lehman, B. J., Taylor, S. E., Kiefe, C. I., & Seeman, T. E. (2005). Relation of childhood socioeconomic status and family environment to adult metabolic functioning in the CARDIA study. *Psychosomatic medicine*, 67(6), 846-854.

¹⁷ Taylor, S. E., Lehman, B. J., Kiefe, C. I., & Seeman, T. E. (2006). Relationship of early life stress and psychological functioning to adult C-reactive protein in the coronary artery risk development in young adults study. *Biological psychiatry*, 60(8), 819-824.

¹⁸ Lehman, B. J., Taylor, S. E., Kiefe, C. I., & Seeman, T. E. (2009). Relationship of early life stress and psychological functioning to blood pressure in the CARDIA study. *Health Psychology*, 28(3), 338.

¹⁹ Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: a social psychological perspective on mental health. *Psychological bulletin*, 103(2), 193-210.

²⁰ Taylor, S. E. (2010). Mechanisms linking early life stress to adult health outcomes. *Proceedings of the National Academy of Sciences*, 107(19), 8507-8512.

Again, this demonstrates how a health system could measurably improve early family environment, reduce psychological distress, or bolster psychosocial resources to reduce the likelihood of an array of future negative health outcomes – producing savings that should be rewarded.

While these cascades focus on social and emotional factors, cognitive development is also an important mediator. For example, toddler vocabulary at twenty-four months is predictive of social and emotional kindergarten readiness at age five is associated with health outcomes.²¹

For the third-tier measure reported to CMS, sites should select measures across the life-course for which the most evidence is available about projected savings to CMS. There are two ways to calculate the expected value of changes in each measure: (1) If sites have access to sufficient longitudinal data, they could propose a life-course calculation of actuarial risk that estimates the likelihood of progressing along a developmental cascade and incurring or avoiding certain costs to CMS given the scores obtained on a specific measure. (2) If sites do not have sufficient longitudinal data, CMS could assign expected values to the measures based on the empirical literature.

Some examples of ways that sites or CMS could work to produce such measures are:

- Minimized perinatal maternal stress/psychosocial distress.^{22,23}
- Decreases in the SEEK PSQ scores,^{24,25,26,27} SWYC Parent's Concerns and Family Questions scales, or other measures for adversity and protective factors, which are predictive of prevented Adverse Childhood Experiences (ACEs) and corresponding future health costs. Even one ACE is associated with the following odds-ratios for future health care conditions:²⁸
 - Tobacco Use (past-year): 1.1

²¹ Morgan, P. L., Farkas, G., Hillemeier, M. M., Hammer, C. S., & Maczuga, S. (2015). 24-month-old children with larger oral vocabularies display greater academic and behavioral functioning at kindergarten entry. *Child development*, 86(5), 1351-1370.

²² Talge, N. M., Neal, C., & Glover, V. (2007). Antenatal maternal stress and long-term effects on child neurodevelopment: how and why?. *Journal of Child Psychology and Psychiatry*, 48(3-4), 245-261.

²³ Feinberg, M. E., Jones, D. E., Roettger, M. E., Hostetler, M. L., Sakuma, K. L., Paul, I. M., & Ehrental, D. B. (2016). Preventive effects on birth outcomes: Buffering impact of maternal stress, depression, and anxiety. *Maternal and child health journal*, 20(1), 56-65.

²⁴ Dubowitz, H., Feigelman, S., Lane, W., Prescott, L., Blackman, K., Grube, L., ... & Tracy, J. K. (2007). Screening for depression in an urban pediatric primary care clinic. *Pediatrics*, 119(3), 435-443.

²⁵ Dubowitz, H., Prescott, L., Feigelman, S., Lane, W., & Kim, J. (2008). Screening for intimate partner violence in a pediatric primary care clinic. *Pediatrics*, 121(1), e85-e91.

²⁶ Lane, W. G., Dubowitz, H., Feigelman, S., Kim, J., Prescott, L., Meyer, W., & Tracy, J. K. (2007). Screening for parental substance abuse in pediatric primary care. *Ambulatory Pediatrics*, 7(6), 458-462.

²⁷ Feigelman, S., Dubowitz, H., Lane, W., Prescott, L., Meyer, W., Tracy, J. K., & Kim, J. (2009). Screening for harsh punishment in a pediatric primary care clinic. *Child abuse & neglect*, 33(5), 269-277.

²⁸ Felitti V.J., Anda, R.F., Nordenberg D., et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: the Adverse Childhood Experiences (ACE) Study *Am J Prev Med*, 14 (4):245- 258.

- Severe Obesity (past-year): 1.1
- Depression (past-year): 1.5
- Alcohol Use Condition (past-year): 2.0
- Substance Use (lifetime): 1.7
- Sexually Transmitted Infection (lifetime): 1.4
- Improvements in social-emotional kindergarten readiness, which is associated with the following odds-ratios for future health care expenses:²⁹
 - Tobacco Use: 0.71
 - Substance Use Condition: 0.86
 - Alcohol Use Condition (past-year): 0.89
 - Mental health condition (externalizing): 0.61
 - Mental health condition (internalizing): 0.70
 - Receiving public assistance (related to requiring Medicaid): 0.63
- Epidemiologically significant reductions in the rate of adolescent mental health conditions, which is significant because most mental health conditions will first manifest in adolescence and,³⁰ even though acute symptoms may present episodically, the underlying mental health challenges often remain stable and do not spontaneously resolve (taking into account that rates of conditions may rise at first with increased awareness and diagnosis). Thus epidemiologically significant reductions in the rate of adolescent mental health conditions predict better health outcomes into adulthood,³¹ including reductions in related chronic conditions such as diabetes.³²
- Epidemiologically significant reductions in the rate of adolescent substance use initiation, which makes post-adolescence substance use initiation less likely for many substances,³³ and reduces likelihood of dependence after initiation.³⁴ For example, early initiation of alcohol use at or before age thirteen is associated with the following odds ratios of later dependence, each of which are associated with comorbidities:³⁵
 - Alcohol dependence: 1.80
 - Illicit drug dependence: 2.56

²⁹ Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *Am J Public Health*, 105(11): 2283–2290.

³⁰ Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, 62(6), 593-602.

³¹ Ford, T., Collishaw, S., Meltzer, H., & Goodman, R. (2007). A prospective study of childhood psychopathology: independent predictors of change over three years. *Social psychiatry and psychiatric epidemiology*, 42(12), 953.

³² Knol, M. J., Twisk, J. W. R., Beekman, A. T. F., Heine, R. J., Snoek, F. J., & Pouwer, F. (2006). Depression as a risk factor for the onset of type 2 diabetes mellitus. A meta-analysis. *Diabetologia*, 49(5), 837.

³³ Taylor, S. E., Lerner, J. S., Sherman, D. K., Sage, R. M., & McDowell, N. K. (2003). Are self-enhancing cognitions associated with healthy or unhealthy biological profiles?. *Journal of personality and social psychology*, 85(4), 605.

³⁴ Chen, C. Y., Storr, C. L., & Anthony, J. C. (2009). Early-onset drug use and risk for drug dependence problems. *Addictive behaviors*, 34(3), 319-322.

³⁵ King, K. M., & Chassin, L. (2007). A prospective study of the effects of age of initiation of alcohol and drug use on young adult substance dependence. *Journal of Studies on Alcohol and Drugs*, 68(2), 256-265.

- Prevalence of other conditions associated with adolescent behavioral health, such as rates of sexually transmitted infections, teen pregnancies, and motor vehicle fatalities,³⁶ or associated with obesity, diabetes, and cardiovascular risk from behavioral/allostatic effects.^{37,38,39,40}
- Where feasible, saliva tests could also be used for value-based payment for reducing basal cortisol levels,^{41,42} or for providing targeted prevention for certain genetic risks for mental health and substance use conditions.^{43,44}

For each of the health outcome odds ratios, significantly correlated comorbidities should also be considered, so that the expected value captures the full range of related health conditions and expenses.

As this research is still evolving, sites should also have the option of using intervention-specific measures to predict expected value to CMS. Cost-benefit research and economic modeling on long-term health costs have been conducted for a number of evidence-based CAB developmental interventions. Sites should have the alternative option to use the cost-benefit analyses of specific interventions instead of the expected value from one of the short-term outcomes listed above, using demonstrated post-test effects from the intervention to award incentive payments. Even if the post-test effect measured is not a significant mediator of the long-term health outcomes, it still indicates intervention fidelity and that the long-term health outcomes are likely to be realized. For example, the Good Behavior Game is an intervention typically conducted in elementary school classrooms, and the Washington State Institute for Public Policy estimates that it could save approximately \$2,000 per student to health care over the long-term if implemented successfully.⁴⁵ Unfortunately, many of these savings come from reductions in

³⁶ Catalano, R. F., Fagan, A. A., Gavin, L. E., Greenberg, M. T., Irwin, C. E., Ross, D. A., & Shek, D. T. (2012). Worldwide application of prevention science in adolescent health. *The Lancet*, 379(9826), 1653-1664.

³⁷ Brotman, L. M., Dawson-McClure, S., Huang, K. Y., Theise, R., Kamboukos, D., Wang, J., ... & Ogedegbe, G. (2012). Early childhood family intervention and long-term obesity prevention among high-risk minority youth. *Pediatrics*, 129(3), e621-e628.

³⁸ Smith, J. D., Montañó, Z., Maynard, A., & Miloh, T. (2017). Family Functioning Predicts Body Mass Index and Biochemical Levels of Youths with Nonalcoholic Fatty Liver Disease. *Journal of Developmental & Behavioral Pediatrics*, 38 (2), 155-160.

³⁹ Smith, J. D., Montañó, Z., Dishion, T. J., Shaw, D. S., & Wilson, M. N. (2015). Preventing weight gain and obesity: Indirect effects of the family check-up in early childhood. *Prevention Science*, 16(3), 408-419.

⁴⁰ Smith, J. D., George, S. M. S., & Prado, G. (2016). Family-Centered Positive Behavior Support Interventions in Early Childhood to Prevent Obesity. *Child Development*.

⁴¹ Slopen, N., McLaughlin, K. A., & Shonkoff, J. P. (2014). Interventions to improve cortisol regulation in children: A systematic review. *Pediatrics*, 133(2), 312-326.

⁴² Karlén, J., Ludvigsson, J., Hedmark, M., Faresjö, Å., Theodorsson, E., & Faresjö, T. (2015). Early psychosocial exposures, hair cortisol levels, and disease risk. *Pediatrics*, 135(6), e1450-e1457.

⁴³ Beach, S. R., Brody, G. H., Lei, M. K., & Philibert, R. A. (2010). Differential susceptibility to parenting among African American youths: Testing the DRD4 hypothesis. *Journal of Family Psychology*, 24(5), 513.

⁴⁴ Brody, G. H., Chen, Y. F., Yu, T., Beach, S. R., Kogan, S. M., Simons, R. L., ... & Philibert, R. A. (2012). Life stress, the dopamine receptor gene, and emerging adult drug use trajectories: A longitudinal, multilevel, mediated moderation analysis. *Development and Psychopathology*, 24(03), 941-951.

⁴⁵ <http://www.wsipp.wa.gov/BenefitCost/Program/82>

young adulthood health outcomes, such as tobacco use, drug and alcohol abuse/dependence disorders,⁴⁶ suicide attempts,⁴⁷ and arrests for violent behavior.⁴⁸ However, studies found immediate reductions in teacher-rated shy and aggressive behavior at post-test.⁴⁹ Although the reduced shy and aggressive behaviors might not independently predict decreased rates of later substance abuse/dependence, suicide attempts and antisocial behavior, it still indicates that the Good Behavior Game was successful and that decreased substance is likely to follow – and expected value can be assigned accordingly for incentive payments to the system when reduced shy and aggressive behaviors are found at post-test. The Blueprints for Healthy Youth Development offer a list of evidence-based programs that have been rigorously demonstrated to improve developmental outcomes and that pediatric ACOs may want to implement.⁵⁰ The Washington State Institute for Public Policy (WSIPP) offers benefit-cost analyses for many of these, and that should inform the expected values assigned to post-test effects for some interventions.⁵¹

This framework of prevention-oriented quality measurement should fit within and complement CMS's current directions in treatment-oriented quality measurement – i.e. value-based incentives tied to rates of yearly screenings for mental health and substance use conditions and rates of response to treatment. While mitigating risk factors, promoting protective factors, and supporting healthy development are essential to minimizing the likelihood of developing a mental health or substance use condition and maximizing life-course behavioral health, mental health and substance use conditions will continue to manifest in some subset of individuals due to genetic, epigenetic, or other risk factors that current clinical practice may not be able to address. In these instances, pilot sites must continue to receive appropriate incentives for early intervention and coordinated, measurement-based care to address developing needs as quickly and effectively as possible.

Ultimately, sites should propose some combination of value-based payment that makes sense for them, and be able to receive incentives for long-term cost-savings. As gaps in measure become

⁴⁶ Kellam SG, Brown CH, Poduska JM, Ialongo NS, Wang W, Toyinbo P, Petras H, Ford C, Windham A, Wilcox HC (2008). Effects of a universal classroom behavior management program in first and second grades on young adult behavioral, psychiatric, and social outcomes. *Drug and alcohol dependence*, 95, S5-S28.

⁴⁷ Wilcox HC, Kellam SG, Brown CH, Poduska J Ialongo NS, Wang W, and Anthony JC. (2008). The Impact of two Universal Randomized First and Second Grade Classroom-Based Interventions on Young Adult Suicide-Related Behaviors. *Drug and Alcohol Dependence*, S95, S60-S73

⁴⁸ Petras H, Kellam SG, Brown CH, Muthén B, Ialongo N, Poduska J. (2008). Developmental Epidemiological Courses Leading to Antisocial Personality Disorder and Violent and Criminal Behavior: Effects by Young Adulthood of a Universal Preventive Intervention in First- and Second-Grade Classrooms. *Drug and Alcohol Dependence*, S95, S45-S59.

⁴⁹ Dolan, L. J., Kellam, S. G., Brown, C. H., Werthamer-Larsson, L., Rebok, G. W., Mayer, L. S., Laudolff, J., Turkkan, J. S., Ford, C., & Wheeler, L. (1993). The short-term impact of two classroom-based preventive interventions on aggressive and shy behaviors and poor achievement. *Journal of Applied Developmental Psychology*, 14, 317-345.

⁵⁰ <http://www.blueprintsprograms.com/>

⁵¹ <http://www.wsipp.wa.gov/BenefitCost>

evident (e.g. lack of clinical measures for significant mediators such as family functioning or positive parenting) CMS should prioritize them as priority measurement gaps for research.

Savings Across Sectors

While this proposal focuses on outcomes related to CMS, there is voluminous evidence for savings in other sectors too, including disability benefits, special education, juvenile and criminal justice, adolescent parenting and welfare participation, and improved education and career success resulting in increased tax revenue, at both the state and federal levels. CMS should support pilot sites to create contracting arrangements that allow for shared savings across sectors and work with the Office of Management and Budget, as well as other federal agencies, to allow for cross-sector shared savings for federal funds – where possible given statutory authorizations.

Inability to share savings across sectors will significantly inhibit the effectiveness of the model, and undercut its possible contribution to the community that it serves. For example, the WSIPP offers the following breakdown of costs and benefits for Parent Management Training – Oregon Model (PMTO), an evidence-based intervention that health systems may choose to implement in this model:⁵²

Benefit-Cost Summary Statistics Per Participant			
Benefits to:			
Taxpayers	\$668	Benefit to cost ratio	\$2.67
Participants	\$523	Benefits minus costs	\$1,151
Others	\$548	Chance the program will produce	
Indirect	\$102	benefits greater than the costs	83 %
Total benefits	\$1,842		
Net program cost	(\$690)		
Benefits minus cost	\$1,151		

Detailed Monetary Benefit Estimates Per Participant					
Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Crime	\$0	\$33	\$76	\$16	\$125
Labor market earnings associated with high school graduation	\$491	\$223	\$225	\$225	\$1,165
K-12 grade repetition	\$0	\$6	\$0	\$3	\$9
K-12 special education	\$0	\$222	\$0	\$111	\$333
Health care associated with disruptive behavior disorder	\$68	\$208	\$258	\$105	\$639
Costs of higher education	(\$36)	(\$24)	(\$11)	(\$12)	(\$83)
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$346)	(\$346)
Totals	\$523	\$668	\$548	\$102	\$1,842

⁵² Washington State Institute for Public Policy (Dec., 2016). *Parent Management Training—Oregon Model (treatment population)*. Retrieved from <http://www.wsipp.wa.gov/BenefitCost/Program/544>.

According to this analysis, PMTO has a benefit cost ratio of \$2.67, the distribution of which represents tremendous positive effects to the community, and much of which also returns to the federal government – but not necessarily to CMS. To avoid providing systemic disincentives for the most impactful interventions, it is crucial that CMS work with other partners to facilitate cross-sector shared savings.

Also note that these measures and incentives would need to be supported by an all-payer advanced alternative model-type arrangement, so that each payer pays for effective preventive outcomes and all benefit, and no payers are able to free ride. Ideally, for the reasons illustrated above, “all-payer” should be construed broadly to include a blending of federal, state, local, foundation, and private funds (e.g. Child Care Development Block Grant, local wellness trusts, corporate social responsibility payments), which can be organized by an Accountable Health Community-type Bridge Organization and managed by a Community Advisory Board. The sharing of savings should be accompanied by a cross-sector sharing of incentives, as explored in III. 2. a. below.

IV. 2. The SEEK PSQ, the SWYC, the PSC, the SDQ, and the Well-Visit Planner are all recommended by the American Academy of Pediatrics Bright Futures Guidelines and used in clinical practice. The SWYC will soon be embedded in EPIC and Cerner electronic medical record systems. The ASQ-SE is proprietary and not part of the Bright Futures tools, but is used in clinical practice. The mental health and substance use screens are also currently implemented in clinical practice, and many are recommended by the U.S. Preventive Services Task Force⁵³ or the Child Core Measure Set.

Information about social and emotional kindergarten readiness is increasingly being collected, but using different measures that may differ from the one used in the study cited above. In this case, CMS could require that the measures used by the sites be significantly related to those used in the research literature, or have other grounds for demonstrating expected value.

Few of the mediator measures along the developmental cascades are presently collected in clinical practice, but each measure uses a short questionnaire that could feasibly be included with minimal additional burden and compensated by the incentive payments, and more than offset by reductions in need for process measures.

III. 2. a. In taking a life-course developmental perspective that meets the needs of diverse children, CMS will want to support a system of interlocking APMs that work together to foster shared accountability and provide appropriate incentives. This could be:

- A pediatric Comprehensive Primary Care Plus-type model (including enhanced base payments to allow for universal anticipatory guidance on parent-child behavioral health

⁵³ O’connor, E., Rossom, R. C., Henninger, M., Groom, H. C., & Burda, B. U. (2016). Primary care screening for and treatment of depression in pregnant and postpartum women: evidence report and systematic review for the US Preventive Services Task Force. *Jama*, 315(4), 388-406.

promotion;⁵⁴ risk-adjustment that includes predicted life-course costs based on risk and protective factors (e.g. SEEK PSQ score) to allow for additional interventions and supports to meet specific psychosocial needs or address risk factors; and value-based incentives for dimensional improvements in children's CAB development);

- Accompanied by an Alternative Quality Contract/bundled payment-type model for specialized needs or in coordination across institutions (e.g. a bundled payment for juvenile justice diversion, or coordination with child welfare to avoid an out-of-home placement) (multi-systemic therapy or coordinated specialty care interventions such as first-episode psychosis programs may also fall into this type of model, where the complexity may exceed the capacity for management through primary care, and payments could be tied to improvements in health-related quality of life and/or functioning);
- Inside of an Accountable Health Community model (arranged as if there was a Track 4 – the similar to Track 3 except that investments and incentives are shared with other systems, such as early care and education);
- All within a cross-sector Accountable Care Organization (ACO)-type framework that considers savings (and increased tax revenues) across budgets and allows for shared accountability, governance, and distribution of incentives across all producers of life-course health, not just health care providers (i.e. child care providers).

For the “Efficient Use of Resources” incentives (such as shared savings payments in the cross-sector ACO), we propose using a net present value of care formula instead of Total Cost Of Care, as made possible by the measurement system proposed above, in which providers can share in savings from reduced need for future costs. A payment model that incorporates all producers of life-course child health and focuses on short-term outcomes that predict improved health status and thereby net benefit simplifies attribution for savings because there are fewer entities outside of the system that could have caused the change in short-term outcomes – i.e. it does not matter if the pediatric health system, the school system, or community-based organizations caused the savings, because all of them are integrated into the cross-sector Pediatric ACO and will receive incentives.

Attribution and distribution of risk and incentives within the system should be determined by the ACO members, the Bridge Organization, and the Community Advisory Board, in cooperation with other relevant stakeholders, and done in a way that fosters team-based care, shared accountability, and fairness, while being consistent with findings from behavioral economics. For example, the system could offer coordination payments to child care providers to promote alignment in meeting each child's CAB needs, and share incentive payments as pediatricians and child care providers partner to get each child kindergarten ready. Just as savings accrue across sectors, the potential to promote health is distributed across sectors, with many of the evidence-based CAB promotion interventions occurring in community settings. Fair distribution of

⁵⁴ Schuster, M. A., & Fuentes-Afflick, E. (2017). Caring for Children by Supporting Parents. *The New England journal of medicine*, 376(5), 410.

accountability, risk, payments, and incentives should be worked out locally based on the needs of the community, but should acknowledge the role that each member can play toward promoting health.

Ultimately, it is essential that the system be structured so that practices and communities recognize that their primary role is to improve child health trajectories, primarily through responding more preventively, holistically, ecologically, and developmentally. While there are a growing number of emerging models of more effective primary pediatric practice showing great potential for improving child health trajectories,⁵⁵ much more needs to be learned through innovation and diffusion, even at this practice level, and even less is known about effective collaboration across sectors for CAB promotion. APMs can contribute most when they foster this innovation and diffusion – and incent, above all, practitioners to increase their efforts in this area, while recognizing those practitioners are not accountants, econometricians, or bio-statisticians. The emphasis of any alternative payment system must be to promote actions at the practice and community levels that align with the science of healthy child development, moving beyond biomedical responses to disease and injury to strengthening child and family agency in healthy development.

III. 2. b. The risk-adjustment principles should be based on the expected level of care and size of the value-based payments necessary to incentivize systems toward maximal performance on the measurement system outlined above, with the increased amount of payment justified by the expected value of the outcomes achieved. This is conceptually similar to the Million Hearts cardiovascular risk reduction model, with the measures estimating risk over a very long-term, and incentives for effectively intervening to mitigate that risk and reduce life-course costs.⁵⁶

Given the focus on short-term outcomes that predict longer-term outcomes and that allow providers to receive timely incentive payments, attribution may not need to be significantly different from emerging population-based attribution models used more generally,⁵⁷ although given that the cross-sector ACO will likely incorporate most of the providers in a community, geographic attribution may make the most sense.

⁵⁵ Elizabeth Tobin Tyler, Rachel L. Hulkower, and Jennifer W. Kaminski, *Behavioral Health Integration in Pediatric Primary Care: Considerations and Opportunities for Policymakers, Planners, and Providers*, Milbank Memorial Fund (Mar., 2017).

⁵⁶ Sanghavi, D. M., & Conway, P. H. (2015). Paying for prevention: a novel test of Medicare value-based payment for cardiovascular risk reduction. *Jama*, 314(2), 123-124.

⁵⁷ Population-Based Payment Work Group (2016). *Accelerating and Aligning Population-Based Payment Models: Patient Attribution*. Retrieved from <https://hcp-lan.org/groups/pbp/pa-final-whitepaper/>.

Conclusion

Finally, throughout this process, the undersigned encourage CMMI to continue to promote the involvement of individuals and families to best understand their needs and preferences, ensuring the success of the pediatric APM. This could, for example, include the development of a stakeholder engagement infrastructure within CMMI, such as a Patient Advisory Panel including families and child advocates from across the spectrum of health care need and risk to help ensure that emerging models are person-centered, and a process to facilitate input from individuals and families throughout the development and evaluation processes. The increased individual and family participation throughout the model development process will help to foster alignment between value-based payment and what it is that individuals, families, and communities ultimately value.

The undersigned appreciate CMS's consideration of opportunities to transform pediatric behavioral health care, and look forward to working with CMS to fostering future payment and delivery initiatives at the local level. For more information, please do not hesitate to contact Nathaniel Counts, J.D., Senior Policy Director of Mental Health America, at
Thank you for your time.

Sincerely,

Mental Health America

American Institutes for Research

American Psychological Association

Campaign for Trauma Informed Policy and Practice

Center for Autism and Related Disorders

Child Care Aware

Child and Family Policy Center

Depression & Bipolar Support Alliance

Eugene S. Farley, Jr. Health Policy Center at University of Colorado School of Medicine

National Alliance on Mental Illness

National Head Start Association

ZERO TO THREE

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Johns Hopkins School of Medicine

Michael W. Yogman, M.D.

Advisory Board Chair, Boston Children's Museum
Chair, Child Mental Health Task Force
Mass Chapter American Academy of Pediatrics

Mercy Kids Hospital

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Miller Children's & Women's Hospital Long Beach

I am writing to add my strong endorsement of the comments submitted by the Center to Advance Palliative Care in response to the attached Pediatric RFI on 3/28.

Respectfully submitted,

Minnesota Chapter of the American Academy of Pediatrics

Key components in the design and payment for new models of pediatric care include:

Strongly supporting integration of pediatric care and social services in a way that allows for real-time collaboration on behalf of pediatric patients and their families;

Strongly supporting integration of behavioral health service with pediatric primary care;

Recognition of patient/family "social complexity" as a component of health with a goal of reducing health disparities; and

Providing opportunities for models that integrate health-related social services with pediatric primary care.

Thank you for the opportunity to comment.

Minnesota Hospital Association

See attachment.



Minnesota Hospital
Association.pdf



Minnesota Hospital Association

April 3, 2017

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Mr. Alexander Billioux

Director, Preventive and Population Health Group

Centers for Medicare & Medicaid Services

Department of Health and Human Services

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Re: Request for Information on Pediatric Payment Model Concepts

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Dear Dr. Billioux:

The Minnesota Hospital Association (MHA) represents 142 hospitals and health systems, which provide quality care for patients and meet the needs of our communities. On behalf of Minnesota's children's hospitals, MHA would like to express support for the response submitted by the Children's Hospitals Association and offer the following comments regarding the Center for Medicare and Medicaid Innovation (Innovation Center) Request for Information on Pediatric Payment Models.

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We believe the development of alternative payment models (APMs) for the pediatric population will create some unique challenges. The most important attributes are that such a model can help to coordinate care across a spectrum of services from preventive care for optimal physical and mental development to specialty care needs for those with complex conditions and disabilities.

In order to ensure the best outcomes, pediatric integrated care and alternative payment models should implement child and family-focused care solutions. Care coordination is reliant on an efficient care system that should be child and family-driven supported by an infrastructure aligned with the child's developmental needs. It should integrate physical and mental health to address the whole health of the child and be delivered via an integrated network of care that is home and community-based with access to specialized services as needed.

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Like in the adult population, integrated care should address not just the medical needs, but access to housing, legal and transportation needs and social supports that impact an individual's health and access to care. Pediatric integrated care models must also focus on a child's education needs, including early childhood development. Innovations should be developed through state initiatives and public and private partnerships, with federal regulations and guidelines not hindering state progress.

APMs must adequately align with the needs of pediatric patient populations, which are smaller and have lower disease incident rates than adult patient populations. The size and geography – rural or urban – and the availability of specialized pediatric resources must be considered with respect to developing the network structure. It is important that access to pediatric specialties and

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Mr. Alexander Billioux

April 3, 2017

Page 2

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subspecialties be protected and that those children with special health care needs be considered in the development of the model.

2

APM and integrated care models should:

- Demonstrate a long-term commitment to the care of children and expertise to manage pediatric populations;
- Meet the needs of children across a geographic region;
- Provide comprehensive pediatric specialty care;
- Adopt electronic health records (EHRs), incorporating electronic data sharing (primary and specialty care) and telehealth capabilities; and
- Have a centralized care management function to streamline patient access and reduce duplication of services and the ability to integrate high risk children in other sectors.

3

A pediatric APM should aim to reduce barriers to providing integrated care, such as burdensome regulation, inadequate funding and data sharing obstacles. Such a system should clarify regulations to address the current challenges of differing regulatory interpretations with respect to allowable services and information sharing to enable flexibility in the provision of services and data sharing.

4

There should be careful attention paid to the details surrounding attribution of pediatric patients. There will be unique challenges to the hand-offs between children's specialty providers and primary care pediatric providers. Children's providers will need clear delineation and data to support the care and unique care management challenges of working with pediatric populations that cycle in and out of secondary and tertiary care. Transitioning of children from pediatric to adult care providers is also an important consideration of any APM, especially for those children who have complex medical conditions.

5

An APM should also include an upfront payment mechanism, such as a per member per month care management fee, to support a centralized care coordination function and include adequate funding for emergency social services for high need populations, which serve to stabilize the revenue stream and provide readily available support more reliably for families. The infrastructure needed to support these types of models is not insubstantial. Hospitals need front-loaded care management payments to support this infrastructure development.

6

MHA thanks the Innovation Center for focusing on the unique needs of pediatric patient populations and the providers who care for them. We look forward to working with you to develop innovations to provide high-quality, child and family focused care. Please feel free to contact Joe Schindler, MHA Vice President of Finance, at

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Sincerely,

Briana Nord Parish

Policy Analyst, Minnesota Hospital Association

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Mississippi Center for Advanced Medicine

Good Afternoon,

Background on Mississippi Center for Advanced Medicine

The Mississippi Center for Advanced Medicine is pleased to respond to the Center for Medicare and Medicaid Innovation's request for information on Pediatric Alternative Payment Model Concepts. The Mississippi Center for Advanced Medicine (MCAM) is a new healthcare organization in Mississippi that integrates pediatric subspecialty medical care, clinical pharmacy services, and compassionate care coordination for patients with pediatric and congenital disorders that started in July of 2016. Our unified care process assures timely and thorough evaluations and treatments for pediatric patients who need subspecialty services. We believe open and frequent communication combined with an integrated specialty care model will optimize quality, safety, service, outcomes, and cost for subspecialty medical and pharmaceutical care in our state. MCAM currently offers the following pediatric subspecialty services; Endocrinology, Hematology and Rheumatology while actively recruiting additional pediatric medical and surgical subspecialists to join our team. In April of 2017, we will offer care in five locations around our state: Biloxi, Madison, Oxford, Ruleville and Tupelo.

Research

Dr. Spencer Sullivan, Pediatric Hematologist, has participated as a treating provider and principal investigator for a gene therapy trial for a patient with severe Hemophilia B. This patient has not had to infuse blood clotting factor in over 12 months after participating in the study. Dr. Sullivan is currently opening additional studies for Hemophilia A and B. The Mississippi Center for Advanced Medicine would like to replicate gene therapy studies to a variety of pediatric patient populations as they become available.

Ongoing Challenges Facing Mississippi's Children

Children in Mississippi suffer from a lack of access to care, especially with regard to children with complex medical conditions. In some areas, pediatric subspecialists are several hours away and cities/towns do not have a pediatrician. To compound this affect, the access to high quality pediatric behavioral health providers remains a top concern for the state's children. Reimbursement for these services makes it challenging to attract people into the field and thus recruitment of pediatric behavioral health personnel remains a challenge. MCAM is actively looking to add a full complement of pediatric behavioral health specialists that can serve the state's children.

Population Health Concepts Under Consideration by the Mississippi Center for Advanced Medicine

Our organization is poised to become the leading pediatric subspecialty care provider in terms of quality, cost and the flexibility and adaptability to participate in and lead alternative payment models for pediatric patients in the state of Mississippi. MCAM is well-suited to serve as a hub of pediatric subspecialty care in Mississippi while pediatricians can serve as the spoke. Consistent with this model, MCAM is actively considering the development of a clinically integrated network (CIN) of pediatric providers throughout the state. By utilizing a CIN, pediatric providers would be able to share quality data, core measures and align on costs. This concept is analogous to the model used by Children's

Health in Dallas, Texas where I was previously employed. To make the largest impact, an EHR interface for pediatric providers would need to be created.

MCAM's potential to create improved outcomes and savings due to its position to develop a statewide ambulatory pediatric network are tremendous. By partnering with primary care providers and local systems, MCAM can further its goals of keeping patients close to home when possible and preventive care for patients with chronic conditions by best addressing their care needs to avoid unnecessary hospitalizations, readmissions and visits to the emergency department. These are things that will be tracked to develop a strategy around the alignment of quality and costs.

Home Health

Mississippi lacks options to a home health service dedicated to chronically ill children, MCAM would like to explore and advance this concept over the coming years.

Uniting with Community Partners

MCAM would like to continue to grow its relationship with school nurses across the state of Mississippi. Often, these nurses serve as the first responders to a child with a chronic conditions and through alignment with them, MCAM believes it can better manage children with chronic conditions keeping them well and out of the hospital. Additionally, MCAM would like to focus on strengthening relationships with churches, Boys and Girls Clubs, schools and other community based partners to make a significant impact on the pediatric population.

Extending core measures for children with chronic conditions

MCAM is working to develop a set of core measures for each chronic illness served by its specialist (i.e. Diabetes, Hemophilia and Lupus to name a few) to track the health of the population, quality and patient satisfaction and costs over a period of years further the goal of the Triple Aim.

Reimbursement

In order to execute some of the above-mentioned concepts and ideas, there must be an adequate reimbursement model in place to make the alternative strategies financially viable in the short and long term. These would include but not be limited to shared savings programs, capitated payment arrangements, pay for performance and accountable care through an ACO, further alignment with traditional Medicaid and managed Medicaid (MS CAN plans) and Delivery System Reform Incentive Payment (DSRIP) programs. DSRIP programs in Texas have motivated pediatric providers through the state to drive forward on accountable care by incentivizing the creation of new bricks and mortar locations in underserved areas and through the creation of measurable goals for pediatric healthcare in Texas. Implementing DSRIP in Mississippi and throughout the nation would provide movement towards pediatric population health based payment modules. Here in Mississippi, we could use the DSRIP program or its equivalent to create a model of accountable care that is financially viable by providing the right pediatric care at the right place and at the right time.

Thank you for the opportunity to comment on this important initiative to further advance pediatric care. Please reach out to me with any questions or comments.

Mott Children's Health Center

Dear CMS Team,

Thank you for giving us the opportunity to participate in RFI process for improving Pediatric care.

I will enumerate few suggestions:

1. There should be comprehensive health assessment at well visits where time is allocated for education and case management which are beyond child's immediate needs. This time should be spent understanding long-term family and individual needs pertaining to whole health, understanding barriers to care and partnering with community resources to match those needs. Reimbursements for these visits could be done with a different well visit code which should be compensated accordingly, as it will take a lot more time and staffing resources to accomplish this. Such visits could be done bi-annually due to rapidly changing needs of Medicaid population.
2. Population health management would be another key to improve outcomes and decrease cost in the long run by decreasing utilization and improving quality of life. My suggestion in this regard would be to have a dedicated para clinical staff who could care co-ordinate on recommended care and follow up of chronic diseases e.g. Asthma, ADHD and Obesity, DM. These cohorts could be followed via phone for care co-ordination to make sure they are in compliance with recommended plan of care and have no barriers to treatment. This opportunity could also be used for disease management education and streamline recommended follow up with PCP. These non-face to face visit should have adequate reimbursement codes as they will need to be done periodically by a trained staff. This will in long term decrease ER utilization and hospital admission rate along with decreasing co-morbidities associated with chronic diseases.
3. Whole health model should be promoted where mind and body are treated as one unit and PCP works in conjunction with MSW/Psychologist to achieve this. Mental health specialist can provide screenings and brief intervention/ therapy and help establish the diagnosis for PCP for medication management for often underdiagnosed mental health disorders like Adhd and Depression. This will in turn also improve compliance and understanding of chronic medical illness and disease course. With growing shortage of child psychiatrist it is almost prudent to have a mental health therapist in PCP office to achieve whole health model. Such concepts although promoted are not reimbursed by Medicaid and are barriers to adopt in real life settings.
4. School input in the health of child could be mandated by developing streamlined questionnaires that would be filled out by homeroom teacher and then sent directly to PCP office. This would enable understanding gaps in care if any.

Warmest Regards

MPRO

Good morning,

MPRO is Michigan's QIO within the Lake Superior Quality Innovation Network (LSQIN). We received the request for information related to improving pediatric care and would like to offer the following comments related to our experience in quality improvement work surrounding both immunizations and cancer prevention.

Immunizations continue to be a high priority in the pediatric population. Given the updated Advisory Committee on Immunization Practices (ACIP) recommendations for HPV vaccination dosing schedules, increasing targeted technical assistance would drive rates of adolescents vaccinated to prevent HPV-associated cancers. Approaches to increasing the quality of pediatric care related to HPV vaccinations may include:

- Bundling HPV with the other vaccines given at the 11-year-old well visit (Meningococcal and TDaP)
- Emphasize motivational interviewing techniques with providers to encourage positivity and decrease fear and stigma in parents
- Connect providers with current and updated resources and vaccination schedules to promote vaccinations using consistent evidence-based messaging
- Describe HPV as a cancer-prevention vaccine

Additionally, emphasizing the importance of all vaccines recommended from birth to age eighteen will promote immunizations as tools for prevention of deadly diseases to providers and community members. Vaccination is applicable to all ages, and a dedicated effort to stay up-to-date on immunizations throughout the course of patients' lives will help improve both pediatric and adult health outcomes. Approaches to increasing the quality of pediatric care related to all appropriate vaccinations may include:

- Utilizing reminder/recall systems as part of state immunization registries
- If a state doesn't have an immunization registry, resources should be put into establishing and mandating its use through policy
- Community involvement through daycares, sports/activity groups, etc., to engage parents directly in a non-healthcare setting
- Sharing resources dispelling vaccine myths as part of back-to-school materials, going home from the hospital after birth materials, etc.

The promotion of vaccinations in pediatric healthcare is a concept that will encourage primary care providers to collaborate with health-related social service providers through:

- Collaboration with local and state health department programming

- Collaboration with pharmacies in states that allow pediatric vaccination in pharmacies
- Exploring partnerships through mobile clinics for some vaccines (such as the flu shot or other comparatively easy to store vaccines) at camps, playgrounds, and/or other frequently visited public spaces will help raise awareness and provides a chance to educate those who may be vaccine hesitant

Finally, given the increasing rates of Hepatitis A infection in the adult population, encouraging completion of the Hepatitis A vaccine series should be a priority for pediatric immunizations. Approaches to increasing the quality of pediatric care related to Hepatitis A vaccinations may include:

- Creating awareness around Hepatitis A and making it a regular part of the childhood vaccination series
- Collaboration between physician groups and health plans to incentivize completion of the vaccine, rather than just the first dose
- Collaboration with local health departments to offer this vaccine to populations that are often lost to public health follow-up

Thank you for the opportunity to offer our input on approaches to improve the quality of pediatric care and ensure lifelong health. Please let us know if we can provide any additional information.

Thank you

National Association of Medicaid Directors

Good afternoon,

Please find attached the National Association of Medicaid Directors' response to the Pediatric Alternative Payment Models request for information. For any follow-up communications, please contact my colleague, copied here.



National
Association of Medi

March 28, 2017

Ms. Seema Verma
Administrator
Centers for Medicare and Medicaid Services

Re: NAMD Response to CMS Pediatric Request for Information

Dear Ms. Verma:

On behalf of the nation's Medicaid Directors, thank you for the opportunity to comment on the request for information on pediatric alternative payment model (APM) concepts. Our comments focus on areas where CMS could partner with states to most effectively support Medicaid innovations for children.

The National Association of Medicaid Directors is a bi-partisan, non-profit association representing the administrators of the Medicaid program in all 50 states, the District of Columbia and the territories. Medicaid is the largest health care safety net program and is responsible for the health care of 73 million Americans, including nearly half of all births and 2 in 5 children nationally who are served by Medicaid and CHIP. Medicaid has led the way in implementing care delivery innovations and value-based payment reforms across our health care system, including for the next generation of Americans.

Medicaid Directors recognize that delivery system and payment reform for the pediatric population must reflect the unique health care needs of kids. In particular, social determinants of health and adverse childhood events are a key cost driver for children and impact their long-term health as adults. The earlier these factors can be addressed, the better the results for the immediate health of the child, as well as the long-term health of the child and his/her family. Similarly, evidence shows that children can be best served by concurrently addressing the needs of these kids and their families. Advancing family-centered models of care is a key goal for states.

Medicaid Directors appreciate CMS's desire to partner with states to advance innovations that address these unique health care needs of children. The following comments identify six ways CMS

can support state Medicaid initiatives that improve health outcomes for children and deliver value for the taxpayer dollar.

1. *We ask CMS to partner with states to design pediatric innovations tailored to each unique Medicaid program and that align with existing transformation efforts in the state.* To improve health outcomes and contain costs, pediatric Medicaid reforms must reflect each state's unique delivery construct, provider landscape, budget parameters, geographic features, and population health needs. CMS leadership have acknowledged the importance of state variation, and in fact, this variation must be reflected in the quality strategy states submit to CMS. Likewise, CMS should work with states to design pediatric innovations that are tailored to each state's Medicaid program and the children it serves.

Similarly, CMS should work with states to deploy pediatric innovations that build on the state's overarching transformation approach. The key to the long-term success of Medicaid's comprehensive delivery system and payment reforms is to ensure broad alignment of purpose, organization and implementation. States are seeking to align delivery system and payment reform strategies across populations, providers, and payers, while reflecting the unique needs of beneficiaries, including children. In some cases, this may be achieved by creating new child-focused episodes of care in an episode-based payment strategy. In others, it may be building on the foundation of a medical home or total cost of care model, or exploring innovations that strengthen the role of MCOs in integrating care for kids. We encourage CMS to work with states on strategies to achieve this broad alignment while reflecting children's differences in health care utilization, rapid developmental changes, and the need for family-centered care.

2. *We encourage CMS to work with its federal partners to break down federal silos between medical and social support programs.* As noted above, health outcomes and costs for kids are largely driven by adverse childhood events and social determinants of health, such as housing, food insecurity, education, etc. Integration between health and social supports is needed to address these issues. However, current federal statutory and regulatory frameworks often prevent state and community partners from pursuing such innovations. Each program is subject to a distinct and complex set of federal rules and oversight. This generally limits how funding streams can be leveraged in a holistic and value-based way. For example:

- The Health Resources and Services Administration's (HRSA) maternal and child health programs target low-income mothers, many of whom are covered by Medicaid. But the distinct federal structures and rules prevent Medicaid and state maternal and child health programs from creating the most value across funding streams for infants and their mothers.
- Budget neutrality calculations in Medicaid 1115 waivers cannot consider the cost savings these innovations generate for other federal programs. This prevents states from testing integrated service delivery initiatives that are cost-effective across federal programs.

In addition, the lack of coordination across programs at the federal level prevents data from flowing between health and health-related programs. The exchange of this information is essential to integrated care models. For example, the education system and Medicaid operate under distinct information privacy requirements. This prevents data from flowing between schools and pediatricians who are seeking to deliver integrated care.

Therefore, we call on CMS to work with its federal partners to address the siloed program structures that prevent integrated care at the state and community level. In particular, there need to be clear regulatory pathways for states to holistically leverage Medicaid and other Health and Human Services programs for children, such as:

- HRSA's maternal and child health programs (i.e., Healthy Start and Healthy Babies);
- Programs in the Centers for Disease Control (i.e., Vaccines for Children);
- Substance Abuse and Mental Health Services Administration block grant funding for children; and
- Programs in the Administration for Children and Families (i.e., child care assistance).

Similarly, this coordination should extend to other federal agencies and programs that have a direct impact on the health of children in Medicaid, such as the Department of Education, Department of Justice, Department of Housing and Urban Development and others.

3. ***We urge CMS to align pediatric quality measures across Medicaid and other health care programs.*** Purchasers of health care regularly identify the lack of alignment across quality measure sets as a major barrier to health system transformation. This holds true to Medicaid as well. For example, there are substantial differences between the Medicaid meaningful use incentive program measures and the Medicaid child core set. This type of misalignment across federal measure sets prevents states, providers, and managed care organizations from working towards common quality goals for children. It also creates a significant administrative burden on the pediatric providers that serve them.
4. ***We recommend CMS partner with states and stakeholders to strengthen quality measurement for children.*** In addition to the need for quality alignment, there are also gaps in existing quality measures that address disparities among racial and ethnic minorities, children with complex physical and behavioral health conditions, and children in urban versus rural areas. CMS can play a role in directing states and stakeholders to address these gaps in a strategic and aligned manner. This effort could also build on the work beginning in some states to measure the social determinants of health, such as school readiness, food insecurity and stable housing. Finally, CMS could provide support related to data and analytic capacity to strengthen quality measurement for children, as well as assist states in developing regional benchmarks for pediatric quality improvement.
5. ***We encourage CMS to continue investing in the state infrastructure to drive health transformation for children.*** Transformation activities are resource-intensive. Capital and technical assistance resources are required not only by state and local entities, but by the health

systems and affiliated pediatric providers who are working to analyze impacts and modify systems. It is especially resource-intensive to create new linkages between the health care and social support system for children and their families, which have traditionally been separate. States must develop IT systems and data analytic tools that support providers in delivering coordinated care across sectors. In addition, it also requires significant staff time and resources to bring new stakeholders and community partners to the table.

An ongoing federal investment in state infrastructure for payment and delivery system reform, such as through the State Innovation Model Program, is needed to advance our shared objectives of integrated care for children. We also urge CMS to continue allowing states to use federal advanced planning funding for IT infrastructure development, which provides critical support for this work.

6. We request CMCS and CMMI decision-makers closely coordinate with one another as they work with states on pediatric innovations. As we have noted in previous comments, there is often a lack of coordination between CMMI and CMCS on new delivery and payment models with states. This creates process challenges that impede state innovation. After CMMI approves a model, states often face significant delays as they work with separate decision-makers on the approval of Medicaid waivers, SPAs and managed care contracts. CMS can address this challenge by:

- Providing an expedited pathway for state approval of any necessary SPAs and waivers once a model is approved by CMMI;
- Engaging both CMMI and CMCS decision-makers throughout state design and implementation of a model; and
- Coordinating across CMS and the Office of Management and Budget (OMB) throughout the design of models that will require an 1115 waiver. This will ensure budget neutrality considerations in these waivers do not delay the implementation of models that states develop in partnership with CMS.

We applaud CMS's interest in supporting state Medicaid innovations that improve care and contain costs for children in the program, and we welcome ongoing engagement with CMS on this work. If you have additional questions, please contact Lindsey Browning at

Sincerely,



Christian L. Soura
Director
South Carolina Department of Health and
Human Services
President, NAMD



Judy Mohr Peterson
Med-QUEST Division Administrator
State of Hawaii
Vice President, NAMD

National Center for Children's Vision and Eye Health

Vision impairment can be devastating to a child's future if not detected and treated early- negatively impacting their ability to learn, athletic performance, and overall potential in life. Some eye diseases are more responsive to treatment before children reach the age of 7.¹ In addition, optical correction of significant refractive error may be related to improved child development and school readiness.^{2,3,4} Yet only 52% of children ages 3 through 5 are screened for vision problems.⁵

Amblyopia and its primary risk factors, strabismus and significant refractive error,^{6,7} are the most common visual disorders in preschool children.⁸ Evidence suggests that the success of amblyopia treatment is influenced by a child's age, with children younger than 7 years of age being more responsive to amblyopia treatment.⁹ A recent report concluded that there is adequate evidence that early treatment of amblyopia results in improved visual outcomes.¹⁰ In addition, optical correction of significant refractive error may be related to child development and improve school readiness.^{11,12} Healthy People 2020 specifically includes the goal of increasing vision screening rates in children aged 5 years and under, with a modest 44% target.¹³ In addition, the USPSTF has endorsed preschool vision screening for children 3 years to 5 years of age,¹⁴ and the American Academy of Pediatrics' Bright Futures Guidelines¹⁵ recommend vision screening for all children annually at all well-child visits from birth to age 6 years old, and then periodically in each period of childhood to detect amblyopia or risk factors for the development of amblyopia.

Further, disparities exist in the incidence of vision problems and access to eye care for several high-risk populations, including children with special healthcare needs, children from low-income families, and minority populations¹⁶- those largely served by Medicaid and CHIP programs- resulting in higher incidence of uncorrected vision problems. Infants and young children with visual impairment have delayed motor development milestones; may express particular mannerisms; and have delayed language development. Improved assessment tools, education and outreach initiatives to support earlier identification of vision problems and appropriate referral to eye care in vulnerable populations will result in improved potential for better vision. Timely intervention and effective treatment lead to long-term improvements in children's vision and eye health and potentially that of the population at large.

Nationally and at state-levels, there exists little consistency among stakeholders in children's vision health in regards to policy, frequency, referral criteria, or coordinated systems in place to ensure follow-up for children referred to eye care from a vision screening. Further contributing to the public health challenges of children's eye health is the fact that there are no standards for the public health surveillance of children's eye health in the U.S. The development of a more uniform approach to children's vision health systems remains a critical need and deserves increased attention and funding.

Statistical Snapshot:

- o Vision problems in children are common- 12.1 million school-age children – one in four – have some form of vision problem,ⁱ

- o Refractive error, amblyopia, strabismus, and astigmatism are common conditions among young children, affecting 5 to 10 percent of all children aged three through fiveⁱⁱ

- o Researchers in vision and child development have found that vision “functions as a framework for the

use of other senses and motor functions” and is “the earliest avenue for effective communication and understanding other people’s emotions and intentions.”ⁱⁱⁱ

- o Visual functioning is a strong predictor of academic performance in school-age children,^{iv,v}

- o Vision disorders of childhood may continue to affect health and well-being throughout the adult years.^{vi}

- o Results from the most recent phase of the National Institutes of Health/National Eye Institute-funded Vision In Preschoolers (VIP) Study concluded that preschool age children with vision problems are at a significantly increased risk of having worse performance on tests of early literacy.^{vii}

- o The economic cost of children’s vision disorders in the United States has been found to be \$10 billion annually.^{viii}

- o Data from studies of specific programs in limited geographic regions suggest that both rates of referral after failed vision screening and rates of receipt of necessary care after referral are quite low- less than 50%.^{ix}

- o The Medical Expenditure Panel Survey (2009-2010), which used a nationally representative sample of 5-year-old children, found that 22% of children had never had their vision checked by a doctor or other health provider and also detected differences by race/ethnicity, family income, and insurance coverage.

- o 30% of Hispanic children had never had their vision screened, compared to 19% of non-Hispanic children.

- o 31% of children in families with incomes less than 200% of the federal poverty level (FPL) had never received vision screening, compared with 15% of children in families with incomes at or above 200% FPL.

- o 61% of children with no insurance had never had their vision screened, compared to 27% of children with public insurance only, and 17% of children with any private insurance.

As CMS considers the development of a new pediatric health care payment and service delivery model, I wish to submit the following recommendations on behalf of the National Center for Children’s Vision and Eye Health at Prevent Blindness:

1. Implement the outstanding recommendations from the 2010 OIG report (<https://oig.hhs.gov/oei/reports/oei-05-08-00520.pdf>) to improve vision screening rates as a component of pediatric preventive health services. Suggestions to improve service rates include improved vision screening data collection and analysis

2. Replicate state Medicaid program models that demonstrate improved rates of vision screening. For example- the Arizona state Medicaid program provides a one-time reimbursement for an instrument-based vision screening for children between the ages of 3 through 5 years old

3. Provide health care training and guidance that promotes referral of children who fall into high risk categories for vision problems. Integrate performance measures to promote connection of these

children with an eye care provider and implement standardized guidance given to parents/families of these children

4. Promote use of evidence-based and age-appropriate children's vision screening procedures, developmental assessments, and medical history/risk factors to ensure children are being appropriately referred to the eye care system, reducing the number of unnecessary referrals that create reduced access to eye care for those

5. Promote vision screening data sharing and integration among primary health care and public health care providers who also perform vision screenings in order to reduce duplication of services (PCMH/Patient centered care model)

6. Consider reimbursement opportunities for public health providers conducting vision screening on the targeted population

Thank you for the opportunity to provide information and recommendations for system improvement in pediatric preventive health services. Prevent Blindness and our National Center for Children's Vision and Eye Health are ready to assist you with any questions or additional information to support children's vision.

National Committee for Quality Assurance

See attachment.



National Committee
for Quality Assurance

March 28, 2017

Centers for Medicare & Medicaid Services (CMS)

To Whom It May Concern:

Thank you for the opportunity to comment on the Request for Information on Alternative Payment Models (APMs) for pediatric beneficiaries of Medicaid and Children's Health Insurance Program (CHIP). The National Committee for Quality Assurance (NCQA) supports this effort to drive multipayer participation in APMs and extend high-quality integrated care to new populations. Developing this APM will accelerate the much-needed transition to paying for value instead of volume in state-level health care programs.

We believe there is a significant amount of interest among states for a model like this. Many states have already prioritized quality improvement for their pediatric population through Medicaid waivers and State Innovation Model (SIM) grants. For example, states like Colorado have used SIM grant funding to integrate behavioral and primary care within Patient-Centered Medical Homes (PCMH) to ensure every child enrolled in Medicaid receives comprehensive health care. Participants in this program were required to either meet state-developed standards or achieve NCQA PCMH recognition.

States frequently require that practices meet national standards because for many, particularly those practices which primarily serve Medicaid beneficiaries, this level of integration is difficult to achieve. Programmatic expectations require fundamentally transforming a practice and investing in infrastructure to support that transformation.

NCQA PCMH standards provide a systematic approach to practice transformation and a roadmap for development of the necessary infrastructure. The principles of the PCMH model of care are directly aligned with the expectations of this APM and would help practices thrive in such an integrated environment. We developed the principles in part through collaboration with the American Academy of Pediatrics to ensure the model met pediatric needs. We also have experience implementing PCMH for Medicaid patients in Federally Qualified Health Centers through a contract with the Health Resources & Services Administration.

Our program sets expectations of team-based practice, with specific goals of coordinating, tracking and managing all patients across the entire continuum of care. Our recognized practices must also implement an organized, systematic approach to preventive screenings and assessments for common medical and behavioral issues, as well as procedures for tracking that information via registry. We've established standards to help practices manage relationships with social and community services, as leveraging these non-medical resources is essential for improving long-term outcomes.

That's why the NCQA PCMH Recognition Program provides an excellent foundation for an APM with these goals. Not only does NCQA PCMH demonstrably improve practice performance on pediatric quality measures, evidence also indicates that the program increases participation of physicians in Medicaid.¹² Researchers have also found that PCMHs are particularly effective at delivering preventive services to children and adolescents by boosting vaccinations, screenings and sexual health services.³

However, children frequently must seek care at the most convenient site, such as school clinics and urgent care centers. That's why NCQA built a complementary program based on the PCMH model: Patient-Centered Connected Care (PCCC). PCCC recognizes ambulatory care providers – such as urgent care centers, school clinics, retail clinics and others – that communicate and coordinate with primary care.

NCQA's third clinical recognition program, Patient-Centered Specialty Practice (PCSP), is also based on the PCMH model and recognizes specialists that deliver high-quality, patient-centered care. Together, this suite of clinical programs helps create the foundation for building a medical home neighborhood that would thrive in an APM arrangement.

Regarding pediatric measures beyond the Medicaid Core Set, we believe you should include additional measures that address the important issue of behavioral health.

There are two measures in the Core Set to assess quality for children on antipsychotics. We recommend complementing this set with an additional measure, *Metabolic Monitoring for Children and Adolescents on Antipsychotics*. This measure is endorsed by a national body, included in the NCQA Healthcare Effectiveness Data & Information Set (HEDIS®), and assesses whether children on these powerful medications receive recommended metabolic testing. This is a critical aspect of care that must be measured, as childhood use of antipsychotics is associated with long-term cardiovascular complications, diabetes, and other consequences into adulthood.

The model must also have a complete set of measures to assess depression care. Currently only *Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment* is included in the Core Set. Three additional measures are necessary to capture the quality of care at key points along the continuum of depression management and treatment. Inclusion of these measures would create a full suite that effectively measures screening for depression, use of a standardized tool to screen and monitor depression symptoms, follow-up, and the associated outcome (remission or response to treatment):

- *Depression Screening and Follow-up for Adolescents and Adults* (in HEDIS®)
- *Utilization of the PHQ-9 to Monitor Depression Symptoms for Adolescents and Adults* (in HEDIS®)
- *Depression Remission or Response for Adolescents and Adults* (proposed for HEDIS®)

¹ The Patient-Centered Medical Home Initiative in New York State Medicaid: Report to the Legislature, April 2013. New York State Department of Health. http://www.health.ny.gov/health_care/medicaid/redesign/docs/pcmh_initiative.pdf

² Takach, M. (2011). Reinventing Medicaid: State Innovations to Qualify and Pay for Patient-Centered Medical Homes Show Promising Results. Health Affairs. <http://content.healthaffairs.org/content/30/7/1325>

³ Garcia-Huidobro D, Shippee N, Joseph-DiCaprio J, O'Brien JM, Svetaz MV. (2016). Effect of Patient-Centered Medical Home on Preventive Services for Adolescents and Young Adults. *Pediatrics*. <http://pediatrics.aappublications.org/content/early/2016/05/12/peds.2015-3813>

Initially developed and collected by Minnesota Community Measurement, these measures are now collected by health plans nationwide for HEDIS reporting. They are specified to leverage electronic data from multiple sources – electronic health records, health information exchanges, registries, and even claims – to assess the full spectrum of depression care. They also utilize patient-reported outcome data. This is critical to understanding depression outcomes. NCQA sees these measures as an opportunity to revolutionize the way data are collected and reported for quality measurement.

Regarding eligible populations, we agree that you should prioritize children with or at risk for developmental, social, emotional, behavioral, or mental problems. We suggest you also consider including pregnant women. Preventative services during pregnancy can prevent morbidities later in a child's life. There is also significant potential for savings in a pediatric APM by ensuring pregnant women and their babies are getting the care they need prior to birth, thereby reducing the use of the neonatal intensive care unit.

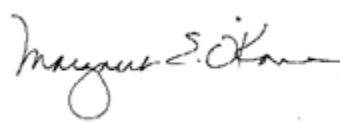
Regarding regulatory and structural barriers to integrating care, we believe the most significant challenge is sharing data across settings. States frequently have siloed delivery of social and medical services through separate agencies, so participating states must support data sharing agreements across those siloes. Any model for integrated care must include explicit direction about what data can and cannot be shared, who may authorize data sharing, as well as expectations for sharing data collected through social and community-based services. This is essential information that must be shared with the appropriate medical providers.

We recommend a “data follows the child” approach where a single passport inclusive of medical, behavioral, and social data is accessible across systems and providers. Leveraging and building upon community-based registries can provide the infrastructure for such an approach.

Finally, we also believe that CMS should transition to mandatory reporting of the Medicaid Core Set for all states, including states with only traditional fee-for-service Medicaid. NCQA has [endorsed legislation](#) that requires mandatory reporting of the Core Set from all states and continue to believe it is the most effective set of measures for assessing quality for this population.

Thank you for the opportunity to comment on this Request for Information. We look forward to working with CMS as you develop new models for integrated care. Please contact Joe Castiglione, Federal Affairs Manager, at if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Margaret O'Kane", is written over a thin horizontal line.

Margaret O'Kane
President

National Head Start Association (NHSA)

To Whom It May Concern:

The National Head Start Association (NHSA) is pleased to submit the attached document in response to the Request for Information seeking input on the design of pediatric alternative payment models.

We thank you for the opportunity to provide feedback and look forward to your continued work in this area.



National Head Start
Association (NHSA).i



April 7, 2017

Center for Medicare and Medicaid Innovation
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Response to Center for Medicare and Medicaid Innovation Request for Information
on Pediatric Alternative Payment Model Concepts

To Whom It May Concern:

Thank you for providing the opportunity to submit comments regarding the development of a pediatric alternative payment model. The National Head Start Association (NHSA) recognizes that innovative payment and service delivery models present a valuable opportunity to increase quality of and access to critical pediatric health services, while reducing costs and creating meaningful opportunities for collaboration across sectors.

As the voice for more than one million children, 250,000 staff, and more than 1,600 Head Start grantees in the United States, NHSA is committed to the belief that every child, regardless of circumstances at birth, has the ability to succeed in life. For more than 50 years, Head Start has provided early learning opportunities for our country's least fortunate children and comprehensive supports to families that address long-term economic stability and better health prospects, ultimately mitigating the devastating impacts that poverty can have on the future success of young children.

Providing health services to children is a critical factor in preparing children to succeed, both in school and later in life. Children and families who are marginalized by lack of access to critical services, including but not limited to health care and high-quality early education, are provided much needed support by local Head Start programs. From the very beginning of Head Start, Dr. Robert Cooke and a team of psychologists wrote that the first objective of the program was "improving the child's physical health and physical abilities." In the more than 50 years since Dr. Cooke wrote those words, Head Start has continued to reinforce the importance of health, integrating health care access, immunizations, screenings, and developmental supports into the comprehensive services offered to all children and families. Today, health remains an essential and unique part of the Head Start model. As is reflected in the Head Start Program Performance Standards (HSPPS) and in practice, Head Start is committed to the idea that children must be healthy to learn and that health services, especially early in life, are essential to supporting children's readiness for success in school and beyond.

When Head Start programs connect children and families to insurance, doctors, and care, the consequences of poor health in early life are minimized, ultimately contributing to better lifelong health outcomes. By improving children's health trajectories, Head Start's health services reduce the incurrence of future costs of preventable and



NATIONAL HEAD START ASSOCIATION

treatable health conditions. For example, through Head Start, children are more likely to receive preventive health and dental services,ⁱⁱⁱ and they have better nutrition habits during their time in the program.^{iv} With more outdoor play, Head Start children are likely to have lower Body Mass Index (BMI) scores than their counterparts.^v They have better overall health status that lasts into adulthood^{vi} and are less likely to smoke,^{xii} use drugs, or have hypertension.^{xiii} Ultimately, children who attend Head Start have lower mortality rates for conditions, such as anemia and asthma.^{xiv}

Collaboration with other local agencies can improve access to health services and the quality of care for Head Start children and families, ultimately contributing to better health outcomes throughout their lifetimes.

Head Start programs across the country are committed to forging pathways to better health outcomes for their children and families, often through a blend of their own services and Medicaid providers. Of the 1,045,402 Head Start children with health insurance at the end of the 2016 program year, more than 90% were covered by Medicaid and/or Children's Health Insurance Program (CHIP), but connecting children to health insurance is just the beginning.^{xv} Head Start programs confront a variety of challenges to providing health services to their children and families and, when local services are inadequate, Head Start programs compensate with their grant or private funding to meet the needs of their children and families.

In the spring of 2016, NHSA conducted a nationwide survey of programs to determine the various ways Head Start programs provide health services to their children and families, collecting responses from 482 programs, approximately one quarter of Head Start grantees and delegates nationwide. While participation was voluntary, the programs that responded closely reflect the national diversity of grantee auspices and sizes. The results of this survey provide insight into both the successes and challenges that Head Start programs and families currently experience when accessing health services in their communities.

In an effort to enhance their ability to offer comprehensive services, Head Start programs build community partnerships to overcome the challenges of limited resources. These partnerships are formed with a wide variety of organizations and agencies, from state and local organizations to doctor's offices to local medical and nursing schools. Almost all programs reported partnering with their state health department (95%). Other common partners included individual dentists (85%), pediatricians (77%), and mental health providers (71%). These partnerships vary depending on local community need and available resources. For example, programs serving urban communities are much more likely to partner with a local nursing school (41%) than programs serving purely rural communities (8%). By contrast, programs serving rural communities are far more likely to partner with Lions Clubs or similar local organizations. Many programs also shared that they work with WIC (Women, Infants and Children), Federally Qualified Health Centers (FQHCs), United Way, private insurance providers, hospitals and urgent care locations, the YMCA, special needs and military providers, and tribal health services. On average, programs reported partnering with at least seven different organizations to facilitate, enhance, or provide the required



NATIONAL HEAD START ASSOCIATION

health services. For Head Start programs and their families, these partnerships play a powerful role in increasing access.

Both the quantitative and the qualitative data make it clear that Head Start programs confront a variety of challenges to providing health services to their children and families. In response, many Head Start programs have made innovative and adaptive changes to meet their community's needs, and Head Start continues to have a positive impact on the health of the children and families in the program. The sheer breadth of providers and the number of partnerships reported suggest an overarching need for collaboration around providing families with as much support and access to health services as possible. The Head Start model encourages these partnerships at the local level and, as a result, Head Start programs play meaningful roles as conveners within their communities.

Optimizing child health requires that children are addressed comprehensively through active stakeholder engagement that reaches beyond health care to include early childhood providers. To do so, coordination at the community level is vital. CMMI should establish an advisory panel that includes parents, health care advocates, early childhood leaders and providers, and other valuable stakeholders to ensure that new payment models reflect the needs and preferences of all who share an interest in better long- and short-term child health outcomes.

The roles of Community Health Workers (CHWs) should be supported, formalized, and expanded.

The local partnerships formed by Head Start programs vary depending on the location, needs, and resources of each program, and access to health services varies based on these factors in communities, as well. Programs report the highest level of access to pediatricians and primary care providers, compared to other types of health providers. Half of the programs report that "Most or all families can access the services they need, and another quarter report that while most families have access, some communities they serve do not have enough providers. While this may suggest that the majority of families have adequate access to pediatricians and primary doctors, 12.3% of respondents report that there are a limited number of providers in their community *and* that families experience long waits for appointments. There is far less access to other provider types. Less than one-third of programs report that most families can access the mental health services they need, while nearly half reported limited providers and long waits for appointments. In every instance, reported access dramatically decreased when the survey inquired whether the care was linguistically and culturally appropriate. Many Head Start programs expend programs funds and staff capacity in order to provide transportation and translation services for their families. The need for greater access that is both culturally and linguistically appropriate is abundantly clear.

Community Health Workers (CHWs), also sometimes referred to as Promotores de Salud or Community Health Advisors, are members of the community who provide basic health care. In this role, they have the potential to improve health care delivery, increase access to health services, and ensure culturally and linguistically appropriate care in the



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neighborhoods they serve.^{xvi} The vast majority of states have not introduced legislative or regulatory action regarding CHWs' education, certification requirements, or payment through Medicaid, despite the great benefits--such as an increased capacity to provide preventive care to underserved populations-- that would follow. These states have multiple options for creating pathways for Medicaid reimbursement for CHW services and should create or pilot mechanisms for CHWs to be reimbursed by Medicaid for services that are recommended by physicians. With proven return on investment, CMMI should support the sharing of best practices for integrating CHWs into health care delivery systems.^{xvii}

CMMI should institute a formal process through which feedback from parents can be provided throughout stages of development, demonstration, implementation, and evaluation.

Maximizing child health requires a two-generation approach that focuses on long-term success--addressing children in the context of their family and treating parents as partners for healthy futures. Fostering strong, positive relationships between parents and children during the early years of child development can increase a child's physical and emotional health, helping him or her become a successful adult that can contribute and integrate successfully into society.^{xviiiixxxx}

Head Start programs recognize the powerful role of both mothers and fathers in their children's health trajectory and collaborate with parents on meeting children's health needs, with a focus on parents with low health literacy. The Head Start Program Performance Standards (HSPPS) require programs to provide parents with other health education opportunities, preventive care, emergency first aid, environmental hazards, tobacco use, lead and safe sleep, among many others. Although all programs meet these same requirements, each program adjusts the delivery of the services to best meet the needs of their local community.

Head Start's parent engagement can have impacts on Medicaid costs and children's health. According to a study by the UCLA Johnson and Johnson Institute, Medicaid costs for a child's trip to an emergency room or clinic can be reduced by at least \$198 per family annually when Head Start programs provide their parents with easy-to-understand health care guidance. The parents who participated in the study reduced the number of unnecessary emergency room trips by 48%. This also translated to a dramatic reduction in the number of lost days at work (43%) and at school (41%).^{xxi} With so few opportunities for short-term cost savings in the world of pediatric care, investment in parent engagement is a valuable opportunity that should be emphasized, including consideration throughout the development of new models, specifically:

- 1) CMMI should institute a formal process through which parents can provide feedback throughout stages of development, demonstration, implementation, and evaluation of alternative payment models.
- 2) CMMI should promote research-based parenting programs.



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Every opportunity should be taken to increase access to maternal depression screening.

In recognizing the critical role of parents in children's health outcomes, maternal depression screening should be included as a core metric in a pediatric model. Maternal depression is a serious condition that affects the well-being and quality of life of both mother and child. AAP estimates that, among families living below the federal poverty level, more than half (55%) of infants live with a mother suffering from depression.

Recently, Centers for Medicare and Medicaid released guidance that encourages states to take action to include maternal depression screening as part of the EPSDT well child visits covered by Medicaid. States should look to Colorado, Illinois, North Dakota, Virginia, and New York, the states leading the way in increasing access to screening for maternal depression through these means.

Pediatric Alternative Payment Models (APMs) should include an intentional focus on addressing toxic stress and Adverse Childhood Experiences (ACEs).

The Adverse Childhood Events study highlights the long-term health impact of exposure to adverse childhood experiences (ACEs).^{xxii} ACEs have been linked to risky health behaviors, chronic health conditions, low life potential, and early death.^{xxiii} Toxic stress— extreme and repetitive stress due to physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and household dysfunction— can disrupt and damage neural development in children. Children who are exposed to toxic stress are at higher risk for long-term physical, mental, and behavioral health disorders in adulthood.^{xxiv}

A 2015 study underscores the return on investment (ROI) of high-quality early ACEs interventions. The study found that for every dollar invested in ACEs interventions, there is a \$6 return on investment. The total economic lifetime benefits identified include: increased lifetime net earnings, tax revenues, and public system savings, and reductions in health care utility, mortality, and costs.^{xxv} Early interventions identified include: parent education and coaching, home visitation, quality early childhood care and education, and pre-kindergarten programs. Other ACE interventions conducted at the pediatric primary care setting show favorable outcomes, as well.

A systematic review also conducted in 2015 found that implementing screening programs, training clinicians to recognize and discuss psychosocial issues with patients and their families, and providing providers with community resources can improve child outcomes.^{xxvi} Additionally, interventions conducted at family-centered medical homes can effectively help build resilience (the process by which a child addresses a traumatic event through utilizing a variety of positive factors that can help the child return to a healthy emotional state) among children with ACEs.^{xxvii}



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At both the federal and state level, collaboration between Head Start and Medicaid should be strengthened to support, encourage, and incentivize local collaboration and innovation.

All Head Start programs make assessments as to whether each child is up to date on Medicaid's Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) well child and dental periodicity schedule, immunization recommendations from the Centers for Disease Control and Prevention (CDC), and nutrition needs. The findings of these assessments inform ongoing care in which programs use observations to identify and track individual health concerns, including referrals and services. For children who require extended follow-up care, programs facilitate diagnostic testing and treatment.

When examining the delivery of health screening, three distinct patterns emerge:

1. Vision and hearing screenings are performed and funded by Head Start programs at a similar rate. Nearly two-thirds of programs report providing vision and hearing screenings themselves, and more than half report paying for these screenings from their own budget. About a quarter report that vision and hearing screenings are conducted by pediatricians or primary care doctors, while another 17-25% of screenings are funded by community partners. Only 2-3% of programs reported billing Medicaid for the cost of vision and hearing screenings.
2. Behavioral and developmental screenings show a similar pattern. For behavioral and developmental screenings, more than 80% of programs conduct the screenings themselves. More than 70% of programs also report paying for these screenings out of their program budget. Only 10% of these screenings are provided by community partners and another 10 to 15% are conducted by pediatricians or primary care providers.
3. Blood-related screenings (lead and hemacrit/hemoglobin) are handled a third way. Blood-related screenings, those for lead exposure and anemia, are the most likely to be conducted by doctors and billed to Medicaid. Even still, two-thirds of programs report that "pediatricians screen some children and we screen others." However, while programs conduct a substantial number of blood-related screenings, only 15% report paying for these screenings with program funds. Five percent report billing Medicaid themselves, and the vast majority, more than 70%, report that the pediatricians bill Medicaid or private insurance.

When screenings are conducted by pediatricians or primary care physicians, it is critical that the results be communicated properly to parents and programs. However, if screenings are conducted outside of the program, programs frequently repeat these screenings anyway to gather the information they need. When health providers conduct the screenings, the information is often incomplete or not shared with families and/or programs.

NHSA's survey asked participants, "If you refer a family to their pediatrician because of a need identified by screenings done by your program, does intervention or treatment



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happen appropriately?" While 58% of respondents report that referrals do result in intervention or treatment, 42% report that treatment and intervention "occasionally" or "almost never" happens or that, when intervention does happen, programs only sometimes get adequate information back from doctors about it.

When coordination, collaboration, and communication between health providers and early childhood programs are inadequate, the quality of care is negatively impacted. Through meaningful support at the federal level, local early childhood and health providers could both reduce the duplication of time- and resource-consuming services, allowing Head Start programs to focus their resources on providing educational and socio-emotional support that complements the mental health and pediatric care being provided. Innovative coordination practices should be shared across programs and sectors to ensure the success of an alternative payment model. Through such collaborations, the support to children would be maximized, as would the life-course outcomes and future savings.

We are pleased that CMMI is exploring the development of a new pediatric care model and seeking input through this RFI. We welcome the opportunity for this being a continued dialogue. It is our hope that you will pursue these endeavors with the goals of Head Start in mind: improving the early environment and educational opportunities of children in poverty. We very much look forward to your findings.

Sincerely,

A handwritten signature in cursive script that reads "Yasmina Vinci".

Yasmina Vinci
Executive Director



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See attachment.



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**The Research Institute at Nationwide Children's Hospital
Center for Innovation in Pediatric Practice**

April 4, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Submitted electronically to:

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

On behalf of Nationwide Children's Hospital, the nation's largest children's hospital and affiliated with the nation's largest and oldest pediatric ACO, thank you for the opportunity to respond to the CMMI RFI on Pediatric Alternative Payment Model Concepts. The growing body of research on child development, costs of care, and efficiencies to be gained in healthcare make this an opportune time for CMMI to provide national leadership on child focused models.

We approach our response in two parts. First, experts from Nationwide Children's Hospital (NCH) contributed to other responses to this RFI. These include the response from Partners For Kids (PFK), our affiliated ACO, as well as the Children's Hospital Association response, and our institution endorses their points (see attachments A and B). In addition, NCH endorses the vision of the response submitted by the NAM Forum on Child Cognitive, Behavioral and Affective Development that proposes the primary long term focus be on developing comprehensive child-serving trusts that coordinate child development and well-being across multiple integrated child-serving sectors. We recognize that the NAM Forum's vision is something for the future rather than a near term RFP.

Second, Nationwide Children's Hospital in Columbus, Ohio has unique experience and research as a previous CMMI Innovation Awardee and with the largest and oldest pediatric Accountable Care Organization (ACO), Partners for Kids. These experiences and our research informed our endorsements above, but they also have informed specific feedback to CMMI around a proposed model that would be relevant to an RFP in the near future. We outline those issues below in response to the RFI questions only where we have additional relevant information or feedback beyond those in the endorsed responses.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

QUESTIONS:

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services?

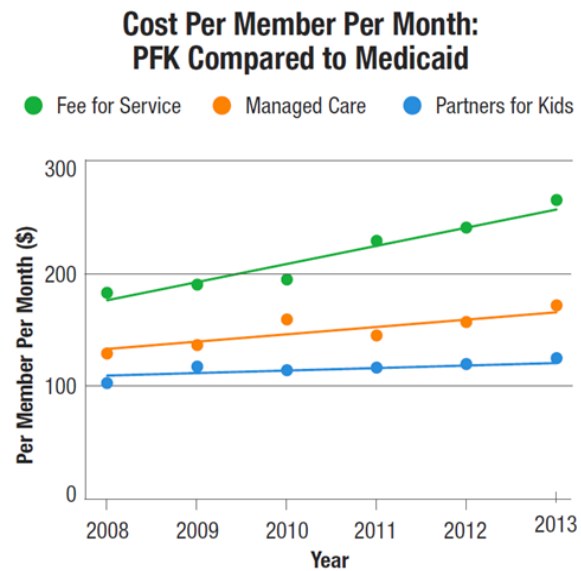
- a. **The level of commitment and interest from states, in our experience, is substantial.**

First, Ohio has been an outstanding and ongoing partner in collaboration around the benefits of population health and care coordination for Medicaid-enrolled or eligible children across service sectors.

The current budgets and proposals from the State support that trend to include enrollment of all behavioral health benefits for children and adolescents, foster children and the remaining waiver children on fee for service into our ACO.

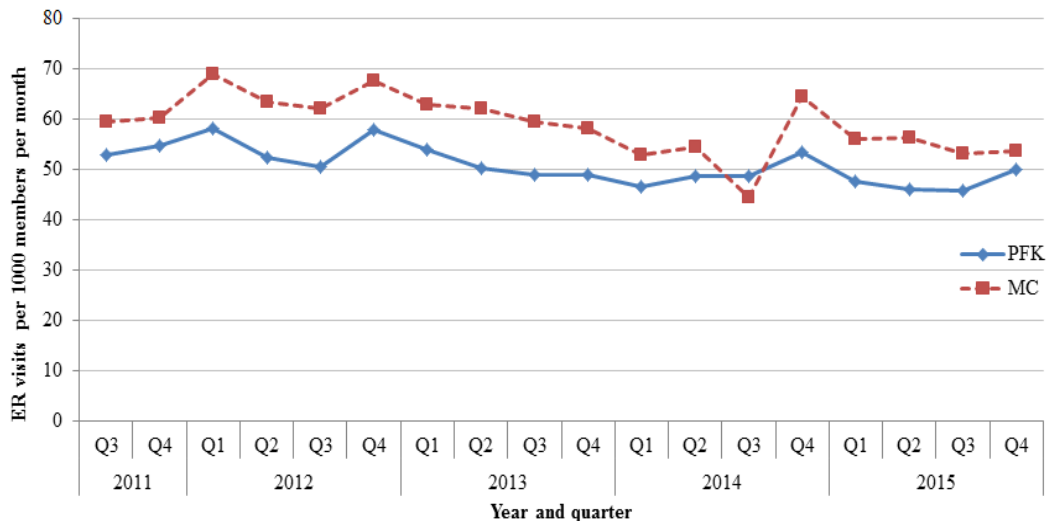
- b. **Importantly, Ohio has shown that statewide “one-size-fits-all” solutions are not essential and that strong regional collaboratives among the State, Managed Care Organizations (MCOs) and**

ACO result in important outcomes, such as the below average cost per member per month in PFK (Fig 1 above).



- c. **Thus, while ‘state-driven’, we believe regional solutions that might allow varying degrees of public/private leadership, along with cost- and data-sharing would be beneficial.** We suggest to CMMI that both statewide and regional initiatives with appropriate state agreements should be encouraged. Regional innovations would also allow important within state comparisons. For example, PFK demonstrated consistent and substantial reduction in emergency room visits per 1000 members/month by children enrolled in Medicaid compared to children enrolled in managed care from other regions of the state over a five year period (Figure below).

Figure 1. Emergency room visits in PFK and other Ohio Medicaid. August 2011 to December 2015.



- Where pediatric health care providers have partnered and aligned with health-related social service providers?

NCH and PFK are committed to addressing the social determinants of health and to ensuring efficiency in child serving sectors across the community. Partnerships and services to do so that address issues beyond those mandated by Medicaid fall into three diverse buckets that will require careful delineation in any future RFP by CMMI.

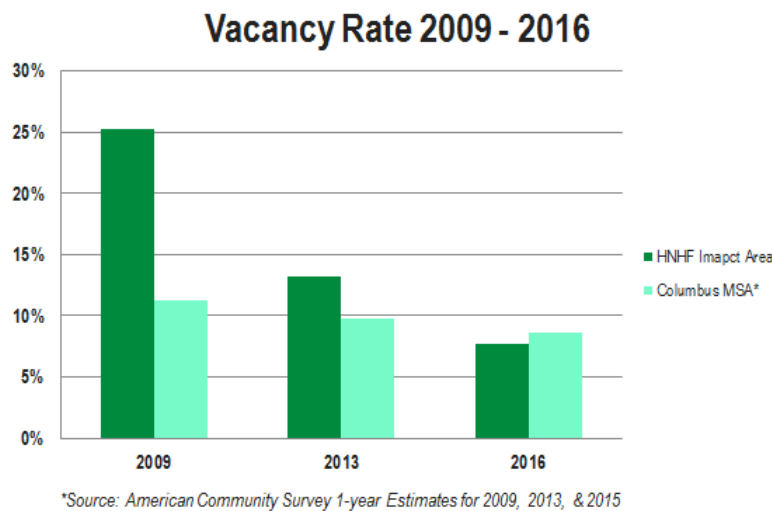
First, there are numerous co-located services especially in urban, low income neighborhoods. There are multiple examples of each:

- Co-location of WIC and SNAP enrollment programs at primary care clinics
- Care coordination beyond mandated population
- School based services
- School based interventions
- Medical legal partnership
- Domestic violence and abuse related services
- Teen Pregnancy Support
- Early Childhood
- Emergency Food Insecurity Support identified in PCC

These initiatives have limited outcomes measurement beyond individual clinics or practices, and therefore may have limited applicability in a larger RFP.

Secondly, NCH and PFK sponsor the largest, integrated community development program associated with a pediatric hospital in the US. The program includes housing, early education, jobs and vocational training for parents of young families, safety interventions and school initiatives. One

example of outcomes is the reduction in blight and vacancy in Columbus' South Side over the past six years as illustrated in the following figure.



Finally, in our opinion, one of the greatest opportunities for pediatric alternative payment models is the integration of diverse sectors with shared children and shared outcomes/savings. Sites proposing alternative payments models for children will need to document innovative partnerships with schools, child protective services or behavioral health settings that allow sharing of data and outcome measures. The RFI proposes diverse groups of high risk children for inclusion in integration and coordination between health and social services. The specific list mentions foster care and behavioral health along with home visiting and IDEA Part C services. We believe these integration efforts are consistent with the Ohio's plans for further integration of child services in managed care, but the eventual RFP will require access to state data and coordination with these agencies. We believe the State of Ohio is well-positioned to partner on analyses of joint savings and coordination with appropriate agreements.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

NCH and PFK have a longstanding commitment to providing care and access to rural Appalachian communities. Like other capitated groups, access and savings are more challenging in rural areas. In response, CMMI should:

- **Require inclusion of rural/underserved children in an APM:** ACOs or other APM models should include a sufficiently large geographic region that 25% of enrollees live outside MSAs and/or may not effectively "carve out" underserved or less desirable communities (no clinical gerrymandering).
- **Meet access standards for primary care and specialty pediatric services.** One of the best checks on this is a mystery shopper program that could be run nationally or regionally for efficiency's sake. Formal arrangements with FQHCs and/or Rural Health Centers should be

required with evaluation of outcomes and care at these sites. FQHCs are often best positioned to conduct school health clinics in rural areas.

- **Delivery innovations will have to include school-based services; expanded telemedicine; expanded use of mobile units; expanded use of pop-up clinics/school-based clinics/retail-based clinics; and physician extenders including certification of peer models.** See link below for our recent publication related to this topic in the New England Journal of Medicine:

<http://www.nejm.org/doi/full/10.1056/NEJMp1700713#t=article>

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

QUESTIONS

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

- **Current data sharing and confidentiality policies make integration nearly impossible.** This could be overcome by federal clarification of HIPAA, FERPA, and other acronym policies that keep data from moving across systems.
- **Data sharing is even a challenge within health care.** For example, as a pediatric ACO we can't see the mother's Medicaid claims therefore we miss evidence of domestic violence, substance use, or mental health issues that could be influencing the child's health. As another example, we can't see outcomes after the child ages out of the ACO which limits our ability to measure the longer term value of interventions.
- **Medicaid payment rules keep payors from directly paying for the social needs that would meaningfully improve health and health care costs (e.g., removing moldy carpet from an asthmatic child's house; food).**

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

- **We support the inclusion of models that take advantage of both the strengths of MCOs in enrollment, claims payment and contracting and the strengths of expert pediatric networks and linked care coordination, both supported by facilitation from State agencies that care for children like education, child welfare and health.** MCOs by themselves, however, have not been able to integrate with local agencies and non-health serving sectors, have not achieved the savings in Ohio that PFK has, nor have they demonstrated the level of commitment to low income communities present in the NCH Healthy Neighborhood investments. This is in part because they do not have sufficient penetration in any one community. Thus, we believe that the State/MCO/ACO partnership is an ideal solution as an option when an ACO like PFK includes the majority of high risk children in a broad geography. Alternatively, we endorse the Oregon CCO model that supports the integrated efforts of numerous organizations. We are less supportive of models whereby the social determinants initiatives are separated from the care coordination and healthcare services as in Massachusetts.

- **MCOs are uncertain about taking on “responsibility” for social needs when they are still trying to keep up with clinical needs.** Going beyond recognition and referral is often seen as outside their scope of responsibility, especially when their scope of responsibilities is national rather than regional.

8. What role do models of care such as ACOs play in the pediatric environment?

To date, ACOs play two competing roles in the pediatric environment. Commercial ACOs have largely ignored pediatrics, child health outcomes and pediatric governance (see A Chien). In fact, pediatrics represents a very small amount of the US healthcare dollar and in places where there is no pediatric focused ACO, child health outcomes and social determinants may be underrepresented. Such a situation might be contrasted with places that have pediatric ACOs (see Makni and Kelleher, 2015) where outcomes measurement, specialty network advocacy and primary care sufficiency are all being considered. Although the evidence is not complete, pediatric ACOs may represent the best model for child related outcomes in the US system.

- a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?

Although pediatric ACOs are driven by their payment arrangements, the single national article on the topic (Makni et al, 2015) points out that the existing pediatric ACOs see themselves predominantly as care delivery models facilitated by payment models. Each was made possible by an alternative payment contract.

- b. How are pediatric ACOs the same or different from adult-focused ACOs?

Pediatric ACOs differ greatly from the Pioneer and other ACOs outlined by CMMI in previous announcements. First, pediatrics has far fewer measures and clarity on the outcomes in medical settings. Secondly, the pediatric healthcare market for specialty care is largely non-competitive due to provider shortages, a contrast with adult healthcare. Therefore, regulatory requirements for local competition will have to be linked to primary care choices or health plan/MCO choices while specialty networks will rarely be competitive. Thirdly, savings are possible in pediatrics in the short run, but adult patients consume 90% of the healthcare dollar and pediatrics savings are obtained on the margin and through volume in healthcare PLUS through coordination with other service sectors such as avoidance of foster care. In other words, pediatric ACOs require special status to be able to negotiate geographic opportunities for prevention and savings across sectors/domains and to invest in such prevention. Relatedly, the patient centered primary care medical home is less relevant than the patient centered primary care medical neighborhood for children because schools, child care and other agencies are local.

Outcomes for pediatric care sometimes don't appear until after transition to an adult payor so we are limited to a shorter horizon for outcomes measurement and savings.

- c. What opportunities do pediatric ACO's have for integration with community and health services systems?

Our response to Section I, Question 2 outlines our views of the many opportunities for integration with community and health services systems.

d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

Ohio provides a model for allowing MCOs and ACOs to each focus on their strengths and for the mix of responsibilities to vary by region as outlined in previous questions.

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

- **Health coordination models or expanded Pediatric Health Homes that can be part of ACOs would further address the behavioral issues that plague children and yet many youths with behavioral disorders would not qualify for existing health homes.**

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?

We do not believe that an alternative payment model for pediatrics must include any one type of patient or group of children to be successful, but the general principle should be that insurance risk should be spread across total populations to avoid adverse selection and gaming in choosing patients. Moreover, we believe that integrated services for high risk children with other children facilitates mainstreaming patients and calculation of savings and cost avoidance. In other words, the greater the population and types of children, the greater encouragement of population health, prevention and savings with early intervention.

- a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate “ramp-up” periods relative to the payment models.

NCH favors Type 4 APM (see HCP LAN) with all populations included. Such models are the most likely to result in a focus on prevention and long term commitment to the community. In addition, we have demonstrated savings over years with this approach as compared to other regional managed care companies and fee for service in Ohio.

Such a system requires GEOGRAPHIC attribution prospectively, allowing a ‘smart’ system to target vulnerable children. We do believe that categorical adjustments for children with disabilities in the SSI system are relevant and important for stability. In places where enrollment is not stabilized churn can occur.

Enrollment instability, “churn”, will be an important consideration for design of pediatric alternative payment models. Evidence about the impact of churn on risk bearing models for at-risk populations is

sparse in Medicaid. High cost/high need populations, including children with disabilities and children in the foster care system, have sustained needs for case management, care coordination, health coaching, and social supports and these services require sustained funding to support the associated infrastructure. This funding cannot be subject to administrative process or marginal changes in household income because these factors do not change patient need. In a recent analysis of claims data, we have found over 20 percent of disabled children newly enrolled in a Medicaid ACO switched from ABD status, with a contracted enhanced capitation, to income based status enrollment status with base capitation, in their first two years of enrollments. The rate of switching was consistent across levels of clinical complexity and was higher in rural populations. Importantly, there was no association between switching and use of emergency department or inpatient use so those who experienced churn yielded a lower effective capitation but likely equivalent costs. APMs will be unlikely to take on risks for these patients without a mechanism for addressing this concern. Options include longer enrollment periods (quarterly or annually rather than monthly), funding for care coordination in a separate stream from capitation, or personalized capitation setting based on patient experience.

- b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

There are a variety of approaches to avoid adverse selection. The single most effective is assignment of the entire population of a geographic area; thus, in the design of a pediatric APM, taking all risk for the entire population of Medicaid enrolled children should be given the highest priority. Other solutions are less likely to completely eliminate adverse selection.

c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

- **Provider attribution can't work in communities served by multiple entities addressing the same community level factors: there needs to be community level rewards systems that incent collaborative, cross-provider, cross-sectional approaches.**

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

Fully integrated models will be dependent on comprehensive data-sharing, bundling or flex funding and common or similar eligibility criteria. Because few states and programs will meet that on a large scale, we recommend that CMMI encourage states to move towards this ideal through flexibility in partial integration of care coordination/case management, data transparency, and coordinated eligibility. For example, such requirements for mandatory full integration might work in some urban areas, but preclude rural areas from participation. But if the state could show significant progress towards increased data sharing and coordination of case management, care coordination and other support services, this would be a significant step.

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

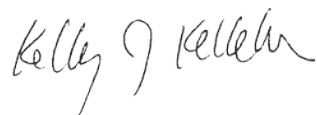
Ideally, total societal costs of care trended over time and compared against historical and secular trends (differences within differences) is an effective tool for nonrandom comparisons in policy. However, we argue that CMS and other payors are constrained from considering total societal costs and therefore a payor perspective should be considered. CMS and states should calculate savings based on a payor perspective, focused only on those agencies sharing data and experiencing savings. Moreover, states and Medicaid programs that can demonstrate regional savings through historical and geographical comparisons (the latter gathered prospectively) should be advantaged in competition. Our own efforts have shown that regional comparisons are most effective for state policymakers in establishing future policy. Offset of special education, child protective services, juvenile justice and other non-health costs are particularly valuable to state general funds budgets. They often exceed the state component of the Medicaid outlay and gain weight in local discussions.

SECTION IV: PEDIATRIC MEASURES

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years?
See attached publication (in press, Gardner W, Kelleher K JAMA Pediatrics) for ongoing work with the National Academy of Medicine after their Vital Signs publication.

Thank you for the opportunity to provide input as CMMI considers pediatric alternative payment model concepts. Nationwide Children's has a wide range of experts who stand ready to serve as a resource to you drawing on our experience and research on this topic. Please feel free to be in touch with me at

Sincerely,



Kelly J. Kelleher, M.D., M.P.H.
Professor of Pediatrics and Public Health
Colleges of Medicine and Public Health
The Ohio State University
Vice President for Health Services Research
Director, Center for Innovation in Pediatric Practice
The Research Institute at Nationwide Children's Hospital

Nationwide Children's Hospital

To whom it may concern:

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Nemours Children's Health System's

Good morning,

Attached please find Nemours Children's Health System's comments regarding the Request for Information for a pediatric model. Should you have any questions, please feel free to contact us. Thank you.

Regards,



Nemours Children's
Health System.pdf



March 28, 2017

Dr. Alexander Billioux
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Center for Medicare and Medicaid Innovation Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

Nemours Children's Health System (Nemours) thanks the Center for Medicare and Medicaid Innovation (Innovation Center) for the opportunity to comment on a Request for Information (RFI) for a pediatric model. Nemours is an internationally recognized and integrated children's health system that owns and operates the Nemours/Alfred I. duPont Hospital for Children in Wilmington, Delaware, and Nemours Children's Hospital in Orlando, along with major pediatric specialty clinics in Delaware, Florida, Pennsylvania and New Jersey. Established as The Nemours Foundation through the legacy and philanthropy of Alfred I. duPont, Nemours offers pediatric clinical care, research, education, advocacy and prevention programs in the communities we serve. The Nemours promise is to do whatever it takes to treat every child as we would our own. We care for more than 400,000 patients each year and are committed to making family-centered care the cornerstone of our health system.

As a pediatric health system, we have particular interest in ensuring that all children have the opportunity to grow up healthy. We recognize that the clinical care that we provide within the walls of our health system is but one factor influencing the health of the children and families we serve. Helping to promote health in the places where children live, learn, play and worship is a critical priority for Nemours. Toward that end, we are strongly encouraged by the Innovation Center's exploration of the development of a new pediatric health care payment and service delivery model that would drive towards integration of health care and health-related social services.

Nemours respectfully submits the following comments for consideration. These comments have been informed by: 1) our experience as an integrated health system embedded in the communities we serve; 2) our Round 1 Health Care Innovation Award (HCIA) from the Innovation Center that included a focus on partnering with aligned sectors to address social determinants of health; 3) insights from a meeting we co-convened in November of 2016 that included participation from leading pediatric health systems and experts and focused on optimizing child health; 4) a Medicaid roadmap and case studies we developed for states and MCOs, showing how existing Medicaid authority will reimburse for a range of prevention activities; and 5) a series of calls we convened with pediatric and health care practitioners, systems and experts to discuss the RFI.

Before responding to the specific questions posed in the RFI, Nemours urges consideration of the following guiding principles as the Innovation Center explores development of a pediatric model.

Guiding Principles for a Pediatric Model

1. Improving child health necessitates two-generation approaches that focus on the family—from addressing basic needs (housing, food, etc.) to strengthening parenting competencies to amplifying family representation in decision-making. This includes an intentional focus on patient and family engagement.
2. There is no wrong door for improving child and family health; all community partners and members have a role to play.
3. Optimizing child health goes beyond health care. It means attending to the whole child's health, development and well-being and engaging the sectors where children spend time in order to develop shared goals and partnerships that result in meaningful collaboration.
4. Emphasizing (but not limiting to) a focus on the early years provides the opportunity to improve health across the life course. Young children are particularly sensitive to social determinants.ⁱ
5. Onerous requirements and rigidity stifle innovation; initiatives designed to improve pediatric health and reduce costs should foster conditions for local innovation, allow flexibility and reduce burdensome and duplicative reporting requirements.
6. Older adults are a costlier, sicker population than children, and therefore achieving short-term wins and cost savings is a more reasonable proposition for that population. Models designed to improve child health should have a longer Return on Investment (ROI) timeframe.
7. To move the needle on health over time, public and private funds can catalyze key stakeholders at the community level to create shared ownership in a common destination for their community and then become jointly accountable for arriving at that destination.

Responses to Selected Questions

Question: Section I. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)?

Based on our experiences, we can attest to the importance of integrating health care and social services. As a foundational element, we believe that the concept of a medical home is critical. The medical home provides a core foundation that can serve as a hub for connections to other services. To determine which services a child and family need, we support a screening strategy for children and families in the context of a comprehensive approach to early detection, referral and linkage to programs and services. We recommend that a pediatric model embrace approaches such as *Help Me Grow*, that place early detection activities for vulnerable children within the context of a comprehensive, integrated process of developmental promotion, early detection, referral and linkage to intervention. As part of a two-generation approach, we also recommend inclusion of maternal depression screening.

In general, it is important to align with sectors that impact children, including child care, schools and community-based organizations. Referral to basic services that address underlying social determinants of health (e.g. housing, transportation, food security, employment) is also necessary.

Below are more specific aligned services that participants under a potential pediatric model should have the opportunity to address through partnerships, with the caveat that no participant should be required to integrate with each of these but should have the flexibility to do so. This is not an exhaustive list.¹

Mental/behavioral health:

The Adverse Childhood Events study highlights the long-term health impact of exposure to adverse childhood experiences (ACEs).ⁱⁱ ACEs have been linked to risky health behaviors, chronic health conditions, low life potential, and early death.ⁱⁱⁱ Toxic stress - extreme and repetitive stress due to physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and household dysfunction - can disrupt and damage neural development in children.ⁱⁱ Children who are exposed to toxic stress are at higher risk for long-term physical, mental, and behavioral health disorders in adulthood.^{iv}

A study conducted in 2015 underscores the return on investment (ROI) of high quality early ACEs interventions. The study found that for every dollar invested in ACEs interventions, there is a \$6 return on investment. Early interventions identified include: parent education and coaching, home visitation, quality early childhood care and education, and pre-kindergarten programs. The total economic lifetime benefits identified include: increased lifetime net earnings, tax revenues, and public system savings, and reduction in health care utility, mortality, and costs.^v

Other ACE interventions conducted at the pediatric primary care setting show favorable outcomes. A systematic review conducted in 2015 found that implementing screening programs, training clinicians to recognize and discuss psycho/social issues with patients and their families, and providing providers with community resources can improve outcomes.^{vi} Additionally, interventions conducted at family-centered medical homes can play an effective role in building resilience (the process by which a child addresses a traumatic event through utilizing a variety of positive factors that can help the child return to a healthy emotional state^{vii}) among children with ACEs.^{viii} We recommend an intentional focus on addressing toxic stress and ACEs.

Support for parents regarding building parenting skills and competencies and connecting them to health care services.

Parents play a crucial role in the upbringing of their children, impacting their well-being and long-term health trajectory. Fostering strong, positive relationships between parents and children during the early years of child development can increase a child's physical and emotional health, helping them to become successful adults that can contribute and integrate successfully into society.^{ix, x, xi} We recommend promotion of evidence-based parenting programs. What follows are examples of effective programs to build the skills of parents from a strengths-based perspective, which creates a positive context for healthy childhood development:

Home visiting programs are widely used interventions to help support parents during the stages of prenatal, infant and early childhood. The model focuses on improving long-term child health outcomes by improving parent-child relationship and parenting approaches. Trained professionals help parents to address problems such as poor birth outcomes, maltreatment, and lack of school readiness. Outcomes from home visiting programs show improvements in positive parenting, use of community resources, and lower health care utilization (e.g. less visits to the

¹ The Washington State Institute for Policy conducted a 2012 analysis entitled "[Return on Investment: Evidence-Based Options to Improve Statewide Outcomes](#)" that may be informative in identifying evidence-based policies and programs.

Emergency Department for children).^{xii} Research shows that home visiting programs can yield returns on investment ranging \$1.75 to \$5.70 for every dollar spent.^{xiii}

The Nurse-Family Partnership (NFP) is a home visiting program focusing on improving prenatal health and outcomes by improving diet and nutrition, child health and development, and families' economic self-sufficiency and/or maternal life-course development for first-time, low-income mothers. The program consists of one-on-one visits between trained registered nurses and mothers, beginning at pregnancy and concluding when the child turns two. Studies of the program have shown statistically significant improvements in prenatal health, fewer childhood injuries, and higher rates of maternal employment.^{xii}

Another approach includes co-managed well care provided through evidence-based programs such as Healthy Steps for Young Children. The Healthy Steps clinical trial incorporated developmental specialists and enhanced developmental services into pediatric care for a child's first three years. The trial enrolled 5,565 children at birth and followed them for 5.5 years. Among key results are the following: families that received Healthy Steps services were more satisfied with care and more likely to receive needed anticipatory guidance. They reported reduced odds of using severe discipline and had greater odds of reporting a clinical or borderline concern regarding their child's behavior.^{xiv}

The Triple P-Positive Parenting Program, is a population health, evidence-based system of interventions that is designed to enhance parental knowledge, skills, and confidence to prevent, treat, and address behavioral, emotional, and developmental problems in children from birth until 16 years old.^{xv} The US Triple P Trial shows a reduction in hospitalization from child abuse injuries, out of home replacements, and child abuse cases in counties with Triple P programs.^{xvi} An analysis of the Triple-P program in Arizona found that Triple P can save a community \$1137-5447/family in 2011 dollars.^{xvii} Washington State successfully obtained Medicaid reimbursement for two pilot programs using the Triple P approach for mental health services.^{xviii}

Additional research has also shown potential benefits of programs that promote effective parenting on obesity.

"Two long-term follow-up studies of randomized trials show that relative to controls, youth at risk for behavior problems who received family intervention at age 4 had lower BMI and improved health behaviors as they approached adolescence. Efforts to promote effective parenting and prevent behavior problems early in life may contribute to the reduction of obesity and health disparities." The intervention group entailed an adapted version of the *Incredible Years Series*; 22 2-hour parent and child groups.^{xix}

Another study documented the potential protective nature of general parenting interventions that integrated behavioral health specialists into primary care pediatrics during infancy and toddlerhood, against child obesity. Results found that "compared with children 'not at risk,' children 'at risk—no participation' were more likely to be obese at age 5 years... Their mothers were less likely to exhibit restriction and limit setting and more likely to pressure to eat than mothers in the 'not at risk' group. Children 'at risk—participation' did not demonstrate differences in weight status compared with children 'not at risk.'" Though further study is needed, results indicated that a "brief general parenting intervention that targets individual concerns and needs may be impacting child weight status through providing education about parenting

skills, promoting healthy responsive parent-child interactions, and/or providing the care coordination needed to obtain long-term care referrals.”^{xx}

Early literacy promotion— screening, referral and intervention in community

Low literacy is estimated to add up to \$236 billion to the country’s health care and related costs each year.^{xxi} People who read at lower levels are up to three times more likely to have an adverse medical outcome as people who read at higher levels.^{xxii} Researchers also found that, among non-pregnant adult patients on Medicaid, those with a reading level at or below 3rd grade had Medicaid charges over 3.5 times greater than those with higher reading skills.^{xxiii}

In the United States, only about a third of students score as ‘proficient’ readers.^{xxiv} The developmental trajectory for reading is set early: a child who is behind in reading at the end of 1st grade has only a 12 percent chance of reading at grade level by 4th grade,^{xxv} which places him at much higher risk of high school dropout.^{xxvi} Early preventive strategies with preschoolers have been proven effective by Nemours researchers and others.^{xxvii, xxviii, xxix, xxx, xxxi, xxxii} Consistent with the American Academy of Pediatrics’ (AAP) policy statement, “Literacy Promotion: An Essential Component of Primary Care Pediatric Practice”^{xxxiii}, we recommend universal reading readiness screening at age 4, for which several tools are available, followed by tailored levels of anticipatory guidance and targeted early intervention. Increased efforts to produce competent readers, as a health imperative, could reduce health care and related costs for individuals across the lifespan.

Nutrition education and promotion of breastfeeding

Babies who are breastfed have lower risks of ear and gastrointestinal infections, diabetes and obesity, and mothers who breastfeed have lower risks of breast and ovarian cancers. Researchers found that children who were breastfed for more than 6 months have a 42 percent reduction in obesity risk compared to children who were never breastfed. Moreover, breastfeeding lowers health care costs significantly. Researchers have estimated that \$2.2 billion in yearly medical costs could be saved if breastfeeding recommendations were met.^{xxxiv, xxxv, xxxvi} We recommend nutrition education and promotion of breastfeeding for new mothers.

Healthy Homes

The *Green and Healthy Homes Initiatives (GHHI)* is dedicated to breaking the link between unhealthy housing and unhealthy children. GHHI replaces stand-alone housing intervention programs with an integrated, whole-house approach that produces sustainable green, healthy and safe homes.^{xxxvii} Since 2000, GHHI has conducted *Healthy Homes* housing interventions for over 1,700 homes of asthma diagnosed patients in Baltimore City to reduce the incidence of asthma and to stop avoidable visits to the emergency room and hospital through strategic housing interventions to reduce asthma triggers and educate families on how to improve asthma management. The program significantly reduces asthma-related healthcare utilization with a reduction in hospitalizations by 65.5 percent and emergency room visits by 27.7 percent post-intervention.^{xxxviii} A systematic review conducted by the Centers for Disease Control and Prevention’s Community Preventive Services Task Force on home-based multi-trigger, multi-component environmental interventions for asthma management indicates a median decrease of 0.57 acute healthcare visits per year and substantial return on investment of \$5.3 to \$14.0 for each dollar invested.^{xxxix, xl}

In order to incentivize partnerships among health care and aligned social services agencies and partners, we recommend that CMS consider the following:

Recommendations:

- CMS should clarify and test out Medicaid case management or other incentives to do fully integrated care and care coordination and referral to non-medical services.
- CMS should work with other agencies and programs (e.g. child welfare, the Women, Infants and Children Program, Maternal and Child Health Bureau's Title V program) to encourage blending, braiding or layering of administrative and financial resources across sectors and programs and allow flexibility in the use of grant dollars from non-CMS programs to test new solutions. State agencies should be expressly permitted to blend or integrate funding streams with aligned goals and explore public-private partnerships to improve coordination among programs from different sectors (potentially through Section 1115 waivers). Such flexibility could include a pilot to test how to pool resources to enable a focus on the outcomes that we are seeking to achieve for the child or population, without creating onerous reporting and tracking requirements.
- CMS should test approaches to incentivize providers to work with aligned community partners to investigate what is happening with groups of patients in the community (e.g. investing in analytics to investigate what is a local trigger of asthma in a particular hotspot).
- CMS should allow for testing of new approaches to improving provision of services, based on direct input from patients and families (e.g. testing what would be the most effective incentive to encourage new mothers to engage in healthy behaviors like breastfeeding).

Question: Section II. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

Recommendation: We recommend that a pediatric model linking health care providers with health-related social service providers should: 1) include some type of backbone structure, such as a coalition, community leadership team, or integrator, to work across key community stakeholders to create alignment regarding the goals, metrics, governance, sustainability (including financial sustainability), learning systems, and other key aspects of the partnership; 2) include robust community engagement; and 3) include a process for identifying community needs, assets and gaps. Below we have highlighted a few models to shed light on how some successful partnerships have operated.

Nemours

As previously mentioned, as part of the Innovation Center's HCIA Round 1, Nemours was awarded \$3.7 million to work with community partners in Delaware to better integrate clinical care with community-based prevention for children with asthma, including Medicaid beneficiaries. The target population included children with asthma receiving care in a family centered medical home at each of three Nemours primary care sites in Delaware, care that included targeted clinical interventions and risk stratification for the more than 800 children enrolled in asthma registries. This nested model included 42,000 children in six identified, associated communities who could be impacted by broader, community-based systems and changes in policy.

The model included collaboration with housing agencies, public health, Early Care and Education providers, schools and other community partners such as the DE chapter of the American Lung Association. To operate the model, Nemours employed navigators (described below) to work at the individual level and community health liaisons to work at a systems level to identify and mitigate issues

within the community, such as reducing bus idling, which exacerbates asthma, and reducing asthma triggers in public housing and in child care. The work of the community liaisons, which included collaborating with community partners through the establishment of community leadership teams and community asthma action plans, was critical to improving population health within the context of community needs that go far beyond the walls of the health system. Preliminary findings from the independent evaluator indicated a significant reduction in total cost of care (-\$533 per child per quarter) for children in Nemours' program relative to the comparison group.^{xlii}

Nationwide Children's Hospital

Nationwide Children's Hospital (NCH) has a model that also includes strong collaboration with health-related social services providers. NCH also co-owns a pediatric ACO called Partners for Kids (PFK) and carries full financial risk for about 330,000 children in the Medicaid program. PFK implements an upstream population health strategy using predominantly Medicaid funding to partner with existing community services to protect and improve the health and wellness of Columbus' children, particularly those in the South Side neighborhood. A network of partners and activists – jointly led by Reverend John Edgar of Community Development for All People, Erika Clark-Jones from the Columbus Mayor's Office and members of NCH's staff – have committed various levels of funding and support for a suite of initiatives to develop the South Side neighborhood adjacent to the hospital by providing housing support, community development resources, workforce development, early care and education, wellness resources and many other services. A cost analysis found that from 2008-2013, PFK's per member per month costs were consistently lower than other Ohio Medicaid MCOs as well as the state's Medicaid fee-for-service program.^{xliii} During this time period, PMPM costs for PFK grew at a rate of \$2.40 per year; managed care plans grew at a rate of \$6.47 per year, and FFS Medicaid grew at a rate of \$16.15 per year.^{xliiii}

Children's Health System of Texas

Children's Health System of Texas' (CHS) population health initiatives focus on addressing the social systems and the support systems that impact families in the neighborhood. CHS engages in four primary initiatives: 1) the Health and Wellness Alliance; 2) Charting the Course (part of HWA), which focuses on addressing obesity through partnerships with the Dallas Chamber of Commerce and United Way; 3) Working in Neighborhoods Strategically, a place-based initiative with many partner organizations, targeted to two zip codes in Dallas that includes distinct focal areas chosen by each neighborhood, ranging from housing to safety; and 4) Pediatric Promise, a partnership among providers, hospitals and federally qualified health centers to provide services to children in Dallas. Each initiative is data driven, with data regarding health care utilization, housing, school attendance/graduate rates, etc. driving the focal areas. CHS also mapped the resources for each initiative in the community, and data is shared among multi-sector coalition partners.

The Health and Wellness Alliance (HWA), created by CHS, is a coalition of more than 60 cross-sector community organizations, spanning health, education, government, business organizations, nonprofits and the faith community – that are focused on improving the health and well-being of children in Dallas County.^{xliiv} HWA uses a collective impact model to utilize a common agenda, shared measurement, mutually reinforcing activities, continuous communication and the strong and coordinated support of a backbone organization (CHS) to create large-scale and positive change in children's health in the region. Of note while CHA provides the backbone staff, it does not own or control the coalition's agenda, which is shaped by data from the community regarding needs.

Other Models for Consideration

In addition to the pediatric models described above, two other broader models that might have relevance to this RFI include Washington's Accountable Communities for Health and Oregon's Community Care Organizations, both of which provide formal structures under which a broad set of partners collaborate.

Washington's Accountable Communities for Health

Fueled by federal, state, and community funding, Washington State has been working for years to enact delivery system transformation. Washington State's Innovation Plan, Healthier Washington, serves as the framework for health system transformation within the state and has been supported by a State Innovation Model (SIM) award from the Innovation Center. Healthier Washington is a multi-payer, integrated care model designed to improve individual and population health throughout Washington. Healthier Washington takes a bottom-up approach, allowing regional community health needs to influence which services are delivered and how. Central to Washington State's delivery system transformation effort are the nine Accountable Communities of Health (ACHs) across the state.^{xiv} ACHs serve as integrators through which regional activities and statewide plans are aligned to address the social determinants of health, provide high-value health care, and improve population health in their geographies. To receive official designation by the state, each ACH had to develop a Regional Health Needs Inventory and establish a region-specific improvement plan. Through the inventory process, the ACHs have been able to identify priority areas specific to their region (e.g., social determinants of health, physical-behavioral health integration, care coordination), and therefore design improvement initiatives that can be implemented locally to address those priority areas. With support from the Health Care Authority, the identified health improvement initiatives within each region can then be implemented.

Oregon's Coordinated Care Organizations

Oregon established Coordinated Care Organizations (CCOs) for its Medicaid population through a Section 1115 waiver in 2012. CCOs are community-level entities that finance health care and are governed through a partnership of: (1) providers; (2) payers that assume risk for Medicaid enrollees; and (3) community-based organizations. Each CCO is required to have a Memorandum of Understanding with its local public health authority and establish a Community Advisory Council that brings together stakeholders to assess community needs and develop plans to address those needs. Currently, 16 CCOs provide services to more than one million Medicaid beneficiaries across the state. The CCOs' primary functions are to: integrate and coordinate physical, behavioral and oral health care; reward outcomes rather than volume in the payment system; align incentives across medical care and long-term care services and supports; and partner with community public health systems to improve health.^{xlv} The CCOs are paid a global budget based on a per member per month capitated amount that grows at a fixed rate to cover the physical, mental and dental care needs of Medicaid patients in their region. The state withholds a percentage of its CCO payments and places the funding in an incentive pool. Performance on specified metrics, such as developmental screening and enrolling patients in medical homes, developed by Oregon's Metrics and Scoring Committee, determines what the CCOs can earn back.^{xlvii} In 2016, the Metrics and Scoring Committee established a population health measure to reduce tobacco prevalence, and the committee is exploring additional population health measures. Oregon's model encourages CCOs to focus on prevention, chronic illness management and person-centered care.^{xlviii} For example, the CCOs can use non-traditional workers (e.g., community health workers) to better coordinate care by connecting Medicaid beneficiaries to social services like the Supplemental Nutrition Assistance Program when appropriate.^{xlix} The CCOs also can provide certain non-medical services (called "flexible" services in Oregon) such as housing supports to better meet the needs of their population. Through this flexibility, for example, CCOs are paying for air conditioners as a

way to prevent unnecessary hospitalizations or emergency department (ED) visits. The Coordinated Care model has resulted in improvements in a number of areas such as reductions in ED visits and costs and increased access to primary care for children and adolescents.^{l,i} An additional area of interest in Oregon is the Pathways model^{lii}, which could be applied more specifically to address the needs of children and families.

Question: Which health related social service providers have been or should be included in a child -and youth-focused integrated service delivery model?

Based on Nemours' experiences and the experiences of other health systems we have profiled and collaborated with, we recommend that a pediatric model is flexible with regard to the types of providers that participate in the delivery of clinical care and aligned social services to ensure that children and families receive the right services in right time in right venue (which could include telehealth) by the right provider (including clinical, community and home-based settings and otherwise qualified providers). Examples of providers that model participants should have the flexibility to choose from include:

- At the core is a **clinical team** consisting of physicians, nurses, social workers, psychologists and other behavioral health professionals, and care coordinators. Providers focusing on prevention/promotion of healthy behaviors should also be included in models focusing on prevention, healthy development and/or the early years (e.g. nutrition educators, lactation consultants, developmental specialists, etc.).
- **Navigators** work at the individual level to connect children and families to social and legal services. They should include but not be limited to social workers, care coordinators, nurses and/or Community Health workers. They would assess the child holistically, determine the social needs, connect children and families with community partners who can assist families with addressing those needs (e.g. securing housing, food, transportation, employment, child care, Medical Legal Aid, etc.) Also included within this category are home visitors who provide assessments, education and other services in the home environment.
- **Integrators** or other types of structured collaborations among multi-sector community partners are a critical foundational element to supporting partners in collectively addressing social factors impacting health. Integrators^{liii}/anchor institutions/ backbone organizations,^{liv,lv} serve as conveners that bring partners together to work towards common goals. They can map community resources and assets to assist the navigators in identifying available resources and to identify gaps that need to be filled. They may perform geocoding and data analytics functions to assess what broader conditions/hot-spotting could be impacting the health of patients. They could also serve as a formal backbone organization that blends and braids funding. A variety of entities could serve the integrator role, including but not limited to health systems, local government/public health, nonprofits, etc.
- **Peers** can serve a critical role as mentors and support systems for one another.
- **Child-Serving Sectors, especially Early Care and Education and Schools/School-based Health Clinics** are particularly important providers to engage given their direct role in caring for and educating children. For example, Head Start provides a strong opportunity for parent engagement. One study found that Medicaid costs for a child's trip to an emergency

room or clinic can be reduced annually by at least \$198 per family when Head Start parents are provided with easy-to-understand health-care guidance. This also translated to a dramatic drop in the number of lost days at work (43 percent) and at school (41 percent).^{lvi}

Question: Section II. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

Several health systems across the country (e.g. Cincinnati Children's, Children's Hospital of Wisconsin) have made major progress in linking clinical and social services data into an integrated record or system. Each proprietary model looks slightly different, but much can be learned from beacons in the field. Additionally, the federal government's investment in the eLTSS program out of ONC may provide some of the technical specifications requested in this section. For example, the eLTSS team has worked on contracts and agreements, data capture standards and many other elements. A pilot of this program was completed in 2016. Further, connecting to regional or statewide health exchanges, like the Delaware Health Information Network (DHIN), has been a critical element for data sharing. However, more work must be done to not only allow, but also encourage cross-sector data sharing as well as cross-state, cross-sector consent agreements.

Nemours has invested in an integrated health record which includes clinical data, behavioral health data and social work information; all providers have the same complete record, with necessary consent for data sharing. In addition, Nemours partners with local schools to provide access to students' clinical records on-site in the school nurses' office, with parent consent.

An interesting multi-sector initiative is a Milwaukee program called DataShare. It is an integrated data system with source data from the Department of Justice, public health, health systems, schools, criminal records, court records, and other sources, which are linked at the level of the individual and geocoded across nearly 1 million addresses. Colorado has a health exchange program that links similar data sources. In Dallas, the Information Exchange Portal provides an electronic platform that enables health systems, community service providers, and social services agencies to securely share medical and social information through a shared portal. All data sharing is patient-authorized and shared via a two-way exchange platform to facilitate care transitions and coordinate care more effectively to address both clinical and social needs. This system provides historically absent information to health providers, and subsequently to social services providers as well. Also in Dallas, Parkland Hospital hosts the Parkland Center for Clinical Innovation (PCCI) and Pieces Technology, Inc. who worked together to design and license Pieces Tech, a cloud-based software platform that provides end-to-end monitoring, prediction, documentation and discovery software for health systems and community based organizations.

Recommendation: We strongly recommend that the Innovation Center include as part of an alternative pediatric model an investment in scaling integrated health and social/community services data sharing mechanisms, such as those in Dallas, Milwaukee and other places referenced above. These models should track referrals to services to meet a child and family's social and developmental needs, as well as whether the referral was fulfilled and the service rendered so that the clinical providers and navigators are able to follow up appropriately. Children, especially the most vulnerable served by multiple health and social service agencies, and those who care for them, would benefit greatly from a multi-sector

integrated data sharing system which includes all relevant information necessary to provide the best service to our nation's children. This approach would also contribute to decreasing unnecessary or preventable healthcare utilization and share accountability for the health and wellbeing of our children among the many dedicated partners who serve them.

Additionally, we recommend that the Innovation Center include the role of trained care navigators and/or integrators that shepherd the flow of cross-sector information and interpret information for families and communities.

Question: Section II. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

There are a number of obstacles to service integration. An obvious barrier is the lack of integrated data systems. As addressed above, CMS could assist with scaling promising models and could also provide additional clarity regarding what is allowable under Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA) with regard to data sharing. A more basic gap exists in some communities – where health care providers are not even aware of the types of services available in the community to which they could be referring and connecting patients. Ensuring robust community engagement and promoting community asset mapping and needs assessment would help address this barrier.

Another obstacle that many communities face relates to complications that arise from uncoordinated funding sources. In order to accomplish goals, they leverage a variety of categorical funding sources – each with its own reporting requirements and metrics. CMS could work with sister agencies at HHS to test innovative approaches that allow the blending, braiding or layering of funding from different federal, state, local and private entities – with an ultimate goal of creating a unified set of goals, metrics and reporting requirements to test impact of a combined set of interventions within a state or community. This would necessitate permitting some funding to support an integrator/backbone staff (as described above) to do the financial management and coordination.

A final barrier particularly in the pediatric space is that true impact of preventive interventions is often not realized for many years to come and can often manifest in avoided costs and better outcomes for individuals. While it is important to show progress along the way, for a pediatric model, CMS should include a medium-term and long-term period for the Return on Investment and should track savings in the health care sector and other sectors (such as juvenile justice, education, etc.) and should account for cost savings for the parent-child dyad, as opposed to just the child.

Question: Section III: What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

CMS should be flexible and allow states and communities to test different approaches and target different populations as part of a pediatric model.

Some communities may wish to target a specific segment of the pediatric population and one or two related sectors (e.g. medically complex children or children in the foster care system). They should be allowed to do so. **However, a pediatric model test should not focus solely on high-cost users.** It is critical that it focus more broadly on testing approaches to optimize health for the entire population, including approaches that seek to prevent socially vulnerable children from becoming high-cost adults. We believe that there is great potential for improved outcomes and/or savings associated with targeting vulnerable children at risk for adverse developmental, behavioral, and medical problems but not yet manifesting delays, diseases, or disorders. We base this belief on research documenting the efficacy and availability of such interventions.^{lvii}

Recommendation: Therefore, we strongly urge that CMS test a variety of approaches, such as: 1) specific high cost/complex populations; 2) vulnerable, at-risk children, and 3) accountable health community approaches that include pediatric risk stratification approaches to improve the health of all children in a geographic region (improving health for high-cost populations, reducing risk factors and addressing needs for medium/at risk populations, and optimizing health and wellbeing for healthy children). Additionally, we urge that approaches include a focus on not just the child but also the family.

Regarding the age-range for a pediatric model, we recommend that a pediatric model include pre-natal to age 18. We recommend that CMS allow flexibility to go up to age 21 or 26 if a case is made (e.g. for children with medical complexity or rare diseases in which there are not many adult providers who are trained to deal with the condition).

Question: Section 3: How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

- **What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.**
- **Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.**

Recommendation: With regard to a pediatric payment model, we urge CMS to be flexible and not overly prescriptive. We also recommend that CMS identify best practices and remove barriers to health systems accessing cost data in real time.

States, communities and providers need latitude to experiment with pediatric incentive models because there is limited experience in the pediatric field with value-based models. Different delivery models will require different incentives – for example, targeted models that are focused specifically on special populations (e.g. children with medical complexity) may not be best suited to the same payment model as a delivery model that tests an approach to improving health of a geographic population. Finally, as incentives are tested to align with value-based models, there will need to be a focus on practice transformation and culture change, which takes time.

Below are few examples of payment models CMS might consider allowing providers, states and communities to test:

- Allow providers to start with upside only risk to get experience (e.g. for three years) and then to transition over time to upside and downside risk; consider allowing providers to test a risk-adjusted capitation rate with reliable measures of severity to adjust for variation in risk, including both social risk and clinical utilization.
- Allow testing of a model that includes prospective payments and a reward for reducing risk factors for future health conditions that will not appear in the short-term, perhaps as part of a delivery model structured as an Accountable Community for Health for Children and Families. While this would be an innovative approach, it is supported by research. For example, according to the CDC, experiences, both positive and negative, have a tremendous impact on future violence victimization and perpetration, and lifelong health and opportunity.^{lviii} Clinical models that respond to factors addressed in the ACE study^{lix, lx} could be incentivized.
- Allow testing of a blended alternative payment model that contains:
 - a pediatric Comprehensive Primary Care Plus model (including enhanced base payments to allow for universal anticipatory guidance on parent-child behavioral health promotion;
 - risk-adjustment that includes predicted life-course costs based on risk and protective factors (e.g. Safe Environment for Every Kid (SEEK) Parent Screening Questionnaire score; and value-based incentives for dimensional improvements in children's healthy cognitive, affective, and behavioral development);
 - an Alternative Quality Contract/bundled payment-type model for specialized needs; and
 - an Accountable Community for Health for Children and Families model.
- Allow for pooling/combining of resources by issuing a joint pediatric model test that includes resources and additional flexibility from more than one agency and allows states, communities and providers to blend, braid and layer categorical funding streams at the local or state level. This would entail a multi-sector place-based approach where the systems of care (clinical, child care and family/parent care, community etc.) work in concert to support a child's overall health and wellbeing. It could include an at-risk payment structure to one entity to organize and "deliver" the continuum of care and services needed to address the child/family's overall health and well-being for a set of health and wellbeing outcomes.
- Explore redefining the Medical Loss Ratio (percent of premiums spent on medical claims) as the Health Loss Ratio that is inclusive of social spending.

Question: SECTION IV. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

A pediatric model should include core metrics and optional metrics. States/communities should be encouraged to select a manageable number of metrics that are meaningful to their specific focus and intended outcomes. **The metrics utilized will vary, depending on the nature of the intervention and delivery model.** For example, while all model participants should track measures of health care utilization, models that include a focus on prevention may include utilization metrics tracking the health of a pregnant mother and baby that would likely not be appropriate for all delivery models. The metrics included below are examples from which model participants could select. This is not an exhaustive list.

Measures of *health care utilization* should be tracked. Depending on the intended outcome of the model, these could include hospital admissions, Emergency Department visits, hospital readmissions, number of prenatal and postpartum health care visits, number of well child and primary care visits, etc.

Another important category is *fulfilled referrals to health-related social services* (e.g. number of fulfilled referrals to community resources such as food, employment, housing; community-based parenting programs) and fulfilled referrals to services to address needs after completion of developmental screenings. These categories would ensure that children and families are actually being connected with the appropriate community-based providers to address their health and developmental needs.

Health care costs to Medicaid and CHIP should be tracked. CMS should make every attempt to work with State Medicaid agencies to encourage data sharing with model participants to ensure that health care costs can be tracked. Awardees should also have the option (if feasible) of calculating savings to other sectors and to private payers to provide a more holistic view of the impact of the model.

A final category of *quality and outcomes measures* should include short-term, medium-term and long-term metrics and should address the health of the child, family and pregnant mother to track health before and during pregnancy and enhance outcomes for the child in the future. Examples of options for outcomes measures (to be selected by model participants include, based on the nature of the model) include:

- Prematurity rates, birth weight, infant mortality, preventive care (for pregnant mom and child), immunization rates, scores on validated screeners and questionnaires or assessments (e.g. SEEK, ^{lxi},^{lxii} Ages and Stages, PEDS, and Strengths and Difficulties, Strengthening Families Five Protective Factors Assessment, literacy screenings), breastfeeding rates for new mothers, decreasing stress, trauma, drug usage in teenage women, tobacco usage in the home, increased use of safe sleep techniques; weight for children and adolescents; identifying screening and treating toxic stress; proportion of children ready for kindergarten, kindergarten attendance/school days missed, reading level by grade 3, proportion of adolescents that use alcohol or tobacco or that develop mental health conditions, rates of maternal depression, length of time in custody for adolescents, rates of food insecurity for families; rates of housing insecurity/homelessness for families.
- Some of the metrics above would require data-sharing across sectors. We encourage CMS to: 1) allow model participants to have enough time upfront to determine how they can work across sectors to share the necessary information needed to track a cross-sector metric (e.g. in the case of school readiness – what mechanisms would allow for data sharing with health care providers); and 2) be flexible and allow model

Debbie L. Chang

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New Jersey Hospital Association

See attachment.



New Jersey Hospital
Association.pdf

March 28, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

On behalf of our nearly 400 hospitals, health systems, and other members – including 10 designated children’s hospitals - across the state, the New Jersey Hospital Association (NJHA) appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models. We focus our comments on several key aspects of the request that we believe are important to the evolution of care systems for our nation’s children, particularly those that integrate healthcare and health-related social services with shared accountability and savings. From healthy children in need of preventive care for optimal physical and mental development to those with complex conditions in need of a specialized medical home, all children benefit from a child and family-centric perspective driving the design of future systems of care.

Networks must be organized to address the health (physical and mental) and the housing, school, legal and transportation needs of children that impact their health and access to care. Organizations will need to be strong conveners to serve as integrators of care focused on child development throughout childhood. Network innovation must be explored not only through state solutions, but also through public and private partnerships.

Overall, we believe a system of care for children must:

- Be child - and family - driven and supported by an infrastructure aligned around the child’s development with metrics designed specifically for kids.
- Integrate physical and mental health to address the complete health needs of children.
- Be delivered via an integrated network of care that is home and community-based with access to specialized services as needed.

NJHA's response reflects the experience of our member hospitals and our organization. We focus on the experience and recommendations of pediatric ACOs, pediatric health plans and children's hospital leadership who have developed relationships with social service organizations in their communities. We also include examples of the barriers organizations have faced when attempting to integrate services particularly addressing regulation, funding and data sharing obstacles.

Based on these experiences, we offer the following points on the specific payment model and network attributes for integrating pediatric healthcare and health-related social services with shared accountability and savings.

Alternative Payment Models

- Clarify regulatory issues to enable flexibility in service provision and enable more widespread data sharing. Organizations currently face significant hurdles when integrating needed social services due to differing regulatory interpretations with respect to allowable services and information sharing.
- Develop a payment mechanism (e.g., PMPM care management fee) for a centralized care coordination function and funding for emergency social services for high need populations. This will serve to stabilize the revenue stream and provide readily available support more reliably for families (e.g., Health Home model).
- Provide payment incentives for primary care and rural practices to keep children close to home.
- With experience, move to capitation for an actuarial sufficiently sized population that:
 - Includes payment for physical and mental healthcare
 - Incorporates social services into the medical cost (e.g., Oregon model)
 - Includes a socio-economic risk adjustment factor (e.g., Massachusetts model)
 - Ensures patient attribution is prospective
 - Establishes credible risk adjustment and outlier protection for children with complex conditions
 - Calculates the return on investment over the long-term (10+ years)

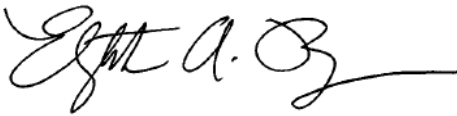
Integrated Networks

Unlike adult solutions, regional competition in pediatric care can be counterproductive. Pediatric populations are smaller and disease incident rates are lower than their adult counterparts, resulting in the concentration of specialized services across geographic regions. Thus, the size of the pediatric population and availability of specialized pediatric resources must be considered with respect to network structure. Networks must:

- Demonstrate a long-term commitment to the care of children and adopt appropriate guidelines and expertise to manage pediatric populations.
- Be able to meet the needs across a geographic region.
- Provide comprehensive pediatric specialty care.
- Be able to integrate high-risk children in other sectors.
- Have large scale EHR adoption, incorporating electronic data sharing (primary and specialty care) and telehealth capabilities.
- Have a centralized care management function to streamline patient access and reduce duplication of services.

We look forward to working with you to explore promising innovations for the health of America's children as well as needed public policy changes that can facilitate their spread. If you have any questions on our comments, please contact John Slotman at

Very truly yours,

A handwritten signature in black ink, appearing to read "Elizabeth A. Ryan", followed by a long horizontal flourish.

Elizabeth A. Ryan, Esq.
President & CEO

New River Valley Pediatrics (Retired)

- 1) Require payers to pay extra to Medicaid and Chip providers who have achieved PCMH or similar recognition. This may help offset the fact that Medicaid payments are not on parity with Medicare payments.
- 2) Encourage well checks by setting up computer programs to monitor these for individual patients and notify families who are not complying with the Bright Futures schedule.
- 3) Institute similar programs for immunizations. In states where this is already being done, try to make these programs more efficient and effective.
- 4) Require payers to financially reward practices that have Care Coordinators who serve, among others, Medicaid patients.
- 5) Require Medicaid or Chip patients/parents visiting the ER or urgent care to check off on a standardized form why they are not visiting their primary care physician (PCP) with this illness. Choices would be such things as sudden worsening, office closed, PCP refused to see, don't know who the PCP is, referred by PCP, etc. Carefully analyse these responses at a federal level and consider how to act on these results. This reaction should be structured to reinforce the utilization of the child's medical home.

NICHQ (National Institute for Children's Health Quality)

See attachment.



NICHQ (National
Institute for Childre

April 5, 2017

Centers for Medicare & Medicaid Services | Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

To Whom It May Concern:

The National Institute for Children's Health Quality (NICHQ) appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models.

NICHQ is an independent, 501(c)(3) non-profit organization whose mission is to improve children's health. NICHQ's vision includes a focus on social and community influences on children's health, development, and safety, as well as reducing health disparities. NICHQ's expertise includes: leading large-scale efforts in public health agencies, community organizations, ambulatory and inpatient healthcare systems; providing federal, state and local healthcare agencies with leadership and expertise in continuous quality improvement; program design and implementation using improvement science, including Breakthrough Series (BTS) learning collaboratives and Collaborative Improvement and Innovation Networks (CoIIN); providing systems design in healthcare, public health and related systems; patient and family engagement, including two-generation approaches to service delivery; and offering cross-sector collaboration and convening of diverse stakeholders.

As a nationally recognized leader in using quality improvement (QI) methodology to support system change and improve care and health outcomes for children, NICHQ has had significant experience with identifying appropriate measures, collecting relevant data and reassessing these measures to ensure that they capture outcomes most relevant to our programs. NICHQ has been an active participant in the development of pediatric measures in many capacities such as supporting the Agency for Healthcare Research and Quality's Pediatric Quality Measures Program (PQMP). In addition, NICHQ has led multiple national programs, convening diverse stakeholders cooperatively with state agencies and other private and public organizations to improve children's health. Partnering with pertinent organizations and other stakeholders has been a key factor in the success of NICHQ's cooperative projects. For example, as the Coordinating Center for the federally-funded Early Childhood Comprehensive Systems (ECCS) Collaborative Improvement and Innovation Network (CoIIN), which is supporting 12 ECCS states and their place-based communities to implement strategies and interventions that improve rates of age appropriate developmental skills among communities' three-year old children, NICHQ is building and nurturing a network that utilizes a collective impact approach to facilitate collaboration among state and local level leaders and is particularly focused on building leadership capacity in these communities to implement continuous quality improvement and innovation.

Our response to this RFI is informed by NICHQ's decades of experience working with federal and state agencies, healthcare institutions and providers, community organizations, and others to use quality improvement methodology to identify and implement changes that lead to improvement in children's health, as well as identifying and using associated measures that indicate improvement. As such, we have responded to questions directly linked to NICHQ's impact on improving children's health that we believe will enable Center for Medicare and Medicaid Innovation (CMMI) to not only build upon its work on pediatric quality measures that are

indicative of improved health outcomes for Medicaid and CHIP beneficiaries, but also critical success factors to achieving better health outcomes for children.

We look forward to working with you and your colleagues to improve the quality of health care provided to Medicaid and CHIP beneficiaries to ensure healthy children become healthy adults. If you have any questions on our comments, please do not hesitate to contact me at

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Berns', with a stylized, cursive script.

Scott Berns, MD, MPH, FAAP

President and CEO

National Institute for Children's Health Quality (NICHQ)

SECTION IV: PEDIATRIC MEASURES

NICHQ as a leader in Developing Pediatric Quality Measures for Medicaid and CHIP

The National Institute for Children's Health Quality (NICHQ) was founded in 1999 by pediatric and public health leaders and continues to be led by staff with a commitment to improving the health of children, with a particular focus on improving health equity at the population health level. Within the realm of pediatric quality measures, NICHQ has been an active participant in the development of pediatric measures in many capacities. Most notably, NICHQ's President and Chief Executive Officer, Scott D. Berns, MD, MPH, FAAP, contributed his expertise as a member of the Steering Committee on the National Quality Forum's Perinatal and Reproductive Health Measures Endorsement Project. Dr. Berns also served on The Joint Commission's Technical Advisory Panel for Perinatal Care Certification. He also serves on the Executive Advisory Committee for the recently awarded Agency for Healthcare Research and Quality (AHRQ) Pediatric Quality Measures Program (PQMP) award to the University of Michigan in 2016. In addition, over the past several years, NICHQ has supported AHRQ's PQMP Centers of Excellence and has served on the steering committees of the PQMP Centers of Excellence for the following programs:

- Children's Hospital Boston Center of Excellence for Pediatric Quality Measurement (CEPQM);
- Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC) at the University of Michigan;
- Mount Sinai Collaboration for Advancing Pediatric Quality Measures (CAPQuaM).

SECTION IV: Q.1 PEDIATRIC MEASURES

Question	
1	What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

Through its own efforts, NICHQ has fostered cross-sector collaborations to improve the quality of pediatric health care that has led to a national presence with successful partnerships in all 50 states. Many of these projects include collection of important pediatric measures that should be considered for CMS beneficiaries.

Collaborative Improvement and Innovation Network to Reduce Infant Mortality (IM CoIIN)

Through the Collaborative Improvement and Innovation Network to Reduce Infant Mortality (IM CoIIN), NICHQ leads a multi-year national effort, funded by the Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration (HRSA), to decrease infant mortality and improve birth outcomes. IM CoIIN, involves the engagement of multiple constituencies (federal, state, and local leaders; public and private agencies; health care professionals; families and communities), using innovation, collaborative learning, and QI methods to address complex public health challenges that are directly relevant to improving infant outcomes:

Based on our experience, we recommend your consideration of the following measures:

- Initiation of 17 alpha-hydroxyprogesterone caproate (17P) in pregnant women with prior preterm birth (to prevent a subsequent preterm birth);
- Percentage of claims for most effective contraception (e.g., long-acting reversible contraceptives);
- Adolescent well-visit;
- Delivery of very low birthweight and very preterm infants at risk appropriate facilities (Level III+ Neonatal Intensive Care Units).

Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN)

NICHQ is leading a five-year project charting the course for early childhood systems through funding from HRSA MCHB. Together with HRSA MCHB, NICHQ is leading the Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN). Through this national initiative, NICHQ has engaged 12 states and 28 place-based communities across the United States together with partner organizations.

With input from experts, faculty, families as well as the states and place-based communities partnering on the ECCS CoIIN, we are currently developing indicators and measures to align with the six primary drivers in the initiative. The primary drivers and draft indicators and measures are outlined below.

Primary Drivers:

- Early identification/prevention of developmental health needs
- Family engagement
- Addressing social determinants of health
- Systems promote developmental health & meet needs of children and families
- Systems are linked and coordinated
- Advocacy & policy change

The ECCS CoIIN is currently developing the following project indicators/measures across the six primary drivers in the initiative.

Overall Project Indicators/Measures:

- Achieving overall developmental health (birth through age 3), as evidenced by meeting expectations as measured by a standardized developmental screening tool; by age, gender/sex, poverty level, race
- Promoting early literacy and learning: Percent of children enrolled in home visiting with a family member who reported that during a typical week s/he read, told stories, and/or sang songs with their child daily, every day
- Demonstrating early childhood data sharing/integration capacity: data sharing agreements; share, link, integrate data; reporting; coordinate activities
- Expanding family engagement: improved social support
- Expanding Early Childhood System Building/Community Awareness: community resources: awareness, usefulness, accessibility
- Expanding Systems Linkage: accessing new needed social determinant of health service or support
- Reporting on the Quality Developmental/Relational Health Promotion System (including developmental/relational health promotion activities, standardized developmental screening, coordinated referral and follow-up, social determinant assessment, parent concern, elicitation and promotion of/linkage to community resources)

Sickle Cell Disease Treatment Demonstration Program

NICHQ also has significant transferable experience in the sickle cell disease (SCD) arena; some of this work, including measure development and quality improvement for SCD screening and improvements in SCD transitions of care through health care information technology, was featured in the Journal of Preventive Medicine¹.

NICHQ's SCD Newborn Screening Program involved six teams from federally qualified community health centers and other primary care sites, comprehensive SCD treatment centers, and community-based organizations. That work created local improvements by facilitating a Breakthrough Series learning collaborative to apply QI methodology to SCD care and education in varied settings; it also led to the development of expert-reviewed acute care quality measures for SCD.

NICHQ's SCD work has also included serving as the National Coordinating Center for the SCD Treatment Demonstration Program (SCDTDP). With the SCDTDP, NICHQ works with four Regional Coordinating Centers (RCCs) from across the country to increase the number of providers treating children and adults for SCD-related conditions and the percentage who prescribe disease modifying therapies. There is a significant advantage in

this demonstration program focusing on both pediatric and adult patients as many individuals with sickle cell disease do not experience a smooth transition from pediatric to adult care. A successful transition program can prepare young adults for this challenging time and help them avoid unnecessary complications of the disease. NICHQ gathers data and evaluates the performance of SCDTDP grantees, reporting to Congress on project results, including the development of a Model Protocol and Compendium of Resources to improve SCD care that is informed by the regional teams.

Increasing the number of providers treating persons with SCD and improving access to care

A key element to this work is increasing access to care sites to treat those with SCD. All four regions have made this a priority for this work, and report increasing the sites available that provide quality care for patients living with SCD.

NUMBER OF PATIENTS SERVED BY RCC PROGRAMS IN 2016

CHANGE FROM 2015 PRESENTED WHERE AVAILABLE

Region	Pacific	Heartland	Midwest	Northeast
States	Washington, Oregon, Utah, Idaho, Nevada, California, Alaska	Nebraska, Kansas, Iowa, Missouri	Wisconsin, Michigan, Minnesota, Illinois, Indiana, Ohio	New York, New Jersey, Pennsylvania, Delaware, Maryland, Washington DC, Virginia, West Virginia, Puerto Rico, US Virgin Islands
Total # patients receiving care (2015-2016)	1225 ²	1778 ³	309	3168
% Increase/previous year	35.5% (N=796)	3% (N=1723)	Not Available	Not Available

All four regions report increases in patient access to SCD care among their programs. Data (where available) for number of patients served is presented above⁴.

Additional Activities to Support Access to Care for Persons with SCD:

Strategies for improving access to care range from opening comprehensive care centers in high need locations to implementing patient outreach and follow-up with community health workers in collaboration with local SCD community-based organizations.

- The Northeast (RCC) developed strong relationships with community-based organizations at the state and regional level to increase patient access to SCD care.
 - In Virginia and Maryland, SCD care centers collaborated with local community based organizations and community health workers to outreach to people needing SCD care as well as follow-up with patients to continue care.
- The Pacific region saw increased patient access to care with the opening of two new comprehensive centers for sickle cell disease care in key urban areas targeting larger concentrations of patients with SCD.
 - The MLK Outpatient Center for Adults, with a catchment area of more than 1,000 potential patients with SCD, in Los Angeles, CA and the Children's Specialty Center of Nevada provide their patients

with access to knowledgeable physicians and systems of care that improve the quality of life for patients with SCD and their families.

- In the Heartland region, telementoring has been used to address geographically related health disparities.
 - Nebraska is implementing telementoring programs to benefit patients in between visits to their specialty provider. Through telementoring, the specialty provider is available for the primary care physician and acts as a resource for the patient's local, routine care team and for the patient, which extends local knowledge and provides expertise on best practices for the patient's care.
- In the Midwest region, efforts have focused on addressing care by helping systems address gaps that occur in an ever-changing healthcare environment.
 - For SCD patients in Gary, IN, the closest geographic access to care was in Illinois. When Illinois stopped accepting Medicaid patients from Indiana, there was a severe gap in access for patients in Gary. Providers in Indiana filled this gap by setting up satellite clinics in Gary that connected patients and local providers to staff and resources at larger medical systems with SCD expertise from across the state.

Measures collected through these efforts include the following:

Increase the number of providers treating persons with sickle cell disease	Number of providers in Plan who saw at least one patient younger than 18 years of age with SCD two or more times during the past 12 months
	Number of providers in Plan who saw at least one adult patient with SCD two or more times during the past 12 months
	Number of providers in Plan who saw any patient with SCD two or more times during the past 12 months
	Number of children in Plan with SCD who had at least 2 outpatient visits in the past 12 months.
	Number of adults in Plan with SCD who had at least 2 outpatient visits in the past 12 months.

Increasing the use of Hydroxyurea

As one of the frontline drugs to treat SCD and prevent SCD-related complications, the National, Heart, Lung and Blood Institute(NHLBI) has recommended that all eligible patients with SCD should be on hydroxyurea⁵.

- Over the course of the three-year contract, all four SCDTDP regions report increases in the number of patients being treated for SCD with Hydroxyurea within their partner sites.
 - For example, the Pacific region saw an overall 26% increase from 403 patients to 537 patients on hydroxyurea.
- Regions attribute increases in HU use to improvements in patient access to care and improvement in care systems to better facilitate the integration of guidelines from NHLBI's SCD Expert Panel Report⁶ for HU use in provider training and decision making tools.

Additional Activities to Support Hydroxyurea Use:

- Midwest regional grantees have been implementing healthcare systems improvements including integration of NHLBI guidelines into EPIC EHR systems (Indiana) and quality improvement strategies (Illinois) to help support informed and shared decision making among physicians and their patients, driving increases in HU prescriptions.
- The Midwest RCC has developed an online hydroxyurea clinical decision support toolkit for providers based on the NHLBI guidelines that will be launched in the spring of 2017.
- Both the Midwest and Northeast RCCs are developing a decision-making toolkit for providers to use with their patients regarding treatment decisions including HU targeting adults (Northeast) and pediatric patients and families (Midwest).
- The Pacific RCC developed and disseminated patient brochures in English, Spanish and French on HU to treat and manage SCD symptoms. Providers used these tools with their patients to facilitate shared decision making in HU use.

Measures collected through these efforts include the following:

Increase the number of providers prescribing hydroxyurea	Number of providers in Plan who prescribed hydroxyurea to a child with SCD at least once during the past 12 months
	Number of providers in Plan who prescribed hydroxyurea to an adult with SCD at least once during the past 12 months
	Number of providers in Plan who prescribed hydroxyurea at least once during the past 12 months
	Number of children with SCD who filled a prescription for hydroxyurea at least once during the past 12 months
	Number of adults with SCD who filled a prescription for hydroxyurea at least once during the past 12 months

SECTION V: PARTNERSHIPS

Question	
1	What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

Demonstration of Successful Partnerships

Through nearly two decades and over 60 projects both large and small in scope, NICHQ has become expert in creating and sustaining collaborative partnerships among entities such as hospitals, physician practices, professional groups, families, state health departments, federal agencies, and private foundations. NICHQ's work is deeply collaborative, bringing together entities that have important knowledge and ideas to share but that often do not work closely together. NICHQ's experience leading the ColIN to Reduce Infant Mortality and the Early Childhood Comprehensive Systems ColIN, demonstrates our expertise in promoting partnerships between states, payors, service providers, families, and community organizations.

Within the Infant Mortality ColIN, partnerships led to the achievement of policy objectives such as:

- Engaging Hospital Associations to support policies promoting safe sleep practices and education for parents in the NICU;
- Engaging state Medicaid offices to implement hard stop policies that prevent reimbursement of non-medically indicated early deliveries;
- Engaging Medicaid to reimburse smoking cessation programs for pregnant women in non-clinical settings, such as public health departments;
- Engaging Medicaid to reimburse transport to appropriate levels of care; and
- Supporting policies and reimbursing insertions of long-acting reversible contraception to reduce teen pregnancy and overall unintended pregnancies.

NICHQ believes that when effective partnerships are extended into the realm of quality improvement, everyone benefits: patients, families, providers, and organizations. When that work is focused on improving the quality of care for the smallest and most vulnerable patients—our children—the benefits, from a life course perspective, are perhaps the most profound of all. NICHQ's ColIN approach provides a model for developing, maintaining and sustaining effective cross-sector partnerships.

NICHQ's CoIN Approach

NICHQ has developed a comprehensive and robust approach to guiding and supporting and facilitating partnerships, bringing collective impact together with three proven models for improvement (see graphic below).

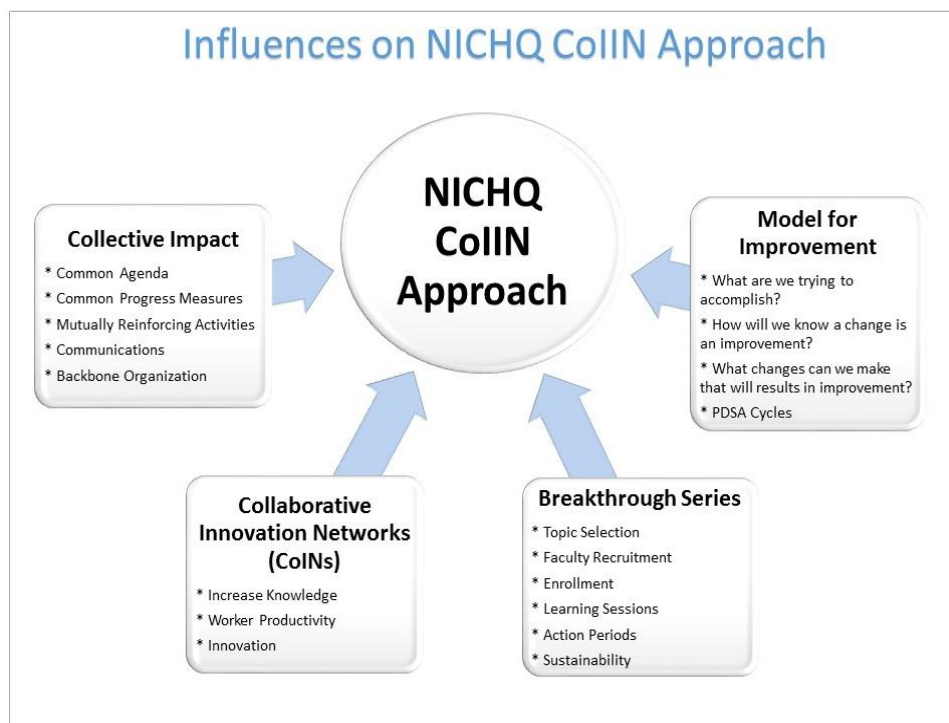
The **collective impact framework** is an innovative and structured approach to tackling complex issues across multiple sectors. Critical components of the collective impact framework that help facilitate partnerships include:

- A common agenda and common measures so all participants are clear about both expectations and outcomes for the group.
- Mutually reinforcing activities and continuous communication: which keeps momentum moving forward in a common direction,
- Resources provided by a backbone organization: allows the team to feel supported and provides the time needed to focus on the process and outcomes. NICHQ provides the backbone by guiding the vision and strategy, aligning the activities, establishing shared measurement practices, building public will, advancing policy and mobilizing funding.

Building on this framework, NICHQ uses the **Breakthrough Series (BTS) Learning Collaborative** model as the vehicle for refining and spreading changes. In the BTS model, teams gather regularly to assess current performance and progress towards project goals. With the assistance of faculty experts in the science of improvement, participating teams share data, ideas and strategies, learn about essential improvement techniques, and prioritize possible actions in terms of impact and feasibility. The BTS provides a structure for planning, pre-work, learning sessions, action periods and team calls in which improvement teams can learn from each other and recognized experts to make real, system-level changes. The BTS model has been shown to be effective when there is a gap between knowledge and action.

The **Model for Improvement (MFI)**, developed by *Associates in Process Improvement*, guides improvement efforts in a CoIN. The MFI has been used successfully by hundreds of healthcare organizations to improve different healthcare and public health processes and outcomes. The model addresses three fundamental questions: 1) What are we trying to accomplish; 2) How will we know if a change is an improvement; and 3) What changes can we make that will result in improvement. The MFI is a simple yet powerful tool used by NICHQ to accelerate improvement.

Finally, NICHQ utilizes the Collaborative Innovation Network (**COIN**) method developed by Peter Gloor. A COIN is defined as a “team of self-motivated people with a collective vision, enabled by the web to collaborate in achieving a common goal by sharing ideas, information and work.” A COIN moves beyond the traditional dissemination of information by engaging participants from multiple settings in the full spectrum of change implementation—from defining the problem, to designing an intervention, to implementation and evaluation, followed by the diffusion and adaptation of effective innovations in new settings. Key elements of a COIN include: 1) creating and sustaining a “cyberteams” (much of the work being distance-based and web-facilitated); 2) fostering innovation through immediate and on-going communication across all levels; 3) ensuring work is done in patterns characterized by meritocracy, transparency and openness to contributions from everyone; and 4) creating innovations that are open and disruptive.



For each CoIIN, NICHQ develops a charter that outlines roles and expectations for the participating teams in relation to key predictors of successful change. These roles and expectations are synonymous with components of successful partnerships and include:

1. **Will:** Organizational will, good ideas and effective project execution.⁷ Teams need leadership that establishes a common vision;
2. **Ideas:** Proven and promising ideas about policies and programs with potential impact;
3. **Execution:** The capability of listening and working together across much broader boundaries; mechanisms to assess their communities and organizational needs and set priorities; mechanisms to learn from like teams confronting similar challenges; and an approach to effect change.

NICHQ's experience with the IM CoIIN has led to measurable improvements in key perinatal outcomes including infant mortality, smoking cessation among pregnant women and early elective deliveries in many states. Preliminary analyses indicate that IM CoIIN has also shown a commensurate greater than \$200 million cost savings, a 20 to 1 return on the investment, thus far.

NICHQ supports the adoption of the IM CoIIN methodology as an approach that should be integrated into CMS's pediatric care model. The CoIIN model could be adopted by: 1) individual programs; and/or 2) CMS as an overarching infrastructure above the individual programs that would apply these principles as part of the oversight and shared learning function.

SECTION V: MODEL TO IMPROVE

2	As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

Promoting Young Children’s Socioemotional Development in Primary Care

In addition to NICHQ’s effort in leading the ECCS COIIN, NICHQ, in partnership with Ariadne Labs, and with support from the Einhorn Family Charitable Trust (EFCT) has worked together, in close partnership with experts in child health, early childhood development, and intervention delivery at scale, as well as lived experience experts (parents, grandparents, caregivers, etc.), to define the opportunity to shape healthy socioemotional development and relational health for children ages 0 to 3 specifically within the pediatric primary care setting. In the context of early childhood health, relational health is defined as a multidimensional and dyadic construct established by the parent-child interactions during the first 1,000 Days of life that build lifelong health, early learning, socioemotional capacities, self-regulation and resiliency. We view the child health setting as the key access point and as an early childhood sub-system within the larger ECCS system.

The importance of fostering socioemotional development in young children, through strengthening parent-child relationships and the opportunity to do so within the context of a pediatric well-visit care is well documented. Pediatric primary care is a nearly-universal, de-stigmatized point of connection for families with young children, even in high-risk populations. For example, 88 percent of children on Medicaid receive pediatric well-care in the first six months of life.^{8 9 10} These visits also serve as a source of trusted advice for families, especially when a longitudinal relationship can be established and an emphasis can grow on building early relational health. Healthcare providers are in a unique position to strengthen health and well-being by addressing the intersection of physical and socioemotional health and development with a focus on the earliest relationships.^{11 12 13} Unfortunately, relatively few relational and socioemotional interventions take place in primary care settings, and socioemotional screening within primary care for infants and toddlers is not universal.^{14 15}

Through an environmental scan, expert meeting, and a survey of the current field of interventions, a vision of success and recommendations emerged for optimizing relational health and socioemotional development in the pediatric setting. This is captured within the following general principles:

- All families can benefit from and deserve enhanced socioemotional functioning.
- Approaches should be widely available to all families, not limited to “at-risk” groups.
- The caregiver-child bond may be viewed as a stepladder to help enhance socioemotional functioning. The goal of any approach should be to meet families where they are and help them move higher up the ladder.
- Optimize interactions and access to resources for all families before, during, after, and in between pediatric well-child visits.
- Identify families where socioemotional development is at risk. Connect these families to resources that match their risk and needs.

Emerging from a broad range of experts, 11 specific design elements for pediatric well-child visits incorporating the above principles were identified:

1. Use well visits to assess bond between caregiver and child.
2. Model behaviors that promote socioemotional development during well visits.
3. Educate families about socioemotional development and age-appropriate expectations during visit.
4. Modify visit structure and timing to allow for meaningful interactions.
5. Provide access to extended care team members (i.e., in addition to the physician) during and between visits to continue family support and identify families requiring extra resources; build team unity so all care team members feel they are part of team (including parent supports and community supports).
6. Improve the quality of interaction between care team and caregivers.
7. Create an office culture that promotes openness and nurturing and fosters the bond between care team and caregiver, as well as caregiver and child.
8. Use the waiting room to foster and model pro-social interactions.
9. Provide all families with resources to promote socioemotional development and age-appropriate expectations between visits.
10. Connect families to tailored resources they can access during and between visits. Tier resources based on level of need. Use extended care team to help families navigate systems.
11. Use time between visits to strengthen bond between care team and caregivers.

The environmental scan and survey of existing interventions highlighted two key challenges to overcome on the path toward success. There is an overall lack of standardized measurement of the caregiver-child bond, which may be a reflection of the few existing standardized tools that measure it. In addition, there are barriers to scaling, including financing, training, buy-in, and the pediatric visit structure.

The following five targeted lines of inquiry are recommended in order to further investigate how to overcome the key challenges and incorporate the 11 design elements to ultimately create optimal, scalable approaches for promoting socioemotional development via well-child care:

- Identify and Implement Standardized Socioemotional Outcome Measurement within Primary Care Assessments – Create a measure of the caregiver-child bond that can be implemented in pediatric care.
- Define the Path for Scaling Interventions in the Pediatric Setting – Clarify the path to achieving full scale within pediatric care, through case studies of prior scaling efforts within the setting and site visits to evaluate scaling successes and potential of current approaches.
- Validate the Design Elements Recommended for Pediatric Well-Child Visits – Work with interventions, providers, and/or practices to test and validate the six design elements related to the well visit.
- Investigate Impact, Scalability, and Collaboration between Pediatric Care and Other Settings – Examine the opportunities for synergy across settings, including the five recommended design elements that extend beyond the well visit.

- Establish a Learning Community to Enhance Existing Interventions' Efforts to Scale – Create a network for existing interventions to share scaling strategies and accelerate their scaling efforts.

There is a tremendous opportunity for the pediatric well-child visit to have a positive impact on the lives and socioemotional development of the overwhelming majority of U.S. families. NICHQ plans on addressing this important sub-system within the context of our broader ECCS CoIIN work.

Please note, the full report on Promoting Young Children's Socioemotional Development in Primary Care presents an overview of principles, recommendations, and interventions designed to address early childhood socioemotional development within the pediatric primary care setting.

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Appendices

1. Quality Indicator Development for Positive Screen Follow-up for Sickle Cell Disease and Trait
2. ECCS COIIN Overview
3. IM COIIN - Six Strategies to Reduce Infant Mortality Nationwide
4. Promoting Young Children's Socioemotional Development in Primary Care
5. NICHQ's Sickle Cell Disease Treatment Demonstration Program 2014-2017 Impact Statement
6. Sickle Cell Disease Treatment Demonstration Program Model Protocol 2014

Quality Indicator Development for Positive Screen Follow-up for Sickle Cell Disease and Trait



Elissa Z. Faro, PhD,¹ C. Jason Wang, MD, PhD,² Suzette O. Oyeku, MD, MPH^{1,3}

Extensive variation exists in the follow-up of positive screens for sickle cell disease. Limited quality indicators exist to measure if the public health goals of screening—early initiation of treatment and enrollment to care—are being achieved. This manuscript focuses on the development of quality indicators related to the follow-up care for individuals identified with sickle cell disease and trait through screening processes. The authors used a modified Delphi method to develop the indicators. The process included a comprehensive literature review with rating of the evidence followed by ratings of draft indicators by an expert panel held in September 2012. The expert panel was nominated by leaders of various professional societies, the Health Resources and Services Administration, and the National Heart, Lung, and Blood Institute and met face to face to discuss and rate each indicator. The panel recommended nine quality indicators focused on key aspects of follow-up care for individuals with positive screens for sickle cell disease and trait. Public health programs and healthcare institutions can use these indicators to assess the quality of follow-up care and provide a basis for improvement efforts to ensure appropriate family education, early initiation of treatment, and appropriate referral to care for individuals identified with sickle cell disease and trait.

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Introduction

Annually, more than 2,000 newborns are born with sickle cell disease (SCD), the most common condition identified by universal newborn screening (NBS) programs in the U.S.^{1,2} SCD is an inherited red blood cell disorder characterized by chronic hemolysis, unpredictable acute complications, and variable development of chronic organ damage resulting from vaso-occlusion and chronic anemia.¹ The primary public health goals of NBS programs for SCD are early identification and initiation of effective treatments and subsequent enrollment in comprehensive care to optimize health outcomes.^{3–5} A secondary outcome of NBS

initiatives is identification of other hemoglobin disorders, such as sickle cell trait.⁶

Each state is responsible for its own NBS program, and there are multiple stakeholders involved in follow-up of positive screens for SCD, including state NBS program staff, primary care providers, hematologists, and genetic counselors.⁷ The structure and administration of each state NBS program varies across the U.S. For example, in some states NBS results go to the state community-based organization as well as the responsible provider and family, whereas in others the results are solely shared with the responsible provider and the family. Although NBS programs for SCD have been in existence for more than 20 years in some states, gaps and variation continue to persist in follow-up processes: the notification of families of NBS results, performance of confirmatory testing, offering genetic counseling and education about NBS results, initiation of effective therapies, and enrollment in care.^{7–10}

Improving the system of follow-up care for positive screens for SCD is essential to achieving the goals of the NBS programs. This system encompasses the subsequent steps of the follow-up process: not just the immediate screening but also follow-up counseling about the implications of NBS results years later. Presently,

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a limited set of quality of care indicators—an essential component for system-level improvement efforts—exists to measure performance related to follow-up processes of sickle cell care.¹¹

The goal of this project was to develop a set of quality of care indicators related to follow-up care for children with positive screens for SCD and sickle cell trait suitable for use by the Health Resources and Services Administration (HRSA)–funded improvement teams consisting of patients, providers, public health programs, healthcare institutions, and community-based organizations.¹² The project was not focused on long-term follow-up (e.g., getting into care, recommended elements of care [vaccinations, specialty and primary care]), which was addressed by another concurrent HRSA-funded project.¹³

Methods

Development of Draft Indicators

The research team, consisting of the authors, systematically reviewed the scientific literature on the processes of screening and follow-up for SCD and sickle cell trait across the life course. The authors searched the PubMed MEDLINE and Cochrane databases from January 2000 through July 2012 (using the prior SCD literature review as foundational materials),⁷ using terms related to 20 topics relevant to SCD screening and follow-up: *SCD*; *sickle cell trait*; *hemoglobinopathies*; *neonatal screening* (instrumentation, methods, organization and administration, standards, trends, utilization, classification); *genetic testing*; *genetic counseling*; *prenatal diagnosis*; *preconception care*; *medical home*; *genetic screening*; *community-based screening*; *NBS*; *parental notification*; *diagnosis*; *mass screening*; *carrier state*; *hemoglobin electrophoresis*; *confirmatory testing*; *sickledex*; and *complete blood count*. The search terms were based on the following four categories, which arose from process maps for the screening and follow-up of SCD and sickle cell trait:

1. clinical/laboratory elements of the NBS process;
2. communication of results from the state laboratory to the doctor;
3. NBS follow-up process (i.e., getting the information to parents, and getting them connected to the appropriate specialty care); and
4. outreach to immigrant/emerging populations.

The authors identified additional articles for inclusion by reviewing the bibliographies of key references. The authors screened 350 abstracts, initially reviewed 83 articles, and selected 36 articles for final review. Each article was initially reviewed by one investigator, and then those selected for final review were reviewed by one of three additional reviewers.

On the basis of the findings from the literature review, the authors drafted a set of candidate quality of care indicators and documented the highest level of supporting evidence for each indicator:

1. RCT;
2. non-randomized controlled trial, cohort or case-control study, or multiple time series; or
3. descriptive study or expert opinion.¹⁴

An indicator was included if it

1. measured an intervention or a treatment with potential health benefits for the patient;
2. was supported by adequate scientific evidence or professional consensus;
3. covered care that is under the control or influence of the healthcare provider or organization; and
4. covered information that typically is found in the medical chart or whose absence from the chart could be considered a marker for poor quality.¹⁵

Overview of Modified Delphi Method

A modified Delphi method was used to generate the final set of indicators.¹⁶ This process consisted of one round of ratings of the indicators by an expert panel followed by a face-to-face panel discussion facilitated by the research team. Immediately after the meeting discussion and revisions to the draft indicators, the expert panel completed a second round of ratings. This method has been shown to produce appropriateness criteria for medical procedures and quality of care indicators that have face, construct, and predictive validity.^{17–19}

Selection Process for Expert Panel Members

The authors requested nominations for the expert panel from the HRSA, the Center for Disease Control and Prevention's National Center on Birth Defects and Developmental Disabilities, National Heart, Lung, and Blood Institute, Sickle Cell Disease Association of America, and Working to Improve Sickle Cell Healthcare faculty. In reviewing the nominations, the authors considered the experts' geographic locations in the U.S. and subspecialties to ensure that the panel represented a wide spectrum of clinical and non-clinical experience with the screening and follow-up process, including genetic counseling, emerging populations, public health, state-level and national screening programs, confirmatory testing at a laboratory, and the patient/family perspective. The authors then contacted the 15 selected nominees to assess their interest and availability, and if they were unavailable, the authors worked with them to find a suitable replacement. Fifteen panelists participated, including six hematologists (five pediatric, one adult); two patient representatives (one parent, one patient); one community-based organization representative (also a parent); public health specialists; and former and current SCDNBS Program grantee representatives (Table 1).

First-Round Ratings of Indicators by Expert Panel

For the first-round ratings, panelists were sent the list of 18 candidate indicators along with the highest level of supporting evidence for each indicator and the relevant citations to the literature (Appendix, available online). Panelists rated each indicator separately for validity and feasibility on a 9-point scale (1 = lowest; 9 = highest) before the face-to-face meeting. The panel was instructed to give high validity scores to indicators for which a high proportion of the determinants of adherence are under

Table 1. Expert Panel Participant Information

Name	Professional domain	Position and affiliation
Maria del Pilar Aguinaga, MD	Obstetrics and Gynecology	Professor, Dept. of Obstetrics and Gynecology, Associate Director, Sickle Cell Center, Meharry Medical College
Talana Hughes, MPH	Community Based Organization Representative	Executive Director, Sickle Cell Disease Association of Illinois (SCDAI)
Kusum Viswanathan, MD	Emerging Populations	Vice Chair, Dept of Pediatrics; Director, Div. of Pediatric Hematology/Oncology, Brookdale University Hospital and Medical Center
Peter Lane, MD	Pediatric Hematologist	Director, Sickle Cell Center at Emory; Children's Healthcare of Atlanta
Dennis McCullum	Patient Perspective	Sickle Cell Disease Partner, Illinois, Sickle Cell Disease Treatment Demonstration Program team
Lynnie Reid	Parent Perspective	Senior Project Manager, National Institute for Children's Health Quality
Charmaine Royal, PhD	Genetic Counseling	Dept. of African & African American Studies, Duke Institute for Genome Sciences & Policy
Joseph Telfair, DrPH, MSW/MPH	Public Health	Professor, Public Health Research and Practice, University of North Carolina at Greensboro
Katherine Harris	State Newborn Screening Program	New York Mid-Atlantic Consortium for Genetic and NBS Services Project Manager, New York State Genetic Service Program Director
Carolyn Hoppe, MD	Confirmatory Testing/Laboratory	Associate Hematologist/Oncologist, Children's Hospital & Research Center of Oakland
Althea Grant, PhD	Sickle Cell Trait	Commander, U.S. Public Health Service; Chief, Epidemiology and Surveillance Branch, Division of Blood Disorders, National Center on Birth Defects and Developmental Disabilities
Keith Hoots, MD	National Heart, Lung, and Blood Institute (NHLBI)	Director, Division of Blood Diseases & Resources NHLBI NIH
Lauren Raskin Ramos, MPH	Association of Maternal & Child Health Programs (AMCHP)	Director of Programs, AMCHP
Jelili Ojodu, MPH	National Newborn Screening & Genetics Resource Center	Director, Newborn Screening and Genetics Association of Public Health
Kwaku Ohene-Frempong, MD* *participated in second round ratings	Newborn Screening and Pediatric Hematologist	Professor of Pediatrics, The Children's Hospital of Pennsylvania; Director Emeritus of the Comprehensive Sickle Cell Center; President of the Sickle Cell Foundation of Ghana

the health professional's influence and at least one of the following criteria were met:

1. The supporting scientific evidence or professional consensus is adequate.
2. There are identifiable health benefits for patients who receive the specified care.
3. Health professionals with higher rates of adherence would be considered higher-quality providers.

A high feasibility score was given in the following cases^{11,15}:

1. The average medical chart is likely to contain information that is needed to determine adherence.
2. Estimates of adherence on the basis of medical chart or secondary data are likely to be reliable and unbiased.
3. Failure to document information relevant to the indicator is itself a marker of poor quality.

Panelists also were encouraged to provide comments and suggest revisions to the candidate indicators.

Expert Panel Meeting

The panel met in Bethesda, MD, on September 10, 2012. At the start of the meeting, each panelist received a list of the candidate indicators that included their first-round ratings for each indicator and the median first-round ratings for the group. The research team was present to answer questions about the literature review, candidate indicators, and expert panel process. The discussion of the indicators was framed by an overview of the project driver diagram as well as brainstorming sessions for change ideas around each of the indicators. Each candidate indicator was discussed during the meeting. Some were eliminated by consensus, others were modified, and new indicators were added based on new expert opinion. The panelists then completed ratings for the revised set of indicators during the second round.

Second-Round Ratings of Indicators

The authors used the following scoring criteria to evaluate the panel ratings: Indicators were accepted if they received a median validity score of ≥ 7 and a median feasibility score of ≥ 4 . Of those that met the cut offs for median validity and feasibility, indicators were eliminated if substantial disagreement existed on either validity or feasibility (at least three votes in the 1–3 range and at least three votes in the 7–9 range for an eight- to ten-member panel).^{20,21} These cut offs were based on predetermined ranges and distribution of scores used in the Rand/University of California, Los Angeles, appropriateness method, a modified Delphi method developed at the respective institutions.^{15,16}

Following the second-round rating of the revised set of candidate indicators, the research team finalized the indicators based on discussions at the meeting and, in some cases, in follow-up conversations with panel members based on their individual areas of expertise.

Results

For the first round, 18 candidate indicators were drafted in four topics:

1. counseling for expectant mothers;
2. counseling for adolescents;
3. NBS communication and follow-up care; and
4. patient education, patient experience, and care coordination for non-newborns and immigrants.

For some topics included in the literature review such as community-based screening and prenatal diagnosis, the study team was not able to develop candidate indicators that met the inclusion criteria for indicator development on the basis of the available evidence.¹⁵

During the meeting, the panelists eliminated six candidate indicators and made significant or minor changes to the remaining 12 indicators. In the second-round review, an additional three candidate indicators were eliminated on the basis of feasibility, particularly with regard to the foci of the work of the concurrent HRSA-funded improvement teams.¹²

The final nine indicators (Table 2) focused primarily on two themes that emerged from the discussion at the expert panel meeting:

1. genetic counseling and education; and
2. the follow-up process from the results of the NBS.

The two genetic counseling indicators focus on ensuring that individuals with SCD and sickle cell trait receive appropriate education and counseling by the time they reach reproductive age.

The indicators that addressed the communication of the results of screening to stakeholders were split into

four final indicators, two measures concerning the communication of SCD and two for sickle cell trait results. Within each pair, the notification of appropriate stakeholders was addressed—one each for the responsible clinician and the family or caregiver of the newborn (i.e., the notification of SCD results to the responsible clinician, the notification of SCD results to the family or caregiver of the newborn, the notification of sickle cell trait results to the responsible clinician, and the notification of sickle cell trait results to the family or caregiver of the newborn).

The remaining three indicators covered connecting newborns with a positive screen for SCD and their families with the appropriate clinical care and education about early complications, including ensuring that newborns with SCD are started (and remain) on life-saving prophylactic antibiotics.

Discussion

The authors describe the development of quality of care indicators related to the follow-up of children with positive screens for SCD. The process included a comprehensive literature review with rating of the evidence followed by ratings by an expert panel. The final set of indicators expand the existing set of quality of care indicators with a specific focus on key processes of newborn screening follow-up care.¹¹ These indicators can be used by providers, healthcare institutions, and public health programs to gauge the quality of care for children identified with SCD through NBS programs and assess if public health goals of screening have been achieved. The research team focused on developing measures that were directly relevant to the focused work being conducted by improvement teams funded through HRSA sickle cell programs for the project period of 2011–2015. The primary focus of their improvement efforts were to ensure children who had a positive screen for SCD were enrolled in the appropriate care and their families received requisite genetic counseling and information about their condition.

The panel also recommended quality of care indicators related to follow-up of positive screens for abnormal hemoglobin traits, such as sickle cell trait. This is important given the opportunity to provide counseling to adolescents and parents about the future risk of having a child affected with SCD or another hemoglobin disorder.^{6,38}

Limitations

One limitation of this study is the absence of inclusion of quality of care indicators focused on follow-up of older children, adolescents, and adults who were initially

Table 2. Screening and Follow-Up Indicators by Topic

Indicator	Topic	Indicator definition	Function ^a	Modality ^b	Strength of evidence ^c
1	Counseling	All men and women with SCD should receive genetic counseling about SCD by 15 years of age	E	I	III ^{22–26}
2	Counseling	All men and women known to be hemoglobinopathy carriers (HbAS, HbAC, HbAVariant including O, E, D, and G) should receive genetic counseling by 15 years of age	E	I	III ^{22–25}
— ^e	Counseling	Initial genetic counseling for SCD for patients with limited English proficiency should be offered in a person's preferred language within 2 months of confirmed diagnosis	E	I	III ^{22,25,27,28}
— ^e	Counseling	Education and counseling for hemoglobinopathy trait (Hb AS, Hb AC, Hb AE, Hb A Variant) for patients with limited English proficiency should be offered in a person's preferred language within 3 months of positive screen	E	I	III ^{22,25,28,29}
3	Follow-up/ results	Families/caregivers should be informed about the results of positive NBS tests for SCD within 1 month of screening ^d	F	T	III ⁷
4	Follow-up/ results	State NBS programs should inform the responsible clinician (e.g., primary care clinic, hematologist) about the results of positive NBS tests for SCD within 7 days of screening	F	T	III ⁷
5	Follow-up/ results	Families/caregivers should be informed about the results of positive NBS tests for hemoglobinopathy trait (FAS, FAC, FAVariant/FAO/E, FAD/G [hemoglobin variant]) within 3 months of screening	F	T	III ⁷
6	Follow-up/ results	State NBS programs should inform the responsible clinician (e.g., primary care clinic, hematologist) about the results of positive NBS tests for hemoglobinopathy trait (FAS, FAC, FAVariant/FAO/E, FAD/G [hemoglobin variant]) within 1 month of the screening.	F	T	III ⁷
7	Follow-up/ clinical care	All children identified with FS (HbSS and HbS Beta zero thalassemia) on initial NBS should have prophylactic antibiotics initiated by 3 months of screen	Tr	I	III ^{3,30,31}
8	Follow-up/ clinical care and education	All families of newborns identified with SCD on NBS should begin to receive education about recognition and treatment of early complications of SCD by 2 months of screen	E	I	III ^{24,32–34}
9	Follow-up/ clinical care	Children with HbSS and HbS Beta zero thalassemia who are younger than 5 years should receive antibiotic (e.g., penicillin) prophylaxis against pneumococcal disease	Tr	I	I ^{3,30,31,35}
— ^e	Screening	All non-newborn screened populations (including emerging and immigrant populations), whose hemoglobinopathy status is unknown, should recommend screening/testing for hemoglobinopathies during their first primary care/community based organization visit.	S	I	III ^{28,35–37}

^aFunction: S, indicates screening; R, referral; E, education; D, diagnosis; Tr, treatment; F, follow-up.

^bModality: H, history; Ph, physical examination; T, tests; I, intervention/medication; R, return/referrals.

^cStrength of evidence: I, randomized, controlled trial; II, non-randomized, controlled trial, cohort or case control study, or multiple time series; III, descriptive study or expert opinion.

^dTemporally, “screening” refers to the entire process including time of blood draw, time the test is run, and the time the test is resulted.

^eIndicators that were not included in the final set of operationalized measures.

SCD, sickle cell disease; NBS: newborn screening

screened for SCD beyond the newborn period. Although all infants born in the U.S. undergo screening for SCD at birth, 13% of the total U.S. population is foreign born and may not necessarily have undergone such screening. The

majority of foreign-born individuals residing in the U.S. hail from Latin America (53%) and principally from Mexico.³⁹ Asians represent 28% of those who are foreign born in the U.S., whereas those from Africa represent

only 4% of the foreign-born U.S. population.³⁹ Furthermore, the global burden of SCD is increasing predominantly in Sub-Saharan Africa.⁴⁰ Currently, there are no recommendations about the appropriate process for screening new immigrants in the U.S. or older children, adolescents, or adults who were not screened as infants for SCD.⁴¹

Another possible limitation is the paucity of data documenting the link between some of the process measures (e.g., counseling-focused measures) in this measure set and health outcomes for individuals with SCD. Genetic counseling and education about symptoms and treatment for early complications of SCD could potentially impact future reproductive decision making and impact healthcare utilization practices among affected children and their families.^{42–45} Further studies are needed to better document the association between process of care measures and healthcare utilization and outcomes. It is plausible that these indicators could be used by insurers, but another limitation is that the feasibility of obtaining these data from administrative or claims data was outside the scope of the HRSA-funded project. The measures were pilot tested with data obtained through chart review.

Future directions include expanding the evidence base related to screening for hemoglobin disorders beyond the newborn period, which can inform future development of quality of care indicators.

Conclusions

The quality of care indicators detailed in this article are based on a synthesis of existing evidence and evaluated by an expert panel. These indicators can be used by multiple stakeholders involved in NBS follow-up care for SCD and sickle cell trait to improve process of care and potentially suggest opportunities for future policy or practice-based intervention.

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Appendix

Supplementary data

Supplementary data associated with this article can be found at <http://dx.doi.org/10.1016/j.amepre.2016.01.005>.

ECCS CoIN Overview

Background

Since 2003, the Health Resources & Services Administration (HRSA) Maternal and Child Health Bureau (MCHB) has funded projects that support Early Childhood Comprehensive Systems (ECCS). ECCS are partnerships between interrelated and interdependent agencies and/or organizations representing physical and mental health, social services, families and caregivers, and early childhood education. These partnerships develop seamless systems of care for children from birth to kindergarten entry. The ECCS CoIN (Collaborative Improvement and Innovation Networks) is an initiative of the ECCS Impact Grant Program, funded by HRSA. NICHQ (National Institute for Children's Health Quality) is the lead on a five-year cooperative agreement to build on previous work to continue enhancing early childhood systems at both the national, state and community levels.¹

Project Description

The Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIN) is a public-private initiative seeking to enhance early childhood system building and demonstrate improved outcomes in young children's developmental health and family well-being. It is designed to help the ECCS Impact grantees and their chosen place-based communities innovate and improve their early childhood system approaches using the science of quality improvement and collaborative learning. The CoIN will facilitate innovation, communication and sharing across state and place-based community teams. The ECCS CoIN Coordination Center, led by HRSA MCHB and NICHQ, is responsible for managing, coordinating and executing the project. Lead technical partners on the Center team in early childhood comprehensive systems and data indicators and processes include ZERO TO THREE and Applied Engineering Management Corporation, respectively.

Participating ECCS Impact recipients will strive to show a 25 percent increase from baseline in age appropriate developmental skills of their communities' three-year-old children, and reduce disparities in these skills among these children. This project will engage 12 Impact grantees and their place-based communities in three sequential cohorts from August 2016 through July 2021.

The ECCS CoIN will bring together experts in quality improvement science, early childhood development, integrated data systems, and early childhood systems to improve the systems that serve our youngest children resulting in improvement of the health of our nation's children

¹ "Early Childhood Comprehensive Systems." *Maternal & Child Health Bureau*. N.p., Aug. 2016. Web. 27 Sept. 2016.

and families. At the core of the effort is the concept of Collaborative Improvement and Innovation Networks (CoIIN) [see next section for details]. These are dynamic, technology-enabled, virtual teams in which people with a shared vision collaborate to achieve a common goal by exchanging ideas, information, and work.

The goals of this project are to:

- strengthen state and place-based community leadership in continuous quality improvement;
- achieve collective impact in early childhood systems at the state, county and community level by supporting collaborative learning, innovation and quality improvement efforts to improve child developmental health and family well-being by providing guidance and technical assistance to Impact grantees on the effective use of collaborative learning approaches, collective impact, as well as quality improvement principles and practices.
- develop primarily two-generation (parent-child dyad) approaches to drive integration of EC services vertically (within sector) and horizontally (across sectors);
- develop and adopt core sets of evidence-based indicators to measure EC system process and outcome indicators in order to measure population impact around children's developmental health and family well-being; and
- test innovative EC systems change ideas, develop dissemination strategies, and adopt new EC policies for sustaining the systems, including scale-up.

The collaboration, guidance, and coordination of several key organizational leaders in the public health and EC fields is essential to realizing this work.

What is a “CoIIN”?

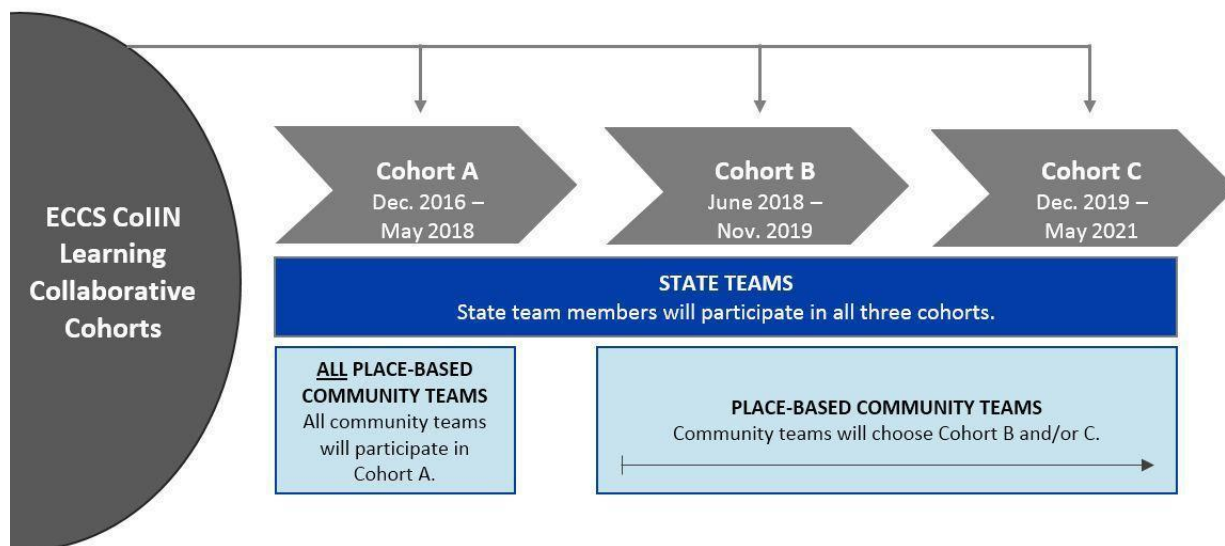
Collaborative Improvement and Innovation Networks (CoIINs) are teams of federal, state and local leaders working together to address a common problem. A CoIIN combines the science of quality improvement, innovation, and collaborative learning with a collective impact framework. Using technology to remove geographic barriers, participants with a collective vision share ideas, best practices and lessons learned, and track their progress toward similar benchmarks.

To be successful, each CoIIN develops:²

- Straight-forward aims and specific, measurable, action-oriented, realistic, and time-specific objectives – to explain what they are setting out to achieve

² “Collaborative Improvement & Innovation Networks (CoIINs).” Maternal & Child Health Bureau. N.p., July 2016. Web. 12 Oct. 2016

- Evidence-based strategies – to show how these objective will be accomplished
- Clear-cut metrics and real-time data – to show what’s working and what isn’t in real time, and ultimately determine how successful it was.



Framework and Core Methods

Collective Impact

The ECCS CoIN is designed to produce large scale social change by strengthening early childhood systems across the country. The efforts required to achieve such goals demand high level cross-sector coordination. The Collective Impact framework helps to structure the collaboration, guiding and aligning efforts around a common goal and vision. There are five components of collective impact: 1) common agenda, 2) shared measurement, 3) mutually reinforcing activities, 4) continuous communication, and 5) backbone organization. All ECCS CoIN processes are guided by this framework and supported by extensive technical and content experts; the work occurs at many levels, including the state and community. The table below outlines the 5 Conditions of Collective Impact³ and its application to the ECCS CoIN.

³ Kania, J. & Kramer, M. Collective Impact. Stanford Social Innovation Review 2011. Available from: http://www.ssireview.org/articles/entry/collective_impact

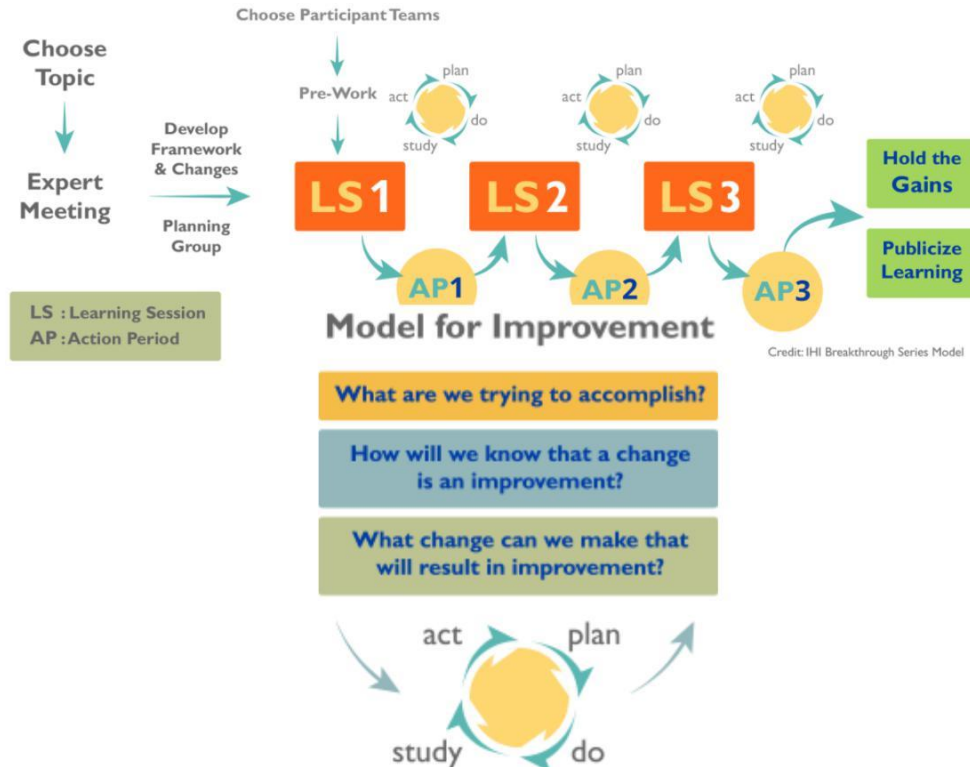
The Five Conditions of Collective Impact: A Framework for the ECCS CoIIN		
Key Elements of Collective Impact		ECCS CoIIN Applications
Common Agenda	Participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.	ECCS CoIIN-wide Aim: “Within five years of the program start, participating communities will show a 25% increase in age appropriate developmental skills among their communities’ three-year-old children.” Learning Collaborative Cohort Aim: Each Learning Collaborative Cohort will share a common aim to drive their work.
Shared Measurement	Collecting data and measuring results consistently across all state and community participants ensures efforts remain aligned and participants hold each other accountable.	States and their communities will collect and report on a family of shared measures to ensure progress towards the ECCS CoIIN aim. States will also have access to an array of data supports including a data dashboard that will facilitate accountability among states.
Mutually Reinforcing Activities	Each participant must undertake a specific set of activities at which it excels in a way that supports and is coordinated with the actions of others.	Impact Grantees will engage in collaborative learning with peers in other states, and learn and apply innovation and quality improvement methods to identify activities within their states that strengthen their early childhood system.
Continuous Communication	Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.	The ECCS CoIIN online community is a “collaboration engine” that enables participants to work together across professions and organizations, in real time or asynchronously, to share information and data. Through the ECCS CoIIN and the online community, states and their place-based communities will be working to break down existing silos that prevent children and families from receiving necessary services and supports.

<p>Backbone Organization</p>	<p>Creating and managing Collective Impact requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.</p>	<p>NICHQ (National Institute for Children’s Health Quality) and HRSA MCHB are the backbone organizations, along with support from partner organizations.</p> <p>Together, we will provide the infrastructure and supports required to advance the work of Impact Grantees and their community partners.</p>
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Breakthrough Series Learning Collaborative Model & Model for Improvement

In addition to the Collective Impact approach, the ECCS CoIN will use the Breakthrough Series (BTS) Learning Collaborative Model, modified to meet the requirements and unique needs of the ECCS CoIN. A BTS learning collaborative is a vehicle for identifying, testing, and spreading changes that are effective for improving care and outcomes for defined populations. The general structure of a BTS collaborative appears below.

Using this approach within each Learning Collaborative Cohort, NICHQ and its partners will



work intensively with each Impact Grantee to achieve significant improvements in the developmental skills of young children. Impact Grantees will learn to apply the Model for

Improvement (MFI), a structured approach to systems change that improvement teams use to drive improvement. It stresses a well-focused, time-limited aim, process measures and outcome measures to track improvement and evaluate progress.

NICHQ Collaboratory

The NICHQ Collaboratory (CoLab) is an innovative and dynamic web-based platform facilitating online collaboration among the 12 ECCS CoIIN Impact Grantees and accelerating their quality improvement efforts. This state-of-the-art, password-protected system leverages collective knowledge and common measurement to drive improvement and enable the continuous spread of best practices and innovations. The CoLab features two complementary components—the community and the data portal—offering a community space for members to interact and share resources, as well as a secure space for data entry and management.

CoLab Community

The CoLab community features a social networking interface combined with traditional discussion boards and comprehensive resource library to support the diverse preferences of its users. Members work within and across teams, initiating and participating in discussions, posting pre-work and PDSA (“Plan-Do-Study-Act”) worksheets, and receiving coaching and technical assistance from faculty and quality improvement advisors. Specifically, CoLab members can:

- Post and view resources and articles
- Collaborate with others doing similar work
- Leverage collective expertise and explore promising results
- Learn about relevant upcoming events and webinars
- Develop a close-knit community of learners on similar journeys
- Showcase expertise and knowledge by helping others overcome challenges
- Connect with colleagues within specific topic or geographical areas

CoLab Data Portal

The CoLab data portal is where designated personnel submit and receive expert feedback on the quality improvement data collected using common performance and outcome measures. The system enables data managers for each team to enter data periodically and review their team’s progress on key metrics with the aid of evaluations submitted by an improvement advisor or other faculty member. Employing a secure user authentication infrastructure to ensure that access is restricted to only appropriately permissioned accounts, the system supports:

- Submission and retrieval of periodic data on key metrics (both qualitative and quantitative data)
- Completion of self-assessments against common project goals on a routine basis
- Review of feedback provided by improvement advisors to further a team's improvement and learning
- Generation of charts to visually detect trends and display progress
- Downloading of data to share with team members and others

For large-scale improvement projects, such as ECCS CoIN, getting all stakeholders and voices into one room at the same time can be nearly impossible. Built using several of the web's most advanced and secure open source technologies, the CoLab serves as the virtual collaboration hub supporting high-level collaboration asynchronously—giving team members the freedom to work at their own pace, from their own location, and still contribute meaningfully to the improvement work.

For more information, please contact

PRE & INTERCONCEPTION CARE

Half of all pregnancies in the U.S. are unintended. Pre & interconception health focuses on the care of women before and in-between pregnancies in order to detect, treat, and help women modify behaviors, health conditions, and risk factors that contribute to poor pregnancy outcomes. This learning network focuses on improving health during this essential time

AIM STATEMENT

By July 2016, we will improve life course care for women related to pre and interconception care. Our goals are to:

1. Improve the postpartum visit rate 10% or more relative to the state baseline;
2. Improve adolescent well visit rate 10% or more relative to the state baseline;
3. Improve birth intention and client choice of contraceptive methods including most and moderately effective contraception;
4. Improve birth spacing and reduce the proportion of live births that were conceived <6 and <12 months from the previous live birth* by 10% or more relative to state baseline and ultimately <18;
5. Reduce racial/ethnic disparities in the above goals

RISK APPROPRIATE PERINATAL REGIONALIZATION

Neonatal mortality is associated with gestational age, very low birth weight (VLBW), and health problems immediately before or after pregnancy. This learning network



focuses on increasing the number of high-risk babies born at appropriate level hospitals to ensure the best possible outcomes for mothers and babies.

To learn more about the Infant Mortality CoIIN, contact us at CoIIN@NICHQ.org or visit our website at <http://www.nichq.org/coiin>

AIM STATEMENT

By July 2016:

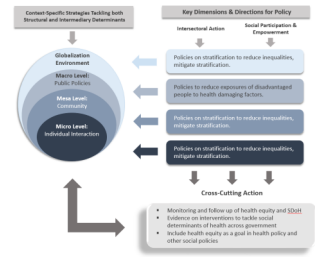
1. Increase the % of VLBW (< 1500 grams) and very preterm (<32 weeks gestation) infants delivering at risk appropriate facilities (level III + neonatal intensive care units) to 90% (or 20% increase relative to state baseline);
2. Increase the % of pregnant women with high risk placental conditions (placenta accreta or placenta previa with prior uterine surgery, placenta percreta), expectant management of preeclampsia with severe features at less than 34 weeks of gestation and severe maternal cardiac conditions receiving care at appropriate facilities (Level III or IV) by 10%.

SOCIAL DETERMINANTS OF HEALTH

Health and well-being are determined by not only the choices people make throughout their life, but by the socioeconomic, cultural, and environmental factors. This learning network strives to close the inequalities by addressing gap

determinants of health such as policies to reduce poverty, housing, employment, and healthcare services.

WHO Framework for Tackling SDOH



AIM STATEMENT

The aim of the Social Determinants of Health (SDOH) Learning Network is to build state and local capacity, and test innovative strategies to shift the impact of social determinants of health. The primary focus is innovation and to spread evidence-based policies, programs and place-based strategies to improve social determinants of health and equity in birth outcomes.

Acknowledgement: This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) (under grant # UF3MC26524, Providing Support for the Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality, \$2,918,909, no NGO sources). This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.



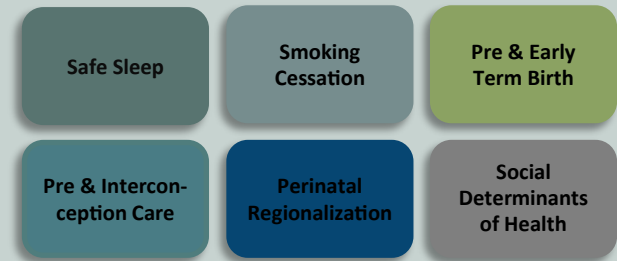
Infant Mortality Collaborative Improvement & Innovation Network (IM CoIIN)



Six strategies to reduce infant mortality nationwide

SIX EVIDENCE-BASED STRATEGIES

The Collaborative Improvement and Innovation Network to Reduce Infant Mortality (IM ColIN) is a multiyear national movement engaging federal, state and local leaders, public and private agencies, professionals and communities to employ quality improvement, innovation and collaborative learning to reduce infant mortality and disparities. The IM ColIN has identified six strategy areas that focus on:



SAFE SLEEP

Sudden infant death syndrome (SIDS) is the leading cause of death among babies between 1-12 months. This learning network focuses on actions individuals can take to help babies sleep safely and reduce the risk of SIDS and other sleep-related causes of infant death.

ALONE | ON BACK | EMPTY CRIB

AIM STATEMENT

- By July 2016, reduce infant sleep-related deaths by improving safe sleep practices so that states:
1. Decrease sleep related sudden unexpected infant death (SUID) mortality rate by 10% relative to the State baseline;
 2. Increase % infants placed on backs for sleep by 10% or more relative to the state baseline;
 3. Increase the % of infants placed to sleep in a safe sleep environment by 10% or more relative to the state baseline;
 4. Increase the % of infants sleeping alone by 10% or more relative to the state baseline.
 5. Reduce relative disparities between white and non-Hispanic Black and American Indian/Alaska natives for SUID by 10% or more.

CHANGE IDEAS

Aim statements and change ideas are available for each Learning Network. The following chart provides evidence-based examples that states can apply to their infant mortality initiatives.

Change Ideas		
Safe Sleep	*	Set up a model nursery in hospital lobby
Smoking Cessation	*	Use motivational interviewing techniques to help moms commit to stop and stay quit
Pre & Early Term Birth	*	Expand access to group prenatal care, such as centering pregnancy
Pre & Interconception Care	*	Connect women with coordinated care to support access to effective contraception
Risk Appropriate Perinatal Regionalization	*	State agencies & programs serving pregnant women and families such as home visiting and WIC, receive training and materials on appropriate levels of care
Social Determinants of Health	*	Promoting health equity in all policies

PRE & EARLY TERM BIRTH

Every week of pregnancy matters for the health of babies. Babies born

before full term (39 weeks) may encounter health issues and developmental disabilities. This learning network focuses on reducing early elective deliveries and increasing access to 17P to prevent pre & early term births.

AIM STATEMENT

- By July 2016, reduce prevalence of preterm and early term singleton births. States will:
1. Decrease non-medically indicated births between 37 0/7 weeks of gestation through 38 6/7 weeks of gestation by 20%;
 2. Increase the percent of pregnant women on Medicaid with a previous preterm birth who receive progesterone to 40%;
 3. Achieve or maintain equity in utilization of progesterone by race/ethnicity.

SMOKING CESSATION


Smoking during pregnancy causes several health problems, including premature birth (being born too early), birth defects, and infant death. Additionally, infants exposed to smoke may be at a higher risk for poor outcomes, such as SIDS. This learning network focuses on reducing tobacco use before, during, and after birth.

AIM STATEMENT

- By July 2016, we will reduce tobacco and nicotine dependency in women in their reproductive years. Our goals are to:
1. Increase the percentage of women who stop smoking prior to pregnancy relative to the state baseline by 10%
 2. Increase the percentage of women who stop smoke during pregnancy relative to the state baseline by 10%
 3. Increase the percentage of women who maintain cessation after deliver by 10% relative to the state baseline
 4. Increase the number of women enrolled in Quitline in reproductive years by 10% relative to state baseline
 5. In pilot sites: increase the percentage of smoking women who are referred to smoking cessation counseling

Risks from Smoking Before/During/After Pregnancy

Risks for	Risks for Baby:
◇ Increased risk for miscarriage	◇ Fetal death
◇ Difficulty getting pregnant	◇ Sudden Infant Death Syndrome
◇ Risk for pre & early term birth	◇ Babies born too small
	◇ Birth defects
	◇ Babies born early



PROMOTING YOUNG CHILDREN'S (AGES 0-3) SOCIOEMOTIONAL DEVELOPMENT IN PRIMARY CARE

ABSTRACT:

This report presents an overview of principles, recommendations, and interventions designed to address early childhood socioemotional development within the pediatric primary care setting. It provides high-level recommendations of next steps in order to develop a comprehensive theory of change around how to target interventions within the setting at scale to advance this work in the future.

NICHQ |

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EXECUTIVE SUMMARY

The National Institute for Children's Health Quality (NICHQ), Ariadne Labs, and the Einhorn Family Charitable Trust (EFCT) have worked together, in close partnership with experts in child health, early childhood development, and intervention delivery at scale, as well as lived experience experts (parents, grandparents, caregivers, etc.), **to define the opportunity to shape healthy socioemotional development for children ages 0 to 3 within the pediatric primary care setting**. This report presents an overview of principles, recommendations, and interventions designed to address early childhood socioemotional development and highlights aspects of those efforts that can be augmented, adapted, and built upon in the pediatric primary care setting.

BACKGROUND

Substantial literature highlights the importance of fostering socioemotional development in young children and the opportunity to do so within the context of pediatric well-visit care. Individuals' development in early childhood has critical implications on later physical, social, emotional, and economic outcomes.^{1,2} A healthy caregiver-child bond is critical for healthy socioemotional development; the child feels safe and securely attached and receives consistent and reliable responses from the primary adult caregiver.³ Indeed, the quality of infants' early relationships and interactions shape the architecture of the brain and affect long term sensory, language, and cognitive development.¹

Pediatric primary care is a nearly-universal, de-stigmatized point of connection for families with young children, even in high-risk populations. For example, 88 percent of children on Medicaid receive pediatric well-care in the first six months of life.^{4,5,6} These visits also serve as a source of trusted advice for families, especially when a longitudinal relationship can be established. Healthcare providers are in a unique position to address the intersection of physical and socioemotional health and development.^{7,8,9} Unfortunately, relatively few socioemotional interventions take place in primary care settings, and socioemotional screening within primary care for infants and toddlers is not universal.^{7,10}

FINDINGS

Through an **environmental scan**, **expert meeting**, and a **survey of the current field of interventions**, a vision of success and recommendations emerged for optimizing socioemotional development in the pediatric setting. This is captured within the following general principles:

- **All families** can benefit from and deserve enhanced socioemotional functioning.
- Approaches should be **widely available** to all families, not limited to "at-risk" groups.
- The **caregiver-child bond** may be viewed as a stepladder to help enhance socioemotional functioning. The goal of any approach should be to meet families where they are and help them move higher up the ladder.
- Optimize interactions and access to resources for all families before, during, after, and in between pediatric well-child visits.
- Identify families where socioemotional development is at risk. Connect these families to resources that match their risk and needs.

At the expert meeting, a broad range of experts (including those with lived experience, such as parents, grandparents, and caregivers) identified **11 specific design elements for the pediatric well-child visits that incorporate the above principles**. Six main design elements (#1-6) are relevant to the well-child visit itself. Five others (#7-11) relate to, but extend beyond, the clinical well-child visit.

1. Use well visits to **assess bond** between caregiver and child.
2. Model behaviors that promote socioemotional development during well visits.
3. Educate families about socioemotional development and age-appropriate expectations during visit.
4. Modify visit structure and timing to allow for meaningful interactions.
5. Provide access to extended care team members (i.e., in addition to the physician) during and between visits to continue family support and identify families requiring extra resources; build team unity so all care team members feel they are part of team (including parent supports and community supports).
6. Improve the quality of interaction between care team and caregivers.
7. Create an office culture that promotes openness and nurturing and fosters the bond between care team and caregiver, as well as caregiver and child.
8. Use the waiting room to foster and model pro-social interactions.
9. Provide all families with resources to promote socioemotional development and age-appropriate expectations between visits.
10. Connect families to tailored resources they can access during and between visits. Tier resources based on level of need. Use extended care team to help families navigate systems.
11. Use time between visits to strengthen bond between care team and caregivers.

The environmental scan and survey of existing interventions highlighted two key challenges to overcome on the path toward the vision of success. There is an overall **lack of standardized measurement of the caregiver-child bond**, which may be a reflection of the few existing standardized tools that measure it. In addition, there are **barriers to scaling**, including financing, training, buy-in, and the pediatric visit structure.

NEXT STEPS

The following five targeted lines of inquiry are recommended in order to further investigate how to overcome the key challenges and incorporate the 11 design elements to ultimately create optimal, scalable approaches for promoting socioemotional development via well-child care:

- **Identify and Implement Standardized Socioemotional Outcome Measurement within Primary Care Assessments** – Create a measure of the caregiver-child bond that can be implemented in pediatric care.
- **Define the Path for Scaling Interventions in the Pediatric Setting** – Clarify the path to achieving full scale within pediatric care, through case studies of prior scaling efforts within the setting and site visits to evaluate scaling successes and potential of current approaches.
- **Validate the Design Elements Recommended for Pediatric Well-Child Visits** – Work with interventions, providers, and/or practices to test and validate the six design elements related to the well visit.
- **Investigate Impact, Scalability, and Collaboration between Pediatric Care and Other Settings** – Examine the opportunities for synergy across settings, including the five recommended design elements that extend beyond the well visit.
- **Establish a Learning Community to Enhance Existing Interventions' Efforts to Scale** – Create a network for existing interventions to share scaling strategies and accelerate their scaling efforts.

There is a tremendous opportunity for the pediatric well-child visit to have a positive impact on the lives and socioemotional development of the overwhelming majority of U.S. families. Advancing these five next steps can strengthen efforts in primary care to promote the optimal healthy development that all children deserve.

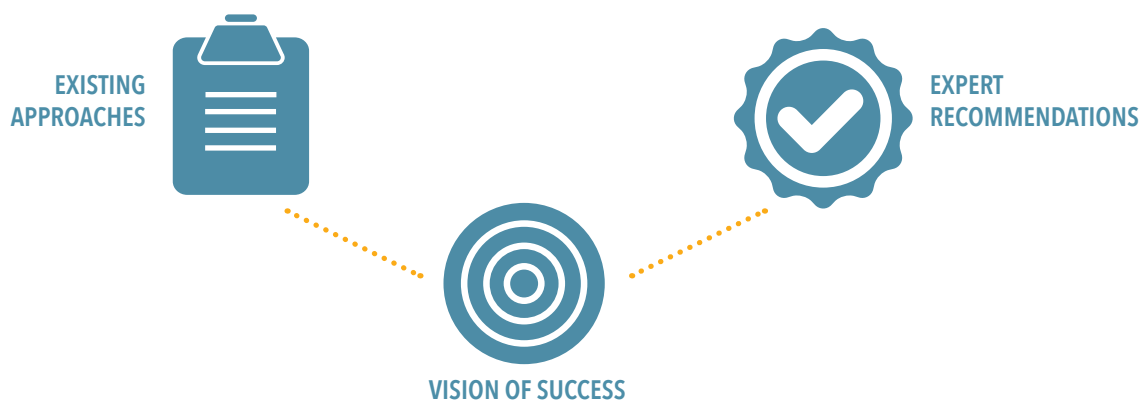
I. OVERVIEW

Early childhood is a critical window of opportunity for promoting socioemotional health which has significant implications on long-term wellness. Promoting optimal socioemotional development requires a comprehensive, system-wide approach, including ways to support all children and their parents across multiple settings. Pediatric primary care presents a promising and underutilized resource for driving impactful socioemotional health interventions that can be scaled and spread to the majority of all U.S. families.

The National Institute for Children's Health Quality (NICHQ), Ariadne Labs, and the Einhorn Family Charitable Trust (EFCT) have worked together, in close partnership with experts in child health, early childhood development, and intervention delivery at scale, as well as lived experience experts (e.g., parents, grandparents, caregivers), to define the opportunity to develop scalable interventions in the context of pediatric well-child care for children ages 0 to 3 (see the [Expert Meeting List](#) for full list of experts and their bios). **The goal of this work has been to identify optimal, scalable approaches for promoting healthy socioemotional development and improving the caregiver-child bond via well-child care.**

This effort has involved three focus areas:

- **Existing Approaches** used by current interventions in this space
- **Expert Recommendations** for key design elements required in potential approaches
- **Vision of Success** for the future, outlining general principles and recommendations to achieve optimal, scalable approaches for promoting socioemotional development via well-child care



This report presents an overview of principles, recommendations, and interventions that are designed to address early childhood socioemotional development, and highlights aspects of those efforts that can be augmented, adapted, and built upon in the pediatric primary care setting. It provides high-level recommended next steps to develop a comprehensive theory of change to use in future work to scale socioemotional interventions.

II. BACKGROUND

SOCIOEMOTIONAL DEVELOPMENT

Healthy socioemotional development entails the ability to play, communicate, learn, face challenges, form satisfying, trusting relationships with others, and experience and handle a full range of emotions.¹¹ Substantial literature highlights the importance of fostering socioemotional development in young children and the opportunity to do so within the context of pediatric well-visit care. Individuals' development during early childhood has critical implications on later physical, social, emotional, and economic outcomes, including better cognitive, linguistic, and executive functioning skills; improved moral and regulatory outcomes; and improved high school graduation, employment, and incarceration rates.^{1,2} Many things lead to children not achieving their full potential, including on the most serious end of the spectrum, adverse childhood experiences (e.g., absence of serve and return, trauma, neglect, abuse).^{1,2,12,13}

A healthy caregiver-child bond is critical for healthy socioemotional development; the child feels safe and securely attached and receives consistent and reliable responses from the primary adult caregiver.³ Indeed, the quality of infants' early relationships and interactions shape the architecture of the brain and affect long term sensory, language, and cognitive development.¹ Individuals' ability to develop crucial coping mechanisms such as empathy and resilience stems from relationships and experiences in this critical, earliest time period. There are varying levels of attachment and effective relationship building between parents and children that can shift over time.^{14,15}

There has been a significant focus on children's cognitive development and achieving developmental milestones, but traditionally less focus on socioemotional development. In recent years, that has begun to change. While many existing programs focus on the poor and underserved, literature reveals that 15 percent of children who are not at high socioeconomic risk exhibit disorganized attachment with their caregiver.^{16,17} This indicates that intervention is required across classes in order to achieve a widely scalable approach to benefit as many children and families as possible.





PEDIATRIC PRIMARY CARE SETTING

There are many settings for addressing young children's socioemotional development. Such settings include the home, community centers and programs, early childhood education centers, and healthcare providers.^{18,19} Of these potential settings for intervention, focusing on primary care is promising for a variety of reasons. Pediatric primary care is a nearly-universal, de-stigmatized point of connection for families with young children, even in high-risk populations. For example, 88 percent of children on Medicaid receive pediatric well-care in the first six months of life.^{4,6,20} These visits also serve as a source of trusted advice for families, especially when a longitudinal relationship can be established. This makes it a very strong point of entry for mental health screening, early intervention, and linkages to appropriate services as necessary.²¹ The Early Periodic Screening, Diagnosis, and Treatment schedule for well-child care recommends ten well-child pediatric visits in the first three years of life, and 13 by age five.⁶ With ten distinct chances for interaction, there is opportunity for longitudinal engagement and building of trust between families and their children's primary care teams.

Healthcare providers are in a unique position to address the intersection of physical and socioemotional health and development.^{7,8,9} Unfortunately, for a number of reasons, many may not engage with families in conversations on this topic, relatively few of the multitude of socioemotional interventions take place in primary care settings, and socioemotional screening within primary care for infants and toddlers is not universal.^{7,10} The lack of interventions in this arena likely is due in part to perceived inherent design challenges. Primary care providers face increasing demands for non-clinical responsibilities such as billing, documentation, and evaluation. Some primary care providers also report lack of confidence and/or training to conduct socioemotional screening.²² While clinicians already have numerous competing demands for a brief visit, including physical growth and development, household safety, and vaccinations, providers who have participated in socioemotional health interventions have reported that time constraints did not weigh heavily in terms of limitations.⁸ There is a clear opportunity for interventions, sensitive to the barriers and competing demands in the primary care space, to strengthen the promotion of socioemotional development in pediatric well-child care.

III. APPROACHES

An in-depth environmental scan was conducted to gain a rich understanding of the current state of evidence and the key levers for addressing the issue of socioemotional development in early childhood. This process identified what types of interventions currently exist, what populations they serve, and what outcomes they are achieving. The assessment included:

- Review of the peer-reviewed literature
- Review of the “grey literature,” such as unpublished reports and websites
- Scan of related initiatives, e.g., based on program websites
- Key informant interviews to fill in any gaps in the scan

The research revealed that there are a multitude of interventions focusing on promoting young children’s socioemotional development. These interventions exist in a variety of settings, including but not limited to, the outpatient clinical setting. Given the potential for interventions to be adapted from one setting to another, the environmental scan examined interventions across multiple settings and included an analysis of interventions with some evidence of impact. Each of these 29 interventions, as well as six that were later identified through expert nomination, is presented by setting in the table on the following page. For more details and references, please refer to the [full environmental scan document](#).

The 25 intervention programs in Group 1 (“Promising Interventions”) were included based on expert nomination and/or repeated mention in the literature. They are grouped together because they were assessed through a diversity of evaluation methods.

In the case of intervention programs that use home visiting for part or all of their intervention model, the Department of Health and Human Services (DHHS) has established criteria for evaluating the effectiveness of programs and impact on outcomes in key areas. The 10 interventions in Group 2 are all home visiting programs that have been deemed by the DHHS to meet Home Visiting Evidence of Effectiveness criteria for early childhood home visiting,²³ and that demonstrated positive outcomes in at least one of the following three areas: child development and school readiness, maternal mental health, and/or positive parenting.



INTERVENTIONS FOCUSED ON PROMOTING YOUNG CHILDREN'S SOCIOEMOTIONAL DEVELOPMENT

PROGRAM NAME/SETTING*	CS	ECE	HV	FC	OP	NICU	S
GROUP 1: "PROMISING INTERVENTIONS"							
1. ACE Screening Intervention							
2. Assuring Better Child Health and Development (ABCD) Program							
3. Brazelton Touchpoints; Newborn Behavioral Observation**							
4. CenteringParenting**							
5. Circle of Security Parenting**							
6. Collaborative Problem-Solving Approach							
7. DULCE							
8. Family Foundations							
9. Family Nurture Intervention							
10. FIND Video Coaching							
11. Healthy Start + Family Thriving Program							
12. Incredible Years Advanced Parenting Education in Pediatrics (APEP)							
13. Infant Health and Development Program							
14. Newborn Individualized Developmental Care and Assessment Program (NIDCAP)							
15. Parent-Child Interaction Therapy							
16. ParentCorps							
17. Project LAUNCH							
18. Reach Out and Read**							
19. Reaching Educators, Children and Parents							
20. SafeCare							
21. Smart Start							
22. The Parent-Child Home Program							
23. Thirty Million Words**							
24. Triple P-Positive Parenting							
25. Video Interaction Project**							
GROUP 2: APPLYING HOME VISITING AND PREVIOUSLY ASSESSED AGAINST UNIFORM CRITERIA							
26. Child FIRST (CF)							
27. Early Head Start–Home Visiting (EHS-HV)							
28. Family Check-Up (FCU)							
29. Family Spirit (FS)							
30. Healthy Families America (HFA)							
31. Healthy Steps (HS)							
32. Minding the Baby (MTB)							
33. Nurse Family Partnership (NFP)							
34. Parents as Teachers (PAT)							
35. Play and Learning Strategies (PALS)							
Grand Total (Across All 35 Interventions)	11	7	20	2	20	3	6

*Abbreviations for Settings: CS = community setting, ECE = early childhood education, HV = home visiting, FC = foster care, OP = outpatient clinical setting, NICU = neonatal intensive care unit, S = school

**Expert Nominated

Of the 35 interventions reviewed, 20 included application (in part or in full) in the outpatient healthcare setting. However, none of them currently reach even one in ten children, with the largest intervention currently reaching less than 7% of the U.S. population aged 0-5, and most only currently reaching around 1,000 children a year (about .00001% of this population). Furthermore, although the self-reported work of larger interventions reaches more children, socioemotional development is addressed in a much more diminished intensity within those interventions than within smaller interventions. To promote positive socioemotional development in the majority of children, intervention efforts must be expanded. Given the potential reach of the primary care setting, experts in the field want to identify the barriers to full scale while also more fully understanding the level of scale being achieved by current interventions. Some existing barriers to scale that have already been identified include:

- Well-child visits are predominantly fee-for-service, short visits
- The focus of the visits is physical growth and development
- Most well-child care is provided by physicians (some by additional staff), and physicians do not necessarily receive training on how to promote socioemotional development
- Development and mental health are, indeed, increasing concerns and areas of focus in pediatrics, but as previously stated, the field is still not routinely engaging in primary prevention around socioemotional development specifically

More data about current reach and barriers to scale can be found in [Section IV](#).

For those interventions that are not currently in the outpatient setting, there may also still be promise for adaptation to achieve scalability in primary care. This potential is based, in part, on the success of these interventions with prior adaptations. Many of the interventions have been implemented in a wide variety of populations, and most of the interventions did successfully adapt to new settings, populations, and areas beyond their original scope. Specifically:

- 17 of these interventions already exist in multiple settings
- Many existing interventions are implemented in a variety of populations, including across cultural contexts, languages, and geographies
- Several interventions exist in multiple modalities, including in-person, online, and/or video components
- Many of the interventions allow for a variety of implementers to administer them, including parents themselves, health and social service professionals, early childhood specialists, and community members/peer educators who receive special training

It should be noted that due to the diversity of measurement among existing interventions, it is currently very challenging to evaluate the impact and effect across interventions that focus on young children's socioemotional development and health. However, these intervention programs have demonstrated adaptability and success in reaching new populations, indicating promise for potential scale within the pediatric well-visit setting. (For further detail, please refer to the [full environmental scan document](#).)

IV. EXPERT RECOMMENDATIONS

EXPERT MEETING: EXPLORING OPPORTUNITIES IN PRIMARY CARE

NICHQ, Ariadne Labs, and EFCT convened 67 experts (including 39 content experts and 28 lived experience experts—see the [Expert Meeting List](#) for full list of experts and their bios) in Boston, MA, for a two-day expert meeting to identify opportunities within pediatric primary care to promote optimal socioemotional development (for children ages 0-3). The two days were informed by the results of the environmental scan, and facilitated by leaders from NICHQ (Shikha Anand and Marianne McPherson), Ariadne Labs (Atul Gawande and Lisa Hirschhorn), the Design Team (a small group of experts in the fields of scale, early childhood, and program design and implementation, as well as lived experience experts such as parents), and Nancy Settle-Murphy from the facilitation, training, and communications consulting firm Guided Insights.

The expert participants defined success both from the perspective of a family as well as the population-level community perspective, and proposed measures of success for the short-term (6-12 months) and longer term (3-5 years).

Expert participants reinforced the opportunity to help all children and families improve their socioemotional function, being inclusive of all primary caregivers (e.g., mothers, fathers, grandparents). At the same time, experts acknowledged the need for particular attention to children and families who might fall into at-risk groups, on a variety of criteria (e.g., socioeconomic status, social isolation, adoptive parents).

The underlying premise around identifying possible intervention approaches was that caregiver-child interactions are critically important for children's short and long-term emotional wellness and health. This dynamic can also impact the parents' wellbeing, which in turn influences the child. Parenting is hard; even pediatricians, who have extensive formal training in infant care, report feelings of inadequacy when caring for young children. There is evidence for a number of successful interventions that have improved parent and child outcomes. While certain factors increase the risk of poor socioemotional development, all families deserve attention in this area. Primary care is a unique and important opportunity for multiple reasons including that almost all families bring their children to well-child visits multiple times starting early. There are varying levels of attachment and effective relationship building between parents and children that can shift over time.^{15,18} This continuum could be likened to a stepladder, with the possibility of improving the relationship and moving higher up the ladder, while recognizing that families may move up and down the ladder toward an overall progression, with providers always meeting families where they are.

Key ideas for consideration in pediatric primary care-based intervention aimed at improving the caregiver-child bond and the child's socioemotional development included:

- Success for both parent and child, measuring the relationship and engagement of the whole family
- Measuring the extent to which children receive appropriate services and educational placements
- Measuring whether parents have improved levels of support, self-efficacy (especially re: health-seeking skills), and mental health
- Strengthening the community (e.g., measuring the socioemotional health of the community)
- Better organized and integrated systems of care (including health and education)
- Greater involvement at the community level and concept of socioemotional community health

Based on the environmental scan and synthesis from the expert meeting held in June, a vision of success and recommended design elements emerged in relation to optimizing socioemotional development in the pediatric setting. It is important to think of these findings as an “ideal state”, and consider what is possible and reasonable for adaptation and adoption in the pediatric setting.

VISION OF SUCCESS: GENERAL PRINCIPLES

A vision of success and recommendations emerged for optimizing socioemotional development in the pediatric setting. This is captured within the following general principles:

- **All families** can benefit from and deserve enhanced socioemotional functioning.
- Approaches should be **widely available** to all families, not limited to “at-risk” groups.
- The **caregiver-child bond** may be viewed as a stepladder to help enhance socioemotional functioning, with the possibility of always improving the relationship and moving higher up the ladder. The goal of any approach should be to meet families where they are, and to acknowledge that while a family may move up and down the ladder over time, there is an opportunity for overall progression that moves higher up the ladder.
- Optimize interactions and access to resources for all families before, during, after, and in between pediatric well-child visits.
- Identify families where socioemotional development is at risk. Connect these families to resources that match their risk and needs.

WELL-CHILD VISIT RECOMMENDED DESIGN ELEMENTS

The participants in the expert meeting identified 11 recommended design elements for the well-child visit that incorporate the general principles outlined above. The design elements have been grouped into those that are relevant to the well-child visit itself, and those beyond, but related to, the clinical well-child visit. Implementing, at scale, all 11 design elements might require broad-based systems change, so it is not surprising that no existing program currently addresses all design elements.

These elements represent the overarching themes of the numerous suggestions that came from the expert meeting. While they include both experiential design elements and others that simply offer information, the research on behavior change has found that experiential elements play a primary role. In addition, further testing would be required to determine if each element can be implemented along a spectrum or is purely binary (e.g., the element exists or it does not). It is understood that full implementation is an ideal state developed by participants; there may be incremental steps and iterations, as well as testing and revision, in order to improve the well-child visit over time.

DESIGN ELEMENTS RELEVANT TO THE WELL-CHILD VISIT CLINICAL ENCOUNTER



DESIGN ELEMENT 1:

Use well visits to assess bond between caregiver and child

- > Implement universal written screener for socioemotional development, similar to developmental assessment tools
- > Assess for physical punishment and punitive parenting methods
- > Assess stressors/vulnerabilities that are interfering with caregiver/child bond (barriers)
- > Give caregivers tools for self-reflection, allowing them to choose to disclose reflections with care team during visit
- > Use direct observation (consider checklist) to assess strength of bond, tailor intervention according to bond strength: may observe reading, feeding, playing, talking, diaper changing
- > Use wordless books to see parent-child socioemotional connections
- > Take time alone with primary caregiver to assess bond with his/her partner
- > Assess major stressors: domestic violence, depression, food, education, and housing insecurity



DESIGN ELEMENT 2:

Model behaviors that promote socioemotional development during well visits

- > Use props in exam room to model serve and return relationship (posters, exam table paper, wallpaper, etc.)
- > Model something doable as take away for parent to use later when needed
- > Use every opportunity for care team to model serve and return behaviors: check in, vital signs, physical exam, immunizations, check-out
- > In exam: ask about favorite games of parent – demonstrate a relevant, age appropriate game (tossing a ball back and forth, give toy or game to family, etc.)
- > Use the post-vaccination time to model calming behaviors



DESIGN ELEMENT 3:

Educate families about socioemotional development and age-appropriate expectations during the visit

- > Use technology to point to micro-strategies/skills/stories via smartphone during visit, encourage caregivers to access same resources post-visit
- > Take videos of caregivers and children playing together during visit for strength based feedback
- > Provide information about breaking bread together as a family (quality of time more important than quantity)
- > Educate caregivers regarding responding to infant cries
- > Educate caregivers about how to handle age-appropriate behaviors including crying, tantrums, defiance, hitting
- > Educate caregivers about age-appropriate punishment





DESIGN ELEMENT 4:

Modify visit structure and timing to allow for meaningful interactions

- > Create opportunity for each family to meet care team before birth; ensure care team has access to information about prenatal care and course
- > Use vital signs assessment as opportunity for medical assistant or nurse to have private conversation with family before they see pediatrician
- > Redesign visit to create time alone between pediatrician and caregiver while children are being watched by care team or volunteer
- > Use group well-child care to promote bonding between caregivers and children, model behaviors, and allow families to teach each other with care team during visit
- > Separate room for well-care and for sick child – opportunity for quick conversation and screening
- > Create opportunities for more frequent check-ins with families beyond well visits to address/monitor concerns
- > Use well-child visit also as well-parent visit (use family medicine model)
- > Make each well-child visit a longer visit



DESIGN ELEMENT 5:

Provide access to extended care team members

(i.e., in addition to the physician) during and between visits to continue family support and identify families requiring extra resources; build team unity so all care team members feel they are part of team (including parent supports and community supports)

- > Horizontal supports: Parent advisory council, caregiver matching for 1:1 peer support, intergenerational pairing (use retired volunteers to help caregivers navigate early childhood parenting)
- > Care coordinator for caregiver and child – help accessing medical, mental health, and community resources
- > On-site mental health professional
- > Social worker
- > Developmental specialist (e.g., Healthy Steps, DULCE)
- > Nurture Specialist to coach caregivers in calming cycles strategy
- > Visiting nurse or other home visiting specialist
- > Primary care/women's health providers/behavioral health providers for caregivers



DESIGN ELEMENT 6:

Improve quality of interaction between care team and caregivers

- > Take a picture of baby at each well visit and give to the family, use to discuss socioemotional development
- > Use video conferencing to make it easier for all caregivers to attend well visits (consider cell phones as low-cost solution)
- > Strengths-based comments during, before, and after visit
- > Begin with encouragement and strengths-based guidance, then move on to provider concerns
- > Require protected interactions – eye-to-eye, no screen, pay attention
- > Normalize the "What's your child's challenge" conversation, as well as the "What's your challenge as a caregiver" conversation (standard script)
- > Explain how baby is doing from socioemotional perspective, ask meaningfully how caregivers are doing

- > Ask open-ended questions to encourage family opening up, build trust
Begin visit with question that makes parents feel safe ("It's hard, isn't it?", "How do you enjoy your baby?")
"How can I help?" vs. "What do you need?"
"What are your priorities – what is important to you?"
"Tell me how you chose baby's name."
"What is the most exciting moment you have had with your child since the last visit?"
"Is parenting/ caregiving what you expected?"
"How can I support you?"
- > Use physical exam to engage caregivers with opportunity for family to ask questions
- > End with open-ended question ("Is there anything you want to tell me about your child that I haven't seen?")
- > Ensure child and caregiver leave feeling calm and safe – allow time to calm down if upset (e.g., immunization visits); model calming behaviors

DESIGN ELEMENTS RELATED TO BUT EXTENDING BEYOND THE WELL-CHILD VISIT CLINICAL ENCOUNTER



DESIGN ELEMENT 7:

Create an office culture that promotes openness and nurturing and fosters the bond between care team and caregiver, as well as caregiver and child

- > Make patient feel acknowledged, respected, and welcomed
- > Ensure cultural competency by training staff in cultural norms of families most often represented in practice
- > Decrease stressors inherent to provider visit

- > Ensure team is accessible between visits; visit times are available and convenient
- > Ensure pediatrician and care team are trained in socioemotional development; what to ask and how to relate
- > Change ecology; make it a norm that parents know to expect a focus on socioemotional development, nurturing, calming
- > Connect as people, not power dynamics; relate and remember first parenting moments, first time care team members brought their children to pediatrician
- > Training for care teams to learn and be accountable for focusing on socioemotional issues and how to model serve and return behaviors
- > Protocol and train active listening/empathy for care team



DESIGN ELEMENT 8:

Use the waiting room to foster and model pro-social interactions

- > Meet immediate needs of families to increase comfort (water, snacks, entertainment)
- > Use waiting room TV, and staff who will conduct waiting room activities (e.g., play therapists, community health workers, family partners) to model pro-social behavior; include fathers and other caregivers as examples (not just mothers)
- > Teach about nurturing in waiting room (e.g., NOORA Health)
- > Conduct play groups in the waiting room with leader that is trained in social and emotional development (consider parent volunteer, community health worker)
- > Use a waiting room greeter to check in with families, ask what's on their minds, and if any needs are unmet (doula, parent/family leader, care coordinator, social work student)
- > Use parent coaches (grandparents) who guide parent in goal setting, in waiting room
- > Use waiting room to assess physical family needs (housing, education, child care, etc. – e.g., Health Leads)



DESIGN ELEMENT 9:

Provide all families with resources to promote socioemotional development and age-appropriate expectations between visits

- > Digital tools that have songs, games, video to promote socioemotional development (e.g., F.I.N.D. program at Oakland Children's Hospital)
- > "0-3 Toolkit" – a big packet that pediatrician can give away on the first visit
- > Provide all families with information about WIC and food, housing, health, mental health, domestic violence, child care, child development, opportunities for parent/child development; distribute this information with vaccination information and anticipatory guidance (e.g., Bright Futures)
- > Give families toys, books, activities (printed out) for engagement after visit so they can practice what they have learned during visit
- > Every pediatrician/primary office team universally should have pamphlets and a tablet (e.g., iPad) with information that mirrors the life cycle needs from comprehensive approach
- > Information on what secure attachments look like available in different mediums (pamphlet, tablet, kiosk)
- > An app that takes/reinforces what families have learned about socioemotional development during well visit
- > Kiosk or tablet with comprehensive info for families with community resources from food pantries to playgrounds
- > Connection to existing parenting groups and family partners in community; community supports to promote socioemotional development (play groups, etc.)





DESIGN ELEMENT 10:

Connect families to tailored resources they can access during and between visits. Tier resources based on level of need. Use extended care team to help families navigate systems.

- > Local resource guide – available through technology (app, website), printed, and printable through kiosks in office that are searchable by need
- > Social worker to address social concerns
- > Domestic violence coordinator (clinic or community based), shelters, emergency numbers
- > Housing assistance
- > Legal assistance for custody, housing, labor, and immigration issues
- > Behavioral health professional for family mental health concerns
- > Substance use resources
- > Parents and families with similar challenges: social, mental health, physical health
- > Behavioral interventions delivered via video/computer



DESIGN ELEMENT 11:

Use time between visits to strengthen bond between care team and caregivers

- > Courtesy follow-up phone call 2-3 days after each well visit to ensure needs and concerns have been addressed, answer follow-up questions
- > Parent coordinator within clinic to support the medical team with 5-10 minute follow-up calls/check-ins or pre-visit calls to help build relationship and establish trust with families
- > Build awareness of accessible pathways to engage with care team between visits
- > Follow up to close the loop on each referral
- > Call each family who has missed an appointment
- > Create opportunities to email/text providers between visits to make the physician more a part of the core team that is helping family raise a child; use pictures, stories to ensure care team gets to know child
- > Use technology communication mediums to enable structured follow-up between pediatrician and family



INTERVENTION SURVEY

In order to gather primary data on current best practices in the field about the design elements, a [survey](#) was disseminated to implementers and experts engaging in existing interventions within the field. Specifically, the survey captured:

- Information about each intervention, description of its implementation, and its relationship to the primary care context
- Self-assessment of the extent to which each intervention currently addresses, has the potential to address, and has existing barriers to implementing design elements in relation to optimizing socioemotional development in the pediatric setting
- Key measures related to the intervention to measure success at scale
- Considerations for scale, related to the intervention's current state

Of the existing interventions identified through the [environmental scan](#) and through expert nomination, 26 provided further detail about their intervention's current state, measurement, and applications for scaling existing and potential approaches. These interventions can be found in the table below. The majority of these interventions were designed to be implemented across multiple settings, although some are not currently in use in the primary care setting. *Italicized interventions* denote the 10 interventions that do not focus within the primary care setting:

- | | |
|--|--|
| ➤ ACE Screening Intervention | ➤ Incredible Years Advanced Parenting Education in Pediatrics (APEP) |
| ➤ Brazelton Touchpoints; Newborn Behavioral Observation | ➤ Infant Health and Development Program |
| ➤ CenteringParenting | ➤ Minding the Baby (MTB) |
| ➤ Circle of Security Parenting | ➤ <i>Newborn Individualized Developmental Care and Assessment Program (NIDCAP)</i> |
| ➤ Collaborative Problem-Solving Approach | ➤ <i>Nurse Family Partnership (NFP)</i> |
| ➤ DULCE | ➤ <i>ParentCorps</i> |
| ➤ <i>Family Check-Up (FCU)</i> | ➤ <i>Play and Learning Strategies (PALS)</i> |
| ➤ Family Foundations | ➤ Reach Out and Read |
| ➤ <i>Family Nurture Intervention</i> | ➤ <i>SafeCare</i> |
| ➤ <i>FIND Video Coaching</i> | ➤ <i>The Parent-Child Home Program</i> |
| ➤ Healthy Start + Family Thriving Program | ➤ <i>Thirty Million Words</i> |
| ➤ Healthy Steps | ➤ Triple P-Positive Parenting |
| ➤ Healthy Steps and Child and Adolescent Integrated Behavioral Health* | ➤ Video Interaction Project |

**Note: "Healthy Steps and Child and Adolescent Integrated Behavioral Health" was reported as a separate intervention from "Healthy Steps" due to variations in structure and approach*

Due to the subjective nature of the survey, the accuracy and efficacy of interventions' alignment with the design elements could not be determined. Overall, self-reported achievement, potential, and barriers to those design elements did not have strong relationships with interventions' characteristics or settings.

CURRENT STATE: MEASUREMENT ALIGNMENT

A variety of measurement tools are used to determine the impact of interventions focusing on young children's socioemotional development and health, though it should be noted that there was generally a distinct lack of measurement of the caregiver-child bond. Among the existing intervention programs outlined in the environmental scan, the 10 most-frequently-utilized, validated, reliable measurement scales are:

1. Achenbach System of Empirically Based Assessment–Preschool Module (ASEBA)²⁴
2. Ages and Stages Questionnaire (ASQ)²⁵
3. Bayley Scales of Infant Development (BSID)²⁶
4. Brief Infant/Toddler Social Emotional Assessment (BITSEA)^{30,27}
5. Beck Depression Inventory (BDI)^{28,29}
6. Center for Epidemiological Studies-Depression (CES-D)³⁰
7. Child Development Inventories (CDI)³⁰
8. Eyberg Child Behavior Inventory (ECBI)²⁹
9. Parents Evaluation of Development Screening (PEDS)³⁰
10. Parenting Stress Index (PSI)^{31,32}

Language adaptations frequently exist for these instruments, and the majority can be self-administered by parents and caregivers in less than 20 minutes. Only one of the tools, the Parenting Stress Index, identifies risks for both child and parent problematic behavior. Several measures are designed for the youngest children under one year of age, but several others are only suitable for toddlers and older children.

Of the 26 interventions that reported measurement use, 23 identified a total of 64 unique measurement tools and approaches that were being or had been used to assess the success of their interventions. Ten of the interventions only measured children's socioemotional health, while 13 measured both parent and child socioemotional health. It should be noted that the majority of parental measurements were focused on measures of maternal depression, a significant risk factor to the mother-infant relationship dyad and children's overall socioemotional development.³³ Of the measures that corresponded to socioemotional health of either parent and/or child (age range 0-3), 11 measures were identified as being used within more than one intervention, as shown in the table below:

REPORTED FREQUENCY OF STANDARDIZED MEASUREMENT/SCALE USE BY INTERVENTIONS

MEASUREMENT/SCALE	FOCUS			FREQUENCY UTILIZED
	CHILD	PARENT	DYAD	
ASQ-SE: Ages and Stages Questionnaire - Social-Emotional				7
CBCL/1.5-5: Child Behavior Checklist				4
BASC or BASC-2: Behavior Assessment System for Children				3
PSI/PSI short form: Parenting Stress Index				3
ACE: Adverse Childhood Experiences scale				2
BDI: Maternal depression				2
CES-D: Center for Epidemiological Studies Depression Scale				2
MCHAT: Modified Checklist for Autism in Toddlers				2
PHQ: PHQ2, PHQ2 for maternal depression, PHQ9				2
PRFQ: Parental Reflective Functioning Questionnaire				2
SDQ: Strengths and Difficulties Questionnaire				2

Only eight interventions specifically measured the caregiver-child bond, and only three of those eight utilized a standardized and validated measurement battery—the PSI (Parenting Stress Index)—as noted in the chart above. However, the PSI only focuses on domains of caregiver-child relationship stress. Among the other five interventions that measured the caregiver-child bond, one utilized standardized batteries that focus on more holistic measurement of the caregiver-child relationship—the PACT (Parent and Child Together scale), and CAPES (Child Adjustment and Parent Efficacy Scale)—but these are still developing norms for psychometric assessment validation.^{34,35}

While current interventions are measuring socioemotional health, they are not doing so holistically across both the parent and the child. In particular, **there is limited measurement of the caregiver-child bond among existing approaches, and the current measures being used require more validation.** The overall lack of standardized measurement for the caregiver-child bond may be a reflection of the paucity of existing tools found within the current literature that measure this dyad.

Use of standardized measurement batteries—such as the ASQ-SE and CBCL—had moderate positive effects on an intervention’s reported fulfillment of the design elements. Interventions that utilized standardized measures also generally reported fewer barriers than those that did not. This relationship may indicate standardized measurement’s utility in helping to achieve the design elements recommended for the well-child visits, or may be an indication of the overall strength of an intervention’s design and rigor.

INTERVENTION POTENTIAL, BARRIERS, AND CONSIDERATIONS FOR SCALE

Respondents were asked for suggestions related to measuring the caregiver-child bond at scale. Their suggestions included some standardized measures, but many are currently in development. Therefore, the efficacy of such measures is not yet known. The full list of suggestions for potentially measuring the success of strengthening the caregiver-child bond at scale includes:

- Measuring Alpha Amylase as an indicator of stress among parents and their very young children
- Quality of life measures for children and parents
- Additional measures of adult functioning (from a two generational perspective)
- Strange Situation Procedure measurement
- Simple measure of attachment besides the Strange Situation or Adult
- Attachment Inventory
- Brief Infant Toddler Social Emotional Assessment
- Parenting skills measures (e.g., Parenting Scale, Parent and Family Adjustment Scale)
- Parenting self-efficacy measures (e.g., Parenting Tasks Checklist, CAPES)
- Parent adjustment measures (e.g., Depression Anxiety Stress Scale)
- Parental relationship measures (Relationship Quality Index)
- Assessment of parent agreement over discipline (Parent Problem Checklist)
- Longitudinal and standardized use of PACT and CBT across all sites
- Parent Development Interview

All but two interventions specifically reported financial barriers to scaling their intervention, particularly in terms of continued funding (n=7), personnel (n=6), resources (n=6), training (n=4), and payer reimbursement (n=4). Beyond financial constraints, the primary reported barriers to scaling up were:

- Current intervention’s ability to maintain fidelity of concept, implementation, and training
- Gaining additional awareness and dissemination of the intervention
- Adapting and translating to appropriate contexts, cultures, and demographics beyond those originally addressed
- Obtaining sufficient scientific supporting evidence to increase clinical community credibility

These complement some of the existing barriers to scale that were identified within the environmental scan and described in [Section III](#).

V. VISION OF SUCCESS: NEXT STEPS

Based on the results of this project, the following five targeted lines of inquiry are recommended in order to further develop a theory of change for creating optimal, scalable approaches for promoting socioemotional development via well-child care. While the literature search was exhaustive and supported by a subset of experts within the field, lesser known interventions, interventions in development, or alternative interventions that use a combination of approaches could have been overlooked. In considering these lines of inquiry, it is also important to consider feasible interventions that may not even exist yet. Further testing and identification of areas for innovative scale may lead to modification or adaptation of these recommendations.

1. IDENTIFY AND IMPLEMENT STANDARDIZED SOCIOEMOTIONAL OUTCOME MEASUREMENT WITHIN PRIMARY CARE ASSESSMENTS

The importance of the caregiver-child bond's influence on socioemotional development is well recognized. There is an evident need to address the scarcity of existing validated measurement tools and relatively low instances of interventions measuring this critical bond in a standardized way within the context of the pediatric setting. Additionally, further investigation is needed to understand how interventions are currently addressing and measuring the caregiver-child bond and the stepladder of its socioemotional function, and how those processes can be improved and/or standardized.

More extensive and consistent use of standardized measurement may help ease an intervention's overall adoption within the primary care setting. Given the complexity of applying and implementing standardized measurement across diverse contexts and adopting at a larger scale, small pilot-level tests and collaboration among interventions may be necessary to accelerate this process.

Proposed Next Steps to create a validated measure for the caregiver-child bond:

- Identify common elements within any existing measurements of the caregiver-child bond.
- Develop, test, and implement a standardized measurement tool for assessing both improvement in socioemotional development outcomes within the context of the caregiver-child bond, and the caregiver-child bond itself.
- Ensure that adoption within existing interventions is feasible.
- Design a pilot learning collaborative using quality improvement methods that enables socioemotionally-focused interventions to implement this adoption.

2. DEFINE THE PATH FOR SCALING INTERVENTIONS IN THE PEDIATRIC SETTING

The work thus far has examined existing relevant interventions primarily through self-reporting. A more in-depth analysis, including direct observation, could provide a better understanding of which interventions, as well as which of their components, have had the most success in scaling or have the most potential for scaling. Additionally, it could be useful to examine other practices that have been scaled in the pediatric setting and how lessons from those efforts could inform scaling in the area of socioemotional development.

Proposed Next Steps to gain greater clarity and understanding about the path to achieving full scale in the pediatric well-child visit setting:

- Directly observe leading interventions to further identify best practices around scaling approaches in the pediatric setting.
- Investigate cases of other successful scaling practices within the pediatric setting to determine how they can be applied to the area of socioemotional development and scaling of the expert meeting recommended design elements.

3. VALIDATE THE DESIGN ELEMENTS RECOMMENDED FOR PEDIATRIC WELL-CHILD VISITS

In order to adopt the identified expert meeting design elements within the primary care clinic effectively, further exploration and evidence is needed to understand their interaction and impact in the field. Furthermore, the validity and viability of these design elements needs to be assessed with providers and other key experts. Knowledge must be gathered around how these inter-related design elements can be operationalized for specific settings and populations, whether they need to be implemented holistically or can be taken separately, and whether their prioritization is feasible.

If taken separately, it will be important to understand which design elements are most relevant for a specific intervention's approaches and contexts. Additionally, when considering the possible inclusion of one or more of these design elements into current practice, small tests should be administered to learn the necessary components for successful adaptation at larger scales. A learning collaborative model could be used to enable a small subset of interested providers to use and assess different interventions and the recommended design elements while learning from one another. Such a model has been used in several instances at NICHQ to effectively increase hospitals' adherence to and attainment of the WHO's 10 Steps to Successful Breastfeeding.

Proposed Next Steps to validate the design elements recommended for pediatric well-child visits:

- In partnership with the American Academy of Pediatrics, identify "bright spot" pediatric practices that are strengthening socioemotional development and caregiver-child bond to assess the practices' incorporation of the design elements.
- Create a tool that assesses intervention outcomes, in relation to incorporation of design elements, to improve the caregiver-child bond, both holistically and individually.
- Work with interventions and/or providers and practices through a learning collaborative model to administer, integrate, and incrementally test these design elements and their impact on providers.

4. INVESTIGATE IMPACT, SCALABILITY, AND COLLABORATION BETWEEN PEDIATRIC CARE AND OTHER SETTINGS

It is critically important to look at a child's life holistically. The survey of interventions gathered information pertaining to the six design elements strictly within the context of the well-child visit clinical encounter. While the research and experts agree on the potential of the pediatric well-child visit setting to address socioemotional development, the best opportunities to address this issue will likely span across multiple settings. Therefore, the five expert meeting design elements that were related to, but extending beyond, the well-child visit clinical encounter should also be considered. When considering an intervention's inherent scalability and feasibility, one must also look at its effectiveness.

It is important to acknowledge other settings' impact on socioemotional development, and how they might be leveraged through collaboration with primary care settings. Because intervention outcome data have thus far been self-reported, a different assessment approach is needed to determine which potential interventions are the most appropriate, effective, and scalable, particularly in terms of impact and resources. Given the low number of identified interventions exclusively focused on primary care, further investigation is also needed.

Proposed Next Steps to understand the opportunities for impact, scalability, and collaboration between the pediatric setting and other settings:

- Examine the existing impact and scale of approaches to socioemotional development and strengthening the caregiver-child bond that exist in settings other than, but potentially connected to, the pediatric setting.
- Further explore and identify existing scalable components ("kernels") within and through collaboration with pediatric interventions for socioemotional development and the caregiver-child bond.
- Develop and use objective and standardized measures to determine intervention impact and outcomes relating to potential feasibility and scale.

5. ESTABLISH A LEARNING COMMUNITY TO ENHANCE EXISTING INTERVENTIONS' EFFORTS TO SCALE

Intervention barriers to scale provide key areas to address in order to continue to increase the reach of the well-child care visit's impact on early socioemotional development and build an overall theory of change. Using an integrated approach to improvement is critical to address and feasibly overcome existing and potential barriers to scale. Current and potential efforts could be expanded more readily if their efforts were combined or done in partnership within a learning community. These types of collaborative learning environments can allow existing, promising initiatives to address barriers, such as scaling up capacity and means for training providers on how to implement optimal interactions. For example, NICHQ's experience with the collaborative process which utilizes NICHQ's Collaboratory, a web-based technology platform, supports geographically dispersed improvement teams working together to achieve rapid improvement at a large scale.

Proposed Next Steps to expand existing interventions' capacity to scale:

- Using an evidence-based set of guiding principles to partner with existing field leaders, analyze the related features of existing interventions, redesign interventions for scale, and move to implement them across settings and contexts.
- Design a learning community environment of interventions and approaches that is based in quality improvement and focused on addressing barriers to further scaling socioemotional interventions.

VI. CONCLUSION

All families deserve and can benefit from enhanced socioemotional functioning. There is a tremendous opportunity for the pediatric well-child visit to have a positive impact on the lives and socioemotional development of the overwhelming majority of U.S. families. Taking inspiration from this work, it will be important to look beyond existing interventions and discover if there are innovative ways to adapt elements of current interventions to design an effective system that is valuable for all stakeholders.

The following five targeted lines of inquiry are recommended in order to further develop a theory of change for creating optimal, scalable approaches for promoting socioemotional development via well-child care:

- 1. Identify and Implement Standardized Socioemotional Outcome Measurement within Primary Care Assessments** – Create a measure of the caregiver-child bond that can be implemented in pediatric care.
- 2. Define the Path for Scaling Interventions in the Pediatric Setting** – Clarify the path to achieving full scale within pediatric care, through case studies of prior scaling efforts within the setting and site visits to evaluate scaling successes and potential of current approaches.
- 3. Validate the Design Elements Recommended for Pediatric Well-Child Visits** – Work with interventions, providers, and/or practices to test and validate the six design elements related to the well visit.
- 4. Investigate Impact, Scalability, and Collaboration between Pediatric Care and Other Settings** – Examine the opportunities for synergy across settings, including the five recommended design elements that extend beyond the well visit.
- 5. Establish a Learning Community to Enhance Existing Interventions' Efforts to Scale** – Create a network for existing interventions to share scaling strategies and accelerate their scaling efforts.

Advancing these five next steps will lead toward the development of a credible theory of change around how to target interventions to promote children's socioemotional development within the well-child visit and can strengthen efforts in primary care to promote the optimal healthy development that all children deserve.

NICHQ, Ariadne Labs, and EFCT are dedicated to creating the space to explore ways to catalyze activity toward these goals. If you are interested in discussing those plans and/or collaborating in any way, please contact Scott Berns at NICHQ, Lisa Hirschhorn at Ariadne Labs, or Ira Hillman at EFCT).

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Progress & Impact of the Sickle Cell Disease Treatment Demonstration Project (SCDTDP 2014-2017)

It is estimated that nearly 100,000 individuals are living with sickle cell disease in the United States, and even though it is the most common inherited blood disorder, access to quality care remains a persistent problem for this population¹. The sickle cell disease treatment demonstration program (SCDTDP) is a three-year HRSA funded program that has as its primary aim to increase access and quality of care for those living with sickle cell disease (SCD). To meet this overarching aim, three primary strategies were targeted to improve access and quality of care. By increasing the number of providers treating persons with SCD, increasing the number of providers prescribing hydroxyurea, and increasing the number of knowledgeable providers treating those with SCD, we will be able to improve quality of care and quality of life for those living with SCD.

To achieve these aims, a regional learning collaborative model was created to help individual states address access and quality care issues by increasing learning between and within states. There are four Regional Coordinating Centers (RCCs), the Midwest, Pacific, Heartland and Northeast that are leading these efforts to address quality SCD care in 29 states and territories. NICHQ (National Institute for Children's Health Quality) is the National Coordinating Center (NCC) for these efforts, and supports the regions' efforts to collect data at multiple levels to better understand the impact of their programs, and the opportunities for improvement at every level.

Increasing the number of providers treating persons with SCD and improving access to care

A key element to this work is increasing access to care sites to treat those with SCD. All four regions have made this a priority for this work, and report increasing the sites available to provide quality care for patients living with SCD.

Table 1: Number of patients served by RCC programs in 2016, change from 2015 presented where available

Region	Pacific	Heartland	Midwest	Northeast
Total # patients receiving care (2015-2016)	1225 ²	1778 ³	309	3168
% Increase/previous year	35.5% (N=796)	3% (N=1723)	Not Available	Not Available

All four regions report increases in patient access to SCD care among their programs. Data (where available) for number of patients served is presented in Table 1.

Additional Activities to Support Access to Care:

¹ <https://www.cdc.gov/ncbddd/sicklecell/data.html>

² Non-competing Performance Reports submitted by Regional Leads to HRSA, 2016

³ Non-competing Performance Reports submitted by Regional Leads to HRSA, 2015, 2016

Strategies for improving access to care range from opening comprehensive care centers in high need locations as well as implementing patient outreach and follow-up with community health workers in collaboration with local SCD community-based organizations.

- The Northeast (RCC) developed strong relationships with community-based organizations both individual states and at the regional level to increase patient access to SCD care.
 - In Virginia and Maryland, SCD care centers collaborated with local community based organizations and community health workers to outreach to people needing SCD care as well as follow-up with patients to continue care.
- The Pacific region saw increased patient access to care with the opening of two new comprehensive centers for sickle cell disease care in key urban areas targeting larger concentrations of patients with SCD.
 - The MLK Outpatient Center for Adults, with a **catchment area of more than 1,000 potential patients with SCD**, in Los Angeles, CA and the Children's Specialty Center of Nevada provide their patients with access to knowledgeable physicians and systems of care that improve the quality of life for patients with SCD and their families.
- In the Heartland region, telementoring has been used to address geographically related health disparities.
 - Nebraska is implementing telementoring programs with geographically distant patients and their local providers so patients have continued access to knowledgeable care between visits with their specialty provider.
- In the Midwest region, efforts have focused on addressing care by helping systems address gaps that occur in an ever changing healthcare environment.
 - For SCD patients in Gary, IN, the closest geographic access to care was in Illinois. When Illinois stopped accepting Medicaid patients from Indiana, there was a severe gap in access for patients in Gary. Providers in Indiana filled this gap by setting up satellite clinics in Gary that connected patients and local providers to staff and resources at larger medical systems with SCD expertise from across the state.

Increasing the use of Hydroxyurea

As one of the frontline drugs to treat SCD and prevent SCD-related complications, the National, Heart, Lung and Blood Institute(NHLBI) has recommended that all eligible patients with SCD should be on hydroxyurea².

- Over the course of the three-year grant, all four SCDTDP regions report increases in the number of patients being treated for SCD with Hydroxyurea within their partner sites.
 - **For example, in the Pacific region they saw an overall 26% increase from 403 patients to 537 patients on hydroxyurea.**
- Regions attribute increases in HU use to improvements in patient access to care and improvement in care systems to better facilitate the integration of NHLBI's SCD Expert Panel Report⁴ guidelines for HU use in provider training and decision making tools.

Additional Activities to Support Hydroxyurea Use:

⁴ <https://www.nhlbi.nih.gov/health-pro/guidelines/sickle-cell-disease-guidelines>

- Midwest regional grantees have been implementing healthcare systems improvements including integration of NHLBI guidelines into EPIC EHR systems (Indiana) and quality improvement strategies (Illinois) to help support informed and shared decision making among physicians and their patients, driving increases in HU prescriptions.
- The Midwest RCC has developed an online hydroxyurea clinical decision support toolkit for providers based on the NHLBI guidelines that will be launched in the spring of 2017.
- Both the Midwest and Northeast RCCs are developing a decision making toolkit for providers to use with their patients regarding treatment decisions including HU targeting adults (Northeast) and pediatric patients and families (Midwest).
- The Pacific RCC developed and disseminated patient brochures in English, Spanish and French on HU to treat and manage SCD symptoms. Providers used these tools with their patients to facilitate shared decision making in HU use.

Improving provider knowledge and capacity to manage and treat SCD

The SCDTDP RCCs have made great strides to increase and improve provider education and knowledge about SCD treatment and care, thereby improving access to knowledgeable care providers for people with SCD. Table 2 below highlights the reach via the many modes and methods of provider education and information dissemination employed by RCCs over the course of the project to date. RCCs used multiple models of remote communication and dissemination including online CME credit modules on HU use (Northeast); Webinars for both patients and non-clinicians (Northeast), and webinars for providers (Pacific)

Table 2: Modes and Methods for Information Dissemination and Provider Education

Region	Webinars & online CMEs	In-person training	Other
Northeast	Hosted 8 webinars with over 40 individuals participating. Online CME on HU and SCD by Johns Hopkins Medical School	6 conference- calls & 2 in-person meetings in collaboration with CBOs	Grand rounds, symposiums, Journal Article publication
Midwest		6	Development and testing of toolkits for Hydroxyurea clinical decision support for providers
Pacific	5 Webinars in conjunction with the Sickle Cell Data Collection project of CA Rare Disease Surveillance Program	Annual regional learning sessions with all state partners	Over 1456 providers trained through strategic planning & advanced treatment workshops; TA visits
Heartland		2 Annual in-person trainings with CME credits	

RCCs for the Northeast, Midwest and Pacific employed the innovative ECHO (Extension for Community Healthcare Outcomes) Model of telementoring and training. This collaborative approach to medical education and care management out of the University of New Mexico is designed to empower clinicians to provide better care to more people where they live and work. The ECHO projects from each region are in various stages of engagement from start-up (Pacific) to well established (Northeast and Midwest). This is one of the first models of an ECHO program that looks at supporting providers to improve quality of care for a rare disease (see Table 3).

Table 3: Implementation of ECHO Model

Region	Northeast	Midwest
Count		
# of clinics held	47 225 education hours	11
# of participants	285 total	10-20 per clinic
# remote sites	10	5

SICKLE CELL DISEASE TREATMENT DEMONSTRATION PROGRAM

MODEL PROTOCOL AND COMPENDIUM OF RESOURCES



OCTOBER 2014

The National Coordinating Center for the Sickle Cell Disease Treatment Demonstration Program was supported by the Health Resources and Services Administration's Contract HHS250201000022C.

INTRODUCTION

Between 2010 and 2014 Nine Sickle Cell Disease Treatment Demonstration Program (SCDTDP) funded grantee networks from across the United States applied the principles of collaborative learning and improvement science to improve processes and systems of care for individuals living with sickle cell disease. The National Institute for Children's Health Quality (NICHQ) served as the National Coordinating Center during this period.

This model protocol includes recommendations regarding the highest-leverage changes that led to process improvements across five dimensions of sickle cell care listed below in the Hemoglobinopathy Learning Collaborative, sponsored under the auspices of Health Resources and Services Administration (HRSA) and funded by the SCDTDP:

1. Acute care
2. Medical home/care coordination
3. Screening and follow up
4. Transition of care
5. Hydroxyurea

The purpose of this model protocol is to provide clinicians, nurses, allied health professionals, community-based organizations and public health agencies with recommendations and strategies to improve care provided to individuals with sickle cell disease and trait. The National Coordinating Center strongly encourages organizations to develop an integrated advisory committee interested in sickle cell disease care comprised of multiple stakeholders including patients, parents, family members, community health workers or patient navigators, physicians, nurses and allied health professionals. These advisory committees should review these recommendations and consider testing and adapting some of these changes in their respective settings.

The majority of the recommendations result from a synthesis of changes implemented across the grantee networks that led to process improvements. NICHQ also reviewed and included some recommendations from existing published clinical practice guidelines and consensus statements related to the care of individuals with sickle cell disease. Lastly, the model protocol includes guidance from expert panels consisting of health care professionals with expertise in hematology, pediatrics, newborn screening, genetics and public and community health convened by NICHQ for the SCDTDP and the Sickle Cell Disease Newborn Screening Program (SCDNBSP). A systematic assessment of the quality of evidence associated with each recommendation was beyond the scope of the project, and some recommendations may highlight areas where future research is warranted given a limited existing evidence base. The model protocol was reviewed by representatives from all of the SCDTDP grantee networks, including patients and family members of patients, as well as the SCDTDP Oversight Steering Committee and HRSA program staff.



ORGANIZATION OF MODEL PROTOCOL AND COMPENDIUM OF RESOURCES

The model protocol includes a section for each of the dimensions of sickle cell care in which grantee networks worked: acute care, care coordination and self-management, screening and follow up, transition and hydroxyurea. This [model protocol] is not a comprehensive listing of changes for every dimension of sickle cell care but rather includes recommendations on the topics where SCDTDP grantee networks focused their efforts during the funding period. Each section includes an overview of the specific topic, including rationale for why it is important to improve this dimension of sickle cell care, and a discussion of the recommendations for high-leverage changes. The resources listed in each section of the model protocol were used by teams as they implemented the high-level changes in their organizations. The companion compendium of resources includes educational materials for patients and providers such as clinical algorithms, standardized order sets, and patient tracking tools.

ACUTE CARE

Acute vaso-occlusive episodes, often referred to as pain crises, are unpredictable bouts of pain that are the most common reason for emergency department visits and hospitalizations for patients with sickle cell disease.^{1,2,3,4} Timely and appropriate use of oral or parenteral analgesia (i.e., pain medication) can result in pain relief, reduce hospitalizations and reduce the development of chronic pain syndromes.⁵ Both pediatric and adult patients with sickle cell disease experience prolonged periods of waiting for pain medications in the emergency department despite the existence of detailed guidelines^{6,7} and quality indicators⁸ related to the management of pain crises.^{9,10} Emergency department visits and hospitalizations account for a significant proportion of health care expenditures in this population.¹¹

An important component in improving key processes in the management of pain crises in the emergency department is forming a multidisciplinary group comprised of patients and family members, providers from the emergency and hematology departments, and other physicians, nurses, nurse practitioners, psychologists, pharmacists and allied health professionals such as community health workers. Key responsibilities for this team include identifying a physician and/or nurse “champion” from the emergency department, inviting individuals with sickle cell disease to review performance data and provide ideas to inform the initiative, openly sharing data with affected individuals and emergency department staff, and offering trainings and educational materials to nursing and physician staff.

RECOMMENDATIONS:

1. Rapidly triage patients and assess recent use of pain medications and quality and location of patient's pain. Use age-appropriate pain assessment tool to assess intensity of pain.
2. Analgesia should be rapidly started within 30 minutes of triage or within 60 minutes of registration.
3. Use standard order sets for management of sickle cell pain in acute care settings such as the emergency department and, when appropriate, use individual pain treatment plans to facilitate timely, effective and safe management of pain crises.
4. Reassess in regular intervals (e.g. 30 minutes) after each dose of pain medication for pain relief and side effects.
5. Regularly assess patient and family satisfaction with and experience of care in acute care setting.
6. Regularly track performance on timeliness of assessment and reassessment of pain and administration of pain medications to assess impact of process improvements.
7. Consider initiating patient-controlled analgesia for patients who will be admitted to the hospital for pain management.
8. Consider use of intranasal fentanyl as a short-term intervention to relieve pain when intravenous access is difficult or until intravenous access is obtained.

TABLE 1: High-leverage changes and resources tested by grantee networks in acute care

Change Idea	What is it? (Definition) Why do we use it? (Rationale)	Resources
Pain assessment charts	Since pain is often subjective and personal, pain assessment charts help patients describe the amount of pain an individual is feeling. Numerical and picture-based charts allow patients to communicate their pain more clearly so that interventions can be planned accurately.	Illinois SCDTDP Pain Chart Wong-Baker FACES Pain Rating Scale®
Standard order sets	Standard order sets are a group of medical orders used to standardize diagnosis and treatment for specific medical conditions such as sickle cell pain based on clinical practice guidelines. These order sets communicate best practices, reduce variation and potential for medical errors, and enhance workflow. In this context, the order set standardizes the timeframes for triage, medication administration, and reassessment of pain with the goal of expediting patient care and decreasing delays in critical interventions such as administration of pain medication. Standard order sets can be paper-based or embedded in an electronic health record system.	California SCDTDP Sickle Cell Initial Order Set Massachusetts SCDNBSP Pediatric ED VOE Protocol New Jersey SCDTDP ED Algorithm Tennessee SCDNBSP Checklists for Pain, Acute Chest, Stroke and Iron Overload
Pain action plans	Individual pain action plans list pain medication and doses that have been previously effective for that individual. Tailoring pain treatment to the individual facilitates faster and more effective pain management. Care plans should be developed and finalized with patients and their families based on their desired level of engagement.	California SCDTDP (English and Spanish) Pain Action Plan Massachusetts SCDNBSP Adult ED Individualized Pain Plan Pennsylvania SCDNBSP Pain Action Plan
Patient satisfaction surveys	Surveys allow individuals to let clinic staff know which parts of care worked well and which were less than ideal. Obtaining feedback from patients and families allows improvement teams to determine what areas need to be addressed more urgently than others.	Massachusetts SCDNBSP Pediatric ED Satisfaction Survey Massachusetts SCDNBSP Adult ED Satisfaction Survey
Patient-controlled analgesia pumps	A computerized pump which contains a syringe of pain medication prescribed by a physician is connected directly to a patient's intravenous line. Patient-controlled analgesia pumps allow patients to control the timing of intravenous administration of their own pain medication, resulting in timely pain relief.	Massachusetts SCDNBSP PCA Handout
Intranasal fentanyl	Opioid analgesic administered intranasally (a squirt into the nose) to allow for rapid administration of first dose of pain medication while awaiting IV access or if IV access is difficult. This medication comes in a liquid preparation and is not available over the counter. Further studies are being conducted to assess the impact of this medication on subsequent doses of parenteral analgesia.	Massachusetts SCDNBSP Intranasal Fentanyl handout California SCDTDP ED Protocol for IN Fentanyl



MEDICAL HOME/CARE COORDINATION

Care for persons with sickle cell disease is often fragmented, spanning multiple providers and often multiple institutions. This results in many persons with sickle cell disease not having a medical home that coordinates their care. A patient-centered medical home is an approach to providing comprehensive primary care for children, adolescents and adults that is patient- and family-centered, comprehensive, coordinated, accessible and committed to quality and safety.¹² The location of the medical home for individuals with sickle cell disease may vary based on patient and family preferences, and proximity to primary care and specialty care providers.^{13,14} One study highlighted that many children with sickle cell disease did not have care that met the standards for a patient-centered medical home.¹⁵ Additional literature has also shown that patients who receive comprehensive care had fewer emergency department visits and hospitalizations.¹⁶ Coordination between primary and specialty care is crucial to the provision of high quality care for patients with sickle cell disease, as the lack of regular ambulatory care may lead to increased health care utilization in acute care settings (including increased reliance on the emergency department, particularly among transition-age youth (ages 12-25) and adults¹⁷) as well as missed opportunities for preventive care. Lack of outpatient hematology follow up after hospital discharge is a known risk factor for 30 day readmission among individuals with sickle cell disease.¹⁸

One particularly important area of care coordination is the promotion of chronic illness self-management, which is crucial to improving outcomes for children and adults with sickle cell disease.¹⁹ Patients and families have a central role in managing their own or their child's health. Engaging in healthy behaviors such as adhering to prescribed medications, eating a nutritious diet, drinking plenty of fluids, staying active, avoiding extreme temperatures and managing stress levels can lead to fewer instances of complications such as pain crises, and thus improve outcomes and overall quality of life. Knowing how to manage mild complications at home and when to appropriately seek health care also contributes to improved quality of life and may lead to lower health care utilization costs.

Improvements in the realm of care coordination are essential and will require both leveraging pre-existing relationships within networks and developing new relationships to expand and extend clinical and psychosocial services. In turn, these efforts will improve processes to increase the speed and ease with which patients are able to access health services, as well as address some of the psychosocial issues that are often seen in this population, including mental health issues, unemployment,

and homelessness. Ultimately, improvements in the coordination of care across multiple systems and networks and in the provision of primary and specialty care will enhance the quality life of individuals with sickle cell disease.

RECOMMENDATIONS:

1. Develop an individualized care plan collaboratively with patient and/or family to facilitate communication of patient's current treatment plan.
2. Develop health maintenance tool to monitor and track patients' preventive screenings and vaccinations related to their care. Patients can be contacted to come in for requisite screenings and/or vaccinations.
3. Develop process for co-management between primary care provider and specialty provider; specifically outline which provider is responsible for each element of a patient's care.
4. Incorporate care team huddles or meetings each week to review patients' charts and/or care coordination tool and plan care that needs to be provided at upcoming medical visits.
5. Share tools such as health passports or patient diaries with patients that can be used to record, track and manage their treatment and care. Patients can also use this to coordinate care among clinicians.
6. Consider use of community health workers or patient navigators to assist with coordinating patient care.
7. Consider providing patients with self-Management training such as the Stanford University Chronic Disease Self-management Program (CDSMP).



TABLE 2: High-leverage changes and resources tested by grantee networks in medical home/care coordination

Change Idea	What is it? (Definition) Why do we use it? (Rationale)	Resources
Individualized care plans	A medical summary that is a shared document including the patient/family perspective and values. This summary includes a listing of patient demographic information including patient and family (if applicable) contact information, sickle cell genotype, past medical and surgical history, medications, medication and food allergies, baseline lab results, pain management plan (home, emergency department, inpatient setting), treatment algorithms for pain, asthma action plan, provider information (primary care provider and sickle cell team members), pharmacy information, health insurance information, and disability level (if applicable).	Illinois SCDTDP Patient Needs Assessment form Ohio SCDTDP electronic health record tool (sickle cell disease-specific EPIC template “SMART” Phrase) http://www.medicalhomeinfo.org/how/care_delivery/#care
Health maintenance tracking tool	This tool provides a strategy for providers to track the care that patients receive and ensure that patients are up to date with their preventative care (e.g. screenings and vaccinations). This tool could be a paper-based checklist or embedded in the electronic medical record. This tool can be used during pre-clinic team meetings or huddles which is when the care team assembles at a predetermined time to look ahead on the schedule and anticipate the needs of the patients coming to the clinic on a particular day.	Illinois SCDTDP adult patient tracking log, care coordination checklist and screening tool New York SCDNBSP Well Sickle Checklist New Jersey Health Maintenance Checklist
“Health passport”/ patient diary	Patient-centered tool that includes a patient’s medical history and contact information for care providers used to facilitate communication between patient and providers. Patients can track their symptoms and interventions at home and use the data to consult with providers.	New York SCDNBSP patient event diary Ohio SCDTDP electronic health record tool (sickle cell disease-specific EPIC template “SMART” Phrase)
Patient navigators/ community health workers	A patient navigator or community health worker is a member of the healthcare team who helps patients navigate and understand the healthcare system and get timely care. Navigators help coordinate patient care and can improve access to health care and social services such as insurance, housing, and employment.	Maryland SCDTDP (Urban Health Institution Community Health Worker program and the iHOMES program) Colorado SCDTDP Patient Navigators
Patient self-management training	Self-management programs like the Stanford University Chronic Disease Self-Management Program train patients to deal with problems related to living with a chronic disease, appropriate exercises to enhance flexibility and endurance, use of medications, communication with health care providers and evaluating new treatments. Such programs build confidence, empowerment and decision-making skills among patients	Stanford Chronic Disease Self-Management Program New York SCDNBSP Handout: Well Sickle Care Screening - Why needed? California SCDTDP Handout: What is Comprehensive Care in Sickle Cell Disease? California SCDTDP Surveys (Barriers to Care, Iron Overload, Chelation Adherence, Improving School Success) Tennessee SCDTDP online training modules
Provider education to enhance patient self-management	The ACCEPT program (Advancing Communication and Care by Engaging Patients in Training) trains providers to integrate self-management support strategies (such as goal-setting) into routine clinical care.	Ohio SCDTDP and Ohio SCDNBSP’s ACCEPT Training Materials, including overview and follow-up



SCREENING AND FOLLOW UP

Early studies documented that the early administration of penicillin prophylaxis reduced the incidence of pneumococcal infections by 84 percent and reduced mortality from such infections in children with sickle cell disease.²⁰ This finding provided the rationale for newborn screening and early diagnosis (in the newborn period) to ensure prompt treatment of affected individuals.²⁰ The result of screening performed in the neonatal period has immediate implications for the infant found to have the disease, but also longer-term implications for both the child and other family members, such as the ongoing need for genetic counseling and education.²¹

Only since May 1, 2006, have all U.S. states and the District of Columbia required and provided universal newborn screening for sickle cell disease, which also identifies sickle cell trait, despite a national recommendation to this effect in 1987.^{22,23} Each state has developed a newborn screening program that meets the needs and resources of the state. For sickle cell disease and sickle cell trait, some states have well-developed follow-up programs in which nurses, program specialists or community-based organizations contact families of infants with positive newborn screening results and, as necessary, arrange confirmatory testing and follow up with specialists and genetic counselors.²⁴ Other states rely on the primary care provider to arrange for confirmatory testing, provide education to parents and refer patients to specialists.²⁵ Variation also exists in the process of screening individuals who are not screened as infants including pregnant women and immigrants.

NICHQ encourages organizations involved in the care of individuals with sickle cell disease to partner across their communities to incorporate screening genetic counseling and education into their outreach activities. This will expand the reach to diverse populations such as recent immigrants who were not screened in the newborn period.



RECOMMENDATIONS:

1. State newborn screening programs should communicate results to patients or families and primary care providers.
2. Parents or caregivers of patients with confirmed diagnosis of sickle cell disease should receive genetic education about sickle cell disease.
3. Patients with confirmed diagnosis of sickle cell disease should be seen by a hematologist within three months of diagnosis.
4. Patients with confirmed diagnosis of sickle cell disease (SCD-SS and SCD-Sbeta zero thalassemia) should have prophylactic antibiotics initiated within three months of diagnosis to prevent invasive pneumococcal disease.
5. Patients with SCD-SS and SCD-Sbeta zero thalassemia who are younger than five years of age should be prescribed prophylactic antibiotics to prevent invasive pneumococcal disease.
6. Offer genetic education to individuals of reproductive age with sickle cell disease and sickle cell trait to allow for informed decision making. Consider developing electronic medical record prompts and other methods to alert providers that genetic counseling is needed during adolescence.
7. Consider conducting community outreach activities (such as health fairs, public service announcements, or social media posts) to encourage screening for sickle cell disease and sickle cell trait for individuals who were not screened in the newborn period.

TABLE 3: High-leverage changes and resources tested by grantee networks in screening and follow up

Change Idea	What is it? (Definition) Why do we use it? (Rationale)	Resources
Educational and counseling strategies	Educational and counseling strategies include providing counseling and education over the phone, group clinic visits for newborns with sickle cell disease, and electronic health record prompts to remind providers to counsel sickle cell disease patients. Education entails information about genetics of sickle cell disease, managing pain crises and other sickle cell related complications, reproductive implications and health maintenance strategies. Education should be age-appropriate and occur throughout the lifespan for individuals with sickle cell disease and trait.	Missouri SCDTDP Screening and Trait Counseling Education Booklet and Presentation Tennessee SCDTDP Genes for Teens and Genes for Parents of Children with Sickle Cell Disease Massachusetts SCDNBSP Parent's Guide to Sickle Cell Disease
Pre- and post-tests	Questionnaires to assess patient/family knowledge before and after counseling. Administer pre-tests before offering education and post-tests immediately after as well as 3-6 months later to assess retention of knowledge.	Illinois SCDTDP pre- and post-tests Illinois SCDNBSP pre- and post-tests
Sickle cell trait toolkit	This toolkit was developed by grantee network teams to help providers counsel individuals and families recently diagnosed with sickle cell trait. Toolkit provides educational materials about sickle cell trait and sickle cell disease that can be reviewed by families on a periodic basis.	Screening Affinity Group Sickle Cell Trait Counseling Resource Packet



TRANSITION OF CARE

Because of great strides over the past few decades in care for individuals with sickle cell disease, these individuals are now living longer, transitioning from pediatric to adult care as they grow older. As patients transition from pediatric care to adult care, they experience a variety of challenges including leaving a familiar provider and environment, being seen by a provider who may not have knowledge of sickle cell disease, establishing independence from caregivers, and having adequate health insurance.²⁶ Multiple factors may contribute to high mortality during the period immediately following transition from pediatric to adult care including disease progression, lack of routine care and adherence to treatment.²⁷ In addition to increased mortality, young adults with sickle cell disease utilize emergency care services more often and have less frequent care maintenance visits during the transition years.¹⁷ Planned and coordinated transition from pediatric care to adult care is critical in ensuring no interruption in care continuity and improving health outcomes and overall quality of life of individuals with sickle cell disease.

RECOMMENDATIONS:

1. Develop a registry or listing of transition age youth in sickle cell program.
2. Establish a transition clinic/program to facilitate transition to adult care for patients 12 years and older that includes an agreed-upon transition policy posted in a visible place (e.g., waiting room, exam room, office).
3. Incorporate individual transition readiness as assessments or checklists to prepare patients for transition of care.
4. Connect families, in advance of transition, with community and social services for planning and care coordination.
5. Consider scheduling a joint visit between the patient, pediatric hematologist or physician and adult hematologist or physician prior to transfer of care.



TABLE 4: High-leverage changes and resources tested by grantee networks in transition of care

Change Idea	What is it? (Definition) Why do we use it? (Rationale)	Resources
Transition clinic	A transition clinic/program allows providers, patients and families to prepare for the transfer of care from pediatric to adult settings. Ideally, the process of preparing for transition to adult care begins in early adolescence. In developing a clinic, the first step is developing a transition policy. Clinics/programs must develop a method (e.g. registry) of tracking and monitoring transitioning patients, assessing readiness, and transferring care. Transfer is complete if the patient continues to attend visits with an adult provider.	New Jersey SCDTDP Transition Policy
Transition readiness assessment	Tools used to assess adolescents' knowledge and self-efficacy in various knowledge domains including medical, cognitive, emotional, psychosocial, and academic. Skills assessed vary by age and patients should demonstrate increased autonomy over time. Assessments should be administered at the start of the transition period and throughout the process. Results should be used to inform the education individual patients receive during the transition process.	California SCDTDP Transition Intervention Program –Readiness for Transition Assessment Tennessee SCDTDP Readiness Assessment for Academic, Emotional, Medical and Psychosocial domains New Jersey SCDTDP Autonomy Preparation Questions Colorado SCDTDP Patient Activation Assessment Colorado SCDTDP Changing Roles Assessment and Action Plan
Sickle cell disease specific transition curriculum	The comprehensive curriculum covers all ages of the transition period (12-21 years of age) and includes recommendations of educational content for providers, patients and parents. The curriculum is organized into three main sections by age group, and each age group consists of three domains: medical, social, and academic. Use of the curriculum will ensure that all topics are covered throughout the transition planning process. Each domain includes guidelines for topics, suggested methodology, and techniques to measure efficacy. The curriculum can be used as a resource in both the medical and the community setting, and would be especially effective in organizing the work in partnerships.	Transition Affinity Group Sickle Cell Disease Transition Curriculum

HYDROXYUREA

Hydroxyurea is the only therapy approved for sickle cell disease by the Food and Drug Administration.^{28,29} This medication results in a decline in sickle cell-related complications such as pain crises, acute chest syndrome and associated emergency department visits and hospitalizations.³⁰ By reducing the frequency of these complications of sickle cell disease, hydroxyurea can improve the quality of life for patients.^{31,32} Hydroxyurea has been found to lower the costs associated with care for patients with sickle cell disease. While outpatient costs have been found to be higher, they are outweighed by the savings from fewer hospitalizations.³⁰

Use of hydroxyurea varies greatly from region to region and provider to provider, highlighting a substantial opportunity to improve care by making hydroxyurea accessible to more patients.³⁰ One important barrier to the use of hydroxyurea is poor understanding of the clinical benefits, side effects, and long-term consequences of its use. Patients can obtain information from many diverse sources, some of which may be unreliable. Additional barriers to hydroxyurea use are focused at the health system level (e.g., insurance coverage) and provider level (e.g. knowledge, self-efficacy).

RECOMMENDATIONS:

1. Discuss hydroxyurea (including side effects, benefits, and monitoring protocol) with patients with HbSS and Hb Sbeta zero Thalassemia and their families and incorporate patient preferences and values in decision making.
2. For adults with HbSS, treat with hydroxyurea if individual has three or more pain crises annually, has recurrent acute chest syndrome or severe pain impacting quality of life.
3. For infants older than nine months and children and youth, consider hydroxyurea treatment to prevent sickle cell-related complications.
4. Consider use of text/SMS messaging and other technologies to enhance adherence to hydroxyurea.

TABLE 5: High-leverage changes and resources tested by grantee networks in hydroxyurea

Change Idea	What is it? (Definition) Why do we use it? (Rationale)	Resources
Patient education	Videos, brochures, handouts and other information sources can be used with patients and families to convey information about hydroxyurea and clarify misconceptions about this treatment.	Massachusetts SCDNBSP – Keeping you Healthy with Sickle Cell Disease New Jersey SCDTDP – The Best Hope for Sickle Cell (video) Tennessee SCDNBSP – Family Guide to hydroxyurea
Decision support tools	Tools to guide patients and families through the process of evaluating the risks and benefits of hydroxyurea therapy can help facilitate the conversation and allow patients and families to feel more informed before making a decision.	Massachusetts SCDNSBP hydroxyurea Dosing Guidelines
Text/SMS messaging	Tool to send electronic message to patient's cell phone to remind patient to take medication (e.g. hydroxyurea).	Tennessee SCDTDP- Scheduled Instant Messaging Over the Network (SIMON)



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Northeast Guidance Center

As a community mental health provider for children, adults and families on Detroit's eastside since 1963, Northeast Guidance Center serves over 5,800 individuals, including 1,200 children, focusing on preventive health, anti-stigma, wellness and stabilization. The majority of our low-income clients use Medicaid programs. Northeast Guidance Center would suggest that Mental Health services for children be consistently listed on all material and internet sites referencing Medicaid/CHIP.

I receive a monthly message from CMS reflecting on a children's issues. May I suggest a message on mental health issues – infant mental health, Mental Health Awareness Month (May) and/or recognizing the stigma associated with mental health conditions?

Thank you for giving us a voice and allowing us to share our comments.

Nurse-Family Partnership | National Service Office

See attachment.



Nurse-Family
Partnership_Nationa

April 7, 2017

Dr. Alexander Billioux
Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Response to Center for Medicare and Medicaid Innovation Request for Information (RFI) on
Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

The Nurse-Family Partnership® (NFP) National Service Office welcomes the opportunity to respond to the Center for Medicare and Medicaid Innovation's Request for Information (RFI) on Pediatric Alternative Payment Model Concepts.

NFP is an evidence-based community health program with proven outcomes for children and mothers and health system, government, and societal cost savings. As noted in Nemours Children's Health System's response to this RFI, pediatric alternative payment models should leverage two-generation approaches that focus on the family and that go beyond health to focus on a child's development and overall well-being. With its focus on health outcomes, child development, and family self-sufficiency, NFP is an ideal partner for a range of value-based payment models—including accountable care organizations (ACOs) and service delivery bundles—that seek to meet the diverse needs of pediatric beneficiaries by facilitating access to needed health and health-related social services.

Over the past five years, the NFP National Service Office has worked with local agencies implementing the NFP model to improve integration with, and support from, the broader health care system. These efforts have led to a number of innovations, including systematic referral processes and implementation of a pay-for-success project in South Carolina, that may be informative to the Innovation Center's efforts to develop a pediatric alternative payment model.

Background

The Nurse-Family Partnership is an evidence-based community health program which pairs low-income, first-time mothers with registered nurses. The nurses provide ongoing home visits to ensure mothers receive the care and support they need to have a healthy pregnancy, provide responsible and competent care for their children, and become more economically self-sufficient. From pregnancy until the child turns two years old, Nurse-Family Partnership Nurse Home Visitors form a much-needed, trusting relationship with the first-time moms, instilling confidence and empowering them to achieve a better life for their children and themselves.

Nurse-Family Partnership's model is built on over 39 years of research from randomized, controlled trials conducted in three diverse settings. Independent research estimates that for every public health dollar invested in high-risk NFP families, communities can realize more than six dollars in return.

The NFP National Service Office (NSO), headquartered in Denver, Colorado, supports implementation of our program model by 260 partner agencies across the country through education, quality improvement, and advocacy for policies and funding to support local programs. NFP currently serves over 32,000 low-income families in 42 states, the U.S. Virgin Islands and six Tribal communities.

Section I: Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

1. **State and Tribal Interest in Child and Youth-Focused Care Delivery Model.** NFP implementing agencies gain financial support through many different programs, including: federal grant programs such as the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program and the Title V Maternal and Child Health Block Grant; general revenue funds at the state, county and city level; Medicaid; and philanthropy. Across the country, implementing agencies have worked closely with state agencies to identify new or improved sources of sustainable funding for NFP programs. These include discussions of pay-for-success opportunities in a number of states, including implementation in April 2016 of the first home visiting-focused project in **South Carolina**. State Medicaid programs have also included evidence-based maternal and child health services, including Nurse-Family Partnership, in 1115 demonstration waiver applications associated with the Delivery System Reform Incentive Program in **New York** and **Texas**, and as pilot or project opportunities in **Maryland** and **Washington's** recent 1115 waivers.

Home visiting programs must rely on a number of federal funding streams, paired with state and local funds, to attempt to support a full package of services for pregnant women, families, infants, and young children.² There is no preventive home visiting category for coverage or financing of NFP services through Medicaid. As a result, state Medicaid programs typically cover a small fraction of the costs of nurse home visits through an imperfect range of coverage categories such as targeted case management, administrative claiming, or enhanced prenatal services. However, NFP's outcomes are achieved through more than the sum of the program's parts, and state Medicaid programs and other health care organizations encounter significant challenges under existing Medicaid structures when attempting to cover the full range of services provided by nurse home visitors, particularly within a medical rather than administrative budget.

Expressly due to the many sources of funding that agencies must use to support their operations, there are many challenges associated with meeting the requirements of, and appropriately braiding multiple funding sources. In designing an alternative payment model for initiatives that have and will continue to overlap with multiple coverage options and funding streams, technical assistance will be critical in helping state Medicaid programs and other stakeholders understand how the new initiative compares to older, fragmented programs from budgetary, policy, and operational perspectives.

2. **Services Included; Outcomes Achieved.** The NFP model combines case management and preventive services, including nursing assessments, screenings, incidental direct services, and health education and guidance within the scope of practice of a registered nurse. While a few components of an NFP home visit would never be covered by Medicaid (e.g. guidance regarding education, employment), the majority of nursing assessments, screenings and other preventive and health education services could be considered a medical assistance benefit when such services are provided by a qualified Medicaid provider within his or her scope of practice under state law. However, no single coverage category or financing structure currently covers the breadth of services provided by nurse home visitors.

Additionally, based on assessments and continuous reassessments completed during home visits, the NFP nurse develops and implements a care plan that is client-centered and reflects the needs of the client as well as the client's goals for herself. In addition to these typical nursing assessments and case management activities, NFP nurses follow extensive Visit-to-Visit Guidelines for pregnancy, infancy and toddler home visits produced by the NFP National Service Office (NSO), and use a Strengths and Risks (STAR) Framework to modify the intensity and frequency of services in order to meet families' individual needs. As a result, no two visits are alike, and may include a completely different set of services month to month for a single client.

Through the professional knowledge of registered nurses, extensive training on the NFP model, the use of guidelines to structure home visits, and detailed performance measurement at every NFP site using the national NFP data collection and reporting system, implementing agencies are able to provide home visits with fidelity to the model as studied and implemented through randomized, controlled trials. As a result, NFP families see many positive outcomes over their involvement with the program, and for years afterward. A meta-analysis of 39 evaluation reports published in the August 2015 issue of *Prevention Science*¹ projected that for the 177,517 pregnant women enrolled in NFP from 1996 to 2013, NFP will:

- prevent 10,000 preterm births (below 37 weeks gestation);
- prevent 13,000 dangerous closely-spaced second births (within 15 months postpartum);
- prevent 42,000 child maltreatment incidents (through child's age 15);
- reduce childhood injuries (ages 0-2);
- improve language development (through age 6);
- increase by 13% the likelihood of complete immunizations by age 2; and
- reduce Medicaid spending per child by 8.5% from birth to age 18.

3. No response.

Section II: Operation of Integrated Service Model

1. **Extent of Service Integration.** Service integration between pediatric practices and community health initiatives like Nurse-Family Partnership happen on a case-by-case basis. Awareness and collaboration is not systematic or widespread, and systems are not generally in place to facilitate formation of relationships in communities. Collaborations develop from relationships formed between individuals at NFP sites and pediatricians or practice managers at pediatric practices. Health related social service agencies are not systemically connected to Medicaid or to health and

hospital systems, unless the social service is delivered as part of a hospital systems serve to communities. Where interventions such as the Nurse–Family Partnership are implemented within a health or hospital systems, integration is greatly enhanced through access to electronic medical records and when NFP is seen as part of the healthcare team of the hospital system. Other good examples of this integration occurs when NFP is implemented as part of a Federally Qualified Health Center, such as the Carolina Health Centers in South Carolina, or in Denver Health Clinics in Colorado.

2. **Partnerships between Pediatric Health Care Providers and Health-Related Social Service Providers.** Partnerships between NFP and other healthcare providers have included sharing and documenting in the same medical record, creating systematic workflows for communication and coordination of care, and providers from NFP and pediatric or obstetric providers participating in joint care conferences on moms or children with complex health and social needs.

The potential exists to strengthen the partnership between NFP and other healthcare providers through alignment of practice and billing for care provided to children. An example of misalignment are the recommendations or requirements by multiple entities for developmental and depression screens. This misalignment results in moms and children being screened multiple times with the same tool by multiple providers. When pediatric providers bill for screenings done in the office, they are not interested in receiving the screen from in-home providers. Best care for moms and children would ideally include decisions about which provider and environment is best suited to complete the screen and how follow up on the screens should take place across the services moms and children receive. The current misalignment of screening requirements results in both duplications in care and missed opportunities for mutual reinforcement and coordinated follow up.

3. **Infrastructure Development.** Nurse-Family Partnership implementations housed within hospital and FQHC systems have been able to successfully collaborate with pediatric providers via access to and the ability to document and coordinate care within EMR systems. In one case, NFP at Nationwide Children's Hospital is coordinating care within the Pediatric ACO.

The ability to integrate care between NFP and pediatric care necessitates administrative champions on both sides. Operationalizing integration at Nationwide Children's Hospital included involvement of EPIC to build fields for NFP staff and collaboration with the NFP National Service Office on documentation of NFP practice and screenings within the health system. Additionally, having a physician champion to raise awareness with the pediatric practice and to advocate within health systems for the need to collaborate with NFP is instrumental to successful collaboration.

4. **Streamlining of Eligibility.** Nurse-Family Partnership serves primarily low-income, first time mothers, using Medicaid eligibility as a proxy for income. In order to relieve the significant burden of identifying clients for enrollment, both Colorado and South Carolina have implemented systematic referral processes from the state Medicaid program to centralized agencies (Invest In Kids in Colorado, the NFP National Service Office in South Carolina) that then pass information on to implementing agencies or outreach workers to contact the potential clients. Although this represents a small administrative increase for the Medicaid agencies, it frees

up significant resources at the agency level to spend more time providing services and serving more clients.

5. No response.
6. **Obstacles to Service Integration.** Obstacles to integrating care within NFP have included a lack of understanding by pediatric offices of in-home community health services, and a perception that collaboration is ‘one more thing’ to add to an already busy practice. In fact, integration with NFP often saves pediatric offices time. But it is often not until physicians learn how can connect with a family who chronically missed appointments in the office setting, follow up on a child with complex health or social needs, or follow up on mom’s mental health needs, housing, education or other determinants of health that these perceptions begin to change. Development of written workflow processes for referrals and coordination of care by those closest to the work help overcome barriers to integration. Sharing successful integration in venues such as physician grand rounds or community wide health committees also helps other providers address obstacles.
7. No response.
8. No response.
9. **Models of Care for the Pediatric Population.** In addition to the use of MCOs and ACOs, models of care that could improve the quality and reduce the cost of care for the pediatric population include the health home model, in particular a health home that bridges the maternity and pediatric timeframes. Another potential model is the concept recently promoted in Minnesota as an Accountable Community for Health (ACH) or by CMS as an Accountable Health Community, where medical, behavioral, and social service providers collaborate on population health outcomes. With the long-term outcomes associated with pediatric interventions, a strategy based on population health may hold promise for capturing the associated outcomes and savings within a single system.

In addition to alternative payment models, CMS could consider incorporating the wider array of delivery and payment models contemplated here within EPSDT, given the flexibility that EPSDT coverage affords state Medicaid programs to offer and pay for non-state plan services as indicated by a child’s specific needs.

Section III: Payment and Incentive Arrangements

1. **Medicaid and CHIP Populations/Participants.** There are two distinct groups of children and youth, from birth to age 21, that offer opportunity for generating savings and improved outcomes through integrated delivery system models:
 - a. children and youth who have complex medical needs requiring costly specialized care (e.g. those with two or more chronic conditions, serious and persistent behavioral health issues, or other complex health conditions); and
 - b. Children and youth who have unmet socioeconomic or psychosocial needs or who are at risk of experiencing socioeconomic stressors (such as extreme poverty, social isolation, poor housing conditions, food insecurity, financial insecurity).

Many studies demonstrate a strong relationship between a child's exposure to these stressors and future development of chronic conditions and heart disease, engagement in risky behavior, and increased incidence of behavioral health conditions.

Given the nature of the Nurse-Family Partnership program, we are most interested in new delivery system and payment models that better address the social determinants of health for first time mothers and their children. By establishing an integrated maternal and child health delivery model that better links evidence based-home visiting programs like Nurse-Family Partnership with clients' medical homes, duplication of services can be avoided, coordination of care promoted, and mothers empowered to take advantage of health and health-supportive social services that will lead to optimal health for them and for their children.

Young mothers-to-be who live in poverty and who have experienced or who are at risk of experiencing significant stressors and their children should be a primary target for such delivery models given the significant potential to break cycles of poverty and dysfunction and to ensure that at-risk babies have the best chance for healthy childhood development and lifelong health.

2. **Encouraging Collaboration.** Rather than simply encourage collaboration CMS could demand, as a condition of participation in Medicaid and CHIP, that health plans and providers screen or ensure the screening of their patients from birth to age 21 for social determinants of health. This screening could include referral to other clinicians or to appropriate community based health and social services that can address their needs.

NFP routinely provides psychosocial risk assessments, environmental risk assessments, developmental screenings for children, and depression screenings for mom as part of routine home visits. Collaborations between health plans, providers, and NFP would ensure psychosocial screenings for first time moms and their children and referrals to appropriate specialty clinicians or other health supportive services in the community, as well as coordination with the client's medical home.

Adequate funding must be available to providers to enable them to provide these services. At a minimum, capitated payment to MCOs or ACOs should rise to cover the costs for such screenings, referrals, and care coordination. These plans should then hold providers accountable for directly providing such services or arranging for their provision by others.

Separate payment should also be available to enable health supportive services in communities to collaborate with clinical providers in a meaningful way and to share information on client engagement and progress as appropriate and to enable care coordination. Families also may need extra supports to act on referrals received from clinical providers or to navigate available health supportive services in the community.

New infrastructure will be critical to these efforts, including system wide referral networks and tracking systems as well as sharing of client-specific data among integrated system providers. CMS could consider encouraging states to use Medicaid administrative dollars to support such infrastructure development (distributed as a capitated payment based on the number of children

birth to age 21 on Medicaid) to enable seamless referrals and data sharing for shared clients across health and social service providers operating within an integrated delivery system.

Finally, a framework for collaboration is important to ensure that patients are appropriately assigned to partners, and outcomes and savings attributed to the correct partners. Because most states enroll Medicaid and CHIP children in managed care, MCO systems may provide a good basis for this needed patient attribution framework.

3. **Financial Alignment.** Better alignment between federal grant programs (MIECHV, Title V MCH Block Grant) that focus on pediatric populations and Medicaid and CHIP could allow states and local communities to serve more children with fewer administrative hurdles. One way to achieve such alignment could be through federal clarification, through rule making or administrative guidance, on the conditions under which Medicaid and MIECHV can be blended and braided. In the case of evidence-based home visiting, establishing an all-inclusive coverage option and placing Medicaid primary to MIECHV as in other Title V programs would allow federal grant dollars to be used more efficiently to serve more mothers and children in need.

Alignment of goals among partners, shared accountability for outcomes and cost savings, ability to share data across partners, and incentives for achieving success at a community level, such as in a community-based collective impact model, are all necessary elements for financial alignment. Two examples from NFP's network that utilize data systems to support alignment include Goodwill of Central & Southern Indiana's use of Indiana's statewide health exchange to share data with health plans and providers, and software used at the Children's Institute of Rochester, New York to share data between pediatric providers, clients, and health-related supportive services providers.

4. **Coordination of Incentive Payments.** There should be support for community collective impact models where all resources are brought to bear on goals that are to be achieved. Where possible, Medicaid should be given the flexibility to pay for the development of infrastructure necessary to create an integrated delivery system, and to efficiently braid funding with other federal, state, and local funding sources to encourage model development and ensure funds flow to all partners in new systems. Incentive payments could be provided on a population basis for achieving screening targets (e.g., percent of children and youth in a city, county or zip code screened; percent of health plan members screened, or percent of children and youth patients in a practice screened).
5. **Other Services.** Medicaid traditionally pays only for services or outcomes. In many communities, investment in basic infrastructure is needed to be able to provide evidence-based health supportive services. Expansion of payment for services through Medicaid, or as a value-added service "in lieu of" state plan services through managed care as described in the recent managed care regulations, would allow for further growth of programs through other funding sources.

Economic impact models have shown that investments in evidence-based programs such as NFP could be cost-neutral to a health plan or to Medicaid in general. South Carolina recently implemented a pay-for-success initiative that leveraged Medicaid coverage through a 1915(b) waiver to bring NFP to scale in high risk communities. This provided the state with an efficient method to invest in the program while philanthropic funders provided start-up infrastructure and operating funding.

As another means of promoting a package of services to a specific population, Colorado has promoted the idea of an “opportunity bundle” to help move families up the economic ladder, including services such as Nurse-Family Partnership, WIC, and other health supportive services in the community.

6. **Calculating Savings.** NFP’s proven impacts have allowed it to monetize savings to federal, state and local governments, as well as savings to Medicaid. Milliman has also provided estimates of cost savings from impacts of interest to health plans. NFP could share these estimates with CMS upon request.

Conclusion

The potential for implementation of alternative payment models for pediatric health care services could enable state innovation to fully embrace and support evidence-based community health models like the Nurse-Family Partnership. NFP commends your efforts to explore these models, and stands ready to assist in any way possible. Please contact with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Tamar Bauer". The signature is fluid and cursive, with the first name "Tamar" and last name "Bauer" clearly distinguishable.

Tamar Bauer
Chief Policy & Government Affairs Officer

References

1. Miller, T.R. (2015). Projected outcomes of Nurse-Family Partnership home visitation during 1996-2013, USA. *Prevention Science*, 16(6), 765-777. doi:10.1007/s11121-015-0572-9.
2. U.S. Department of Health and Human Services. Health Resources and Services Administration (HRSA) and Center for Medicaid & CHIP Services. Joint Informational Bulletin, “Coverage of Maternal, Infant, and Early Childhood Home Visiting Services.” March 2, 2016. Available at: <https://www.medicaid.gov/federal-policy-guidance/downloads/cib-03-02-16.pdf>

Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSS)

How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

CMS should consider the health home PMPM payment in combination with the CCBHC tiered prospective payment approach. Both models require a care coordination agreement with outside providers for a team approach.

b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

High need/high risk children would receive a higher payment in order to avoid adverse selection.

c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients.

d. Yes, the methodology would have to be adjusted to accommodate smaller or rural providers since they do not have the volume for the same staff to client ratios required for children who are high need/high risk.

e. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

Yes, I really like the concept of the CCBHC cost-related payment approach, in which the provider completes a cost report, and if specialty services that cannot be provided by the clinic, these services can be referred out and the external provider can receive traditional Medicaid FFS payment.

Oregon Health & Science University

Hi, I'm responding to your request for information or RFI. I'm attaching a document that describes a pilot project using a case rate with a Medicaid health plan that included bundled payment to a pediatrician for diagnostic evaluations of young children potentially with autism spectrum disorder.



Oregon Health &
Science University.p



Date: March 22, 2017

To: Centers for Medicare & Medicaid Services

Email:

From: Dr. Robert Nickel

Re: Pediatric Alternative Payment Model RFI

Institute on Development and
Disability
Oregon Center for Children &
Youth with Special Health
Needs

To Whom It May Concern,

The Oregon Center for Children and Youth with Special Health Needs (OCCYSHN) at OHSU has worked to establish 8 community-based medical-educational teams for identification of children with autism spectrum disorder (ASD) or other developmental delays (other DD). This work was supported by the ACCESS grant, a state autism implementation grant funded by the US Maternal and Child Health Bureau. These teams are located throughout the state with 4 located in rural areas. Each team is comprised of a pediatrician, educational staff, a Parent Partner (parent of a child with ASD) and a mental health provider either as a regular team member or a consultant. The educational staff are individuals who regularly do the educational autism eligibility evaluations for Early Intervention/Early childhood Special Education (EI/ECSE) in their community. The Parent Partner is the parent of a child with ASD and functioned as a parent navigator and advocate. She would contact families before the evaluation, attend the conferences with them and contact them 1 month after the evaluation.

One of the teams, the South Coast ASD Identification Team (AIT), has completed a one year pilot project to be paid a case rate for each child evaluated by their local Coordinated Care Organization (CCO, Medicaid health plan) rather than the pediatrician being paid fee-for-service. The amount of the case rate was decided by the medical director of the CCO after review of typical charges for the MD services and review with the team's pediatrician and ACCESS grant staff. The case rate included payment for the pediatrician on the team, payment for "extra" educational staff time in coordinating appointments and attending the team conference with the MD (payment went to the local Educational Service District, ESD), and payment for the time of the Parent Partner on the team. The case rate actually functioned as a bundled payment for the pediatrician on the team who provided 2 E&M visits to complete his or her evaluation of the child and family and then attended the team conference and family conference.

Satisfaction with the AIT process was high both for providers on the team and the families whose children were evaluated. The cost of the case rate to the

CCO was similar to and slightly higher than the cost of referring the family for a comprehensive team evaluation at the medical center; for example, Oregon Health & Science University's (OHSU) autism clinics. CCO staff, however, plan to continue the use of the case rate with the AIT due to the secondary benefits of the local AIT evaluation. If the child was identified with an ASD, the family received both a medical diagnosis and educational eligibility through the same evaluation and entered autism services promptly. Children who were not identified with an ASD had other developmental delays and were referred to appropriate services. The evaluation was comprehensive and timely. The teams were expected to complete their evaluation within the educational timeline (45 or 60 days depending on whether the child was already in EI/ECSE services) rather than a 5-6 month wait to be seen at the medical center. In addition, the evaluation was close to the family's home community which limited the family's out of pocket costs. There was limited need for a family member missing work and no long distance travel or over-night stays.

Sincerely,

Robert Nickel, MD
OCCYSHN Medical Consultant

Parkland Center for Clinical Innovation (PCCI)

Dear Sir or Madam,

Please find attached to this e-mail a PDF document containing the response from Parkland Center for Clinical Innovation (PCCI) towards the above-referenced request for information (RFI) that was issued by the Centers for Medicare & Medicaid Services (CMS).

We are happy to provide further clarification, or to engage in additional dialogue, regarding any of the experiences that PCCI has shared in our response to this RFI. Should you wish to discuss our response, please have a member of the CMS team contact:



Parkland Center for
Clinical Innovation (



April 7, 2016

Administrator Seema Verma
Centers for Medicare & Medicaid Services
Department of Health and Human Services

RE: Request for Information (RFI) on Pediatric Alternative Payment Model Concepts

Submitted via:

Dear Ms. Verma:

Parkland Center for Clinical Innovation (PCCI) welcomes this opportunity to respond, on behalf of our partners in the Dallas Social-Health Information Exchange Portal (IEP), to the Centers for Medicare & Medicaid Services' (CMS) request for information (RFI) on Pediatric Alternative Payment Model Concepts. We understand that CMS is exploring development of a new pediatric health care payment and service delivery model, and that the RFI seeks input on the design of a state-driven model for improving the health of Medicaid- and CHIP-covered children/youths by integrating health care and social services with shared accountability and cost savings.

PCCI is an independent, not-for-profit healthcare innovation organization focused on creating connected communities through data science and machine learning to drive better community health and enhance personalized and precision medicine. We are a mission-driven organization whose purpose is to reimagine and expand the healthcare knowledge base in the age of machines. We combine expertise in clinical patient care with advanced analytics, and artificial intelligence to enable the delivery of personalized precision medicine at the point of care. The vision of PCCI is to create a consortium of connected communities that engage in collaborative learning and knowledge sharing to jointly pursue the ideal where every health outcome is positive.

We have limited our comments to the sections and subsections of the RFI to which the lessons learned and experiences gained by PCCI are most relevant. We are specifically responding to question number 2 of Section I, questions 3 and 6 of Section II, and question 2 of Section V.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Question 2: Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and related social services were included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what time frame (including the time to “ramp up”). Additionally, what program integrity strategies were employed where these partnerships exist?

The experience of the Dallas IEP, although it is not restricted to children and youths alone, is informative in this regard. PCCI is the coordinating organization within this IEP. Its partner organizations are Parkland Health and Hospital System (PHHS), the Dallas County hospital and academic medical center serving the safety net population; Pieces Technologies Incorporated, a software development firm; the North Texas Food Bank, an umbrella organization uniting food pantries or social service agencies assisting food-insecure citizens of Dallas and Collin Counties; and the Metro-Dallas Housing Alliance, an umbrella body of homeless shelters and programs or organizations supporting housing-insecure citizens. Negotiations are underway to expand this circle of partners to include organizations serving citizens (including youths) that are recovering from incarceration, plus an alliance of community colleges and polytechnics in Dallas County.

The mainstay of the IEP is the single-platform, inter-sectoral, inter-organizational sharing of data on recipients of healthcare and/or health-related social services within the target community. Dispersion of services into silos, without integration/coordination, especially overburdens the most disadvantaged populations who are too under-resourced to navigate the boundaries between different sectors or disciplines. Smoother exchange of information has reduced the fragmentation or duplication of services and enabled greater collaboration across sectoral and disciplinary silos, which, in turn, has increased patient access to needed services as well continuity of health and social care. To optimize quality control in data sharing, capacity building and remedial skills training was first conducted at partner organizations whose staff members lacked requisite data handling skills at the baseline. A full-fledged independent evaluation of the Dallas IEP will begin in the late spring or summer of 2017. PCCI will be happy to share with CMS the findings from this evaluation when they become available.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

Question 3: What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

As the first step towards realizing the Dallas IEP, the partner organizations conducted a formal *needs assessment* to identify the client profile best served, most prevalent/burdensome illnesses, social needs with greatest impact on health, potential organizational end-utilizers and use cases for the exchange, plus transferrable lessons from similar programs. The greatest unmet health-related social needs for the population were identified as transportation, finances, social support, insurance and health literacy. The partner organizations then conducted a *feasibility study* to clarify the design infrastructure for the IEP that was likely to be most effective. Six core components of its architecture were identified for parallel pursuit by the partner organizations, namely: clinical workflows, community workflows, legal procedures, technology infrastructure, sustainability, and governance. This then led to the *operationalization phase* of the IEP. PCCI facilitated negotiations between representatives of the partner organizations that led to agreement on the parameters of the clinical and community workflows, plus the governance structure of the IEP. To create the legal framework, a Legal Advisory Team comprising experts from the partner organizations researched applicable laws/regulations. Various members of this team had expertise in patient rights, healthcare law and regulatory compliance, information technology and software development/dissemination, plus intellectual property law. A law firm specialized in corporate law governing healthcare and information technology provided further consultation. Key informants from prior HIE initiatives were interviewed to compile issue reports that enumerated thorny legal issues requiring further inquiry/discussion. The team also reviewed the relevant federal, state and local laws/statutes that would govern the Dallas IEP. Through extensive deliberation and consensus generation, recommendations towards the legal framework were synthesized, which partner organizations later adopted.

As part of the technological infrastructure of the IEP, PCCI then developed a generalizable, exportable, and innovative software system known as Parkland intelligent e-coordination and evaluation system (Pieces™). Twin platforms of this software system have been built, namely: (i) Pieces DS™, which provides connectivity with the Epic™ electronic health record (EHR) to facilitate analytics-driven real-time clinical decision support directly at the point of care, and (ii) Pieces Iris™, which enables coordination between health care delivery institutions and health-related social service agencies. The seamless integration of Pieces DS™ and Iris™ platforms makes possible a continuum of connectivity between health care data within EHRs and information on socioeconomic determinants of health that is routinely collected by social care agencies. Pieces Technologies Inc. took over further development of the Pieces™ system in 2016. Besides PHHS, the Pieces™ system has by now been deployed in five additional hospital systems across the U.S. The partner organizations within the Dallas IEP have all signed on to the highly configurable, customizable Pieces Iris™ platform. A not-for-profit community-based organization that provides recovery assistance to formerly incarcerated citizens has also joined the Iris™ platform. We believe that this level of seamless health information technology inter-connectivity will be necessary for the effective operation of the kind of integrated service model that CMS is seeking to spearhead.

Question 6: *What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?*

In the feasibility and community assessment period preceding operationalization of the Dallas IEP, PCCI conducted an environmental scan of the landscape of nascent programs across the U.S. that are intended to link healthcare providers with community-based organizations (CBOs) that address various health-related social service needs of citizens. The aim of the environmental scan was to highlight the common features, challenges, as well as approaches of these programs, and to propose potential solutions to their challenges.

We utilized a mixed methods approach that began with an extensive literature search, followed by a series of semi-structured interviews and email surveys of those identified as key informants (community leaders, academic experts, national thought leaders, and policy makers). This led to the compilation of a robust list of cross-sector community partnerships across the country. We identified 301 cross-sector community partnerships that met our inclusion criteria for evaluation. Of the 301 programs identified, we completed evaluations on 64, using both web surveys and in-depth interviews. These initial steps also helped us to formulate a rubric or framework, for assessing the maturity of each community effort, which comprises four separate dimensions (available at: <http://www.pccipieces.org/health-care-and-social-service-provider-partnerships-for-complex-patients/>) by which such programs could be categorized:

- a) Coordination among program components
- b) Financial alignment among program component towards the Triple Aim
- c) Data and information sharing among program components
- d) Metric reporting.

We assessed the maturity of evaluated programs according to this four-dimensional framework.

After the preliminary steps, we performed a deeper evaluation of programs that target socially vulnerable, high-utilization, or medically complex populations, and which also demonstrate at least one of the following program characteristics:

- a) Formal financial arrangement between two or more distinct areas of health services that share similar funding streams and client delivery goals.
- b) Care coordination between the clinical sector and another sector
- c) Risk sharing among organizations that extend beyond the clinical sector.

We subsequently conducted quantitative surveys on all the programs as well as semi-structured, in-depth interviews on a stratified purposive sample of the programs. After establishing the key challenges of these programs, we consulted with national experts and drew from our own local efforts to propose solutions to the problems identified and to compile a blue print “playbook” for communities to use going forward (available at: <http://www.pccipieces.org/health-care-and-social-service-provider-partnerships-for-complex-patients/>).

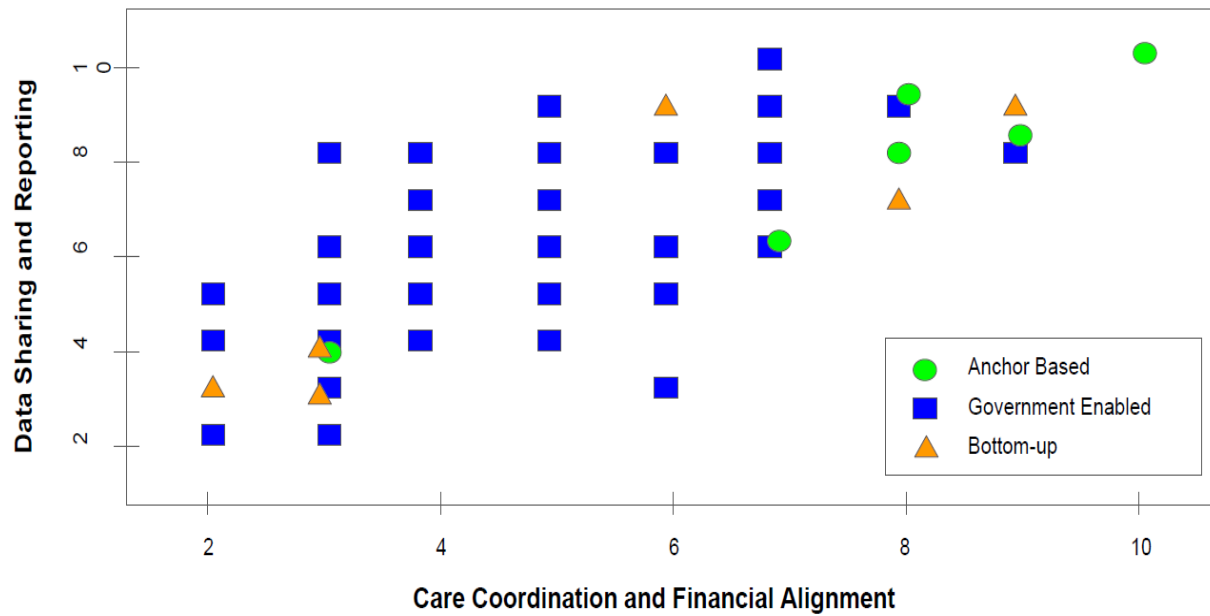
Based on results of cluster analysis of the survey and interview results, we identified three program phenotypes, as summarized in exhibit 1 below:

Exhibit 1: Cross-Sector Community Partnership Phenotypes

Phenotype name	Description	Examples
Anchor based programs	Often led by large, integrated health systems, health plans, or regional alliances or other major community based anchor organization that are in the forefront of payment and delivery system reform initiatives.	Hennepin Health, New York-Presbyterian Regional Health Collaborative, Camden Coalition of Healthcare Providers
Government enabled programs	Programs designed and funded by various federally or grant funded models or demonstration projects	Community-based care transition programs, comprehensive primary care initiative, and various State innovation models
Bottom-up programs	Local innovative initiatives created by community leaders, funded by various sources,	Community information exchange in San Diego, Interfaith House & Northwestern in Chicago

These phenotypes are not mutually exclusive, and some programs currently identified as belonging to one phenotype may have transformed from another phenotype. We found notable differences among programs of these three groups, each with their own self-reported strengths and weaknesses. The “anchor based programs” are usually larger in size and have more complexity than “bottom up programs”. Whereas “government enabled programs” share a few well-defined standardized program elements, as they come from programs defined and funded by the national funding organization. “Anchor based programs” self-reported better outcome measures than the other two groups and tended to be more integrated in the four domains we surveyed than the other two groups (Exhibit 2). As shown in the Exhibit, most anchor based programs are highly integrated in all four domains, but the other two phenotypes varied widely.

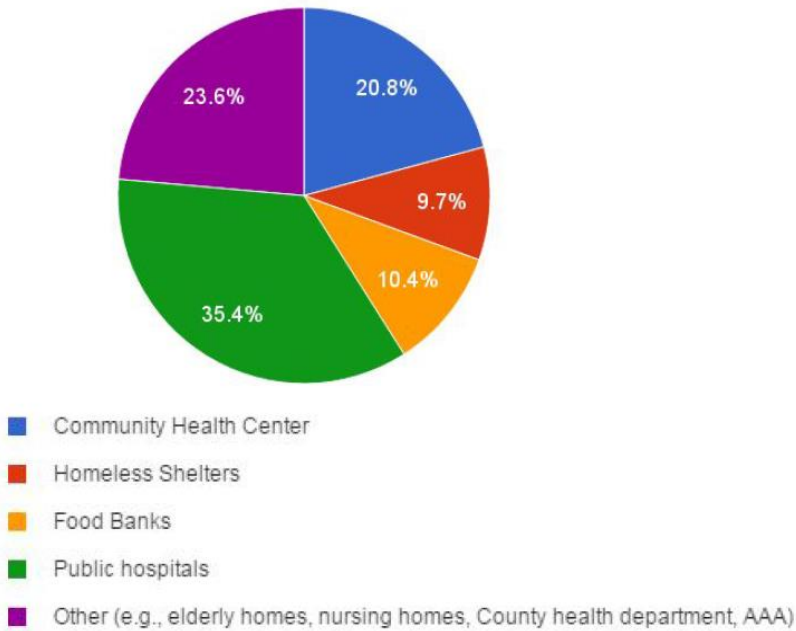
Exhibit 2: Integration Levels among Three Types of Cross-Sector Community Partnerships



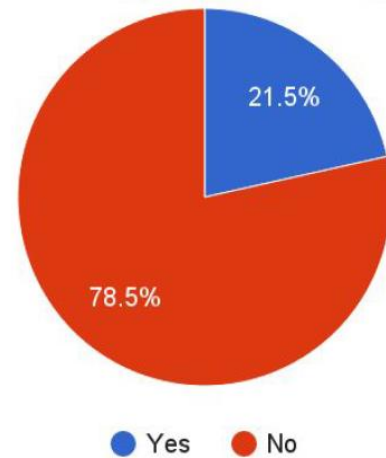
Interpretation: Programs on the top right corner are better integrated in all dimensions than programs in the bottom left corner

Exhibit 3: Diversity of the Cross-Sector Community Partnerships

Community Partners in the Program



Organizations Utilizing Risk Sharing



These differences notwithstanding, all cross-sector community partnerships share a lot of common features and face common challenges. For example, all programs, despite varied financial designs, emphasized the important role of social determinants in their program model. Emphasis was continuously placed on the inclusion of social services and more non-traditional types of care and services (non-health programs) in addressing the needs of at-risk patients and forming community partnerships. Exhibit 3 below shows some characteristics of these diverse programs. As can be seen in the exhibit, most of these programs include participants from a diverse set of CBOs, and a sizable minority (21.5%) includes some risk sharing mechanism among participating organizations.

We identified five common challenges that these early set of programs face, summarized in Exhibit 4 below. We consulted an expert panel, and used our own experiences in the Dallas-Fort Worth region to propose solutions to address these common challenges. In our conversations we also heard from many communities the desire for a community playbook that describes the steps that a community would go through to establish such cross-sector community partnerships, and strategies to address potential issues that may arise during this process. We developed a community playbook to serve this purpose.

Exhibit 4: List of common challenges and proposed solutions*

Challenge	Examples	Proposed solutions
Sustainability	Many programs are grant funded and may not be sustainable after the grant funding is complete. Cost savings and improvement in outcomes may be difficult to sustain after the initial “low hanging fruits”.	Payment reform around transitional care activities and population health has been critical. Coalition of CBOs establishing alignment with hospital strategic plans.
Measurement of outcomes and cost savings	Many programs lack the infrastructure and know-how to define and measure the most relevant outcomes and to accurately estimate cost savings.	Establishing a common data dictionary and data set requirements across hospitals, health systems, community based organizations with a common methodology for analysis.
Sharing of savings	Limited mechanisms and knowledge of how to share savings.	Identification of local philanthropies, foundation and trusts that would provide funding to accelerate experimentation around financial partnerships. Partner around areas of health system penalties or incentives aligned with a CBO’s specific core competency.
CBO data and technology expertise	Many CBOs lack a technical platform, the infrastructure and the know-how to integrate data from different sources, such as EMR, claims data, data from CBOs, and HIEs. Many programs lack the infrastructure to	Utilize in work-flow case management systems at the CBO level that could integrate with EMR systems Hospitals have tremendous data and technology expertise, that can serve as data anchors for community efforts.

consult multiple data sources during the healthcare or social services provision; so services are not well coordinated

Cross-sector workflow evidence base	Programs struggle to define cross-sector, multi-organization, clinical and social workflows.	Increasing demonstration grants provide critical support to experiment and establish this evidence base National collaboratives and learning networks Information clearing-houses to extract maximum value on significant but isolated experimentation occurring across the country
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*For more detailed discussion on other potential challenges and solutions, please see the community playbook, available upon request at: <http://www.pccipieces.org/health-care-and-social-service-provider-partnerships-for-complex-patients/>

Our findings suggest that there is an emerging and diverse group of programs formally coordinating services between independent healthcare and social service organizations, and that while these programs differ in significant ways, there are common challenges that most programs face. We proposed specific solutions (summarized in Exhibit 4 above) and developed a community playbook (available upon request at: <http://www.pccipieces.org/health-care-and-social-service-provider-partnerships-for-complex-patients/>) to address these challenges and to assist communities as they work to forge cross-sector partnerships.

To implement these solutions federal and local policy-makers, philanthropic agencies and foundations, and local anchor hospitals will need to continue to provide support, funding and expertise. For example, system-wide payment reforms around transitional care activities and population health is critical to sustain these innovations and to absorb their positive results into the healthcare delivery system. The Accountable Health Communities program (10) by CMMI is a significant step towards this direction. Funding, mandates, certifications and alliances will be needed to create and maintain a common data dictionary and set of data requirements across hospitals, health systems, and CBOs.

Our findings also highlighted the key role that payment reforms play in driving and sustaining the reforms necessary to build a more integrated healthcare and social delivery system able to care for complex patients. While there is broad agreement that the current fee-for-service system is not sustainable and payment reform is needed to drive care coordination and other changes that reorient the healthcare system towards population health improvement (PCMH, ACO, etc.), there is no consensus on the most appropriate payment model and how to get from the current model to the most appropriate model. The dearth of flexible payment models to properly incentivize and engage social services providers and the difficulty in sustaining the programs beyond the initial funding period were among the key challenges commonly cited by the interviewees. At the same time, there is a wide diversity of payment models behind the programs and little agreement among the interviewees on what types of financial arrangements are needed.

Continued funding for partnership and experimentation is needed to establishing an evidence base for cross-sector workflow. Additional collaboratives, learning networks, and information clearing-houses are needed to extract maximum value from the significant but often isolated experimentation occurring across the country.

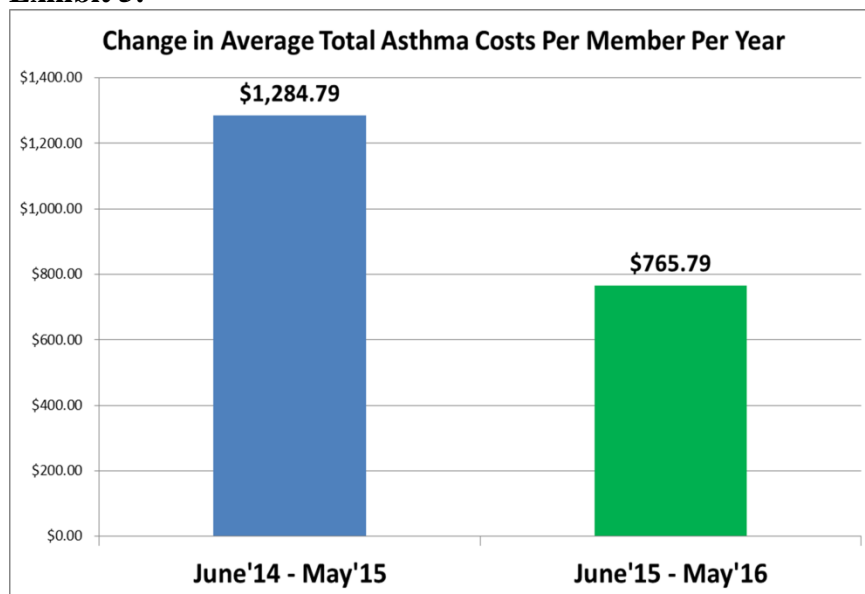
SECTION V: OTHER COMMENTS

Question 2: As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

Yet another project conducted by PCCI provided insights that are relevant to this question. PCCI developed a comprehensive multi-pronged pediatric asthma intervention featuring activations of healthcare providers, patients, payers and the community network, by applying advanced predictive analytics to decrease the cost and improve the quality of asthma-related health care.

We developed a robust mathematical model from payer claims data that stratified the risk of asthma-related hospital admissions and emergency department (ED) visits among children and adolescents. The predictive model proactively classified children or adolescents with asthma as being at very high, high, medium, or low risk for hospitalization or ED admission with a high level of accuracy (c statistic = 0.84). Workflows for the activation of healthcare providers to target high-risk patients were generated and customized to the specific needs of a variety of providers, ranging from large resourceful health systems to small solo community providers. An electronic medical records (EMR) point-of-care alert system was built and deployed, for timely point-of-care interventions to optimize provider's adherence with evidence-based guidelines.

Exhibit 5:



Additionally, we engaged the patients at high-risk for adverse asthma outcomes by means of an automated text messaging program for asthma education, medication and appointment reminders, and remote asthma symptoms monitoring, to optimize patients' adherence to treatment plans. The asthma risk scores and the remote symptoms monitoring system were used to trigger tailored, timely, and appropriate healthcare interventions. Data obtained after one whole year of implementation revealed 50% hikes in controller medication prescriptions by providers, a 15% improvement in the AMR, 30% decrease in ED visits, 43% decrease in hospital admissions, and 40% decrease in annual per capita asthma-related healthcare costs, when compared to the year preceding the intervention (see Exhibit 5). Seventy percent of participants reported the highest satisfaction score with the text-messaging program.

We believe that to improve care and health outcomes for children and youth, comprehensive, multi-sectoral collaborative approaches have to be supported by proactive, timely, and relevant advanced data analyses presented in an actionable and practical format to appropriate frontline providers, and combined with clinical workflows adaptable to different types of healthcare providers. Data from diverse sources including payers, electronic health records, social services providers, and patient generated data, when processed using advanced analytic techniques, including artificial intelligence and machine learning, generate more accurate and in-depth information that can facilitate the targeting of tailored interventions to higher risk patients in a timely fashion. The interaction between proactive data analysis and the health system, combined with targeted and tailored patient engagement, is necessary for impactful interventions that improve health care and outcomes at scale across diverse patient populations, especially the most vulnerable ones. This model could provide the basis for thinking through effective policies to align multi-sectoral partnerships with desired health outcomes.

Thank you, in advance, for considering our responses to and comments on the above-referenced RFI regarding pediatric alternative payment model concepts. We would be happy to engage in further dialogue with CMS on any specific experience that we have shared in this response to the RFI. Please feel free to have a member of your team contact Donna Persaud, MD, the Senior Medical Director at PCCI, and Executive Director of the Dallas IEP, at should you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Stmiff". The signature is fluid and cursive, with the first letter "S" being large and prominent.

Steve Miff, PhD
President and Chief Executive Officer

Partners for Kids

See attachment.



Partners for
Kids.pdf

TO:

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attention: HealthyChildrenandYouth@cms.hhs.gov

From: Sean Gleeson, MD, MBA

RE: Request for Information on Pediatric Alternative Payment Model Concepts

DATE: April 4, 2017

Thank you for the opportunity to comment on the potential program design on behalf of Partners For Kids, a provider-sponsored ACO exclusively serving 320,000 pediatric Medicaid beneficiaries in Central and Southeastern Ohio. We have learned a great deal about the challenges and benefits of the model over the years, having grown from our founding in 1994 as a small organization responsible for a few thousand enrollees. Today, as the largest pediatric ACO, we contract with five managed care plans responsible for all of the Medicaid managed care enrollees across a large region of Ohio. We desire to communicate our lessons learned in such a way that other organizations may be encouraged through proper program design to follow our lead in accepting responsibility for a pediatric population. If more organizations are engaged and participating in this work, more children receive the benefit of dedicated providers accountable to deliver better outcomes for them.

The listing below represents our comments to the specific questions you have posed. Some questions where we did not have substantial contribution we left as N/A. We are available for further discussion if clarification would be helpful.

Section I

- Q1- Our state has been supportive of the concept of greater provider accountability and has received several SIM grants to assist providers in the state to move towards a more accountable position.
- Q2-Although no extension of covered services has been added, we have initiated partnerships with school-based health clinics, and even school nurses in those schools without formal clinics. These partnerships have been very helpful at identifying high risk children, especially those that do not normally interact with the health care system. We have also engaged those entities in the provision of needed services.
- Q3- Inclusion: There is a need for a sufficiently large enough geographic region that includes counties beyond an urban center. As pediatric services in general, and specialty services in particular, are less prevalent than adult services, the effective “local market” for pediatric care often comprises a larger area than adult medicine. Program design elements should account for this need for an expanded service area and allow accountable entities to take responsibility for a large area, both urban and rural.
 - Innovation opportunities include the need for greater use of telemedicine, mobile, school based, and support for non-physician providers to address the relative dearth of pediatric services in rural communities. State regulations promoted by local medical societies have restricted the use of telemedicine. These decisions are made by boards dominated by adult providers. Specialty shortages in pediatrics require easing those restrictions whereas the glut of some adult specialists encourages placing more restrictions.

Section II

- Q1- Accountable providers experience challenges in working with multiple agencies. Even when government agencies do not coordinate, providers have no choice but to interact with them, placing the responsibility for integrating service expectations on the accountable provider.
 - A situation ACOs can face is when two departments setting care coordination expectations have different policies for how care coordination should be done and documented. This creates a regulatory catch-22 for providers taking accountability for care. It is necessary to document the same work on the same patient two ways, or fail to maintain regulatory compliance. Ensuring state agencies with overlapping responsibility establish a unified set of expectations will be a great assistance to accountable providers.
 - State programs understandably often are designed to function well in the adult market as adults consume a disproportionate share of the expenses. This adult focus can create programs that don't function as intended in the pediatric marketplace. PCMH program design assumptions, particularly those for the responsibility distribution for chronic care between PCPs and specialists, must be adjusted for the different reality of pediatric care.
 - Pediatric program design must account for the family issues and therefore must include those agencies that impact positive parenting and the provision of housing, food security and safety.
- Q2- Payment models need to support innovation in delivery of home based services for children to align pediatric centers of excellence (Pediatric hospitals) and pediatric ACOs. Also need to leverage community health worker models, nursing and PA programs to help extend the workforce to the home. Significant shortage of home care providers with pediatric competence, especially in the rural areas, can be a limitation on the out of hospital cost saving options.

- Q3-Pediatric providers are less often connected to community HIE networks as the care of children is less dependent on as broad a range of providers. Funding a children's health and wellness HIE pilot that places the coordination inside a pediatric ACO vs. in a community organization could remove some barriers and accelerate implementation.
- Q4- One challenge to accountable organizations is the eligibility instability of Medicaid recipients. State administration of the program that requires county office agents to determine eligibility resulted in recipients' eligibility status changing among programs, sometimes multiple times a year. This disruption in insurance continuity interferes with care provision. Anything that puts less of a burden on local eligibility office personnel is likely to result in more consistent application of the enrollment process, and benefit accountable organizations by creating greater eligibility consistency. Use of the 1137 program as a vehicle to assure greater consistency of insurance coverage has been a recently adopted improvement.
- Q5- N/A
- Q6- Because of the separate nature of organizations coming together and their separate reimbursement streams co location as opposed to integration is occurring. We suggest options that would allow a bundled payment where the ACO receives the total payment for all services of chronic care and is responsible for distribution, including to social service agencies, and government programs. Areas of trial could include: asthma or ADHD. This crosses payment to hospital, doctors, home health, behavioral health and community based care.
- Q7- MCOs need to be responsible and incentivized for health outcomes, not short term volume based measures.
 - Many Medicaid-focused health plans are more comfortable with the fully insured model and are therefore reluctant to support accountable provider networks. Sustainable models will require additional, externally applied leverage to allow accountable providers to enter the market. Otherwise a lack of health plan contracts will limit their impact to the duration of the grant.
- Q8- The differences in the pediatric and adult health care systems mandate different approaches to pediatric ACOs. Pediatric density of chronic disease is much lower than in adults. The numbers of pediatric high utilizers are lower than in an adult population. This demands a larger population under contract to be actuarially stable, at least 10 times the adult thresholds.
 - Pediatric outcomes of care extend beyond the near term often taking longer to see results and may cross into adult years. Longer term and societal measures will help to support the needed changes.
 - Opportunity exists with FQHCs, Public Health Departments and schools to build integrated care.
 - Pediatric ACOs have to be able to target both children and parents to be effective. This often requires collaboration with adult ACOs. Setting parameters about relative risk and revenue distribution would be helpful to facilitate those contracts.
- Q9- N/A

Section III

- Q1- Must include women of childbearing age. The health of children is directly related to promoting improved birth outcomes. The other impact would be by expanding to age 21. There is increased utilization in teenagers transitioning to adulthood where a more seamless system

could avoid care gaps, social service needs handoffs. Disabled and other populations of chronic disease need to be included to provide sufficient opportunity for cost savings possibility. Integration of behavioral health risk is also important as it has a significant direct cost as a common chronic disease of childhood, but also through its impact on the cost of physical healthcare.

- Q2- Attribution is the challenge. How does the attribution of the cost and benefit extend more broadly to the community? Pediatric ACOs are bearing a disproportionate high risk for the population it serves given the investment it must make to be successful to improve health outcomes. Pediatric ACOs are receiving only clinical care and in some cases care coordination dollars, yet are investing much more beyond that into community partnerships in schools and communities e.g. to improve health outcomes. Changing the pediatric ACO funding model to account for this is necessary to more adequately address issues of health and wellness equity. There needs to be recognition of the pace of innovation balanced with the talent reserves in the pediatric ACO to ramp up changes. Prospective attribution models are necessary as many children do not receive care regularly.
- Q3- Current incentives are not well aligned. There is still more value placed on volume related results than health outcomes. Different funding streams limit the ability to match the resources to where the greatest need is and there is a view of competition vs. collaboration in the achievement of outcomes. MCO P4P incentives needs to flow to the ACO in a transparent manner. Otherwise, the pediatric ACO finds itself in a “winner vs. loser” relationship with its MCO partners as opposed to a win-win.
 - When capitation rates are set by the current utilization patterns, present success sets up an unsustainable future as payment rates continue to decline. A stable payment stream is required or success is penalized with future rate cuts.
 - Data sharing is a significant challenge. An important program design element that would facilitate success would be to establish minimum standards required of data providers (either state Medicaid or Managed Care Organizations). The accountable organizations require this data, but without enforceable standards, this important resource is at risk to be given inconsistently or incompletely as it is not a priority to the data supplier.
- Q4-N/A
- Q5- Health Homes are not the key in pediatrics. Given the relatively lower density of disease compared to adult medicine, a shared services approach is necessary. The “medical neighborhood” is the more appropriate unit of action in pediatrics. Specialty services must be incorporated into this model as that is the locus of the majority of care for the high need patients.
- Q6- Claims data alone for this purpose is a limitation. I would like to see a pediatric ACO pilot funded to work at the community level to drive this work. Pediatric specific population health outcome measures are needed. Total societal spend (including education, incarceration, and social service expenses) should be included as the measurement standard.

Section IV

- Q1- Additional measures are in part the problem. There is a need to align, harmonize the current HEDIS measures as a starting point between MCOs and pediatric ACOs. Be proactive in publishing future measures to allow ACOs to build capacity and expertise to be successful earlier in these results.

- PFK supports the Pediatric Vital Signs/ PMAC measure work. (see included table) This needs to be more fully funded and resourced. The measures need to reflect family measures and not just childhood measures. There remains the need to standardize measures of equity and social determinants to foster improvement.
- Q2: Many of these measures are not collected as they are not the ones typically demanded by stakeholders.

Focus	Aspirational Measure(s)	Best Current Measure(s)	Related Measure(s)
Life Expectancy	Infant mortality (0-1)	Infant mortality (0-1)	Life expectancy at birth (0-18 yrs)
	Violence and injury mortality (2-18)	Violence and injury mortality (2-18)	
Well-being	Patient-reported QOL*	**TBD: need subgroup to explore possible existing metrics	Mood & anxiety in teens
			Maternal depression
			Pediatric ADLs/function
Overweight and Obesity*	Prevalence of Healthy Weight	Prevalence of Healthy Weight	Fitness level
			Healthy eating (breastfeeding in first year, healthy body image in adol, etc.)
Addictive Behavior	Teen tobacco use rate	Teen tobacco use rate	Household tobacco use
			Neonatal substance exposure rate
			Teen alcohol or drug use
Unintended Pregnancy	Teen pregnancy rate	Teen pregnancy rate	Contraceptive use (LARC)
Healthy Communities	TBD	Kindergarten readiness	3 rd grade reading
(prefer composite)		3 rd grade reading	Child abuse/neglect reporting
		HS graduation rate	Childhood poverty
		Need subgroup to determine if need all 3 measures vs select the best	Drinking water quality
			Air quality index
Preventive services	Immunizations at all ages (0-18 yrs)	Immunizations at all ages (0-18 yrs)	Screening and case-finding in PC
(prefer composite)	TBD	Social and developmental risk assessments: need subgroup to identify existing risk assessment	
	Composites to appropriately address		
Care Access	TBD	TBD: need subgroup to determine best measure and clarify if goal is to measure access to primary care vs specialty vs other	Rate of children uninsured for 12 consecutive months or more
	Specialty wait times- TBD	Ambulatory-sensitive hospitalization and ED visit rates	% with unmet needs
Patient Safety	All Care Harm Index	SPS Harm Index (impatient)	Image Gently
			Choosing Wisely
Evidence-based Care	TBD	Days of Hospital Stay/ 1000 Members	
Care Match with Patient and Family/Caregiver Goals	TBD	Patient experience with care (CG-CAHPS)	Clinician satisfaction
Personal Spending Burden	Out-of-pocket spending relative to income	Out-of-pocket spending relative to income	
Population Spending Burden	Trend in "total" spending on human service costs related to children (health & social)	Total cost of health care	Pharmacy, Inpatient, Outpatient, Professional, Ancillary components of total health care cost
			Health care spending growth
Individual and Family Engagement	TBD	Patient activation score vs Self-Efficacy Scale: Need Subgroup to determine best measure	Involvement in Health Initiatives
Community Engagement	TBD	Social support: Social Vulnerability Index vs Social Progress Index vs Other; need subgroup to determine best measure	Availability of healthy food; Walkability; Community health benefit agenda

Section V

Key success factors of accountable care for children involve the following:

- Recognition that the “field of play” is broader than just health care. Education services, social service programs, and home family context all have significant impact
- The healthcare sphere has a different center of gravity than in adult medicine. Primary care centers are overwhelmingly preventative, acute, and minor chronic care focused. Long term chronic care occurs within the specialty office setting. As a result, it takes larger populations to provide a stable and rational contracting unit.
- Data provision is critical. Accountable clinical organizations are dependent on data sources like state agencies and health plans in order to have the information necessary for success. Setting minimum standards for data completeness, timeliness, and accuracy will greatly facilitate success.
- The current holders of risk, managed care organizations, have not readily assigned risk to providers. This greatly limits the potential for sustainable system change unless the ability of providers to enter the accountable care market through contracts is facilitated.

Pediatric Integrated Care Collaborative

Thank you for the opportunity to provide input to the Center for Medicare and Medicaid Innovation Request for Information on Pediatric Alternative Payment Model Concepts

I recommend considering a continuum of services addressing community and family capacity to prevent exposure, experience, and effects of early childhood stress and promote resilience.

Illustrating this involves considering both illness and wellness pyramids and a base of environmental and social determinants of health.

Integrating trauma- and resilience-informed family, primary care, community resources, and mental health services provides a model that takes into account the interaction of neuro-bio-psycho-socio-economic factors involved in childhood experience of stress and the long-term neurological, endocrine, and immune system effects on later health and behavior. Based at Johns Hopkins School of Public Health, the Pediatric Integrated Care Collaborative (PICC) is a training and technical assistance center in the National Childhood Traumatic Stress Network (NCTSN) of the Substance Abuse Mental Health Services Administration (SAMHSA)

The Child and Adolescent Needs and Strengths (CANS), Family Assessment of Needs and Strengths (FANS), and their Trauma Exposure and Adaptation (-TEA) versions provide a four-level stratification of needs and strengths to support communication, action-planning, coordination, and evaluation. A CoreCANS adaptation for integrated care teams is being tested for efficiency, effectiveness, and promising practices for identifying child and parent stress/trauma exposure, resilience, stress-related oral health needs, and attendance at health care visits and Head Start programming. (contact mainerains@gmail.com for current version and evaluation information).

The Edmonton Obesity Staging System for Pediatrics provides another approach to stratifying four levels of need/care across four domains: milieu, mental health, metabolism, and mechanics (medical) which also provides a model for high value team care of chronic child conditions which may have components of stress, mental health, and social determinants of health.

In addition to this quick overview of resources, I would be glad to followup with additional details, literature, etc.



Pediatric Integrated
Care Collaborative 1



Pediatric Integrated
Care Collaborative 2



Pediatric Integrated
Care Collaborative 3



Pediatric Integrated
Care Collaborative 4

Continuum of Integrated Care

Population Focus		Service focus for PC, MH, & families, etc.	Goals
	7 Individual w/ specialty need	Refer to specialty care, coordinated, co-located, or within integrated team	Better health, healthcare, and healthcare cost w/ integrated care
	6 Individual w/ MH needs	Screen for trauma, MH needs. Provide limited, basic service and/or refer to MH	Better 'triple aim' prior to specialty care, maybe with consultation “
	5 Individual w/SD,PF needs	Screen for (SD, PF) needs, resources, Refer/coordinate with SW, health worker	SD and PF needs are addressed to lower trauma experience/effects
	4 Groups, including at-risk for needs	Strengthen family protective factors (PF), resilience, access to services, supports, skills and knowledge, health literacy	Protective Factors are promoted at group level, preventing some individual needs
	3 Practice	Provide Trauma/Resilience/Determinant-informed staff, policy, setting. Survey	Setting promotes family and staff resilience w/o negative experience
	2 Community	Collaborate in Collective Impact	Social Determinants, Trauma Exposure, Community Health,
	1 Population	Address Social Determinants (SD)/ Political/Environmental through Policy, Advocacy, Research	Social Determinants, Trauma Exposure, Population Health

The Edmonton Obesity Staging System for Pediatrics: A proposed clinical staging system for paediatric obesity

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S Hadjiyannakis, A Buchholz, J-P Chanoine, et al. The Edmonton Obesity Staging System for Pediatrics: A proposed clinical staging system for paediatric obesity. *Paediatr Child Health* 2016;21(1):21-26.

Traditionally, clinical recommendations for assessing and managing paediatric obesity have relied on anthropometric measures, such as body mass index (BMI), BMI percentile and/or BMI z-score, to monitor health risks and determine weight management success. However, anthropometric measures do not always accurately and reliably identify children and youth with obesity-related health risks or comorbidities. The authors propose a new clinical staging system (the Edmonton Obesity Staging System for Pediatrics, EOSS-P), adapted from the adult-oriented EOSS. The EOSS-P is used to stratify patients according to severity of obesity-related comorbidities and barriers to weight management into four graded categories (0 to 3) within four main health domains: metabolic, mechanical, mental health and social milieu (the 4Ms). The EOSS-P is based on common clinical assessments that are widely available and routinely completed by clinicians, and has the potential to provide clinical and prognostic information to help evaluate and inform the management of paediatric obesity.

Key Words: Canada; Child; Health risk; Obesity; Treatment

Obesity has both direct and indirect effects on health and well-being, which can vary considerably among individuals based on independent and synergistic genetic, biological, developmental and psychosocial influences (1). It is clear that some individuals are disproportionately burdened by comorbidities linked with obesity (2) and some face greater barriers to weight management. These observations reinforce the complexity of obesity and the long-standing position that there are different types of obesity (obesities) with varying etiologies and health consequences (3). Given this heterogeneity, obesity should not only be defined according to degree of adiposity or excess weight, but also on the basis of a more detailed assessment of obesity-related comorbidities and barriers to successful weight management.

Le système d'Edmonton pour évaluer le stade d'obésité en pédiatrie : un système clinique proposé pour évaluer l'obésité juvénile

D'ordinaire, les recommandations cliniques pour évaluer et prendre en charge l'obésité juvénile reposent sur des mesures anthropométriques, telles que l'indice de masse corporelle (IMC), le percentile d'IMC ou l'écart réduit de l'IMC, pour surveiller les risques sur la santé et déterminer la bonne gestion du poids. Cependant, les mesures anthropométriques ne permettent pas toujours de déterminer avec précision et fiabilité les enfants et les adolescents présentant des risques de santé ou des comorbidités liés à l'obésité. Les auteurs proposent un nouveau système clinique d'établissement du stade de l'obésité (le système d'Edmonton pour évaluer le stade de l'obésité, ou EOSS-P), adapté de l'EOSS destiné aux adultes. L'EOSS-P est utilisé pour stratifier les patients selon la gravité des comorbidités liées à l'obésité et les obstacles à la gestion du poids en quatre catégories (0 à 3) tirées de quatre grands domaines de santé : métabolique, mécanique, santé mentale et milieu social (les 4M). L'EOSS-P, qui repose sur des évaluations cliniques courantes généralisées souvent remplies par les cliniciens, peut fournir de l'information clinique et pronostique pour contribuer à évaluer et étayer la prise en charge de l'obésité juvénile.

Herein, we propose an evidence-informed paediatric clinical obesity staging system that builds on an existing model for adults (4). The staging system captures the severity of disease, as well as factors that complicate management, within four domains of health most commonly encountered in obesity – metabolic, mechanical, mental health and social milieu (the 4Ms) (Figure 1). This assessment tool can help support improved clinical and administrative decisions regarding the allocation of resources (ie, human, financial, time) for obesity management, and provide a platform for future research and clinical care designed to individualize therapeutic options. Given the evidence supporting the presence of many types of obesity with different etiologies and consequences (5,6), an expanded understanding of paediatric obesity

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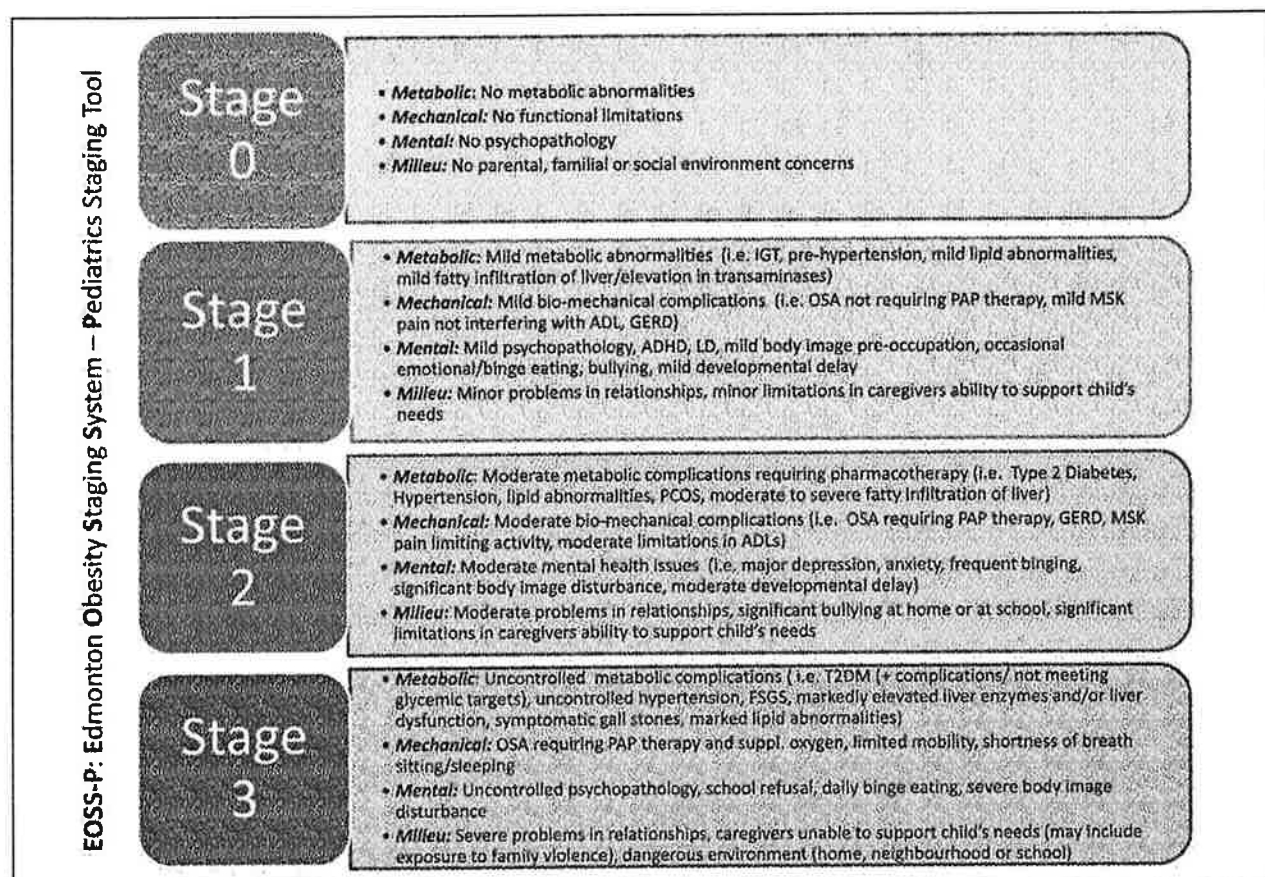


Figure 1) Edmonton Obesity Staging System – Pediatrics staging tool. ADHD Attention deficit hyperactivity disorder; ADL Activities of daily living; FSGS Focal segmental glomerulosclerosis; GERD Gastroesophageal reflux disease; IGT Impaired glucose tolerance; LD Learning disability; MSK Musculoskeletal; OSA Obstructive sleep apnea; PAP Positive airway pressure; PCOS Polycystic ovary syndrome; Suppl Supplemental; T2DM Type 2 diabetes mellitus

may improve on the current but incomplete practice that focuses primarily on anthropometric assessment.

OBESEITY STAGING SYSTEMS FOR ADULTS

The Edmonton Obesity Staging System (EOSS) classifies adults with obesity into five graded categories (0 to 4), which incorporate obesity-related comorbidities and functional status into the assessment (4). One of the strengths of EOSS is that it outlines the metabolic, mechanical and mental health risk factors that should be assessed according to clinical practice guidelines to determine both health risks and an approach to management. The predictive validity of the EOSS was evaluated using the National Health and Human Nutrition Examination Surveys datasets, which found that EOSS stage was predictive of mortality, independent of body mass index (BMI), with clear separation of survival curves (7). Individuals categorized at EOSS stages 0 and 1 were not at increased risk for all-cause mortality compared with normal weight individuals (2), whereas those rated as EOSS stages 2 and 3 had an increased relative risk for all-cause mortality, suggesting that obesity-related comorbidities, and not weight status in isolation, increase risk for mortality (2). In this manner, the EOSS provides prognostic information that can assist clinicians in tailoring interventions based on the stage of obesity – providing those at higher stages with the most intensive treatment (or earlier treatment) compared with those at lower risk (lower EOSS stage). For individuals with EOSS stages 0 and 1, a reasonable target is weight

maintenance and the promotion of health behaviours, while those at EOSS stages 2 and 3 require greater resources to address the medical and/or mental health risk factors identified, in addition to supporting health behaviour modifications. Based on this evidence (2,7), our aim was to develop a paediatric-specific clinical staging system for obesity adapted from the EOSS for adults.

PROPOSED CLINICAL STAGING SYSTEM FOR PAEDIATRIC OBESEITY

The clinical staging system was developed by a group of clinicians and scientists representing, and affiliated with, secondary and tertiary level care centres for managing paediatric obesity across Canada. The original developer of the EOSS system (AMS) and a colleague with expertise in survey development and psychometrics (JL) also contributed clinical and research expertise. As a collective, consensus was achieved for which factors to include in the staging system, and the degree of impact these factors had on the health and well-being of children and youth with obesity. Consensus was reached through an iterative process, which included a series of e-mail communications, teleconferences and face-to-face meetings over a one-year period. Similar to the EOSS, the EOSS for Pediatrics (EOSS-P) is based on common clinical assessments, which include metabolic, mechanical, mental health and social milieu (the 4Ms) histories as well as routine diagnostic evaluations that are widely available and routinely completed (Table 1). The staging system identifies disease severity and potential barriers to

TABLE 1
The Edmonton Obesity Staging System for Pediatrics (EOSS-P)

Risk factor	Stage			
	0	1	2	3
Metabolic	No metabolic abnormalities	<p>Acanthosis nigricans</p> <p>Impaired glucose tolerance (7.8 mmol/L – 11.0 mmol/L)</p> <p>Impaired fasting glucose (6.1 mmol/L – 6.9 mmol/L)</p> <p>Prehypertension</p> <p>Lipids at upper end of normal range LDL-C or non-HDL-C: 3.4 mmol/L – 4.1 mmol/L</p> <p>HDL-C: 0.8 mmol/L – 1.03 mmol/L</p> <p>TG: 1.5 mmol/L – 4.0 mmol/L</p> <p>ALT: 1.5–2.0× normal</p> <p>Ultrasound: mild to moderate fatty infiltration of the liver</p>	<p>T2D without diabetes-related complications</p> <p>Hypertension</p> <p>Lipids modestly elevated LDL-C or non-HDL-C: >4.2 mmol/L</p> <p>HDL-C: <0.80 mmol/L</p> <p>TG: >4.0 mmol/L</p> <p>ALT: 2–3× normal</p> <p>Ultrasound: severe fatty infiltration of the liver</p> <p>PCOS</p>	<p>T2D with diabetes-related complications, hemoglobin A1c ≥8%</p> <p>Uncontrolled hypertension on pharmacotherapy</p> <p>Focal segmental glomerulosclerosis</p> <p>Elevated lipids requiring pharmacotherapy</p> <p>ALT: >3× normal</p> <p>Liver dysfunction</p> <p>Cardiomegaly</p>
Mechanical	No functional limitations	<p>Mild OSA not requiring BiPAP or CPAP</p> <p>Mild MSK pain that does not interfere with activities of daily living</p> <p>Dyspnea with physical activity not interfering with activities of daily living</p>	<p>OSA requiring BiPAP or CPAP</p> <p>MSK pain and/or complications limiting physical activity;</p> <p>Dyspnea causing moderate limitations in activities of daily living</p> <p>Gastroesophageal reflux disease</p>	<p>OSA requiring BiPAP or CPAP and supplementary oxygen overnight; pulmonary hypertension</p> <p>Limited mobility; Blount's disease; slipped capital femoral epiphysis; osteoarthritis</p> <p>Dyspnea when sleeping or sitting</p> <p>Peripheral edema</p>
Mental health	No psychopathology	<p>Mild depression or anxiety that does not interfere with functioning</p> <p>Mild body image preoccupation/concern</p> <p>Mild emotional/binge eating (occasional)</p> <p>Developmental delay with mild impact on weight management</p> <p>ADHD or learning disability</p>	<p>Major depression or anxiety disorder</p> <p>Significant body image disturbance</p> <p>Moderate binge eating (frequent)</p> <p>Developmental delay with moderate impact on weight management</p>	<p>Uncontrolled psychopathology</p> <p>Self/physical loathing</p> <p>Severe binge eating (daily)</p> <p>Developmental delay with severe impact on weight management</p>
Social milieu	No parental, familial, or social environment concerns	<p>Occasional bullying at school or at home</p> <p>Minor problems in the relationships of the child with one or more family members</p> <p>Caregiver is generally knowledgeable of child's needs/strengths but may require information or support in parenting skills</p> <p>Caregiver has minimal difficulty organizing household to support needs of child</p> <p>Caregiver is recovering from medical/physical, mental health and/or substance use problems</p> <p>Mild financial limitations</p>	<p>Significant bullying at school or at home; poor school attendance</p> <p>Moderate problems with parents, siblings or other family members, frequent arguing, difficulty maintaining positive relationships</p> <p>Need for information on parenting skills; current lack of information interfering with ability to parent effectively</p> <p>Moderate difficulty organizing household to support needs of child</p> <p>Medical/physical problems that interfere with parenting; has some mental health, substance use and/or developmental challenges that interfere with parenting</p> <p>Moderate financial limitations</p>	<p>School refusal/absenteeism</p> <p>Severe problems with parent, siblings or other family members, constant arguing or family violence</p> <p>Unable to monitor or discipline child</p> <p>Unable to organize household to support needs of child; experienced recent periods of homelessness</p> <p>Medical/physical, mental health, substance use or developmental challenges that make it impossible for caregiver to parent effectively</p> <p>Severe financial limitations</p> <p>Dangerous home environment; child protection involvement</p>

The EOSS-P can be applied to all children and youth with obesity. Individuals are assigned whatever stage is the highest in which they present with any metabolic, mechanical, mental health or social milieu risk factors. ADHD Attention deficit hyperactivity disorder; ALT Alanine aminotransferase; BiPAP Bi-level positive airway pressure; CPAP Continuous positive airway pressure; HDL-C High-density lipoprotein cholesterol; LDL-C Low-density lipoprotein cholesterol; MSK Musculoskeletal; OSA Obstructive sleep apnea; PCOS Polycystic ovary syndrome; T2D Type 2 diabetes; TG Triglycerides

TABLE 2
The Edmonton Obesity Staging System for Pediatrics and stage-based management plan*

Stage	Management plan
0	Ongoing monitoring of obesity-related risk factors and healthy lifestyle/behavioural counselling by the primary health care provider at regular visits.
1	Ongoing monitoring of obesity-related risk factors and healthy lifestyle/behavioural counselling by primary health care provider in conjunction with dietitian/mental health provider depending on individual needs.
2	Referral to multidisciplinary paediatric obesity clinic for comprehensive assessment; receive more intensive, family-centred counselling and lifestyle/behavioural intervention; plan regular follow-up clinical appointments.
3	Referral to tertiary level, multidisciplinary paediatric obesity clinic for comprehensive assessment, which may include subspecialty care to manage comorbidities; receive more intensive, family-centred counselling and lifestyle/behavioural intervention; consider complementary, intensive therapeutic options (eg, bariatric surgery); plan regular follow-up clinical appointments.

*Persistence in stage 1, 2 or 3 over an extended period (eg, 12 months) should result in intensification of management strategy after the exclusion of nonmodifiable risk factors

effective management within the 4Ms framework, most likely to impact prognosis in paediatric obesity. Some of the proposed cut-offs (eg, lipid panel, blood pressure) were based on clinical practice guidelines, while others were based on clinical and research knowledge and expertise. The EOSS-P was designed to be used by clinicians to provide a framework for assessing children and youth with obesity and to help guide management.

The EOSS-P assesses four main domains that are impacted by obesity and can impact responsiveness to weight management.

Metabolic

Metabolic complications of paediatric obesity include glucose dysregulation (including type 2 diabetes [T2D]) (8), dyslipidemia (9), the metabolic syndrome (10), nonalcoholic fatty liver disease (11), hypertension (9) and, in adolescent females, polycystic ovary syndrome (12). Metabolic complications are often asymptomatic and must be screened for to be identified. Screening should begin at two years of age for lipid disorders, three years of age for hypertension and at 10 years of age or at the onset of puberty, if this occurs earlier, for diabetes (13). Metabolic complications of obesity can improve significantly through changes in health behaviour with minimal change in BMI (14).

Mechanical

Biomechanical complications of paediatric obesity include sleep apnea (15), sleep disordered breathing (15), gastroesophageal reflux disease (16), and musculoskeletal pain and dysfunction (17,18). The presence of sleep apnea and/or sleep disordered breathing can exacerbate the metabolic complications of obesity (19), have deleterious neurobehavioural effects (20), and affect appetite and food intake (21). Biomechanical complications can be barriers to weight management and affect prognosis (22). If left inadequately treated, biomechanical complications of obesity can promote further weight gain.

Mental health

Children and youth with obesity are at risk for social isolation and stigmatization (23). Childhood psychiatric disorders (eg, depression, anxiety), school difficulties, body dissatisfaction, dysregulated

eating behaviours, teasing and bullying have all been linked to paediatric obesity (24,25). Children and youth with obesity have consistently reported lower health-related quality of life compared with normative samples (26,27). Mental health disorders, as well as some of the pharmacotherapeutic agents that are used to manage them, can complicate weight management, promote weight gain and affect prognosis (28).

Social milieu

An assessment of the family, school and neighbourhood milieus (the social milieu) is unique to the paediatric staging system and is important given the key role that parents, family members, schools and communities/neighbourhoods play in the health and wellbeing of children and youth (24). School difficulties and family factors, such as poor parental health, maternal depression, poor family functioning, receipt of social assistance, lack of emotional support, single parenthood and maternal drug use, have been associated with childhood obesity (24). Exposure to greater levels of psychosocial stress has been associated with higher levels of self-reported illness and negative health outcomes (29). Parental involvement and support are integral to successful paediatric obesity management (30).

SCORING AND INTERPRETING THE EOSS-P

The EOSS-P can be applied to children with obesity who are ≥ 2 years of age. The staging system is a tool reliant on clinician ratings, which are based on common clinical assessments including medical history, clinical examination and routine investigations. The EOSS-P is based on the presence and degree of the 4Ms with four stages of increasing health risk severity (0, 1, 2 and 3). The 4Ms are distinct categories, and progression in one of the categories does not necessarily coincide with a concomitant increase in the others. Individuals are assigned the highest stage in which they present with any metabolic, mechanical, mental health or social milieu risk factors.

CLINICAL MANAGEMENT ACCORDING TO EOSS-P STAGE

The EOSS-P enables clinicians to both assess and address four main domains that are impacted by obesity or impact weight management. It identifies complications of obesity, as well as drivers of weight gain and barriers to weight management, and informs an individualized and meaningful approach to weight management (Table 2). For patients at stage 0, the management strategy will be to prevent progression to a higher stage through the reinforcement and support of positive health behaviours. For patients at stages 1, 2 or 3, the management strategies are designed to reverse modifiable risk factors and prevent progression to higher stages. Persistence or progression within stages 1, 2 or 3 over an extended period (eg, 12 months) should trigger intensification of the management strategy, with the exclusion of nonmodifiable factors (eg, developmental delay). Below are some case examples:

Case 1: Stage 0

AM is a 15-year-old boy with a BMI of 35 kg/m² (99th BMI percentile, BMI z-score of 2.40). He has no metabolic or mechanical complications of obesity. He is physically active and has no functional limitations. He has a positive body image. He lives with supportive parents and their relationship is healthy.

Suggested management strategy: For AM, the clinical focus includes helping him to maintain a healthy lifestyle and behavioural habits. He could be followed by his primary care provider (eg, paediatrician, family physician or nurse practitioner) with expertise in paediatric weight management.

Case 2: Stage 1

BC is a 10-year-old boy with a BMI of 34 kg/m² (99th BMI percentile, BMI z-score of 2.57). He has acanthosis nigricans on examination (stage 1, metabolic). He has no biomechanical complications of obesity (stage 0, mechanical). He has attention deficit hyperactivity disorder, a learning disability and is struggling at school (stage 1, mental health). He has been bullied about his weight (stage 1, milieu). **Overall stage: 1.**

Suggested management strategy: BC has metabolic complications of obesity including acanthosis nigricans. The presence of attention deficit hyperactive disorder and a learning disability may complicate weight management. The weight-based bullying is likely a major stressor, negatively impacting his engagement in physical activity and serving as a barrier to weight management. He may benefit from a specialized treatment team to address the underlying causes and complications of obesity, which includes (at a minimum) a consultation with a paediatrician. He may also benefit from a consultation with a psychologist or social worker to explore whether academic and/or social support is available to him at school.

Case 3: Stage 2

LM is a 13-year-old girl with a BMI of 32 kg/m² (98th BMI percentile, BMI z-score of 2.19), T2D and hypertension. Her most recent hemoglobin A1c value was 6.5% (stage 2, metabolic). She has no functional limitations or self-esteem issues (stage 0, mental health; stage 0, mechanical). Her parents are separated and significant conflict exists between her mother and father (stage 2, milieu). **Overall stage: 2.**

Suggested management strategy: LM has metabolic complications of obesity including T2D and hypertension. Her diabetes is adequately controlled. Family stressors may complicate weight and diabetes management. She and her family would benefit from a specialized interdisciplinary team to assess and address the complications of obesity as well as provide a comprehensive therapeutic care plan. She may also require support from the diabetes team. Her family situation can be a complicating factor; therefore, mental health assessment and support would be important.

Case 4: Stage 3

DM is a 16-year-old boy with a BMI of 54 kg/m² (99th BMI percentile, BMI z-score of 3.16), impaired glucose tolerance (stage 1, metabolic) and sleep disordered breathing requiring bilevel positive airway pressure therapy at maximal settings with need for supplemental oxygen (stage 3, mechanical). He struggles with adherence to his bilevel positive airway pressure therapy. He has knee pain that intermittently interferes with his ability to be active. He lives with his mother and two siblings (stage 0, mental health; stage 0, milieu). **Overall stage: 3.**

Suggested management strategy: DM has metabolic complications of obesity including impaired glucose tolerance, and mechanical complications including sleep apnea and musculoskeletal pain. His poorly managed sleep problems may promote further weight gain. He may require consultation with an endocrinologist and respirologist. He would benefit from an intensive, family-based paediatric weight management program that includes a comprehensive assessment, and a care plan completed by an interdisciplinary team with nutrition, physical activity and mental health components. If available, bariatric surgery may be considered after completing an interdisciplinary six-month presurgical intervention and if adequate family/social supports exist to enable success postsurgery.

As illustrated in these cases, using the EOSS-P can provide a better conceptualization of the severity of the condition, an identification of potential barriers and strengths for the child and family, and a more comprehensive evaluation of therapeutic needs than can be identified using BMI alone.

LIMITATIONS AND FUTURE DIRECTIONS OF THE EOSS-P

The EOSS-P has limitations that are important to acknowledge. First, similar to the EOSS for adults, some of the concepts that comprise the EOSS-P rely on clinical acumen for purposes of measurement. Both the mental health and social milieu risk factors can be subject to variation in clinical judgment and, as new data emerge, thresholds proposed for the metabolic cutoffs may differ from the current classification system. Like the EOSS for adults, the EOSS-P does not contain a measure of readiness to change, although it may be a useful prognostic indicator. Attempts were made to stay as consistent as possible with the adult version of the tool to ensure that it would be easily transferable across age groups. Children at higher stages are likely to have greater needs from the health care system. They would, therefore, benefit from access to intensive efforts at intervention, even in the precontemplation phase with support from an expert team to help identify and address barriers to movement across the stages of change. Finally, the tool needs to be evaluated for its reliability and validity in clinical practice. This progression from establishing to testing the staging system is consistent with the adult-based EOSS, which included the original development of the EOSS (4), followed by two independent validation studies that demonstrated the value of using the EOSS versus BMI to determine health risk (2,7). Our team members are currently leading research that will enable us to replicate this sequence of reports. We are advocating, herein, for increased health care resources to be directed to children with the highest EOSS-P stage, although some may argue that given the treatment resistance often observed at these higher stages, resources directed at lower or middle stages of obesity may result in better outcomes and impact a greater number of children/families. We will need long-term studies to determine whether this is, in fact, true.

CONCLUSION

From a clinical viewpoint, current anthropometric classifications used in paediatric obesity are limited. The adaptation of the EOSS-P was designed to provide clinical and prognostic information to help evaluate and guide weight management. The EOSS-P can help clinicians identify children with obesity who are at increased risk and may benefit from more immediate, intensive therapy with treatment stratification according to the EOSS-P stage. The EOSS-P can also inform treatment guidelines, establish differential prognoses and be used to more clearly describe populations used in research so that generalizability of the findings could be better understood.

Children with obesity are a heterogeneous group; therefore, applying the proposed clinical staging system can help prioritize and tailor family-centred health services depending on obesity-associated health risks, which vary across metabolic, mechanical, mental health and social milieu domains.

DISCLOSURE: The authors have no financial relationships or conflicts of interest to declare.

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Integrated Care for Early Childhood Stress

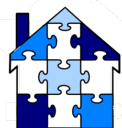
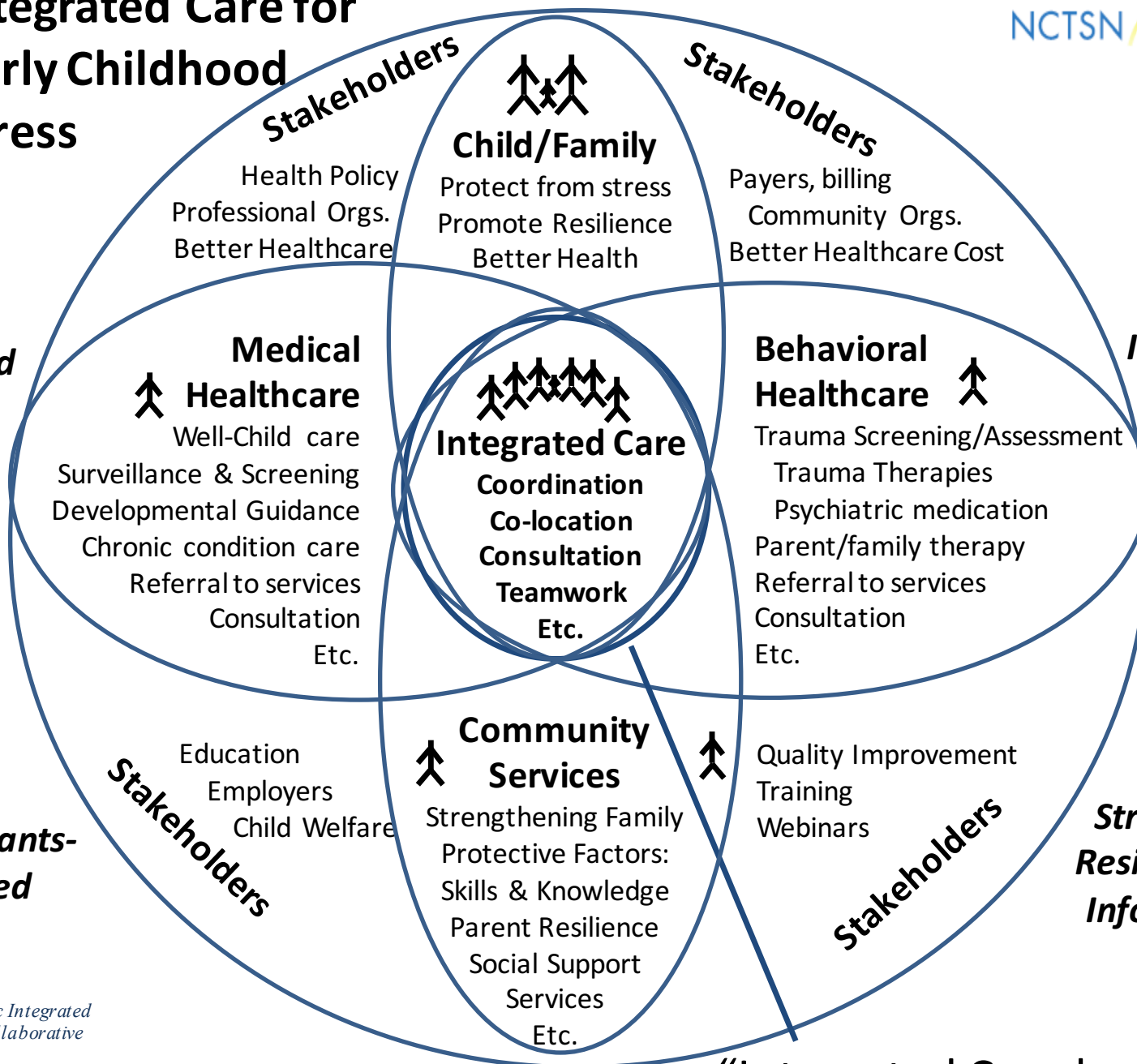
Relationship-Informed

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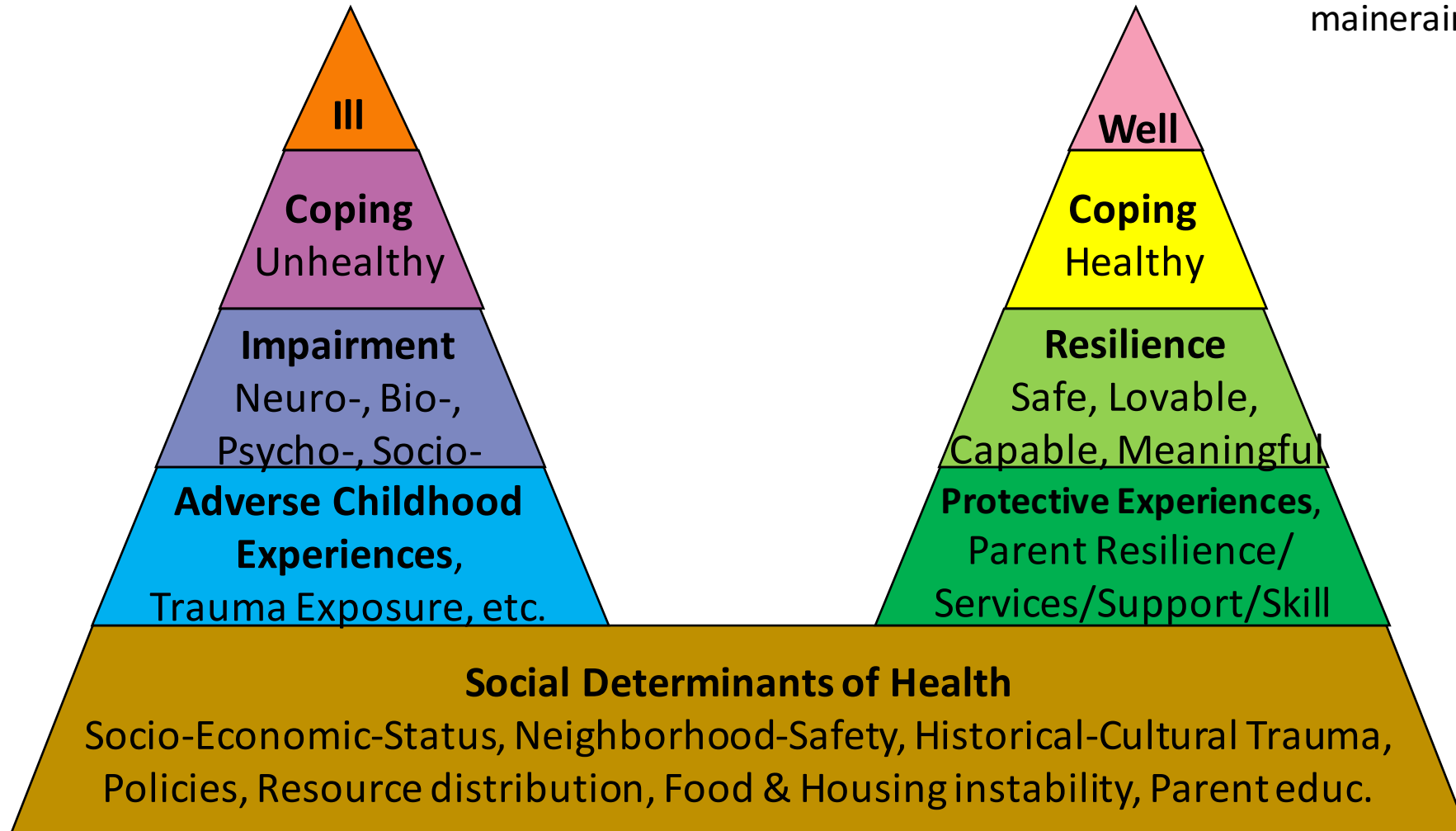
*Strengths/
Resilience-
Informed*



Pediatric Integrated
Care Collaborative
(PICC)

Integrating Healthcare Informed by Trauma, Resilience, and Social Determinants

mainerains@gmail.com



From Notes page for Integrating Healthcare Informed by Trauma, Resilience, and Social Determinants:
As all three components contribute to health outcomes, it pays to be informed about their interaction.

Social Determinants may result in ACEs directly (physical neglect, community violence, cultural trauma, etc.) or indirectly (stressed parent engaging in substance misuse, domestic violence, incarceration, mental illness, parental separation). They may undermine or support parent capacity to provide protective experiences.

Protective Factors involve parental resilience, access to services, social supports, and skills and knowledge (as well as child competence) which underlie parents' ability to prevent, buffer, and soothe stress and to nurture development. Protective factors may prevent ACEs from occurring and may prevent *exposure* to trauma from being *experienced* as traumatic ("tolerable vs toxic") or resulting in impairment *effects*.

Child Resilience to trauma basically involves expectations of being safe, lovable (self-esteem), capable (self-efficacy), and meaningful which are strong enough to sustain a child through adversity that may threaten them. These are promoted within protective relationships within family, school, and community settings. They form a base for learning healthy coping skills and expecting that they will work, a form of "psychosocial immunity". The expectations can be overwhelmed by intense or chronic traumatic experience, resulting in expectations of danger, shame, isolation, helplessness, confusion, meaninglessness, etc. at the "psycho-social" levels of impairment. Therapeutic experience may shift expectations back to positive.

Healthy Coping results in **Wellness** and reduces risk of unhealthy coping.

From Notes page, continued.

Adverse Childhood Experiences (10 categories from ACE Study, plus other overwhelming or chronically unsoothed = “toxic stress” experiences) can lead to **Impairment** at *neurological* (wiring brain for hyperarousal, stress response, impact of cortisol on brain growth and deterioration, sleep?), *biological* (endocrine immune system effects on allergy, asthma, autoimmune disorder, depression, diabetes, obesity, oral health, etc.), *psychological* (anxiety, shame, hurt, depression, helplessness, inaccurate attributions, risk taking, mental illness, etc.), and *social* (aggressive, withdrawn, dependent, criminal behaviors, etc.) levels.

Unhealthy Coping attempts to avoid, fight, enact, self-medicate, etc., experience of impairment.

Illness can result both from impairment (epigenetics, neuroendocrine immune dysfunction, etc.) and unhealthy coping (alcoholism, COPD, diabetes, drug abuse, STD, ulcer, etc.)

Why consider the interactions?

50% of healthcare outcomes are attributable to environment/social determinants, 30% to unhealthy coping
Population Attributable Fraction for ACEs is significantly high for prevalence and cost.

The wellness pyramid offers a public health approach for improving population and individual health.

Pediatric Orthopaedic Society of North America (POSNA)

Dear Administrator Verma,

On behalf of the American Academy of Orthopaedic Surgeons (AAOS) and the Pediatric Orthopaedic Society of North America (POSNA) I have attached our comments to the Request for Information (RFI).

Please let us know if you need anything further.

Sincerely,



Pediatric
Orthopaedic Society



POSNA
PEDIATRIC ORTHOPAEDIC SOCIETY
OF NORTH AMERICA

AAOS
AMERICAN ASSOCIATION OF
ORTHOPAEDIC SURGEONS

April 7, 2017

Seema Verma, MPH
Administrator
Centers for Medicare and Medicaid Services

Subject: CMS Pediatric Care Improvement Request for Information

Dear Administrator Verma,

Thank you for the opportunity to provide feedback on a topic very important to the membership of the Pediatric Orthopaedic Society of North America (POSNA). We are the largest professional body in the United States caring for the musculoskeletal needs of the nation's children. As such, we experience the effects of the broad swathe of healthcare coverage upon our charges. As CMS and CHIP provide healthcare coverage to more than 1 in 3 children in the U.S., nearly all of us in POSNA are intimately involved with your agency and have firsthand understanding of the challenges involved in covering so many children. We are aware of your many successes, but we would like to suggest improvement to some elements of the programs.

In preparation of this RFI, the membership of POSNA was queried as to their suggestions and observations to improve the healthcare coverage yet decrease costs. A grave concern of our membership is the prospect of reduced enrollment in CMS and CHIP programs for the nation's neediest children. We strongly support maintaining and expanding Medicaid. This would allow more children to receive quality healthcare and benefit from having stable, dependable coverage. We stand in opposition to any move that could curtail these important programs. Kurt Newman, MD, CEO of Children's National Health System in Washington DC, summarized the Kaiser Family Foundation's research in his Washington Post op-ed on February 14, 2017 by stating "Children make up 50 percent of today's Medicaid population but account for just 20 percent of Medicaid spending." He argued that as more adults, seniors and disabled individuals are enrolled in Medicaid, children in general are competing for an ever shrinking share of a funding pool. Just as Medicare was created solely to cover the healthcare costs of the elderly, he posits that the nation needs to develop a separate program to cover children. Having a federally run program for children, in the image of Medicare, would set specifications for care across states, thus stabilizing eligibility requirements and standards of care. Currently, access to care is impeded by variable, often low, reimbursement. Rates set by individual states for Medicaid/CHIP programs, often make caring for children unprofitable. A federal government program for childhood

health could guarantee reimbursement at an equitable rate compared to Medicare across all 50 states. We recognize that more covered lives and higher reimbursements will increase the expense to the system. However, we emphasize that this is an investment to prevent higher medical costs and health-related unemployment for our country's future adult population.

An integral part of any efficiently running system is self-monitoring and feedback. We propose that the Medicaid/CHIP programs set aside funding for pediatric healthcare outcomes studies to determine which treatment options truly improve long-term results. The funds should also support disease/condition registries, allowing for the study of substantial multicenter groups of patients, particularly for uncommon maladies. The data derived from this investment would drive evidence-based practices for different conditions, thus, improving treatment efficacy and cost savings.

Our member surgeons also wish to address the need for better preventative health outreach. Benjamin Franklin's truism about fire safety "an ounce of prevention is worth a pound of cure" is arguably applicable to pediatric healthcare. For example, there is an increasing rate of rupture of the anterior cruciate ligament of the knee, which occurring at ever younger ages. Studies have shown that proper training can help young athletes protect themselves from injury. This will both decrease the direct costs of treatment and indirect consequences of knee injury, such as developing premature arthritis. We also believe in the value of public service announcements and educational programs designed to draw attention to devastating injuries caused by lawn mower accidents, all-terrain vehicles, improper seatbelt usage, and firearms. These serve the purpose of protecting children, leading to fewer injuries and the substantial costs involved in treating them. The National Highway Traffic Safety Administration analyzed the circumstances surrounding fatal teen driver motor vehicular accidents and found that 10 percent were distracted drivers. Further study by the American Automobile Association Foundation for Traffic Safety found that 58 percent of all teen driver accidents were due to distraction. A multifaceted educational and instructional program could help to reduce those numbers substantially. We should note that costs for these devastating, yet often preventable injuries, could continue over the victims' lifetime. For a child rendered paraplegic, the effects of these accidents are evident in the need for ongoing care and lack of future earning potential. The opportunity to make an impact, when one third of the nation's children are an accessible audience, is phenomenal and should not be squandered.

We also feel that programs designed to identify and treat those children with vitamin D deficiency or obesity will have a lasting benefit. Costs are comparatively low as compared to treatments of the conditions' consequences, such as fractures and limb deformity. Both can be identified at routine well-child health visits and can be addressed with a combination of medications and parental education. In the case of obesity, the Centers for Disease Control and Prevention note the startling finding that obesity rates in the US double from 9 percent in young children to 21 percent in teenagers. Besides obesity's musculoskeletal childhood issues (i.e., slipped hips and pathologic bowleggedness), its long term associated health implications are extremely debilitating and costly. Tackling these issues is emblematic of interdisciplinary cooperation and education between pediatric orthopaedic surgeons and pediatricians. Pursuing this concept, we champion increased pediatric musculoskeletal education for healthcare students in nursing, pediatrics, and family health, to emphasize earlier diagnosis of conditions such as slipped capital femoral epiphysis (SCFE), developmental hip dysplasia, pediatric compartment syndromes associated with trauma, and infantile bone and joint infections (osteomyelitis and septic arthritis). These are conditions that if treated early need limited surgery and have good outcomes; if treated late, such conditions require multiple surgeries over one's life time, extensive

therapy and often result in permanent disability. Other areas of overlapping preventative health include programs to emphasize prenatal vitamins and prenatal health, to lower the rate of birth defects, such as myelomeningocele (due to low maternal folate), and caudal regression syndrome (linked to maternal diabetes).

One of the biggest challenges we face as pediatric orthopaedists is the child that is not fully rehabilitated following a trauma or a surgical intervention. Often, rehabilitative services are not available to the extent needed to effect full recovery, and therefore children will be unable to return to regular activities, or the outcome of a surgery will not achieve its expected goal. Bundling services such as occupational therapy and physical therapy into the care pathway of a specific surgical procedure or injury would guarantee a patient's access to these needed services.

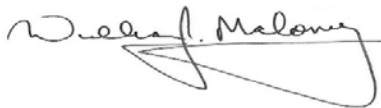
For the near future, we suggest more partnerships between the government and healthcare systems, such as the Partners for Kids (PFK) in Ohio. That program bridges the state's 5 Medicaid Managed Care Plans and the actual care of approximately 330,000 children, through an accountable care organization structure. The PFK is paid on a capitated basis, yet most of the member physicians are paid on a fee-for-service basis. Network members are reimbursed at a rate of 105% of usual Medicaid fees, and are therefore incentivized to treat the clientele. The PFK has a network of health navigators that work to streamline care for complex patients and their families. The partnership further incentivizes its member physicians, for example, to increase adolescent well-visits. It is of a scale that is can create community-based health programs, such as school based asthma therapy. Where such partnerships can be created, we feel they will help not just the individual child, but improve the health of the community as a whole.

Thank you again for the opportunity to present our thoughts and concerns. Our presidential line stands ready to respond to any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read 'JMc'.

James McCarthy, MD
President, Pediatric Orthopaedic Society of North America

A handwritten signature in black ink, appearing to read 'William J. Maloney'.

William J. Maloney, MD
President, American Academy of Orthopaedic Surgeons

Pediatric Palliative Care

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Pedatrix Medical Group

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully,

Pennsylvania Homecare Association

Section I: Question #1—What is the level of interest in APMs that integrate healthcare and social welfare services?

This integration would be beneficial to help pediatric home health agencies serve all of the child's needs, both healthcare needs and social needs. All chronic medical diagnoses such as anoxic brain injury, heart defects, prematurity, and seizure disorders would benefit from an integrated team with both healthcare and social welfare providers.

One example that providers have encountered involves the local Office of Children, Youth and Families (CYF) who have helped the home health provider and family tackle the difficult family dynamics that often accompany a child with special healthcare needs. At first, parents are likely to feel angry and threatened that CYF is involved in their child's care, but experience has shown that once they understand the resources and benefits that CYF can offer these relationships can become a great success story for other families.

Section II: Question #1—To what extent is this integration already happening in the community?

This integration is occurring on a case-by-case basis with families, home health providers, and local CYF offices. However, there are no formal integrated service delivery models that we are aware of that include home health providers. The biggest barrier to this type of integration will likely be the family's response to opening up their child's care and their family's dynamics to a social welfare provider like CYF, an office that is generally only called upon when a family is not providing adequate care to their children.

One potential way to overcome this barrier is to introduce social welfare services as soon as possible to the family. For instance, when a mother is in the hospital with a newborn who will clearly need intense aftercare in the home, it will be important for the hospital discharge planner to introduce CYF and other social welfare offices as a resource rather than a threat to the family. The goal is to have families succeed with caring for their child and the earlier we introduce the social supports the more successful.

Providence St. Joseph Health

Hello,

On behalf of Providence St. Joseph Health, please find our comment letter attached regarding the request for information on the pediatric alternative payment model for Medicaid and CHIP beneficiaries. Please reach out if you have any questions or need additional information.

Thanks,



Providence St.
Joseph Health.pdf



April 7, 2017

To:

Re: RFI on Pediatric Alternative Care Model Opportunities

On behalf of Providence St. Joseph Health, thank you for the opportunity to provide comments to the Centers for Medicare & Medicaid Services regarding the request for information (RFI) on a pediatric alternative payment model (APM) for Medicaid and CHIP beneficiaries.

Providence St. Joseph Health is committed to providing for the needs of the communities we serve, with a special focus on those who are poor and vulnerable. Providence St. Joseph Health combines Providence Health & Services and St. Joseph Health and includes a diverse family of organizations. Together, we employ more than 111,000 people who serve in 50 hospitals, 829 clinics, two health plans and hundreds of programs and services in Alaska, California, Montana, New Mexico, Oregon, Texas and Washington. Our unique not-for-profit organization is transforming health care for the future through digital innovation, population health, mental health, specialty institutes and clinical quality. Each year we work to provide care and services where they are needed most, including investments in community benefit that in 2016 totaled more than \$1.6 billion.

At Providence St. Joseph Health, we have made population health a priority and have created a population health division that is charged with improving the health of more people in our communities while creating highly predictable experiences, access, quality and affordability for all. This work is led by Rhonda Medows, M.D., executive vice president and chief population health officer, who is a member of the Physician-Focused Payment Model Technical Advisory Committee created under MACRA. As an organization who is committed to caring for the poor and vulnerable, our population health strategies underway could be more successful with this proposed integrated pediatric care model to serve the Medicaid and CHIP populations. We are excited about this opportunity and look forward to working with CMS to build a successful pediatric integrated care model.

Integrated pediatric health care and health-related social service delivery model

- 1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental*

health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

As health care providers caring for the most vulnerable populations, we would be very interested in participating in a delivery care model that combines and coordinates health care and health-related social services. The current silos that exist in these areas, including data, financing, patient information, and incentives, make it very difficult to provide the best possible care for children, especially children with special health care needs.

The foster children community could significantly benefit from this type of integrated care model. Children in foster care are at risk and often have some of the highest physical, dental, and mental health needs. At Providence St. Joseph Health, we have made it a priority across our seven state footprint to improve the health needs for foster children. Specifically, in Oregon, there is an incentive metric in place for the Medicaid Coordinated Care Organizations (MCCOs) to ensure evaluations in all three areas within 30-60 days of a child being placed into foster care. Although we are able to execute the evaluation process successfully, we have run into barriers with the actual sharing of this information. As a result, CCOs have no dependable way to know if these children are being placed on their plan.

In addition, there is a void in information sharing between the health care providers, social service organizations, caseworkers, family, and child. Not only is there not an effective system in place to share information but there is also a lack of understanding of what type of information can be shared between health care and community service providers. Providence St. Joseph Health believes having a system and guidelines that would allow appropriate health care information to be shared between health care providers and community services would improve the health outcomes for this population. We urge CMS to create a model that would allow interoperability between health care and community service providers to allow us to provide the best, appropriate care to this population.

- 3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?*

Rural health care is at the heart of care delivery. Families in rural areas often struggle with access to pediatric care, including both primary and specialty care. For example, transportation to more urban areas is not always feasible for families that need to see a specialist. One way to help mitigate this problem would be to integrate Telehealth into the pediatric APM. Allowing Telehealth to be provided to these rural areas will improve the quality of life by easing access to care and increasing the availability of health services to rural communities.

Operation of integrated service model

- 1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?*

- a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children’s Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.*

In addition to CCOs, Oregon has formed Early Learning Hubs which is a coordinating body that pulls together resources focused on children and families in its defined service area, focused on outcomes for children and their families. There is significant progress in cross-sharing of information between the health and early childhood systems through these two structures. However, there is no common data platform or common metrics established.

The various home visiting programs have done a tremendous amount of work to have one point of entry for the numerous programs and now will be using a common data platform for recording data and metrics. However, this continues to be separate from the primary care system and the educational system. The pediatric APM would be most successful if information could be shared across the health and community based sectors.

- 2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?*

One example of programs where integration and alignment have taken place on a small scale are in the Children’s Wrap Around – a voluntary team-based care planning process for youth with complex needs and multiple system involvement, who may have complex behavioral health needs – based in Oregon. Not only are physical and mental health care providers included, but the juvenile justice system, foster care systems, health care social service systems, educational system, and other state agencies involved with the child and family are included in this family driven, youth-guided approach to developing a unified strength-based shared plan of care. In some cases there is initial funding integration/sharing at high levels. The challenge with scale and spread of this model is that it is very resource intensive and the savings that occur are not shared across systems. For some of the most at-risk youth, there is significant opportunity in these models and this has been shown through pilots and studies, but the segmented budgets in the state will continue to be a barrier to developing the full potential of this type of model.

- a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?*

Home visiting, care management, peer supports, community resource systems are all critical to include in an integrated service delivery model. In addition, there must be integration of funding, incentives, data and information sharing with the long-term care systems, developmental disability systems, early learning systems, and intensive care management and respite programs.

- b. What potential exists for increased partnership for provision of home and community-based services?*

There is potential for increased partnership for provision of home and community-based services, but this must be aligned with the traditional health care system, the long-term care system, and the special

programs for special populations (medically fragile intensive programs, respite programs, and intensive mental health programs).

5. *Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?*

There is an opportunity to align programs, services, and data tracking for early identification and treatment of developmental and behavioral challenges and adverse childhood experiences. Coordination and alignment of services provided for very young children has the greatest potential for improved outcomes and cost savings across all public funding. Coordination and alignment for managing complex populations can produce some immediate cost savings within an ACO or other coordinated model. However, that pales in comparison to the true financial opportunity we would have if we could truly align and invest in providing interventions, help, and care at the recommended level.

8. *What role do models of care such as ACOs play in the pediatric environment?*
 - a. *Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?*

Both

- c. *What opportunities do pediatric ACOs have for integration with community and health services systems?*

The total cost savings opportunity for managing children with complex diseases is much less significant than in the adult population. Thankfully, most children never go to a hospital unless they were born there. Adult APMs focus primarily on managing hospitalization cost and disease complications. This concept of managing episodes of care and hospitalization through APMs is not a one size fit all when it comes to caring for the youth. Models for children need to focus on significant upstream identification and prevention. Although this might not generate immediate savings in the first few years like an adult APM, it would create a healthier population in years to come.

Integrated pediatric service model payment and incentive arrangements

1. *What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?*
 - a. *Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?*

High need/high-risk populations that could benefit from an integrated care model include:

- Neonatal intensive care unit graduates;
- children in foster care;

- infants of mothers with maternal depression
 - young children with obesity; and
 - children in foster care.
3. *To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?*

Currently, there is little financial alignment between health care and other health-related service providers serving children and families. These two desperate delivery systems have little to none commonalities with aligning incentives and outcomes. Providence St. Joseph urges CMS to create more financial alignment between health care and health related-service providers through an integrated model of care.

5. *In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?*
- a. *How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?*

A Health Home (primary care and specialty care) models would best meet the needs of the pediatric population if it has non-visit based reimbursement and payment models that incentivize care coordination, integrated behavioral health, integrated dental health, nutrition services, and family and peer support have enormous potential.

Thank you for the opportunity to provide comments on this important request for information. We hope that you find our input informative. For more information, please contact Jacquelyn Alamia, Manager of Federal Regulatory Affairs and Engagement, at

PSA Healthcare

Since Oasis does not apply to patients under 18, how will standardized quality and outcome data be collected and evaluated? Will an Oasis-type data set be developed?



Good afternoon,

My name is Jack Fitzgibbons and I am the President and Chief Operating Officer of Qmetis, a healthcare IT company located here in New York.

Qmetis builds clinical decision-support tools for doctors, nurses, and hospitals that place evidence-based medicine at the point-of-care, directly in front of caregivers, and at the patient bedside, where the greatest difference in cost and outcomes can be achieved.

Our first product is for adult traumatic brain injury, the leading cause of death and disability for those between the ages of 1 and 44. Working with states in the U.S. our program has already improved patient care, improved patient outcomes, (3 and 6 months post-discharge), reduced the need for long-term care, (one of the largest drivers of U.S. health care and Medicaid costs), and cut states' Medicaid costs. (A summary of findings from two trauma hospitals and a medical university is attached above).

Our most recent product is for pediatric traumatic brain injury, which is why we are responding to your RFI.

Pediatric TBI Overview. Based on the Centers for Disease Control (CDC), there are about 7400 children a year under 19 who die of traumatic brain injury. To put that in perspective, if you assume the mortality rate was 20% for severe TBI which is the basic rate that has been used for most clinical trials, that means more than 35,000 children per year suffer from severe TBI. In the most recent study that was performed about 50% of those children had a poor outcome at 6 months, and if you assume an average age of 9 years per child for this disease, and a life expectancy of 78 years, the overall productive life years that are affected by pediatric TBI each year is 1.3 million years. For more perspective, this is about 20 children per day who die of TBI, every single day. In contrast, about 2900 children die each year from cancer, and so pediatric TBI is obviously a critical and under-discussed public health issue.

We would suggest as you move forward that future efforts to improve health and outcomes for children focus on evidence-based care and helping clinicians, perhaps requiring clinicians, to demonstrate higher levels of compliance with what is considered to be the latest standards of care. With adult severe head injury there is ample evidence now in the medical literature that shows the implementation of evidence-based guidelines improves patient outcomes reducing mortality by 50% and improving functional outcome by 50% - while reducing acute care costs by 20%. Naturally, improving functional outcomes would reduce long-term care costs, (delivered often through Medicaid). We have confirmed all of these findings in our own work and will do the same now in our pediatric work.

Good luck, thank you



Qmetis.pdf



School of Medicine

Severe Traumatic Brain Injury: Does compliance to management guidelines affect outcomes?



Katie Krause, Lauren Kava , Brian Reed, Patrick Medado, Syed Ayaz, Brian O'Neil
Wayne State University and Detroit Medical Center , Detroit, MI

BACKGROUND

Traumatic Brain Injury (TBI) is the leading cause of death and disability for individuals between the ages of 1 to 45. Evidence-based guidelines have demonstrated to improve patient care, but adherence has been limited. Noncompliance with these guidelines can prolong patient rehabilitation and recovery, and can lead to a higher cost of care.

OBJECTIVE

To examine whether compliance with the evidence-based neurosurgical guidelines within the first-24 hours after a severe TBI will influence patient outcomes between discharge and month follow-up. 1-6

METHODS

Patients aged 18-75 presenting to the ED of two large hospitals in Detroit, Michigan with blunt head trauma and a Glasgow Coma Score (GCS) between 4-8 were screened for this IRB-approved, prospective, observational study. Patients were excluded if presenting with penetrating brain injury, spinal cord injury, known prior cerebral injury or history of chronic seizures.

Data was collected in the web-based Evidence-Based Medicine (EBM) Care® tool for the first 24-hours post-TBI. Compliance with current guidelines entails MAP above 90mmHg, ICP below 20mmHg and PaCO2 above 25mmHg. Patient outcome was measured by the Glasgow Outcome Scale (GOS), comparing initial injury to 1-6 month follow-up GOS. GOS status was defined as deteriorating, equivalent, and improving. A cross-tabular frequency comparison was performed to assess GOS status, relative to compliance level.

Inclusion Criteria:

Age 18 -75 years

Blunt Head Injury

Glasgow Coma Score (GCS) between 4-8

Exclusion Criteria:

Penetrating Brain Injury

Spinal Cord Injury

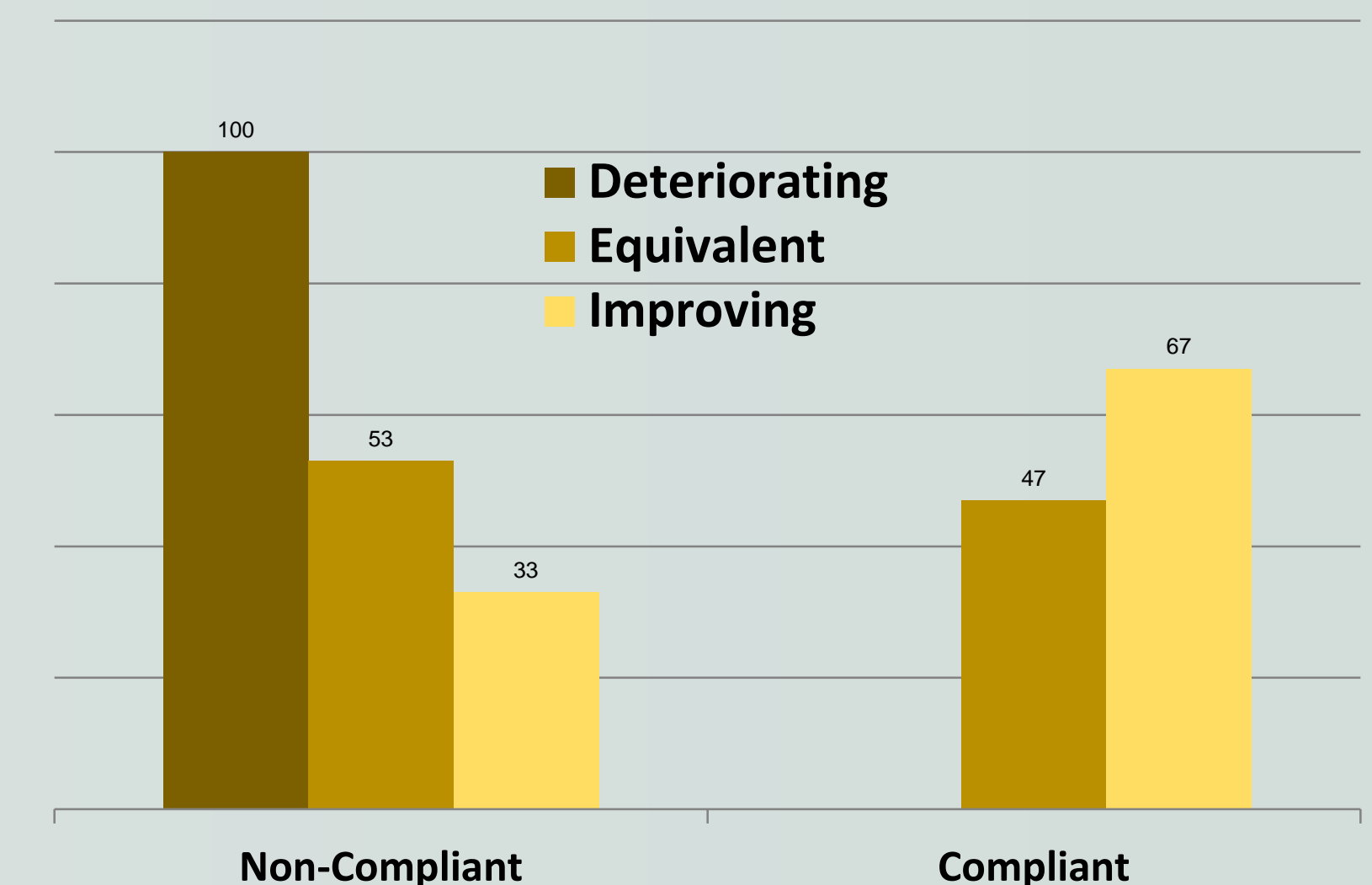
Prior Cerebral Injury

History of Chronic Seizures

RESULTS

30 patients (mean age 36.4 years [SD±12.91]; 83.3% male; 60.0% black) were included., 6.6% had deteriorating GOS, 63.3% had an equivalent GOS, and 30% had an improved GOS score.

Of the 9 patients with improved GOS scores at follow up, 66% were treated according to the guidelines. Of the 2 patients with declining GOS scores, neither were compliant with guidelines. Of the 19 patients who had equivalent GOS scores, 47% met EBM care measurements. The deteriorating group showed a mean change of -2.5, from initial GOS of 5.0 to final of 2.5. The improving group shows mean change of +1.8 from initial mean of 3.6 to 5.3.



CONCLUSIONS

Our data shows that two-third of the patients with improved outcomes were managed according to the guidelines signifying the need for better adherence.

QualityImpact, the COSEHC PTN

CMS QUESTION 1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

QUALITYIMPACT RESPONSE: There is large interest from our primary care pediatric providers to partner with local health-related services. The current health care model minimizes the incentive to share information and partner throughout the child's care. The need to provide services to the uninsured or underinsured pediatric population is the biggest gap that CMS could fill. Larger, non-profit organizations are more likely to have economies-of-scale to offer free services to patients without insurance. However, these programs can also be limited to only Medicaid or only covered by Medicaid in certain states. This can particularly be difficult to providers who practice near state lines. A major challenge for smaller groups is the limited clout to partner with larger hospitals or integrated delivery networks. There is minimal difference between the importance of an informal and a formal, documented relationship as they are still struggling for recognition by the larger community. This particularly becomes a problem when trying to share hospitalization data. Any future plan should particularly consider coordinating payment for all "primary care" or "wellness" that isn't necessarily held in a pediatrician's office, such as improved reimbursement for dental care and mental health as a core component of childhood wellness. It would also be critical for CMS to publicly share quality performance for social services, whether clinical outcomes or patient satisfaction. The quality of a referral is the most important. It can be hard for providers to know both who provides high quality care and has the administrative capacity to report back to the referring or primary care provider. Quality, quantity and consistency should be incentivized by transparent reporting.

CMS QUESTION 2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to "ramp up")? Additionally, what program integrity strategies were employed where these partnerships exist?

QUALITYIMPACT RESPONSE: Children require a host of social services that aren't typically included in a healthcare provider's office. Services such as occupational therapy, physical therapy, speech therapy and mental health services are all services requiring a close partnership for the benefit of the patient. The major benefit in preferred partnerships is the potential to decrease the out-of-pocket expense by patients. Sometimes rates can be negotiated with a trusted partner to see patients who either do not have insurance or their insurance doesn't cover the service. We have experienced across multiple states the benefit of free transportation for individuals under a certain income level, or a certain payer type. Especially for children with chronic conditions requiring multiple office visits during the year, partnering with a local transportation company has ensured that parents have a reliable way to bring their children to their appointments.

CMS QUESTION 3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

QUALITYIMPACT RESPONSE: A new pediatric payment model would need to review who and how are stakeholders incentivized. There should be minimal standards for each state on how to incentivize and educate parents to provide the best care to patients. Many pediatric payment models to-date put the ownership and penalty on the provider if a parent doesn't comply with recommendations. There should also be standard pediatric safety net services for each state. Many times providers want to refer patients to the services they require, or that the payer requires from the primary care provider, but there are no local options.

CMS QUESTION 1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health related social services agencies)? a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children's Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

QUALITYIMPACT RESPONSE: Our providers currently see limited opportunity to partner with state and local levels, primarily due to lack of information for who to contact and limited outreach by state and local departments to advertise the services they can provide patients. One improvement CMS could peruse is a government-based website listing all public services in each market service area. A major challenge is these programs target patients in different insurance and income brackets. It is difficult for providers, and even larger networks, to know which patients are eligible for which programs and what the impact would be on the patient. Local and state agencies should work to develop an easy, potentially centralized, tool to assist in coordinating efforts, such as for patient enrollment.

CMS QUESTION 2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery? a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model? b. What potential exists for increased partnership for provision of home and community-based services?

QUALITYIMPACT RESPONSE: There lies the potential to increase partnership for preventative and pediatric wellness. Especially referring to early childhood development, social services in the local community should support the need for prevention and wellness in settings outside of the provider's office, where patients spend most their time. This could include care at schools or home, or outreach mobile clinics to support patients who cannot go to their provider for a wellness check-up. If CMS will not pay providers for preventative care, funds should be secured for social services to support prevention in the community.

CMS QUESTION 3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training

programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

QUALITYIMPACT RESPONSE: Health Information Exchange platforms are critical for enhancing coordination of care. Many of our providers still have difficulty in accessing state immunization registries. There seems little hope in integrating services if even standard reporting information does not have the function to share back with providers. We have only seen success in state-wide data sharing if a particular electronic medical record company partners with local registries and integrates within the provider's records. This puts the onerous on the individual medical record company who aren't incentivized to share data. A lot of times, these medical record companies may charge providers additional fees for access to these state registries.

CMS QUESTION 5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

QUALITYIMPACT RESPONSE: It is projected that CHIP patients with chronic conditions (obesity, asthma, diabetes, ADHD, etc.) have the most potential for increased coordination and decreased overall spending. This group will also have a large percentage of enrollment in social services or family care needs.

The other large area for potential for improved outcome and lower costs is a comprehensive approach to behavioral health and children with toxic stress. Many times family issues such as divorce or neighborhood violence is identified during a regular office visit, but there is limit resources or time to address. These problems at home have a direct impact on the child's healthcare but therapy in pediatrics is not covered by payers.

CMS QUESTION 6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

QUALITYIMPACT RESPONSE: The major obstacle is lack of time available to coordinate these programs. Providers are more likely to have additional admin staff to support this coordination for commercial plans only as there is an incentive/penalty from the payer to improve coordination of care. Some patients require calls to multiple agencies that can take several hours and there are limited resources to conduct this level of coordination.

CMS QUESTION 7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

QUALITYIMPACT RESPONSE: Managed Care typically limits the resources providers can serve patients to keep them well. Managed Care is often still focused on "sick-care" and puts the onerous on providers to encourage patients on wellness when neither the provider or the patient has incentives to manage this type of care. It is critical that prevention and wellness is the top priority for this new payment model to succeed, and for the overall health of the pediatric population.

CMS QUESTION 8. What role do models of care such as ACOs play in the pediatric environment? a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care

delivery models (improved care coordination within and across care delivery sites), or both? b. How are pediatric ACOs the same or different from adult-focused ACOs? c. What opportunities do pediatric ACOs have for integration with community and health services systems? d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs AND VICE VERSA?

CMS QUESTION 1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

QUALITYIMPACT RESPONSE: Patients with multiple chronic conditions, especially with a mental health condition, have the greatest potential for increased coordination and cost savings. Many of the chronic conditions are treated separately, and not a holistic plan for both the patient and the parents to follow. Particular emphasis on any patient with inconsistent housing, or other social determinants, should be factored in to managing the “high risk.”

Early childhood development has been identified as a critical success factor for managing chronic conditions later on. Particularly therapy, such as speech, occupational and physical, is rarely paid for by insurers but is critical to the patient’s development, and therefore future costs to the health care system. Early intervention during the younger years is likely the age range to benefit from a more integrated health care plan.

Lastly, we would like to highlight that the largest issue in pediatrics may be obesity as it has the largest implication for lowering costs. There are already prevention programs for hypertension, diabetes, and heart failure, but there should be the opportunity to pay for dietitians, nutritionists and counselors as part of the care team. Again, this may be an opportunity to further engage and educate parents to help facilitate change in the child’s behavior. Any new payment model should look broadly for how we as a country treat the big issues, and invest in services to prevent them. This of course includes national programs to provide children with proper nutrition, both at school and at home.

CMS QUESTION 2. How could health care providers be encouraged to provide collaborative services with health related social service providers for a designated pediatric population’s health and social needs? a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate “ramp-up” periods relative to the payment models. b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures? c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers’ patients. d. Are different payment models appropriate for different potential health care and health related social service providers? Please be specific about which payment approaches would be appropriate for specific

patient populations and service providers.

QUALITYIMPACT RESPONSE: Pediatricians have historically been penalized with limited to no incentives or upside shared savings. There is the opportunity to incentivize coordination, patient satisfaction and outcome measures for better performance. This has worked in the adult, Medicare space and will help to identify those pediatricians who provide the best holistic care.

Additionally, different types and severity of office visits should be explored. Currently a provider receives the same payment for a child with a sore throat and patients with multiple chronic conditions. We would like to advocate for an increase payment across the board for providers proving better clinical outcomes so that they are incentivized to provide, and can afford to provide, the right level of care at the right time. This is particularly important for the small entities who cannot afford the staff overhead to provide appropriate coordination for the more high risk patients.

CMS QUESTION 3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors? a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers. b. What factors are essential to the success of this alignment? c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

QUALITYIMPACT RESPONSE: There is limited financial alignment across providers and social services primarily because everyone is getting paid and is incentivized by different sources. Many state programs have one pot of money they manage, while providers still primarily work on a fee-for-service model. One consideration for success is transparency on the cost of each program to the patient. While some services may be covered by insurance, what is the cost for services not covered by insurance? It is critical for pediatricians to know the total cost to the patient to best develop a successful care plan and to know the appropriate service to refer the patient for further care.

CMS QUESTION 4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

QUALITYIMPACT RESPONSE: We believe an innovative idea for CMS is to incentivize performing these disparate services in a central location. For example, perform a dental, physical and mental exam in one joint office visit. We have seen this work for larger health systems, but there is limited understanding how a small entity or rural practice could partner with other services to achieve beneficial economies of scale, and make care delivery easier for patients.

CMS QUESTION 5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model? a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options? b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation? c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

QUALITYIMPACT RESPONSE: We found that parent education is missing in pediatric care. A potential for bundling, or an extension code, would be parent counseling during a child's wellness visit. There is typically limited time during the office visit to provide the parent information and instructions for how to help take care of their child. A parent's mental health is also critical to the child's health success, but is rarely covered by either pediatric or adult programs.

CMS also has the potential to support child development professionals as part of a clinic that could bill for services. The "HealthySteps" (www.healthysteps.org) program has been praised by our providers as a best-practice-standard for child development. It is recommended that CMMI review these core components as part of a child's minimally covered services.

CMS QUESTION 6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

QUALITYIMPACT RESPONSE: The calculation would need to include savings from preventative care. It is hard to measure services that might have been required but were prevented by an earlier intervention. Particularly with pediatrics, it is critical that preventative and wellness interventions are compared to interventions if wellness isn't properly managed.

CMS QUESTION 2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

QUALITYIMPACT RESPONSE: Our providers are interested in knowing how the Medicare Chronic Care Management (CCM) model or the Comprehensive Primary Care Plus (CPC+) could be built for pediatricians. One of the largest barriers to providing appropriate and optimal patient care to children is the more complicated coordination of care. There is interest to learn how a per-member per-month, or per-year fee could be provided to fund additional office support for coordinating care.

Regional Asthma Management and Prevention (RAMP)

Good afternoon,

Thank you for the opportunity to comment on CMS's Request for Information on Pediatric Alternative Payment Model Concepts.

Attached are remarks from Regional Asthma Management and Prevention, a project of the Public Health Institute. In case you are unable to open the PDF, the comments are also pasted below.

If you need additional information or have clarifying questions, please don't hesitate to reach out.

All the best.



Regional Asthma
Management and Pi

CMS's Request for Information on Pediatric Alternative Payment Model Concepts

Regional Asthma Management and Prevention (RAMP), a project of the Public Health Institute, envisions healthy communities where asthma is reduced and well-managed, and the health, social, and economic inequalities that contribute to the unequal burden of the disease are eliminated. Our mission is to reduce the burden of asthma through a comprehensive approach, ranging from clinical management to economic protection. We collaborate, coordinate, share resources, advocate, and promote policy change in order to reduce inequalities, strengthen asthma prevention efforts, and improve management for all communities.

In the United States, 6.3 million children currently have asthma. Asthma is a chronic respiratory disease affecting an individual's ability to breathe. Asthma causes wheezing, breathlessness, chest tightness, and coughing at night or early in the morning, and can be exacerbated by a range of economic triggers such as tobacco smoke, dust mites, outdoor air pollution, cockroach allergen, pets, mold, and smoke from burning wood.ⁱ Asthma cannot be cured but can be properly managed. Poorly controlled asthma can lead to a range of serious outcomes including unnecessary emergency department (ED) visits, hospitalizations and death.

For the past several years, RAMP has focused a great deal of its efforts in California to link high quality asthma clinical care with community prevention, including increasing patient access to health-related economic services that shape health outcomes. These proven interventions help achieve quadruple aim goals of providing better care, improving health outcomes, lowering health care utilization costs, and achieving health equity. As CMS develops Pediatric Alternative Payment Model Concepts, we recommend the inclusion of these interventions in support of children covered by Medicaid and CHIP in California and elsewhere in the nation. Additional information is provided below in response to various questions under RFI Section III, Integrated Pediatric Service Model Payment and Incentive Arrangements.

In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?

New integrated service delivery models should incorporate enhanced patient education and home economic trigger assessments and remediation for children with poorly controlled asthma. The National Institutes of Health's Guidelines for the Diagnosis and Management of Asthma (also known as EPR-3) indicate that effective asthma management requires a combination of four vital components: 1) clinical assessment of severity and control, 2) medication, 3) patient education, and 4) control of economic triggers.ⁱⁱ According to the Asthma Regional Council in their report, *Investing in Best Practices for Asthma: A Business Case*, "Relatively few patients have access to the two [last] components of asthma best practices: patient education and control of economic triggers."ⁱⁱⁱ

For example, per data from the National Ambulatory Medical Care Survey, a nationally representative dataset of patient visits to office-based physicians, "asthma education is underused by primary care physicians for patients with asthma and is declining."^{iv} The percentage of asthma-related visits where asthma education was provided was 50% in 2001–2002 and 38% in 2005–2006. A follow-up assessment that used the same data source and found that the percentage was just 31% in 2009–2010. The authors concluded, "The percentage of patients who received asthma education during their visit remains lower than the current guidelines suggest. This is consistent with previously published results, as it appears

that the provision of asthma education during patient visits continues to be low, despite proven benefits.”^v

The gap in access to patient education and control of environmental triggers provides a tremendous opportunity for making improvements in asthma care.

Definition of Asthma Education and Trigger Remediation

Asthma education, as defined by the National Asthma Education and Prevention Program (NAEPP), is delivered by a variety of professionals in a variety of settings. Asthma education includes information about: basic facts about asthma; proper use of medications; self-management techniques/self-monitoring skills; and actions to mitigate or control environmental exposures that exacerbate symptoms. In the development of the best practice guidelines, the NAEPP concluded that self-management education improves patient outcomes and can reduce costs. The NAEPP explains, “Asthma self-management education should be integrated into all aspects of asthma care, and it requires repetition and reinforcement.”^{vi}

Home environmental trigger remediation is defined as a home-based multi-trigger, multicomponent asthma intervention aimed at reducing exposure to multiple indoor asthma triggers (allergens and irritants), as described by the Community Preventive Services Task Force in their systematic scientific review process.¹ Home environmental trigger remediation interventions involve home visits by trained personnel to conduct two or more activities, including: assessment of the home environment; changing the indoor home environment to reduce exposure to asthma triggers; and education about the home environment. Most programs also include one or more of the following additional home environmental activities: training and education to improve asthma self-management; general asthma education; social services and support; and coordinated care for the asthma client. The Community Preventive Services Task Force recommends the use of home-based multi-trigger, multicomponent interventions with an environmental focus for children and adolescents with asthma based on strong evidence of effectiveness in improving overall quality of life and productivity.^{vii}

The changes made to the home environment through these programs vary. Minor remediation efforts at minimum provide advice or recommended environmental changes to be performed by the members of the household and often provide low-cost items such as allergen-impermeable mattress and pillow covers. Moderate remediation includes the provision of multiple low-cost materials, and the active involvement of the trained home visitor. Activities in this category include the provision and fitting of mattress and pillow allergen-impermeable covers, small air filters and dehumidifiers, integrated pest management, professional cleaning services or equipment, and minor repairs of structural integrity (e.g. patching holes through which pests can enter). Major remediation efforts involve structural improvements to the home including carpet removal, replacement of ventilation systems, or extensive repairs of structural integrity (e.g. roof, walls, and floors). The Community Preventive Services Task Force found that minor to moderate remediation interventions provide good value for the money invested.^{viii}

¹ The Community Preventive Services Task Force is an independent, non-federal, unpaid panel of public health and prevention experts that provides evidence-based findings and recommendations about community preventive services, programs, and policies to improve health. Its members represent a broad range of research, practice, and policy expertise in community preventive services, public health, health promotion, and disease prevention. <http://www.thecommunityguide.org/about/task-force-members.html>.

Workforce Diversity

Based on a solid body of evidence, any new integrated service delivery model should support the delivery of the above asthma services by a range of qualified professionals, even if they are not included in a state's licensure system. Published literature and program-level information about asthma intervention supports this approach, describing improved health outcomes and cost savings when interventions are conducted by a variety of professionals.^{ix} Examples include, but are not limited to, community health workers, *promotoras*, certified asthma educators, lay asthma educators, social workers, respiratory therapists, healthy homes specialists, nurses and other non-licensed, qualified professionals. The Community Preventive Services Task Force specifically cites the value of community health workers (CHWs): “[I]t is beneficial to hire and train CHWs to implement [asthma education and home environmental trigger remediation] for the purpose of reaching out to primarily low-income, ethnic minority populations. CHWs play an essential role in the implementation of interventions, bridging the gaps between underserved populations and researchers. Because they are usually from the same community, CHWs can connect culturally with local populations and build trusting relationships with clients and their families.”^x While important questions still need to be answered regarding standardization of CHW training and qualifications, the core value CHWs bring to the health care landscape is clear. CHWs not only bridge gaps, but can keep intervention costs down while allowing licensed health care professionals to work “at the top of their license.” This may be particularly important for workforce planning as the demand for health care expands with the ongoing implementation of the Affordable Care Act.

What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?

Children who are beneficiaries of Medicaid and CHIP would benefit the most from the integration of asthma education and trigger remediation interventions into Pediatric Alternative Payment Models. Low-income children have higher asthma prevalence than higher income children. Nation-wide, children living below 100% of the poverty line have prevalence rates that are almost double those of children living above 450% above the poverty line (11.1% vs. 6.9%).^{xi} Lower income populations also have higher utilization of urgent care services than higher income populations. As just one example, in California in 2010, Medi-Cal beneficiaries represented 50% of asthma hospitalizations and 42% of asthma emergency department visits, even though they represented only 30% of Californians.^{xii} Therefore, the robust body of evidence showing that asthma education and trigger remediation interventions decrease urgent care utilization supports their use for low-income populations.

The body of evidence supporting the effectiveness of asthma education is robust. As noted in the latest edition of the EPR-3 guidelines, “Evidence is now abundant that asthma self-management education is effective in improving outcomes of chronic asthma.” The report includes the following summary: “The benefits of educating people who have asthma in the self-management skills of self-assessment, use of medications, and actions to prevent or control exacerbations, include reduction in urgent care visits and hospitalizations, reduction of asthma-related health care costs, and improvement in health status (Bartholomew et al. 2000; Cicutto et al. 2005; Cordina et al. 2001; Cowie et al. 1997; Gibsons et al. 2000; Guevara et al. 2003; Krieger et al. 2005; Krishna et al. 2003; Madge et al. 1997; McGhan [sic] et al. 2003; Morgan et al. 2004; Powell and Gibsons 2003; Teach et al. 2006; Wesseldine et al. 1999). Other benefits of value from self-management education are reduction in symptoms, less limitation of activity, improvement in quality of life and perceived control of asthma, and improved medication adherence (Boer et al. 2002; Christianse et al. 1997; Clark et al. 2004; Evans et al. 1999a; Jansons et al. 2003;

McLean et al. 2003; Perneger et al. 2002; Sai i et al. 2004; Thoo e et al. 2003). Cost-analysis studies have show that asthma educatio can be delivered i a cost-effective man er a d that morbidity is reduced as a result, especially i high-risk subjects (Gallefoss and Bakke 2001; Kattan et al. 1997; Powell and Gibso 2003; Schermer et al. 2002; Sullivan et al. 2002).^{xiii} I a summary stateme t, the EPR-3 guideli es oted that improved health outcomes are associated with asthma educatio provided i multiple setti gs: “Accordi g to the review of RCTs [randomized co trolled trials], asthma educatio can be delivered at multiple poi ts of care other than cli cs, EDs, and hospitals. With the support of cli cians, effective educatio al i tervetio s should be provided at poi ts of care outside the traditio al health care setti g, i cludi g schools (Butz et al. 2005; Christianse et al. 1997; Cicutto et al. 2005; Clark et al. 2004; McGhan [sic] et al. 2003), pharmacies (Cordi a et al. 2001; McLean et al. 2003; Sai i et al. 2004), and homes.”^{xiv}

Additio al studies (i cludi g more rece t studies) highlighti g the effective ess of asthma educatio – i cludi g many combi i g educatio with e viro me tal trigger remediatio – are i cluded i Appe dix A. Furthermore, the Commu ity Preve tive Services Task Force “recomme ds the use of home-based, multi-trigger, multicompo e ti tervetio s with an e viro me tal focus for childre and adolesce ts with asthma o the basis of stro g evide ce of effective ess i reduci g symptom days, improvi g quality of life or symptom scores, and i reduci g the umber of school days missed.”^{xv}

I additio to positive health outcomes, asthma educatio and e viro me tal trigger remediatio have sig ificant eco omic be efits. The Natio al Governors Associatio summarized the evide ce: “Leadi g experts i asthma policy and research have asserted that to improve health outcomes and reduce asthma-related health care costs, it is important to augme t high-quality medical manageme t with asthma self-manageme t educatio and home visiti g programs. Studies i dicte that whe those three evide ce-based public health i tervetio s are provided for childre i a stepwise man er, they have the pote tial to yield a positive return o i vestme t (ROI).”^{xvi} For example, for asthma educatio , o e educatio program targeti g high risk childre demo strated an ROI of \$11.22 for every \$1 spe t,^{xvii} while another program targeti g childre demo strated an ROI of \$7.69-\$11.67 for every \$1 spe t.^{xviii} Similarly, the Commu ity Preve tive Services Task Force oted “the combi atio of mi or to moderate e viro me tal remediatio with an educatio al compo e t provides good value for the mo ey i vested based o improve me ti symptom free days and savings from averted costs of asthma care and improve me ti productivity.”^{xix} The Task Force fou d evide ce of a return o i vestme t rangi g from \$5.30 to \$14.00 for every dollar i vested.^{xx} The ROI is typically stro ger for those i tervetio s targeti g childre with poorly co trolled asthma.

To wha ex en are financial incen ives and funding s reams curren ly aligned across heal h care and o her heal h-rela ed service providers serving children and families a he s a e, ribal and local levels, includi hrough public and priva e endeavors?

- a. Please commen on he challenges s a es, local governmen , or o her priva e/public en i ies face in aligni on ou comes for children and you h across heal h care and heal h-rela ed social service providers.***
- b. Wha fac ors are essen ial o he success of his alignmen ?***
- c. Based on he curren experiences, please provide de ails on he da a sharing models and infras ruc ure used o rack ou comes and funding s reams.***

U fortu ately, fi ancial i ce tives and fu di g streams are ot well alig ed across health care and other health-related service providers servi g childre and families at multiple geographic levels. Fu di g for asthma educatio and home e viro me tal trigger remediatio is fragme ted across

different sectors, and it is insufficient to cover current needs. Reimbursement rates for education are generally low and may serve as a disincentive to providing sufficient patient education from licensed practitioners. Additionally, because the majority of services provided by licensed practitioners occur in clinical settings, availability of home trigger assessments is limited. Regarding environmental remediation, since Medicaid and CHIP funding generally can only cover direct patient care, remediation services are typically provided by funding sources outside of the health care field including healthy housing programs, community development block grants, weatherization programs, etc. Below are a series of recommendations to overcome these challenges.

Push State Medicaid Programs to Adopt the Preventive Services Rule

Effective January 1, 2014, a regulation from the Centers for Medicaid and Medicare Services known as the Preventive Services Rule allows state Medicaid programs to reimburse for preventive services that are recommended by a physician and provided by qualified non-licensed professionals.^{xxi} According to the Center for Medicaid and CHIP Services at the Centers for Medicaid and Medicare Services, “It is important to remember that not only the ‘WHO’ (practitioners) has changed; not the ‘WHAT’ (the services).”^{xxii} Additionally, “states retain authority to: define practitioner qualifications; ensure appropriate services are being provided by qualified practitioners; define the preventive services to be provided....; [and] describe the reimbursement methodology.”^{xxiii}

Implementing the rule would permit state Medicaid programs to cover and pay for certain asthma services carried out by a range of qualified professionals in Medicaid fee-for-service while providing flexibility in the delivery of defined services within managed care. In California currently there are a limited number of Medi-Cal managed care organizations providing these asthma services using non-licensed professionals funded by administrative dollars. Such administrative funding is limited so service availability is limited. This rule change would allow managed care organizations in California and elsewhere more flexibility in delivering these important asthma services.

Encourage State Medicaid Contracts with MCOs to Cover Asthma Services

As noted by the National Childhood Asthma Leadership Coalition, “States can require MCO plans, through contractual agreements, to offer community-based asthma interventions to plan enrollees.”^{xxiv} With the understanding of how significantly asthma education and home environmental remediation can improve health and reduce costs, state Medicaid programs should require MCOs to include these services or alternatively, provide incentives for the implementation of these activities by MCOs.

Increase Federal Support for Use of Waivers and Health Services Initiatives to Address Environmental Remediation

CMS can also provide support, encouragement and leadership for the innovative use of Medicaid waivers and CHIP Health Services Initiatives (HSIs) to permit health care funding to cover environmental trigger remediation as appropriate. For instance, as part of California’s recently approved 1115 Waiver, the state is implementing a Whole Person Care (WPC) Pilot Program that will cover, among other things, housing support-related services not traditionally covered by Medicaid.^{xxv} (Remediating home environmental triggers is a potential use of WPC funding, although to date county WPC programs are focused on other housing issues.) Similarly, states can opt to pursue a portion of CHIP administrative dollars for use on HSIs, which CMS has defined as those initiatives that “protect the public health, protect the health of individuals, improve or promote a State’s capacity to deliver public health services, and/or strengthen the human and material resources necessary to accomplish public health goals.”^{xxvi} Both Michigan and Maryland have developed HSIs to address lead remediation efforts focused on home

environmental factors.^{xxvii} Similar HSIs could be set up to address asthma-related environmental conditions.

Augment and Support Other Financing Mechanisms

Even if state Medicaid programs and MCOs take additional steps to support asthma services, there will likely still be a need to augment services such as supporting more intensive environmental remediation. Additional support is needed for exploring other mechanisms of sustainable financing. For example, social impact bond demonstration projects are underway in California and other parts of the country to explore these tools as a financing mechanism for asthma services. Supporting and encouraging this type of innovation could open important opportunities for new financing mechanisms.

While these incremental changes would improve asthma service delivery for low-income pediatric populations, Pediatric Alternative Payment Models could ensure the provision of services in a comprehensive, unfragmented way, that would be even more efficient than the recommendations provided above.

How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

Given that asthma education and home environmental trigger assessment and remediation can lead to a return on investment realized by a reduction in health care utilization costs, sharing savings is an important step toward the sustainability of service delivery. It's particularly important that CMS provide leadership to state Medicaid programs, managed care organizations and other stakeholders to ensure that managed care organizations are able to capture a relevant portion of any shared savings. In California, for example, managed care organizations (MCOs) often face a perverse incentive related to incentives (asthma-related or otherwise) that realize cost savings. MCOs may realize those savings immediately, but the state Medicaid program will subsequently "capture" those savings by reducing payments to MCOs in future budget years. While state Medicaid programs are faced with their own budgetary demands to reduce health care expenditure costs, not allowing MCOs to retain savings from innovative approaches disincentivizes the types of proven, cost-effective incentives children need.

ⁱ Lear. How to Control Asthma, Centers for Disease Control and Prevention. <https://www.cdc.gov/asthma/faqs.htm>. Accessed February 28, 2017.

ⁱⁱ *National Asthma Education and Prevention Program Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma – Summary Report*. National Heart, Lung and Blood Institute, National Institutes of Health, U.S. Department of Health and Human Services. October 2007. <https://www.hltbi.hhs.gov/files/docs/guidelines/asthsumm.pdf>. Accessed February 15, 2017.

ⁱⁱⁱ Hoppin P, Jacobs M, Stillman L. *Investing in Best Practices for Asthma: A Business Case – August 2010 Update*. Health Resources in Action. <http://asthma.regionalcoalition.org/wp-content/uploads/2014/02/2010-Investing-in-Best-Practices-for-Asthma-A-Business-Case.pdf>. Accessed February 28, 2017.

^{iv} Adam L. Hershey Ph.D., M.D., Jonathan K. Orrell-Vale Ph.D., Judith H. Maselli M.S.P.H., Lynn M. Olson Ph.D. & Michael D. Cabaña M.P.H., M.D. (2010) Decreasing Frequency of Asthma Education in Primary Care, *Journal of Asthma*, 47:1, 21-25, DOI: 10.3109/02770900903301286

^v Marquise G. Lee MS, Kevin J. Cross PharmD, MS, Wang Yu Yang MS, Beth S. Sutton PhD & Michael R. Jiroutek DrPH, MS (2016) Frequency of asthma education in primary care

in the years 2007–2010, *Journal of Asthma*, 53:2, 220-226, DOI: 10.3109/02770903.2015.1087024

^{vi} *National Education and Prevention Program Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma – Full Report*. US Department of Health and Human Services, National Institutes of Health, National Heart, Lung and Blood Institute. IHS Publication Number 08-5846 October 2007

^{vii} Crocker DD, Kinyota S, Dumitru GG, Ligo CB, Herma EJ, Ferdinands JM, Hopkins DP, Lawrence BM, Sipe TA, Task Force on Community Preventive Services. Effectiveness of Home-Based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity: a Community Guide Systematic Review.” *Am J Prev Med* 2011;41(2S1):S5-32

^{viii} *Ibid.*

^{ix} Hoppin P, *supra* note iii.

^x Crocker DD, *supra* note vii.

^{xi} US Centers for Disease Control and Prevention. Most Recent Asthma Data.

https://www.cdc.gov/asthma/most_recent_data.htm. Accessed March 28, 2017.

^{xii} Calculated using data from: Milet M, Lutzker L, Flattery J. Asthma in California: A Surveillance Report. Richmond, CA: California Department of Public Health, Environmental Health Investigations Branch, May 2013.

^{xiii} *National Asthma Education and Prevention Program Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma – Full Report*, *supra* note vi.

^{xiv} *Ibid.*

^{xv} *Asthma Control: Home-Based Multi-Trigger, Multicomponent Environmental Interventions for Children and Adolescents with Asthma – Task Force Finding and Rationale Statement*. Community Preventive Services Task Force. <https://www.thecommunityguide.org/sites/default/files/assets/Asthma-Home-Based-Childre.pdf>. Accessed March 28, 2017.

^{xvi} National Governors Association. Health Investments That Pay Off: Strategies for Addressing Asthma in Children. 2015. <https://www.ga.org/files/live/sites/NGA/files/pdf/2015/1504HealthInvestmentsThatPayOff.pdf>. Accessed March 28, 2017.

^{xvii} Clark NM, et al. The Impact of Health Education on Frequency and Cost of Health Care Use by Low Income Children with Asthma, *Journal of Allergy and Clinical Immunology*. 1986;78:108-115.

^{xviii} Greineder DK, et al. A Randomized Controlled Trial of a Pediatric Asthma Outreach Program, *Journal of Allergy and Clinical Immunology*. 1999;103:436-440.

^{xix} *Asthma Control: Home-Based Multi-Trigger, Multicomponent Environmental Interventions for Children and Adolescents with Asthma – Task Force Finding and Rationale Statement*, *supra* note xiii.

^{xx} Nurmagambetov TA, Barrett SBL, Jacob V, Chattopadhyay SK, Hopkins DP, Crocker DD, Dumitru GG, Kinyota S, Task Force on Community Preventive Services. Economic value of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a Community Guide systematic review Adobe PDF File [PDF - 873 kB]. *Am J Prev Med* 2011;41(2S1):S33-47.

^{xxi} “Update on Preventive Services Initiatives,” CMS Informational Bulletin, Centers for Medicare and Medicaid Services. November 27, 2013. <https://www.medicare.gov/Federal-Policy-Guidance/Downloads/CIB-11-27-2013-Preventive.pdf>. Accessed February 16, 2017.

^{xxii} Medicaid Preventive Services: Regulatory Change – PowerPoint Presentation. Division of Benefits and Coverage, Disabled and Elderly Health Programs Group, Center for Medicaid and CHIP Services. April 2014. <https://www.medicare.gov/medicaid/benefits/downloads/preventive-webinar-presentation-4-9-14.pdf>. Accessed February 15, 2017.

^{xxiii} *Ibid.*

^{xxiv} Harty, M and Horton K. Using Medicaid to Advance Community-Based Childhood Asthma Interventions: A Review of Innovative Medicaid Programs in Massachusetts and Opportunities for Expansion under Medicaid Nationwide: Issue Brief from the Childhood Asthma Leadership Coalition. February 2013. www.childhoodasthma.org.

^{xxv} For more information on the Whole Person Care Pilot Program, see the California Department of Health Care Services website: <http://www.dhcs.ca.gov/services/Pages/WholePersonCarePilots.aspx>.

^{xxvi} State Health Official Letter, Health Care Financing Administration, April 6, 1988. <https://www.medicare.gov/Federal-Policy-Guidance/downloads/sho080698.pdf>.

^{xxvii} For more information see *Leveraging CHIP to Protect Low-Income Children from Lead*, a policy brief prepared by Matt Health for the Robert Wood Johnson Foundation’s State Health and Value Strategies Program at Princeton Regional Asthma Management and Prevention

University's Woodrow Wilson School of Public and International Affairs. <https://www.mass.gov/info-details/white-papers/2017/leveraging-chip-to-protect-low-income-children-from>

APPENDIX A:
***As hma Educa ion, Home Environmen al Trigger Assessmen and Remedia ion: Cos -
 Effec iveness and Return on Inves men S udi es***

<i>Me a-Analysis Conduc ed by he Communi y Preven ive Services Task Force</i>					
Source	Study description	Program description	Program cost per patient	Health outcomes	Savings
Nurmagabetov et al. 2011	Review article that included multiple studies	Varied. All involved home-based asthma education and environmental assessments.	Ranged from \$231-\$14,858	Hospitalizations: median decrease of 0.4 hospitalizations per year Emergency department visits: median decrease of 0.2 visits per year	ROI ranged from 5.3-14.0.
<i>Peer Reviewed Literature</i>					
Source	Study description	Program description	Program cost per patient	Health outcomes	Savings
Woods E, et al. 2012	Intervention / Comparison	Case management and home visits.	Unknown	Over a twelve month period decrease in: asthma ED visits (68%); hospitalizations (85%); limitation of physical activity (43%); patient missed school (41%); and	ROI 1.46

				pare t missed work (50%).	
Outman, 2007	Pre-Post I terventio	Home based asthma educatio , e viro me tal assessme t, and moderate e viro me tal remediatio .	\$497	Reductio i u scheduled visits; umber of time oral pred iso e was used; school days lost; hospitalizatio s.	ROI 5.3
Shelledy, 2005	Pre-Post I terventio	Home based asthma educatio , e viro me tal assessme t, and mi or e viro me tal remediatio .	\$721	Decrease i hospitalizatio s, hospital le gth of stay, ED visits, school days missed.	ROI 14.0
Krieger J, et al. 2005	Randomized Co trolled Trial	5-9 home visits targeti g medium to high-risk childre with asthma delivered by a Commu ity Health Worker.	\$1124	10% reductio i days with symptoms/2wks ; 17% improveme t i care giver quality of life; 45% reductio i urge t health service use/2mo; 13% fewer days with limited activity/2wks.	Cost \$23 for each symptom- free day gai ed. I creme t al cost- effective ess ratio: \$56 to \$57 per symptom- free day. Direct medical costs averted/y ear per child: \$124-147.

Kattan M, et al. 2005	Randomized Co trolled Trial	5 home visits targeti g high-risk childre with asthma delivered by two E viro me tal Cou selors.	\$1469	19% reductio i u scheduled Dr. visits per year; 13% reductio i B-ago ist i haler use per year; 37.8 (7%) additio al symptom free days.	Cost \$28 for each symptom-free day gai ed (\$16 per symptom-free day gai ed if just 1 E viro me tal Cou selor admi ister s the i terve ti o).
Castro M, et al. 2003	Randomized Co trolled Trial	Delivered to high-risk adult asthma patie ts i the cli ic, by pho e and at home as eeded.	\$186	54% fewer hospital readmissio s; 34% fewer ED visits; 8% greater improveme t i overall Quality of Life; 76% fewer lost work/school days.	Saved \$36 i health care costs and lost work days for every \$1 spe t o the program.
Jowers JR, et al. 2000	Pre-Post I terve ti o	Targeted medium to high-risk childre (over 12 years) and adults with asthma. Provided 4-6 pho e-based case manageme t and educatio calls and 2 home-based educatio /e viro me t al i terve ti o visits.	\$377	12 mo ths after baseli e: fewer hospital days (37%); fewer ER visits (76%); fewer ICU admissio s (66%); fewer u scheduled Dr. visits (66%); reduced use of	Saved \$4.64 i health care costs and lost work days/ school days for every \$1 spe t o

				rescue medications (50%); fewer missed work days (99%); fewer missed school days (77%).	the program.
Clark NM, et al. 1986	Randomized Controlled Trial	Delivered by a health educator to high risk children with asthma during 6, 1-hour individual sessions in the clinic.	\$1558	58% fewer hospitalizations and 59% fewer ED visits among cases with 1 or more baseline hospitalizations.	Saved \$11.22 in health care costs for every \$1 spent on the program for children hospitalized the previous year for asthma.

Studies:

Castro M, et al. "Asthma Intervention Program Prevents Readmission in High Health Care Users," *American Journal of Respiratory Critical Care*, 2003;168:1095-1099.


Clark NM, et al. "The Impact of Health Education on Frequency and Cost of Health Care Use by Low Income Children with Asthma," *Journal of Allergy and Clinical Immunology*. 1986;78:108-115.

Jowers JR, et al. "Disease Management Program Improves Asthma Outcomes," *The American Journal of Managed Care*. 2000;6(5):585-592.

Kattan M, et al. "Cost Effectiveness of a Home-based Environmental Intervention for Inner-city Children with Asthma," *Journal of Allergy and Clinical Immunology*. 2005;116(5):1058-1063.

Krieger J, et al. "The Seattle-King County Healthy Homes Project: A Randomized, Controlled Trial of a Community Health Worker Intervention to Decrease Exposure to Indoor Asthma Triggers," *American Journal of Public Health*. 2005;95(4):652-658.

Nurmagambetov TA, Barnett SBL, Jacob V, Chattopadhyay SK, Hopkins DP, Crocker DD, Dumitru GG, Kiyota S, Task Force on Community Preventive Services. [Economic value of home-based, multi-trigger,](#)

[multicomponent interventions with an environmental focus for reducing asthma morbidity: a Community Guide systematic review](#)  [PDF - 873 kB]. *Am J Prev Med* 2011;41(2S1):S33-47.

Shelledy DC. The effect of a pediatric asthma management program provided by respiratory therapists on patient outcomes and cost. *Heart & Lung*. 2005; 34:423-8.

Woods E, et al. "Community Asthma Initiative: Evaluation of a Quality Improvement Program for Comprehensive Asthma Care," *Pediatrics*. 2012;129(3):465-472

RFK Children's Evaluation and Rehabilitation Center

To whom it may concern,

Thank you for the opportunity to respond to the RFI for Pediatric Alternative Payment Models. The RFI was well thought out and organized. A response required a great deal of thought on our part. We could have benefitted from more time. However, given the constraints, we hope that you find the material helpful in finalizing your thoughts on this topic.

Sincerely,



RFK Children's
Evaluation and Reh:

**Comments by Montefiore Medical Center Rose F. Kennedy Center
of Montefiore Medical Center on
Center for Medicare and Medicaid Innovation Request for Information on
Pediatric Alternative Payment Model Concepts**

**Prepared by Theodore Kastner MD, MS
Director, RFK University Center of Excellence on Developmental Disabilities
RFK Children's Evaluation and Rehabilitation Center**

**Nicole Furnari LMHC
Director, Rose F. Kennedy Center
Children's Health Home**

Thank you for the opportunity to provide comments on Pediatric Alternative Payment Model Concepts. The RFI reflects a sophisticated understanding of pediatric systems of care and the potential to use financial compensation to drive system-change towards desired outcomes. We have been following the evolution of alternative payment models as they have evolved in the Affordable Care Act, the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), in the Health Care Payment Learning and Action Network (HCP-LAN), in our State, the New York Medicaid Redesign Team's work on Medicaid Transformation, and our organizations Montefiore Medical Center, the Montefiore Care Management Organization and the Rose F. Kennedy Center at Montefiore. While models have not specifically been proposed for use in pediatric populations, this prior work forms a foundation for how Medicaid transformation for pediatric populations, through the use of alternative payment models, may occur.

Montefiore Medical Center has been a leader in the transition to value-based payments and other alternative payment models. Montefiore has partnered with CMS on numerous occasions including the original pioneer ACO model and was one of only a handful which successfully delivered value through the demonstration. Montefiore, through its Care Management Organization (CMO), has a population health focus and a goal of serving 1,000,000 members by 2022. This is supported through risk contracts with three Medicaid managed care organizations

that include 90,000 children living in the Bronx and served in the Montefiore Medical Group. Montefiore is a champion of integration of primary care and behavioral healthcare. Through the Montefiore Medical Group and the Bronx Behavioral Health Integration Program (Bronx-BHIP) Montefiore has led in the integration of pediatric primary care and behavioral health. Through the CMO and the Rose F. Kennedy Center, Montefiore has led in the New York State Children's Health Home (CHH) and is currently coordinating care for children with chronic illness and developmental disabilities in the Bronx who were previously enrolled in six targeted case management programs. The Rose F. Kennedy Center has also established a Medicaid Service Coordination (MSC) in order to coordinate care for children with intellectual/developmental disabilities. Also through the Rose F Kennedy Center, Montefiore has implemented a city-wide infant mental health program (Group Attachment-Based Intervention) which will serve 460 children and families in all 5 boroughs. As a result of these experiences, Montefiore is uniquely positioned to lead in the implementation of pediatric alternative payment models.

Given the knowledge that has been developed over the past 5 years through the application of value-based payment models to adult services, including the Accountable Care Organization (ACO) model and other alternative payment models, it is likely that adult alternative payment models will be applied to pediatric populations. As a result, our comments incorporate the principles underlying the Alternative Payment Model Framework proposed by HCP-LAN (<http://hcp-lan.org/workproducts/apm-whitepaper.pdf>) which includes four payment models moving along a continuum of risk including (1) fee-for-service (FFS); (2) FFS linked to quality and value; (3) APMs built upon FFS architecture and; (4) population-based payments. emphasize the opportunities inherent in the alternative payment model on bundled payments models, episodes of care, shared savings, global capitation and other models.

Confirm Economic Assumptions:

Throughout this analysis, it is assumed that health care funding currently spent on pediatric care can be reallocated through pediatric alternative payment models to achieve the triple aim of improved health outcomes, increased customer satisfaction, and lower cost. While the work of CMS over the past 8 years has increased general support of this belief, there is limited anecdotal evidence for the support of this approach. An analysis of existing data, perhaps with various economic scenarios, could help to guide this discussion and lend support for the application of specific alternative payment models to children.

Contrary to what has generally happened with the implementation of Medicaid managed care, where low risk populations such as TANF-eligible members are enrolled first followed by ABD-eligible members, our experience suggests that alternative payment models may be more appropriate high risk populations where costs are higher and opportunities for creating value

are greater. This approach is exactly what is being sought in Arkansas where the State plans to implement Oregon's Coordinated Care Organization model and will focus on ABD-Medicaid beneficiaries, specifically persons with mental illness and/or developmental disabilities. In New York, pediatric alternative payment models could be applied to high-risk children who are now enrolling in the Children's Health Home model. In New Jersey, pediatric alternative payment models could be applied to high-risk children who are enrolled in the Children's System of Care. (See below for discussion about these two models.)

Define Outcomes

What exactly are the desired outcomes of the pediatric health care delivery system? Most would agree that the goals of pediatric health care, as they occur during the developmental period, are much broader than those of the adult system. Pediatrics providers see themselves as advocates for children in gaining the skills necessary to be healthy, happy and productive adult citizens. In support of this broad goal, they are also advocates for families. For every child, this requires integration with at least one system (public education) outside of health care. It often speaks to broader public health goals including literacy, employment, family function, poverty and trauma. These facts beg the question of what we currently purchase with pediatric health care funds and how pediatric alternative payment models might be used to drive our system(s) to improve outcomes. Without acknowledgement of the diversity of outcomes which could be affected by pediatric alternative payment models, the outcomes we desire and how to measure them, we could use pediatric alternative payment models to drive change in an undesirable direction.

If the goals of pediatric alternative payment models are to be measured accurately, the current Healthy People 2020 goals and MCHB goals are much too narrow.

<https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>

<https://mchb.hrsa.gov/cshcn0910/core/co.html>

Both sets of goals would need to be expanded in order to align with the broad definition of population health embedded in the RFI.

Define Population:

If the population is defined as incorporating all children, the population age boundaries need to be defined. Of the greatest costs associated with the pediatric population, developmental disabilities and chronic illness, a substantial percent has its origins in the prenatal and perinatal period. As a result, if the target is to improve health outcomes for children, it is worth considering incorporation of the perinatal period in pediatric alternative payment models. This

would lend itself to substantial changes in clinical practice, particularly improvements in population health-based prenatal care, high-risk obstetrics, neonatal care and a substantial increase in prenatal genetic screening and testing. The explosion in genetic knowledge has failed to gain clinical traction, in part because it is difficult to make an economic argument for such an expansion. However, this argument could easily be overcome through a prenatal/perinatal episode of care, the question being when (before, during or after pregnancy) would the episode begin. This approach would have substantial impact on the organization of care. Conceivably, neonatology might align more closely with obstetrics and less so with pediatrics. The same could be said for genetics. If the system worked, it could easily affect workforce projections for these two pediatric specialties and their allied professionals. Finally, a small share of the overall health care budget is allocated to pediatrics. Investment of what some consider to be “pediatric” funds to obstetrical providers could raise new political challenges. There are many other concerns. However, the complexity of perinatal episodes of care is so great, it may warrant a specific focus through demonstration projects.

At the other end of the age continuum, children leave the pediatric system of care. Let’s assume for a moment that pediatric alternative payment models and the systems of care which evolve from them, are wildly successful - we increase our ability to support the outcomes we desire and we do so at a lower cost. It is likely that the cost savings resulting from these interventions will appear over the remainder of the life span. How do we attribute this value to the pediatric providers who created it? For example, the greatest costs associated with the Medicaid program are attributable to individuals with chronic illness and disabilities. If pediatric providers can address this burden why shouldn’t they receive the benefit in the form of greater overall investments, higher compensation and other rewards? How would pediatric alternative payment models incentivize pediatric providers across this boundary.

Define Boundaries Between Health and Education

Children with disabilities and chronic illness qualify for a range of non-medical services generally funded through the educational system. Often called “related services” and defined in federal law (i.e. the Individuals with Disabilities Education Act or IDEA and others), many of these services cross the boundary between education and health. Indeed, this is only more confused by the practice of educational providers obtaining credentials as health care providers and billing Medicaid and commercial insurance for services provided by “education” systems. These issues are quite complex when one considers the role of hospitals for children with chronic illness, which often operate their own schools or coordinate with multiple school districts. Substantial work needs to be done to define the boundary between these two systems. As pediatric alternative payment models move further along the risk continuum, there is substantial opportunity for cost shifting between the systems with children falling between

the cracks of any disputed boundary. Again, this issue is of such complexity that current practice and the effects of changing financial incentives need to be studied on greater detail.

Define Boundaries Between Health and Other Social Services Systems

We are increasingly aware of the impact that poverty, homelessness, trauma and other social factors have on the health of children. A better understanding of the relationship between pediatric health care system and social services systems including SNAP, SSI, Health Start, Head Start, foster care, child welfare, pediatric and adult mental health, substance abuse and efforts to address poverty is required. Efforts to integrate care, including physical health and behavioral health integration, are important and pediatric alternative payment models should be used to drive system integration.

a pediatric alternative payment model. We wish to explore models that encourage pediatric Medicaid and CHIP providers to collaborate with health-related social service providers (e.g., early childhood development programs, child welfare services, crisis intervention programs, behavioral health providers, and home and community based service providers) at the state, tribal and local levels, and share accountability for outcomes for children and youth covered by Medicaid, and CHIP.

Knowledge-Base of Pediatric Providers

As noted in the RFI, pediatric providers are generally unfamiliar with pediatric alternative payment models including the ACO model and other incentive payment models proposed in legislation such as MACRA. There is a steep learning curve for many of these providers, particularly those who have not traditionally been part of the health care system. Educational program will be required to support any transition related to pediatric alternative payment models.

The following Comments relate to specific components of the RFI:

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL:

Many states are building pediatric health care systems which address these goals in diverse ways. Medicaid managed care for children in Medicaid and CHIP, children's systems of care (as promoted by SAMSHA) in order to integrate and coordinate behavioral health services), Health Homes under section 2703 of the Patient Protection and Affordable Care Act, CMMI and its Innovation Grants including State Innovation Models (SIMs) and others all stimulate and support "pediatric health care systems and providers (which) work with their states and tribes to take on accountability for the health and wellness of children and youth, with the families at

the center of care planning, potentially sharing that accountability with health-related social service provider partners.” Virtually every State has taken a different approach, building upon its legacy delivery systems, its local culture and partnerships, and its social values and political goals. While there is no single approach, themes appear to be emerging. These include the (1) shifting of financial risk to either insurance companies or delivery systems through Medicaid managed care, Medicare/Medicaid ACOs or other value-based payment models; (2) building children’s systems of care (SAMSHA) with a focus on behavioral health integration; and (3) building case management systems through targeted care management (TCM), Medicaid Home and Community Based waivers, or Health Homes.

While the implementation has been different in every state, we believe that these demonstrations have built local capacity through three mechanisms which support the expanded use of pediatric alternative payment models: (1) shift accountability for outcomes and financial risk to delivery systems; (2) leverage the experience of children’s systems of care to create fully integrated delivery systems; and (3) use children’s Health Homes to coordinate all aspects of pediatric care, including services provided under waiver authorities.

QUESTIONS: 1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services?

At the present time in the Bronx, there are several developments which are moving in parallel to address this issue. With Montefiore’s leadership, we believe they can be organized into a fully integrated pediatric delivery system which can meet the goals set forth by CMS. As noted above, elements of the Montefiore delivery system which can contribute to this effort include: (1) risk contracts with three Medicaid/CHIP HMOs; (2) participation with NYS in the delivery system reform incentive payments (DSRIP) program; (3) a primary care system for 90,000 children; (4) a system-wide electronic health record (EPIC); (5) the Children’s Hospital at Montefiore (CHAM) and a comprehensive array of pediatric specialists; (6) behavioral health integration (BHIP); (7) infant mental health services; (8) comprehensive developmental/behavioral diagnosis/treatment; (9) strong relationships with social service, family and consumer groups; and (10) case management through the Children’s Health Home and Medicaid Service Coordination Programs.

There are approximately 360,000 children in the Bronx including up to 24,000 children who will receive services through the CHH and another 10,000 children with intellectual/developmental disabilities supported in the MSC operated by our State developmental disabilities system, the Office for Persons with Developmental Disabilities (OPWDD). Montefiore has an interest in addressing the needs of this population through the tools we have in place. However, we note that while our system may be capitated for many patients, our providers are still paid on a fee-

for-service basis. Primary care, specialty and other pediatric health care providers continue to be incentivized to produce volume rather than deliver value. In this respect, pediatric systems of care are still operating at cross purposes. Like most delivery systems we are challenged to reward value at the level of the individual provider and would welcome technical assistance in this regard.

Several of us have significant experience with New Jersey's Children's System of Care (NJCSOC) and this knowledge will also inform our response.

In 2000, New Jersey reformed its children's mental health system in order to address the growing number of children who were placed in behavioral health settings and residential facilities. The administration issued a white paper calling for "a comprehensive system of care for children and families in New Jersey by committing to maintaining the integrity of family and community life for children while delivering effective clinical care and social supports services." The white paper outlined important principles which included:

The system for delivering care to children must be restructured and expanded

- There should be a single point of entry and a common screening tool for all troubled children
- Greater emphasis must be placed on providing services to children in the most natural setting, at home or in their communities, if possible
- Families must play a more active role in planning for their children
- Non-risk-based care and utilization management methodologies must be used to coordinate financing and delivery of services

The program was endorsed by the Governor with the caveat that it be statewide and funded through the Medicaid program.

The project funded three types of services. First, a single point of entry, an 800 phone number, was provided through a non-risk bearing managed care organization. This type of manager is a third-party administrator (TPA) or administrative services only (ASO) arrangement. Second, the program created local, county-based, systems of care. Between 2000 and 2006 the State funded county-level partners which included Family Support Organizations, Care Management Organizations and Mobile Response providers. These "system partners" guided the local implementation of the program. Eventually the FSOs and CMOs were combined, giving families an opportunity to serve on the Boards of these new non-profit organizations. Third, the CSOC has funded a network of hundreds of fee-for-service Medicaid providers, all coordinating with the ASO and county system partners. These providers accept referrals from the ASO and CMO, develop care plans (often with the CMO), provide in-home treatment and document their care

on a single electronic health care record which is maintained by the ASO and accessed through a secure portal. This aspect of the program also coordinates payment, generally within two weeks, to the provider.

Not every provider is pleased with the arrangement. Overhead costs are significant and the barrier to becoming a Medicaid provider for this service is high. The use of unlicensed providers to deliver Medicaid-funded services is troubling to many.

However, from the perspective of public policy, the program has been a success. Between January 1, 2010 and October 1, 2016 the number of youth in Case Management increased from 6,894 to 11,873. During the same time frame, the number of youth in Behavioral Health Out-of-Home Treatment Settings decreased from 1,800 to 1,354. In addition, the number of youth in Out-of-State Behavioral Health Out-of-Home placements decreased from 36 to 1. As a result, New Jersey has closed its state-operated psychiatric hospital for youth and significantly reduced the number of Residential Treatment Centers for youth. More children are reached at an earlier age, before they enter irreversible crises. Family satisfaction is high. Costs have been lowered.

The program has led to a substantial reconfiguration of services for children. In the realm of criminal justice, for example, prior to program implementation, New Jersey maintained 17 juvenile justice centers. It now operates 11. The total census for youth in detention has decreased by 60%. In recent years, the scope of the program has been expanded to include children with developmental disabilities and youth with substance abuse disorders. Enrollment is expanding with similar system-wide improvements.

What is all the more remarkable is that this program required a significant expansion of the NJ Medicaid program. Any child living in New Jersey, regardless of income, qualifies for services through the Children's System of Care. There is no means test.

Since its roll-out the program has expanded substantially. In 2013 all children with intellectual and developmental disabilities, about 12,000 at the time, were transferred from the Division of Developmental Disabilities to the NJCSOC. Subsequently, the NJCSOC expanded on its array of waiver-funded services to include those which related to the functional impairments of children with IDD. This includes respite, in-home behavioral supports and summer recreation programs. At the present time, the CSOC serves as the single point of contact for all children in NJ with behavioral health and/or developmental disabilities. However, certain children with special health care needs continue to receive separate case management services through the NJ Title V program.

In summary, each of these programs (NY and NJ) offers case management services. In NJ case management is offered to all children with chronic illness with the exception of developmental disabilities. In NY, case management is offered to all children with behavioral health needs and

developmental disabilities with the exception of children with chronic illness. Both systems offer waiver services to support eligible populations. Either system could be expanded to serve all children and eliminate duplication and service gaps.

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

As noted above, Montefiore is actively seeking means of coordinating and delivering care to children. However, capturing and reinvesting the value we create has been difficult. For example, with funding through the Balancing Incentive Program we implemented a 14-month demonstration program which was able to successfully achieve an 85% reduction in emergency room and hospital use by children with developmental disabilities and challenging behavior through the provision of integrated primary care/behavioral health care with in-home behavioral and family supports. The program was operated under the auspices of OPWDD. However, at the time, OPWDD did not participate in the DSRIP program. As a result, at the end of the demonstration program, there was no means by which the savings created by the program could be captured and re-invested in program maintenance. As a result, the integrated primary care/behavioral health program continues to operate on a fee-for-service basis. However, the in-home behavioral and family supports were eliminated.

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

No comment.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

QUESTIONS 1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health related social services agencies)? a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children’s Mental Health Initiative programs; Healthy Transitions grantees; Safe

Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

Service integration in NYS is in its infancy. The case management and waiver service delivery systems are separated into two systems – Children’s Health Home and Medicaid Service Coordination for children with chronic illness/behavioral health vs children with IDD, respectively.

The creation of the CHH will create a single care plan for all qualifying children which will reduce duplication of case manager effort and improve the ability to coordinate care. Once providers are comfortable with the new case management system, we expect that they will expand service capacity. For example, we are planning to apply to become a waiver provider for those new services which will be created to support the CHH. However, the separation of children with intellectual and developmental disabilities into their own case management system, Medicaid Service Coordination, and the availability of a separate set of waiver services for these children leads to fragmentation. Already we have seen children with autism and other developmental disabilities who are too high functioning to qualify for services through OPWDD but are not categorically eligible for services from the CHH. Further, while we are applying to provide waiver services to children with IDD, we will also need to file a separate application to become a waiver provider for the CHH. Most providers do not have the understanding of these two systems or the stamina to persevere through the process.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery? a. Which health-related social service providers have been or should be included in a child and youth-focused integrated service delivery model?

The answer really depends on what services are identified in the benefits package and how they are paid for. At the very least, we hope that waiver services and their providers can be incorporated into a pediatric delivery system as in-home services have been demonstrated to be effective in reducing the need for out-of-home care (see previous comments about NJ CSOC and Montefiore’s Balancing Incentive Program outcomes.)

b. What potential exists for increased partnership for provision of home and community-based services?

In referring to “home and community-based services” I assume that this references Medicaid services delivered through Medicaid waivers. As noted above, both NJ and NY offer case management to selected populations of waiver eligible children. Neither offers Medicaid waivers to all waiver eligible children. As we stated earlier, waiver services should be in the

package. In order to coordinate and serve all children in a system, all case management and all waiver services should be under one umbrella.

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

There are many models. If the State were to operate a single point of entry, such as the case in NJCSOC, a single EHR could be used to support a TPA or similar entity to conduct intake, establish eligibility, make referrals, provide authorizations, maintain documentation, and make payments. If multiple managed care organizations and/or delivery systems manage these processes, then communication between the entities will need to be established – possibly through a regional health information network. Bronx providers have made some progress in this area in creating the Bronx Regional Health Information Network (Bronx RHIO) as part of the larger data exchange system being built in NY. The challenges for coordination increase significantly as the level of integration decreases. A network of very small providers would be quite difficult to maintain and coordinate.

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

See above.

5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

Obviously, the place to look is where the highest expenditures currently occur. (As we note above, this is the premise for Arkansas' roll out of Care Coordination Organizations focusing on the ADB population.) On a volume basis, aggregated claims data will identify the most expensive conditions. In the Bronx, these would likely include high prevalence conditions such as asthma, sickle cell and other chronic disorders. However, there are numerous conditions which occur with less frequency but, on a unit basis, are quite expensive. These include transplants, cancers, metabolic and genetic disorders and other serious conditions. If waiver services, including out-of-home placements, were included, behavioral health and

intellectual/developmental disabilities would represent significant, recurring costs. Out-of-home placements can easily reach \$150,000 per year. Over the course of the life span these costs are substantial.

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

There are substantial cultural differences between community service organizations and health care providers. In addition, given that many health care systems are much larger, in terms of operating budget, community agencies, including many physicians in small practices, are often concerned about the balance in a relationship with a health care system. Finally, there is a substantial debate about how to allocate health care funding (ie. cognitive vs procedural specialists) and how to attribute value. Shared savings may be a model preferred by primary care providers while bundled payments or episodes of care may be preferred by procedurists.

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

Scale is always beneficial. Large numbers overcome uncertain and risk. Larger systems are more likely to be viable, from an actuarial basis, than smaller systems. However, increasing scale can reduce the number of insurance companies, HMOs or providers. This can reduce choice as is currently seen in some Medicaid managed care and Health Exchange markets. However, market power can also lead to abuses. We have a particular concern about the use of “skinny networks” – the phenomenon where health care payors contract with a small number of providers in order to channel a larger number of patients in exchange for discounted payment agreements. Skinny networks often lead to access barriers for low-income persons who rely on public transportation. Skinny networks can also be used by MCOs to avoid contracting with providers who cater to high-risk populations. Network adequacy must be evaluated and incentivized. However, in current Medicaid MCO practice, this is often not the case leading to serious network deficiencies. For example, in NJ, less than 50% of PCPs and specialty physicians in practice accept Medicaid (see Decker S. “A Baseline To Measure Future Acceptance Rates: Two-Thirds Of Primary Care Physicians Accepted New Medicaid Patients In 2011-12: *Health Affairs*, 32, no.7 (2013):1183-1187.

8. What role do models of care such as ACOs play in the pediatric environment? a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?

There is little experience with pediatric ACOs in NJ or NY. However, there is a similar issue in regard to the role of case management. Some view the role of case managers primarily related

to developing/implementing treatment plans. Others, however, view the role of case managers as incorporating utilization management. Payors and third party administrators often assume that case management incorporates a utilization management function and, sometimes a role as authorizer for services. However, community service organizations which provide case management services generally do not see themselves in a utilization management role. This is in part how their respective goals are defined. Large systems, MCOs and payors require a U/M function. Small FFS providers focus on treatment planning and usually do not have a discreet goal related to utilization. This creates quite a cultural gap between these types of providers.

b. How are pediatric ACOs the same or different from adult-focused ACOs? c. What opportunities do pediatric ACOs have for integration with community and health services systems? d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

In New York State the infrastructure varies across the State and the answer is likely to be different depending on the location. For example, in urban counties, where health care delivery systems have sufficient capital reserves, a case management infrastructure and experience with the ACO model, the ACO model may be preferred. In rural areas, where there are few members, managed care organizations may be more likely to be successful. extensive internal capacity to manage risk.

New Jersey has implemented a Statewide mandatory managed care program which includes all benefits other than behavioral health for both TANF and ABD members. However, health care delivery systems are pushing the State to contract directly with them through Medicaid ACOs. Answers to several of the questions above are contained in the report:

<http://www.njhcqi.org/initiative/medicaid-2-0/>

There may be cost advantages to Medicaid ACOs. Under the current system, Medicaid MCOs are permitted to retain 15% of the premium for administration and profit. (As a matter of reference, Medicare manages its program with a 2% overhead rate.) Many health care delivery systems believe that they can create value by contracting directly with States and deliver care at a reduced overhead rate.

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

No comment.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE

ARRANGEMENTS: CMS recognizes that accessing the optimal combination of child and youth services to meet each child's unique needs presents a significant challenge for vulnerable

children and youth in need of services, as well as for their families. In the draft model concept, we seek to improve coordination and alignment across programs and systems by supporting the establishment of robust health care and health-related social service provider partnerships to improve health, wellness, and total cost of care with the potential for sharing in cost savings for successful performance. We are interested in input on innovative financial arrangements that combine or coordinate funding in an effort to integrate and streamline care for high need and vulnerable children and adhere to current Medicaid and CHIP program integrity requirements. Since the Innovation Center seeks to test models that, when successful, can be scaled and spread, we seek comments on how current Medicaid and CHIP authorities and programs might be used to support reproducible state-based models to improve care for children and youth.

QUESTIONS 1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems? a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)? b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

High-risk, high-need Medicaid and CHIP beneficiary populations/participants such as children who are known to child welfare, are at risk for requiring a higher level of care (including medical hospitalizations, acute psychiatric hospitalizations, residential placements, long-term care facilities, etc.) and/or are diagnosed with multiple chronic health conditions, SED, substance use or developmental disabilities should be included in an integrated care model. The earlier a child or youth has access to integrated and comprehensive care, the greater the impact on their overall health and functioning. (See above discussion about opportunities to create value by enrolling ABD members in alternative payment models.)

2. How could health care providers be encouraged to provide collaborative services with health related social service providers for a designated pediatric population's health and social needs? a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models. b. What specific approaches to attribution and risk-adjustment should be considered in a care

delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

No comment.

c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers' patients. d. Are different payment models appropriate for different potential health care and health related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

No comment.

3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors? a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers. b. What factors are essential to the success of this alignment? c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

No comment.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals' community benefit dollars be combined to support an integrated care delivery model?

No comment.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model? a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options? b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation? c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular "bundles" of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

No comment.

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

No comment.

SECTION IV: PEDIATRIC MEASURES

CMS has worked with stakeholders to develop a core set of child health care quality measures that can be used to assess the quality of health care provided to children enrolled in Medicaid and CHIP. States and tribes can use the child core set of measures to monitor and improve the quality of health care provided to Medicaid and CHIP enrollees; however, CMS notes that state and tribal reporting on the core set is voluntary. CMS is interested in learning from and, where appropriate, building upon its work on pediatric quality measures indicative of health outcomes. In particular, we are interested in short-to-medium term measures associated with both short- and long-term cost reductions and improved quality to both Medicaid and other public sector programs as healthy children become healthy adults. In addition, CMS is interested in learning how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health.

QUESTIONS 1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

See above section on outcomes.

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

SECTION V: OTHER COMMENTS

1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

No comment

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

No comment

Riley Hospital for Children at IU Health

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28

Respectfully submitted,

Robert Wood Johnson Foundation

Here are the Robert Wood Johnson Foundation's comments on the CMS Request for Information on Pediatric Alternative Payment Model concepts and approaches to improve pediatric care. We hope they are helpful.

Please let me know if you have any questions or need additional information.

All the best



Robert Wood
Johnson Foundation



Office of the President and CEO

March 28, 2017

The Honorable Seema Verma
Administrator
Centers for Medicare and Medicaid Services
U.S. Department of Health and Human Services

Dear Administrator Verma:

Thank you for the opportunity to provide input on Pediatric Alternative Payment Model concepts and approaches to improve pediatric care. As the Robert Wood Johnson Foundation (RWJF) works to build a Culture of Health together with partners across the country, we recognize that promoting healthy development for children and their families is critical. We believe that it is essential to provide families, especially young children, with integrated, high value, health care, and social services. Exploring new payment and delivery system models that can provide this type of high quality care can ensure lifelong benefits, especially for the most vulnerable populations, and improve the nation's health.

Here are RWJF's responses to specific questions included in the Center for Medicare and Medicaid Services (CMS) Request for Information (RFI). They are based on input from several of the Foundation's grantees and programs that work directly with states, tribes, and other community-based organizations: Manatt Health, ReThink Health, Data Across Sectors for Health (DASH), Safety Net Action Center (SNAC), Center for Healthcare Strategies, Altarum Institute, Zero To Three, Medical Legal Partnership, and researchers at the University of North Carolina.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

- 1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with*

complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

We have reason to believe that the level of interest would be high for exploring these models. For example, in spring, 2015, the [DASH](#) program, which works at the community level on developing infrastructure to support collaboration of health care and other sectors, released a Request for Proposals (RFP) for community collaborations seeking to invest in multi-sector data sharing infrastructure to improve community health. DASH received 407 applications for 10 awards. Communities from every state (except South Dakota) were among the applicants. Among DASH's 10 grantees, two specifically focus on children. One of those is a city health department-led effort. The other is a tribal government-led effort.

In addition, recent discussions with states and health plans seeking to identify innovative strategies designed to support high-risk, low-income families have identified a number of opportunities to improve care for pediatric beneficiaries. Of course, all of these conversations elicits challenges and opportunities with this work. We would encourage CMS to consider the following topics of interest/technical assistance needs to support an effective model and prompt cross-sector efforts for this population:

- Facilitate community and social services linkages to medical practices: identify how to link community-based resources to medical practices to address upstream prevention. Health-related services should be defined as broadly as feasible in identifying ways to align such services with health care. Under a grant from the Robert Wood Johnson Foundation, the Altarum Institute developed a [framework](#) for thinking about the this type of investing in non-clinical prevention in order to help guide the implementation, evaluation, and alignment of services;
 - Test innovative high-risk family-centered clinical models and interventions: build out new care models and better understand what the health and social services systems need to do differently to support high-risk families;
 - Emphasize two-generation approaches: recognize family relationships and treat the children and parents as a unit; and
 - Identify and share information around basic metrics: identify assessment tools and share information around metrics to determine common measurements that should be tracked.
2. *Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?*

Children and families' needs cross many different domains and sectors. Health care practices are uniquely positioned to partner, align, and coordinate with health-related social services to

maximize benefits for children and families. By leveraging the positive relationships that most parents have with their children's pediatricians, as well as the universal, non-stigmatizing pediatric primary care setting, pediatric practices can go beyond mandatory Medicaid requirements and serve as early childhood systems navigators to impact both the bio-determinants (genetics and biological functions) and social determinants (family stability, poverty, safe housing, accessible outdoor play space, etc.) of health.

Traditionally, pediatric practices have focused exclusively on children's health care needs. However, it is well-documented that a child's health is mediated by his/her caregivers' health, making two-generation approaches critical (see American Academy of Pediatric's [Bright Futures Guidelines](#)). The pediatrician's office is a powerful access point for children *and families*, particularly for low-income, high-need populations. Decades of research show positive impacts across metrics as varied as: well-child visit adherence and immunization rates; injuries and emergency department visits; parenting knowledge and skills, including early literacy habits; parent and child connections to resources and services; and parental satisfaction with the pediatric practice.^{1,2,3}

We are also learning through our work about the critical importance of providing [trauma-informed care](#). So many children and families experience trauma that is at the root of their health and social needs. Health care entities have an opportunity to provide care that recognizes and seeks to address the trauma that these families have experienced, including providing the care and attention necessary for healing.

The DASH program had two pediatric projects that included the following partners: primary care, public health (conducting home inspections for lead hazards and remediation when indicated), schools, Head Start, homeless services, home health, housing, mental health, substance use disorders, child care, child supports, courts, education, employment and training, financial services, food distribution, and fuel and energy assistance. These projects are at the beginning stages so we do not yet have outcomes to share. However, we are happy to provide additional information as it is developed upon request.

In addition, CMS may also consider the role of legal professionals as part of the health and health care team. Social determinants of health, such as unsafe housing, difficulties in school, and unlawful denial of public benefits, may require the services of legal professionals, such as attorneys and paralegals. The integration of legal services into health care began in pediatric practice in the early 1990s. Currently, there are 45 medical-legal partnerships in children's hospitals and over one hundred in health centers, many of which serve children. Adding legal services to pediatric health care ensures that, when social determinants of health are identified, legal professionals are ready and able to treat those social needs with legal remedies. [Medical Legal Partnerships \(MLP\)](#) can save money for patients and health systems. For example, the Health Law Partnership ([HeLP](#)), an MLP for children in Atlanta, Georgia, recovered \$501,209 in benefits for patients with asthma over a seven-year period.⁴

Lastly, we are developing a program to learn more about the connections between health care and community-based social services that already exist and issued our own request for

information on this topic. We would be pleased to provide CMS with additional information once we have it.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

3. *What infrastructure development (electronic medical records [EMRs], health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?*

Data sharing is one of the critical ingredients for collaboration across entities and sectors. One of the significant challenges to this collaboration can be sharing data via the electronic medical record. In our work with DASH, we note that some communities are building a collaborative, longitudinal care record, accessed by providers of health care and/or social services agencies that have agreed to coordinate care. These may be based within a health system or hosted by a third party like a health information exchange. This approach may reduce barriers mentioned above to the point where providers can more readily realize a return on investment of time and effort, particularly with high-acuity patients, but it remains to be seen whether these systems can be sustained by participants.

Another issue that providers are beginning to work on is screening for social determinants of health and adverse childhood experiences. Providers are identifying potential screening tools, but often lack confidence in their ability to screen and in their capacity for addressing challenges that arise during the screening process. The National Association of Community Health Centers, along with multiple partners, developed a screening tool to assess patient social needs, called the Protocol for Responding To and Assessing Patients' Assets, Risks and Experiences (PRAPARE). The PRAPARE tool aligns with federal initiatives that prioritize social determinants of health and is compatible with several electronic health record platforms. Although not specific to pediatrics, PRAPARE is now being used in health centers in 31 states.⁵ This use, coupled with the fact that one in 10 children receive care from health centers, demonstrates that an electronic social determinants of health assessment tool is poised to become a routine feature of pediatric practice for low-income children.

6. *What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?*

There are multiple obstacles, many of which CMS is likely already aware, including the following:

- Data sharing across sectors;
- Many providers addressing social determinants of health are not necessarily recognized as treatment providers, causing reimbursement challenges;
- Financial incentives are not aligned such that health care entities, including accountable care organizations, are not incentivized to support social services;

- Lack of provider time and training to address child and family social service needs; and
- Challenges in that return on investment for pediatric focused programs are often not seen for many years.

Different ways to address these obstacles may include supporting community data infrastructure; providing technical assistance to providers, including thinking about the entire health and health care team as part of training to provide integrated services; allowing providers to bill for interventions that address social determinants of health; and allowing pediatric providers to bill for two-generation services for parents. In addition, many promising pediatric interventions create a longer-term return on investment that yield health and budgetary benefits much further down the line. We encourage CMS to purposefully address these longer-term return on investment opportunities.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE

1b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

The first one thousand days of a child's life are a period of incredible growth, providing families and other caregivers with critical opportunities to promote healthy long-term development. Birth to five years offers the most promising opportunity to impact the trajectory of a child's life and bend the cost curve, especially for children whose parents experienced [adverse childhood experiences](#). Early investments during this time result in improved outcomes, significant cost avoidance, and societal gains. General interventions in the first five years of life can increase children's cognitive and social-emotional development, increase educational achievement and graduation rates, and increase parental involvement. These upstream investments can also mitigate both juvenile and adult crimes, cases of abuse and neglect, intimate partner violence, welfare dependency and the need for special education.⁶

2b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

CMS might consider incorporating social determinants of health factors (such as including homelessness and neighborhood stress scores) into its risk-adjustment model to help avoid adverse selection pressures, as Massachusetts has done for its affordable care organization programs.

3c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

DASH has observed the development of the following data sharing models. These models relate to sharing data for purposes of care coordination and do not address tracking outcomes and funding streams.

- Developing and implementing a common, centrally hosted data system for screening and care coordination across providers. A drawback is that this may require double entry if it is not linked to existing electronic health records,
- Health information exchanges are increasingly building solutions to facilitate capture of social services provided to patients, as well as referrals between health care and social services providers. This is fundamentally limited by: 1) lack of standard electronic systems in use by social services providers, and 2) the technical capacity and market share of the health information exchange, and
- Public health as an intermediary – not necessarily in providing individual level data – but taking in granular environmental datasets and producing place based risk information that is useful for social services and health care providers.

5. In addition to Medicaid's mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model? a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

- We encourage CMS to explore ways to go beyond the payment models to support the integration of health-related social services. CMS can leverage the “flexible services” approach that states like Oregon and Massachusetts are using to these services, prioritizing the coverage of services that are not sufficiently covered via other programs targeted to meet the social needs of pediatric populations. Taking a “fee for service” approach to funding such services may be appropriate, particularly in initial phases or for models like shared savings/risk that do not provide the upfront funding needed to reimburse for health-related social services.

SECTION IV: PEDIATRIC MEASURES

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

RWJF has supported a body of work to consider how we re-orient our system of measurement so that it focuses more on what people and their families want from their health and health care systems, rather than what providers, payers, and researchers are looking to measure, which in turn, often drives accountability measurement programs today. For example, we encourage CMS to move toward measures that are patient-driven, reflect the context of the patient's life, and look beyond the health care system and consider social needs as well, like kindergarten

readiness and school absenteeism. Additionally, measures that consider family involvement should be considered, such as family participation in care; parent depression; and parent substance use. We are happy to provide CMS with additional information on our patient-centered measurement work when it is available.

SECTION V: OTHER COMMENTS

What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

In the absence of a payment or incentive structure that promotes shared accountability across multi-sector providers, the success factors for local partnerships rests heavily on the skill and persistence of local leaders in creating relationships through which partners can develop trust, articulate a shared vision, and build a shared vocabulary.

Overall, we are very pleased to see CMS exploring cross-sector strategies for family-centered, integrated services for all children, particularly at-risk, low-income children and families. The background section within the RFI reflects an understanding of the need to address social determinants of health across the lifespan and recognizes the short- and long-term impact of adverse childhood experiences. We also encourage CMS to include trauma-informed care as part of a pediatric care model concept to reduce the lasting effects that adverse childhood experiences can have on health, behaviors, and life potential.

As always, we are happy to furnish any additional information to CMS or answer any questions that have come up relevant to this response or otherwise. We look forward to partnering together to build a Culture of Health so that everyone has an equal opportunity to live the healthiest life possible.

Thank you,

A handwritten signature in black ink, appearing to read "Risa Lavizzo-Mourey".

Risa Lavizzo-Mourey, MD, MBA
President and CEO

¹ Addressing Early Childhood Emotional and Behavioral Problems PEDIATRICS Volume 138, no. 6 December 2016 :e 20163023 Council on Early Childhood, Committee on psychosocial aspects of child and family health, Section on Developmental and Behavioral Pediatrics.

² Promoting Optimal Child Development: Opportunities in Primary Care Background for expert meeting, 2016 National Institute for Children's Health Quality.

³ The Life-cycle Benefits of an Influential Early Childhood Program Jorge Luis Garcia, James J. Heckman, Duncan Ermini Leaf, Maria Jose Prados Working Paper 12/2016 Human Capital and Economic Opportunity Global Working Group.

⁴ R. Pettignano, L. Radtke Bliss, S. Caley and S. McLaren, "Can Access to a Medical-Legal Partnership Benefit Patients with Asthma who Live in an Urban Community?" Journal of Health Care for the Poor and Underserved 24, no. 2 (2013): 706-717.

⁵ National Association of Community Health Centers, "PRAPARE Implementation and Action Toolkit," available at nachc.org/research-and-data/prapare/toolkit.

⁶ Heckman, J. "Investing in Disadvantaged Young Children Is Good Economics and Good Public Policy." Testimony before the Joint Economic Committee, Washington D.C., June 27, 2007.

Russell Child Development Center

Input Regarding Medicaid Reimbursement for Early Childhood Services Request for Information on Pediatric Alternative Payment Model Opportunities

I am responding to the Request for Information on Pediatric Alternative Payment Model Opportunities

Source: Centers for Medicare and Medicaid Services - February 28, 2017.

I am the Director of a nonprofit providing a range of early childhood programs and services in 19 Southwest Kansas counties. We bill Medicaid for Part C Early Intervention services for eligible infants and toddlers as well as Targeted Case Management for eligible individuals through the Intellectual/Developmental Disability waiver.

In rural Kansas we have experienced significant decreases in all state government funded services over the past several years. This has worsened the already significant lack of physical and mental health care resources. Our agency has been successful in securing private and grant funding for the provision on the Healthy Steps for Young Children program and the Triple P Positive Parenting Program. We have recently been invited to add the Attachment and Biobehavioral Catch-up model to our range of services. All of these have a very strong research base. Due to the lack of effective mental health, social and foster care services and Medicaid (KanCare) access and payment, we have begun to be the referral of choice from these agencies as well as the courts and law enforcement. We are providing services to young children and families with some of the most significant needs and recognize that we are pretty much doing everybody else's job. Our staff have strong credentials for the work and in many ways we're "the only game in town".

Sustainability is always an issue and grantors want us to secure cash match. If Medicaid funding would actually fund these evidence-based, effective, and preventive services there would be a huge rate of return, not to mention, agencies such as ours might actually thrive and survive. We need partners and solutions, not more cuts. Thank you.

RXIHealth

RXIHealth works with RHIOs in NY state to integrate pharmacists within the care team. Based upon our work we see a serious need to address and put in place:

1. Sharing of “picked-up” medication data between pharmacists and social workers; often children may be prescribed medications but due to family conditions are not able to access the medications. Sharing this data with the social workers will allow the set-up of alternate delivery to home
2. Doctors do not forward diagnosis to pharmacists, this limits the ability of pharmacists to perform drug utilization reviews, as a result adverse drug effects that could have been prevented occur. We recommend that as part of integration that pharmacists have access to the CCD of patients with special needs, behavioral mediations, and opioids. This will prevent the overuse of dangerous medications, and the underuse of these medications when appropriate as the pharmacists , will be able to validate the chosen pharmacotherapy as appropriate and safe

Salisbury University

While brief, the comments do provide some information on a Salisbury University Initiative (in partnership with Hopkins and Uof MD School of Medicine). Please contact me with any questions or concerns.

The Child and Adolescent Behavioral Health Education Initiative is the umbrella for the grant funded programs of Salisbury University's Social Work Department. MD BHIPP (Behavioral Health Integration in Pediatric Primary Care) is one of CABHEI's programs and provides Masters level Social Work interns for behavioral consultation services in pediatric primary care offices. Interns are placed in rural/underserved areas of MD to support the behavioral health needs of the practice population. This also allows for workforce development in the arena of integrated behavioral health care.

BHIPP Interns conduct a variety of screening and assessments on referred patients, provide brief consultation (5-6 visits, approximately 30 minutes each), provide education to patient and family, and also complete referrals as needed.

Because MD BHIPP is a grant, and because providers are not able to bill for these services, there are concerns about sustainability. The MD BHIPP program pays an intern supervisor to meet clinical supervision requirements for interns placed in the medical offices. If providers were able to bill for services provided by social workers, and subsequently employ a social worker within the practice, MD BHIPP could expand service delivery. MD BHIPP is in year 5, and an ongoing request from our partnering pediatricians has been information on how to bill for and provide these services beyond the academic year. Pediatric providers have seen this program as beneficial and important in meeting patient needs.

Salisbury University Social Work Department faculty have presented both nationally and internationally on the social work role in the MD BHIPP program.

Sanford Children's Hospital

I wish to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully,

School-Based Health Alliance

The School-Based Health Alliance, a national advocacy and membership organization representing school-based health centers, is pleased to submit comments about alternative pediatric care model concepts being advanced by CMS to improve health outcomes for children and adolescents covered by Medicaid and CHIP. We commend CMS for highlighting the need of health systems to integrate with other youth-serving sectors, programs, and services more intentionally to address the powerful social determinants of health. Multidimensional solutions for mitigating these social, economic, and environmental conditions will require new thinking about health care providers, products and places.

As designs for new pediatric health models are being conceptualized at the national level, we urge CMS and its state counterparts to consider the inclusion of one of the most critical social (and compulsory) institutions in the lives of low-income children: their schools. Each day, Monday through Friday, August through June (and often summers, too), multidisciplinary teams including medical, nursing, mental health and dental care professionals are in school settings providing critical preventive, acute and chronic care services to an estimated 25 million Medicaid-enrolled school-aged children (one in two public school students).¹ By opening their doors to partners like state and local public health departments, hospitals, safety net clinics, and behavioral health centers, schools are creating greater health equity in medically underserved neighborhoods – particularly for mental health and preventive oral health care.

Although the size of school health care sector isn't easily quantifiable, one estimate (now a decade old) puts the collective workforce at 200,000+ nurses, counselors, psychologists and social workers and at an annual cost of approximately \$10.4 billion. Those figures, a conservative and partial estimate, are “large enough to compel attention,” posited Julia Graham Lear, one of the nation's leading school health authorities and author of the data source.²

For children lacking meaningful health care access, school nurses are the first-line of defense for triaging health care needs, controlling symptoms, and managing disease. They administer life-giving medications, screen for preventable conditions, assess acute crises, attend to complex health care needs, and minimize out-of-seat time. Children who are fortunate to attend a school with a school-based health center have access to a model that is a front-runner in delivering integrated care. SBHCs provide primary care, mental health and counseling, family outreach, and chronic illness management—in a location that meets students where they are.

Schools are first-hand witnesses and responders to the link between social determinants of health and academic achievement—bullying, school violence, depression, stress, food insecurity, family dysfunction and instability. As such, they represent an exceptional place-based setting that meets many key attributes of a patient-centered primary care system for children and adolescents.

At critical stages in a child's development, health care settings in schools can play a role in preventing injurious episodes that threaten long-term wellness. Despite this, there's been little attention paid to integrating these parallel systems of care, their respective providers, clinical encounter data, and financing mechanisms. Schools, school-based health services, and their community collaborators are largely disconnected from mainstream health care. Yet this vastly untapped prevention and early intervention system affords integrated delivery models unparalleled access to a population of school-

aged Medicaid and CHIP enrollees, and a built-in health care workforce well accustomed to meeting their needs.

Schools offer many benefits to integrated service models designed specifically for low-income children and adolescents:

Early Warning Surveillance System

Schools provide ready access to an entire population of students who can be routinely screened (timed to be developmentally appropriate and upstream of acuity) for a range of social and environmental determinants, conditions and exposure to health threats: trauma, stress and other adverse childhood experiences, safety, obesity, depression, caries and dental pain, hearing and vision, food inadequacy, homelessness, and school connectedness. Screening results can be used by schools and health systems to identify and respond to children and adolescents at highest risk for medical, behavioral, and oral health problems, as well as academic failure.

Access to Preventive Services

Schools can provide a critical access point for cost-effective preventive services to hard-to-reach populations. School and their health partners can assure full compliance of child and adolescent immunization schedules. They can improve utilization of annual comprehensive well-child visits by connecting with primary care homes or hosting primary care providers in onsite health facilities. Schools also have proven to be effective sites for delivering dental sealants and fluoride applications for students with indicated need.

Chronic Care Management and Coordination with Primary Care Home

Health partners in schools can serve as partners to the primary care home, providing effective management and care coordination for students with chronic diseases, diverting patients from costly urgent care centers, emergency departments, and hospitalizations. School providers assure proper and timely management of asthma, monitoring action plans and access to controller meds, and assessing and controlling for triggers in the school and home that exacerbate symptoms. For diabetics, providers can conduct blood glucose checks, assure ready access to insulin, and provide nutrition counseling to help maintain optimal metabolic outcomes. Students at risk for obesity can be routinely monitored for BMI and supported with nutrition and physical activity counseling.

Behavioral Case Management and Risk Reduction

Schools can provide adolescents with emotional and psychological support to prevent and manage risks common among their age group. School-based clinical health services often include screening for HIV, STI, pregnancy and abuse, counseling on prevention and risk avoidance, contraception access and management, as well as onsite treatment of disease. For substance misuse, trained medical and behavioral health professionals can screen, provide brief counseling or intervention as warranted, and make referrals for treatment by a community-based alcohol and drug specialist. Students experiencing behavioral disorders such as depression, anxiety, ADHD, oppositional defiance and conduct disorders can be offered brief counseling and cognitive behavioral interventions on school site.

Family Supports

Schools can be an effective lifeline to the families of their patient population, connecting them with warm handoffs to medical, mental health, dental, legal, and social services as needed.

Healthy School Environment

Schools also make significant contributions to creating the conditions, behaviors, and norms that support lifelong health. School health providers advocate for policies that assure student access to healthy foods in the school via cafeteria and vending machines, and sometimes in the community when fresh produce is unattainable. They can be champions for access to potable drinking water on campus, as well for fitness and recreation opportunities during school day. They also play a chief role in making certain the school climate safeguards the physical and emotional safety of all students.

Payment and Incentive Arrangements

With CMS providing leadership and incentives through the Innovation Center, Medicaid health plans and community-based providers, public health authorities, and local education agencies could test innovative pediatric-centered accountable care models in predominantly low-income neighborhoods and schools where health inequity is greatest. The ACOs could leverage the partners' collective strengths and resources to harness the potential of schools to accelerate population-level health improvements.

To our knowledge, experience with Medicaid alternative payment methodologies among the school health services sector has been extremely limited. Traditional fee-for-service payments and administrative claiming have been the mainstay of Medicaid financing. States with robust investments in school health care models have typically carved them out of delivery reforms. We know a handful of previous CMMI innovation awards featured school-connected delivery and payment strategies (these include University of Miami School of Medicine, Nemours Hospital, and Children's Home Society of Florida). The school health care community would benefit from the knowledge that CMS and its grantees acquired from that experiment. How can those lessons from school-centered strategies be integrated into the next generation of pediatric health care delivery and payment reforms? Recent efforts by Oregon Health Care Authority to create coordinated care organizations (CCO) are promising, especially as school health providers have been included in their formation. But to date, payments to school health care providers are still largely driven by clinical encounters.

The Alliance welcomes the opportunity to strategize with the Innovation Center about the potential to leverage the myriad sources of federal, state, and local public funding for school health services, as well as current Medicaid expenditures, to create value-based and performance-driven compensation arrangements. Alternatives such as global budgets, capitation, case rates, and pay for performance bonuses could allow school health service programs to break free from traditional clinical encounter based reimbursement. With flexibility and creativity to pursue quality outcomes, school health service programs might employ group modalities with students experiencing similar medical conditions; prevention education in the classroom; school-wide mass screenings to identify at-risk populations; care management and wrap-around services by community health workers or navigators; social-emotional competency and skills-building by a health educator; home visits for environmental risk assessment, etc. Pay-for-performance could be tied to percentages of Medicaid-enrolled children in school with up-to-date immunizations, documentation of annual well child visits in measure year (whether at school or by primary care provider), or third and sixth graders with sealants on molars. Care coordination per member per month rates might be piloted for children in school with cost-sensitive chronic conditions (performance measure could be emergency department or urgent care visits). Case rates might be

imagined for adolescents whose behavioral health risks (sexual activity, substance misuse, ADHD, oppositional defiant disorder, etc.) can be properly managed through school-based interventions. Screening for chronic absenteeism by health care professionals provides a clear window into the chronic medical and psycho-social issues affecting school participation, as well as other conditions likely to influence health and academic success, including hunger, respiratory disease, depression, fear of bullying, family dysfunction, and dental pain. Health providers can affirm for patient and family the importance of regular attendance and help them address the hurdles that keep them out of school.

The evidence supporting a standardized measure of school attendance is not robust. We do believe, however, that the definition of chronic absenteeism advanced by one of the nation's leading subject matter authorities, Attendance Works, serves as a useful starting place for contemplating a national quality measure: 10 percent or more of missed school days for any reason, excused or unexcused.¹¹ We welcome collaborating with CMS and other federal and national public health and education partners to explore and test the use of these health-connected social measures in driving clinical and community-level strategies that will create the favorable conditions for children to be healthy and thrive.

We look forward to engaging in a discussion with CMS to explore the concepts and strategies we've outlined in this correspondence. As we stated previously, achievement of healthier and more equitable outcomes for low-income children and adolescents will require cross-sector collaboration and partnerships. The country's school health care professionals and programs should be foundational to any delivery design reform.

Pediatric Measures

As stated in the RFI, "CMS is interested in learning how measures of health-related social needs might be incorporated in an integrated model to reflect a comprehensive picture of child and youth health." The School-Based Health Alliance advocates strongly for the favorable consideration of two key indicators that are closely associated with child well-being and highly predictive of long-term health issues: food insecurity and school attendance. When screening for and measuring these "markers," health care systems gain a better understanding of the determinants of children's health, the social and emotional context of their lives and the instability of their household setting. Knowledge of these conditions should compel health, education, and social service systems to work more cooperatively to address root causes of poor health and develop timely supports for mitigating their effects.

Screening for food insecurity. Reliable and consistent access to food is vital to children's optimal growth and development. For far too many children and teens, food scarcity and hunger is a routine threat to their physical and mental health as well as to their academic achievement. According to the Urban Institute, an estimated 6.8 million young people are food insecure.³ For children, the uncertainty of being able to access food because of resource constraints is associated with other social risks as well: research demonstrates a clear link between food insecurity among youth and a burden of other health-related social problems, including health care access, developmental issues, chronic medical and behavioral conditions, poor oral health, education failure, housing instability, income insecurity, and substance use.^{4,5} Integrating an assessment of food insecurity into standardized screening processes by health care professionals would identify socially disadvantaged and at-risk youth. The screening process doesn't have to be onerous, as one group of researchers discovered: a simple two-item food insecurity screen was found to be "sensitive, specific, and valid among low-income families."⁶

Screening for school attendance. Because academic achievement is highly predictive of long-term health outcomes, young people who are chronically absent from school risk a lifetime of health issues. Moreover, low-income (Medicaid-enrolled) students bear the burden disproportionately. One statewide study found children in poverty are twice as likely to be absent in primary grades and 50% more likely to be chronically absent from high school.⁷ In the short-term, children who are chronically absent are more likely to fall behind in school and drop out. Without attaining a diploma, less educated young persons are more likely to smoke, have diabetes, and die prematurely from chronic disease.⁸ They are also more likely to be underemployed and financially unstable.⁹ National public health leaders, too, recognize the vital link between academic success and improved health outcomes: Healthy People 2020 includes the reduction of school absenteeism as a major target for adolescents.

Screening for chronic absenteeism by health care professionals provides a clear window into the chronic medical and psycho-social issues affecting school participation, as well as other conditions likely to influence health and academic success, including hunger, respiratory disease, depression, fear of bullying, family dysfunction, and dental pain. Health providers can affirm for patient and family the importance of regular attendance and help them address the hurdles that keep them out of school. The evidence supporting a standardized measure of school attendance is not robust. We do believe, however, that the definition of chronic absenteeism advanced by one of the nation's leading subject matter authorities, Attendance Works, serves as a useful starting place for contemplating a national quality measure: 10 percent or more of missed school days for any reason, excused or unexcused.¹¹ We welcome collaborating with CMS and other federal and national public health and education partners to explore and test the use of these health-connected social measures in driving clinical and community-level strategies that will create the favorable conditions for children to be healthy and thrive.

We look forward to engaging in a discussion with CMS to explore the concepts and strategies we've outlined in this correspondence. As we stated previously, achievement of healthier and more equitable outcomes for low-income children and adolescents will require cross-sector collaboration and partnerships. The country's school health care professionals and programs should be foundational to any delivery design reform.

Seattle Children's

Please find attached Seattle Children's response to the RFI on Pediatric APMs



Seattle
Children's.pdf



[Sanford M. Melzer, MD, MBA](#)

Executive Vice President,
Networks & Population Health
Professor, Department of Pediatrics
University of Washington School of Medicine

March 28, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model (APM) Concepts

Dear Dr. Billioux:

Seattle Children's appreciates the opportunity to respond to this CMS RFI for Pediatric APMs, and we appreciate the attention to this important issue in child health care as we look forward to the future.

Seattle Children's is a freestanding regional children's hospital serving children and families in Washington, Alaska, Montana and Idaho. As the major specialty center for pediatric care in the Pacific Northwest, we have extensive experience with the regional care of pediatric populations, including children with special health care needs. Through our Seattle Children's Care Network, a 1,000 physician Clinical Integrated Network (CIN), and our Pediatric Partners in Care (PPIC)) CMMI funded project, we have also developed experience with longitudinal care coordination and alternative payment models (APMs). These models include a range of healthy populations and children with special needs, and including SSI, commercial and Medicaid populations.

In this document, we have focused our comments on Section III – integrated pediatric service model payment and incentive arrangements. To summarize our experience, we believe that APMs, while appropriate for children, must be closely tailored for the unique needs of this population and the specific market circumstances for pediatrics which are dramatically different from that of adults. Some of the specific adaptations that are required in pediatrics include:

- Use of pediatric specific outcomes and metrics to drive assessment of performance and payment
- Networks that can provide comprehensive care for the whole child including a wide range of primary and specialty care services over an appropriate geography and include specialized facilities for children, including post-acute transitional care.
- Payment mechanisms that include costs for longitudinal care coordination and other required family/PCP- centered interventions to achieve the "Triple Aim"
- Actuarial methods and payment models that account for the low numbers, and high variability of utilization and severity among children with special needs
- Integration of mental and physical health

- Alignment on a single pediatric risk stratification model and availability of integrated and comprehensive data describing real time and historical claims experience and outcomes of the populations under management
- Long term perspective payments for child health that recognizes the unique developmental nature of pediatric care and prioritizes long term improvements and outcomes over short term gains.

Seattle Children's looks forward to working with CMS to develop improved mechanisms to support the health of our children, as well as needed public policy changes to support this work. If you have any questions on our comments, please do not hesitate to contact me at

Sincerely Yours,

A handwritten signature in dark ink, appearing to read "Sanford M. Melzer", followed by a small flourish or arrow pointing to the right.

Sanford M. Melzer MD MBA
Executive Vice President, Networks and Population Health
Seattle Children's
Professor, Pediatrics and Health Services
University of Washington School of Medicine

Seattle Children's Response to RFI on Pediatric Alternative Payment Concepts

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE MEASURES

Q1. What specific populations offer the greatest opportunities for generating savings and improving outcomes?

A1. We believe that the care of most populations of pediatric patients can be optimized to improve outcomes and costs, including healthy children and those with moderate or significant medical complexity. However, from a cost impact perspective, the majority of acute care services provided to children under most current fee for service or APMs occur in the hospital setting, and it is a small number of children with special health care needs accounting for a high proportion of the costs. In our work with SSI patients under our CMMI award, we have found that 10% of the children account for 80% of costs. At first glance, this finding would suggest that populations of children with chronic and complex health needs would be the best populations to focus on for cost savings. However, a closer look at the population data reveals that these populations may not be the best candidates for APMs. From an actuarial perspective the very small numbers of the highly expensive children in a given population and the difficulty predicting which will be high cost year over year drive a "regression to the mean" which makes population modelling very difficult. On a clinical level, many of these conditions are rare and there is limited clinical data that prescribes the best interventions to improve outcomes. And, from a care management perspective, while there is good evidence as to effective interventions on a diagnosis specific basis (e.g. asthma); on a population wide basis the evidence that care management programs improve outcomes and reduce costs (net of interventions) is inconsistent. Specifically, despite lots of experimentation and anecdotal experience, is known about which specific interventions are helpful in reducing costs and simultaneously improving outcomes for populations of children with special needs. Another area that we believe can be productive in exploring improved outcomes and costs is the focus on populations of children that are currently well but at risk to move into higher risk categories. These patients are particularly well suited for prospective preventative interventions and future cost avoidance.

If CSHCN are selected for APMs, it should be absolutely required that:

- Selected networks have complete specialty access complements
- Issues of geographic access to care are adequately addressed
- Appropriate outliers are defined
- Large numbers of children are enrolled to mitigate the "law of small numbers"
- Incentive payments are available both for outcome measures such as PM/P M and delivery of evidence based intervention (process measures)
- Shared data across sites of care is available to provide actionable and trackable information to drive real time and prospective interventions

Q2. How could health care providers be encouraged to provide collaborative services with health related service providers for a designated pediatric population's health and social needs?

A2. Several types of payment models are currently in use for pediatric populations. While there is extensive experience in several large pediatric populations with full capitation, often accompanied by a health plan strategy, we will focus our comments on shared savings which is an emerging APM in pediatrics.

The concept is simple – a provider group is given accountability for a population the actual financial experience is compared against a historical or comparable population, with an expectation that the provider gets to share in a portion of the shared savings, sometimes subject to a quality “gate”. In reality, the science of shared savings APMs, especially in pediatrics, is imprecise and much is still to be learned about this approach. There are many actuarial and practical matters in developing shared savings arrangements for children. Any shared savings approach must address the following, many of which are common to all other APMs.

- Medicaid “churn” on a month to month basis in and out of health plans, which significantly compromises any effort to measure populations and attribute improvement
- Setting appropriate baselines against which savings would be measured including accurate risk adjustment. Is the baseline against a matched population or historical experience with the same population? This approach requires meticulous measures of risk adjustment and availability of claims experience, both of which are frequently lacking in these arrangements.
- Risk and age adjustment is critical. We have experience with tools such as the PRISM scores or other risk adjustment methodologies such as Pediatric Medical Complexity Algorithm (PMCA), but each has their own benefits and disadvantages and many of these tools may not be available to payors or providers.
- Determining which specific components of cost should be included, or should the arrangement focus on “total cost of care”?
- Attributing the impact of shared savings for distribution of excess funds among all the different players in the health care chain including PCPs, specialists, hospitals and managed care organizations
- How much of the shared saving should the health plan share with the providers?
- What quality measures, if any, should be used as a “gate” to determine eligibility for shared savings?
- What is the availability and timeliness of complete claims data to help the providers manage the risk of the population?

In summary, we believe that APMs, while appropriate for children, must be closely tailored for the unique needs of this population and the specific market circumstances for pediatrics which are dramatically different from that of adults.

Thank you for the opportunity to respond to this RFI. For additional questions, please contact Dr. Sandy Melzer at sandy.melzer@seattlechildrens.org

March 28, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

RE: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux,

Seattle Children's appreciates the opportunity to comment on the Request for Information on Pediatric Alternative Payment Models. Drawing from our experience developing a shared savings model with four WA State MCOs through our HCIA2 award, Pediatric Partners in Care, we offer the following expansion of concepts in Section II Operation of Integrated Service Model.

Infrastructure development (EMR, HIE, IT): In order to integrate services across Medicaid enrolled providers and health-related social service providers, a single source of eligibility, program enrollment and utilization data is essential. The cost of ingesting and normalizing data from multiple sources is prohibitive, and creates a barrier for participation of community-based organizations. Centralized analytics assures application of a common risk stratification methodology and promotes the inclusion of social determinants of health data.

Obstacles to integrating services: A significant barrier within the pediatric system of care is the difficulty of partnering with schools. An effective pediatric ACO has established relationships with school-based health clinics, provides centralized clinical education for school RNs, and provides leadership in the standardization of school-based clinical protocols for chronic disease management. Investment in a SaaS application that facilitates access to a longitudinal patient-centered care plan by health providers will assure a common plan of care, eliminating redundancy and improving care outcomes.

Responsibilities of MCOs relative to ACOs: The inclusion of MCOs in a state ACO brings both opportunities and challenges. Our experience within Pediatric Partners in Care leads us to conclude that working with multiple MCOs within a single payment model is unsustainable. While we gain the benefit of larger patient cohorts, unique payer business models, and shared Triple Aim goals, the level of effort to integrate data, build relationship, and align on a common care model is prohibitive.

Seattle Children's remains committed to the development and implementation of alternative payment models that support longitudinal care management, partnership with health and social service providers, and ultimately improve

the outcomes for children. We look forward to working with CMS and thank you for the opportunity to comment on this RFP.

Sincerely,



Paula Holmes, RN, MPH

Program Director, Pediatric Partners in Care
Seattle Children's

Sparrow Hospital

You should allow for pediatric dental coverage in a dentist office. Too many children are being brought to surgery to have their dental work done, under general anesthesia. This is very costly and it puts these children at risk of having an adverse event related to anesthesia.

St. Jude Children's Research Hospital

Hello,

I am writing to add my strong endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28/17.

Respectfully submitted,

St. Louis Children's Hospital

To Whom It May concern:

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

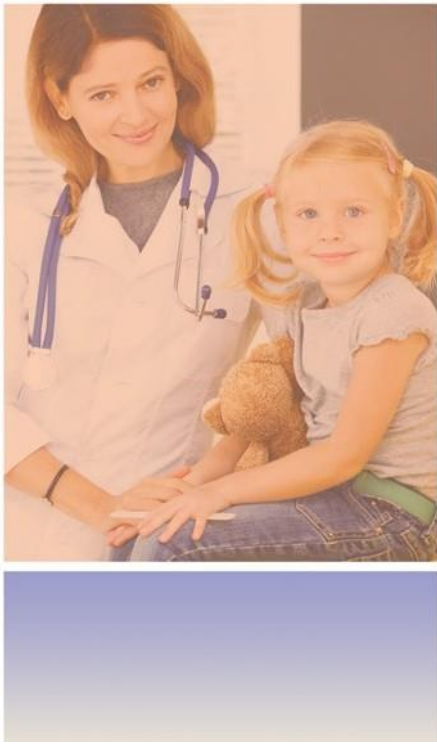
Respectfully submitted,

Starfish Family Services

We utilize a Pediatric Integrated Health Care model highlighted in the attachment to work with Pediatricians and Family Medicine clinics in our community with tremendously positive results for both Physicians and patients.



Starfish Family
Services.pdf



*Pediatric Integrated Health Care
Implementation Model*

One Location, One Visit

A MANUAL FOR INTEGRATING MENTAL HEALTH SERVICES
INTO A PEDIATRIC PRACTICE



STARFISH
FAMILY SERVICES

Developed by Michelle Duprey, LMSW

Pediatric Integrated Health Care Implementation Model

One Location, One Visit

Developed by
Michelle Duprey, LMSW
*Integrated Health Care Director,
Starfish Family Services*



With a generous grant from
The Michigan Dept. of Health & Human Services



With a generous grant from
The Ethel & James Flinn Foundation



Foreward

By Mary Ludtke:

Beginning the journey...

As you begin your journey to explore the integration of behavioral health and physical health or take your first steps toward integration, it is hoped that you will stay focused on improving the lives of the children that you serve. With this focus, we trust that you will withstand the “bumps” in the road and continue on your journey to integrate physical health care to include behavioral health consultation services.

This manual will provide you with a road map for your journey to become an integrated primary care site. As with any road map, how long it takes to get from point A to point B will depend on many factors. The most important factors impacting this transformation will be the commitment of all members of the team to embark on this journey of integration as well as the commitment to the treatment of children in a holistic manner. It is important for the team to acknowledge that their work will include addressing the unresolved behavioral health issues that have a long-term impact on the health and welfare of a child.

Too long have we separated the provision of physical and behavioral health services to children and their families. An integrated health approach closes the gulf between health and behavioral health care and ensures that we provide all children with the support needed for them to move forward on their journey to a healthy adulthood.

Mary Ludtke is a consultant for the Mental Health Services to Children and Families, Michigan Department of Health and Human Services

By Andrea M. Cole:

The evidence to support pediatric Integrated Health Care models is well documented. Yet Primary Care Doctors and settings still have very inconsistent mental health knowledge and capacity to provide effective interventions.

We partnered with the Michigan Department of Health and Human Services and Starfish Family Services to make available to the public a manual to help increase the capacity for primary care to effectively provide Integrated Health Care. Under the dedicated leadership of Michelle Duprey and without many “real world” implementation resources, Starfish successfully pioneered a model that skillfully transformed non-integrated practices to fully integrated practices to better meet the mental health needs of the children they serve.

We are so thankful to Starfish for developing this comprehensive manual that shares lessons learned, along with a step-by-step walkthrough of the process of planning, developing, educating, implementing and evaluating a pediatric Integrated Health Care initiative. It is our hope that primary care settings use this exceptional manual as a helpful guide and resource for implementation.

Andrea M. Cole is the Executive Director and CEO of the Ethel and James Flinn Foundation, which is committed to improving the quality, scope and delivery of mental health services in Michigan.

Testimonial

It's an exciting time of innovation and change in health care and as anyone who is in the health care field will tell you, it's a long and winding road to transformation. The Integrated Health Care model of care is really no longer just a model up for "consideration," but rather a way of delivering care and doing business that has proven successful in increasing patient access to mental health services, lowering costs and improving patient satisfaction.

I have experienced the transformation first hand in partnership with Starfish Family Services and the use of the Implementation Model Manual and I know that it is a process of change, not a "one size fits all" model or something that can be completed with just a decision to integrate. There is a progression that must follow the shift and it must be done within workflows, in attitudes and culture.

Physicians must be willing to make room for behavioral health within their practice in order to see the grand benefits. Staff must be willing to learn new ways of using their unique skills as well. We have implemented Integrated Care Behavioral Health in our pediatric clinics and there is no turning back. It's an exciting time in health care.

*Charles J. Barone II, MD FAAP
Chair, Department of Pediatrics
Chair, Credentials Committee
Henry Ford Medical Group
Clinical Associate Professor of Pediatrics
Wayne State University School of Medicine*

Introduction

The need for a Pediatric Integrated Health Care model is clear. Many children who make it to a doctor's office are either not identified as having behavioral health needs because there is no model for screening, or if identified, most patients are told to contact a mental health facility in their area. Without assistance or a soft hand-off parents/caregivers are less likely to follow through and children/youth will not receive needed early intervention services. Integrated care approaches are being driven in part by the Patient Protection and Affordable Care Act of 2010 (ACA), which emphasizes integrated care approaches. As a result, Integrated Health Care is no longer a concept, but a way of doing business.

Increasing behavioral and emotional problems are occurring at younger and younger ages. A recent family survey conducted for the National Alliance for Mental Illness (NAMI) found that 63 percent of families reported their child first exhibited behavioral or emotional problems at seven years of age or younger. At these ages the most common point of contact for families with children experiencing these problems is their Pediatrician or Primary Care Physician, yet only 34 percent of families in the NAMI survey said their Primary Care Doctors were "knowledgeable" about mental illness. Another 17 percent said their Primary Care Doctor was "somewhat knowledgeable," with 59 percent reporting their Primary Care Doctors were "not knowledgeable" about mental health treatment. A slightly higher percentage (64 percent) state their Primary Care Doctors were not knowledgeable about local resources and supports for families (NAMI, 2011).

An issue paper published by the National Institute for Health Care Management Foundation (NIHCM) eloquently describes the shortcomings of the current fragmentation between behavioral health and physical health care system.

One in five children and adolescents in the U.S. experiences mental health problems, and up to one-half of all lifetime cases of mental illness begin by age fourteen. Seventy-five percent of children with diagnosed mental health disorders are now seen in the primary care setting, making the management of mental health issues a growing part of pediatric practices...Pediatricians are well positioned to detect problems in a child's social and emotional development due to their consistent presence in a child's life,...[however] pediatricians are increasingly relied upon not only to detect problems, but also to provide the full spectrum of mental health services without the tools and resources to do so effectively (NIHCM Foundation 2009).

Childhood can be described as a multi layered system of developmental stages. The needs of an infant are decidedly different from the needs of an 11 year old, however both are considered "Pediatrics." There are also events or risks that occur only within childhood but can have long term consequences as listed below:

Developmental: speech, language, learning, Autism Spectrum, ADHD

Physical Health: obesity, diabetes, asthma, fetal alcohol spectrum, drug/alcohol use, smoking, eating disorders

Social/Emotional: emotional abuse, attachment issues, neglect, bullying, lack of social supports, negative social environment, absent parent, incarcerated

continued

Introduction, continued

parent, substance abusing parent, mentally ill parent, teen parent

Trauma: environmental, physical/sexual abuse, neglect, foster care placement

It is this very nature of Pediatric care that demands a team of knowledgeable professionals who can help patients and parents to navigate the complex issues and needs of childhood.

– Michelle Duprey, Lead Author, Wayne County Pediatric Integrated Health Care Concept Paper

As the integration of Primary Care and Behavioral Health becomes more and more the norm and the number of systems become more interested in integrating, it is imperative that a model for completing a successful integration be made available. It is a well known fact among those who have participated in the integration movement that simply placing a mental health professional into a primary care office is not a sufficient or effective solution. This Integrated Health Care implementation model offers a plan and resources to assist those in charge of integrating a practice that is based on real world experience, research and practice.

Pediatric Integrated Health Care Models

For this model, the following determination will be used

BHC Integrated: This integrated model indicates the presence of a Behavioral Health Consultant on the Primary Care team with referrals made outside the practice for Specialty Mental Health services

Full Integration: This fully integrated model indicates the presence of a Behavioral Health Consultant on the Primary Care team as well as the presence of specialty mental health services at the same site.

For many Pediatric practices, the need for integrating behavioral health onto the Primary Care team may be known and understood, but finding the resources and the knowledge to actually integrate may be unavailable.

The following Pediatric Integrated Health Care model illustrates the flow of goals and tasks necessary to fully integrate a pediatric practice:

- **Educate all stakeholders**
- **Identify all Logistics specific to each primary care site**
- **Development of consistent integrated procedures with site specific fit**
- **Workflow Adjustment to fit each procedure into a new paradigm**
- **Evaluate and monitor each procedure for success as well as the overall paradigm shift**
- **Replicate and repeat with new lesson learned along the way**

This model demonstrates processes for a full implementation and provides tools to help to achieve this goal. Each practice site is different and it should be noted that not all sites will be able to accomplish each task of implementation to a level of 100 percent.

Acknowledgments

I would like to acknowledge and thank contributors to the completion of this manual.

Ann Kalass, CEO and Marisa Nicely, VP at Starfish Family Services for their support of me in the development of this model. Their commitment to Integrated Health Care and providing me the time and opportunity to develop this model was invaluable.

The Michigan Department of Health and Human Services/Michigan Department of Education Transformational Health Care grant team for their financial support, believing in the importance of this model and all of their efforts to help Michigan transform health care delivery.

The Flinn Foundation for their belief in the impact of the model, financial support and advocacy in all areas of Integrated Health Care.

Every Physician and treatment team that allowed us into your practice to utilize and test this model.

Amanda Beck, Debrah Lee, Marisa Nicely, Crystal Shilling, and Tate Haywood for their reviews, input and direction.

My partners Marisa Nicely, Michele Kennedy, Jennifer Jonika and Christina Grim at Starfish Family Services who inspire me every day to dream big, reach far and never give up.

My Integrated Health Care team led by supervisors Jung Nichols and Chy'Leetzia Johnson whose dedication to the day-to-day work allows me to create our vision.

*– Michelle Duprey, LMSW
Integrated Health Care Director,
Starfish Family Services*

How to Use this Manual

Over the years of working in Integrated Health Care, there have been a number of “rules” or lessons learned that some of us take for granted that everyone knows. One of my most valuable lessons is to never assume anyone knows anything.

We are all forced to be very committed and focused on our own work. We can barely keep up with our own “rules” of systems we know well, let alone “rules” of some new system. I am happy to share this one learned lesson with you. You CANNOT hire or contract out or otherwise “place” a mental health person (Social Worker, Psychologist, Counselor, etc.) into a medical practice and say “viola, we are integrated!” I have seen this done, I have seen it fail.

One of the most unfortunate impacts of this approach or breaking of a “rule” is that it leaves the Physicians, the clinic staff, mental health person and patients all saying “oh, Integrated Health Care? Yeah, we tried that, it doesn’t work.” They are correct, this does not work. Unfortunately, this situation also sets back the ability to transform our health system by years. This is not a car wash, a quick fix, a drive thru. This is a transformational process that requires new ways of looking at things, people being expected to take new perspectives and develop new interpretations to things that they hold dear.

If you know how difficult it is for adults to unlearn and relearn, then you understand. Move your trash can in your office and you will understand. Unlearn and relearn. This is why there is a model for guidance. The model is not even the full answer to the question “how do we transform our practice from non-integrated to integrated?” It’s a starting point and a guide. It can take 6 months to 5 years to fully transform a practice, a system, a person.

It is important to note that this model is not prescriptive. It is not an “all or nothing” approach and is not meant to imply that to be a fully integrated clinic all activities must be done as advised and in any particular order. You will notice that there is an order that naturally occurs (ie: you must have an MOU or contract before other activities), however many activities will also naturally occur based on each individual clinic.

The model is broken into two Tiers for the Educate, Logistics and Develop/Implement modules. Tier One represents the basics of integration. Tier Two represents activities that can take the clinic to the next level of integration by providing the patients and community with leadership, services and community education and is recognized as such.

Tier One activities are listed first, with Tier Two activities following in the same section. This allows the reader to have some choices while focusing on a particular area, rather than waiting until Tier One activities are completed before even considering the Tier Two ideas.

Experience informs us that nothing that is newly created is done so in a straight line so the manual should be used in an “as needed” order. The Workflow Adjustment and Evaluate modules are not broken into tiers as the activities are generally the same throughout implementation regardless of how far a practice goes in integration.

This model was originally developed to be used by the Integrated Health Care staff in my department to help contracted Pediatric, Family Medicine and School-Based Health Centers throughout their transformation from non-integrated to fully integrated practices. The activities of the implementation were meant to guide my staff through the process. If your medical practice uses the model without support from an outside source, such as Starfish Family Services, you should be able to follow the same model independently by hiring your own Behavioral Health staff and/or assigning the tasks to an existing staff.

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SECTION II: The Behavioral Health Consultant



The Behavioral Health Consultant (BHC) as a role for a mental health professional is a relatively new concept and there are a number of different interpretations of the role depending on the model of Integrated Health Care that is pursued and utilized by any particular organization.

Continued...



Defining “Behavioral Health Consultant”

For the purposes of this manual and this model, the Behavioral Health Consultant is defined as

“a licensed, professional embedded on a physical health care team to provide their mental health expertise through consultation with the provider team and patients to promote whole-body health and wellness.”

A true BHC is the mental health expert on the team, providing the knowledge, experience, models and theories of psychological functioning to the medical profession. When a mental health professional and a physical health professional join forces, the patient wins. For the Physician, the ability to address their patients social, emotional and psychological needs by calling a team member into the exam room can be as helpful to the Physician as the patient.

The ability to finally say “I have someone for that” rather than “go somewhere for that” is the difference having a Behavioral Health Consultant on the team provides.

IDEA

Explaining The BHC’s Role

The title Behavioral Health Consultant can be much less intimidating and serve to decrease the stigma associated with typical mental health titles such as psychologist and social worker.

Identifying yourself as part of the Physician’s team when meeting or calling patients can help put them at ease and increase perceived credibility.

Develop a brief but powerful “elevator speech” for what your role is as a BHC, such as,

“Behavioral health is part of all health care and by joining the Physician’s team and working together, patients receive the best care”

and

“for too long we have separated the head from the body in health care. I help patients understand the connection for whole-body health and wellness.”

Then be prepared to explain succinctly how your role accomplishes this, such as

“understanding a physical health or behavioral health issue is the first step in better health and I help people do that”

or

“by addressing a health issue with education, action plans and resources, I help patients understand the mind/body connection that can lead to behavior changes and better overall health and quality of life.”



Behavioral Health Consultant

Core Competencies

The role of a Behavioral Health Consultant (BHC) is vastly different from that of a traditional therapist and/or social worker. The emergence of Integrated Health Care as a model of service delivery has created the need for a new definition of what has historically been a more traditional role.

When considering the definition of this new role, it is important to recognize that the “new” does not negate the need for the “traditional.” Specialty Mental Health treatment maintains its position as a much needed service, highly regarded and necessary.

A Behavioral Health Consultant is just different...in scope, focus, pace and skill set. The following are examples of the basic core competencies for the role:

Characteristics	Skills	Orientation to Practice
<ul style="list-style-type: none"> • Flexible, high energy level • Team player • Interest in health and fitness 	<ul style="list-style-type: none"> • Finely honed clinical assessment skills • Behavioral medicine knowledge base • Cognitive Behavioral Intervention skills 	<ul style="list-style-type: none"> • Action-oriented, directive, focus on patient functioning • Emphasis on prevention and building resiliency • Utilizes clinical protocols & pathways • Invested in educating patients, health literacy

Specifically, a BHC must be capable of functioning at a similar pace as a Physician. Whereas a traditional therapist has 45 minute sessions in a comfortable office space with no interruptions, a BHC must be able to engage patients in an exam room and move quickly from patient to patient.

A traditional therapist will spend time completing an assessment and a therapy-focused treatment plan while the BHC will need to possess the ability to quickly identify the problem, ascertain the barriers to resolution and offer behavioral-based plans with a targeted focus. Traditional therapists tend to work one-on-one with the patient while the BHC works concurrently and collaboratively with the Physician, offering consultation, expertise and partnership.

In general, it is imperative that the BHC have the following specific skills:

- The ability to understand the biological components of health, illness, and disease and the interaction between biology and behavior
- An understanding of how cognition, emotion and motivation can influence health
- An understanding of how social and cultural factors affect health problems, access to health care and adhering to treatment regimens
- Knowledge of how to assess cognitive, affective, behavioral, social and psychological reactions for all common conditions seen in primary care.

*Behavioral Health Consultant***Roles****Behavioral Health Consultant**

- Consultant to PCP
- Member of provider team
- Provides assessments and support for PCP screenings
- Provides short, focused interventions with 1-5 follow-up visits
- Provides psycho-education and supportive materials/tools for identified issues
- Provides anticipatory guidance
- Provides linking and coordinating for community resources and systems
- Utilizes PCP medical record

Specialty Therapist

- Provides services in a mental health clinic or traditional mental health services in a medical/school setting
- Uses a variety of clinical models to address mental health needs
- Coordinates with PCP
- Office provides psychiatric services
- Has specialized treatment plan
- Mental health services are provided for duration of treatment plan
- Utilizes mental health clinical record

Behavioral Health Consultant

Role Process

Initial Consultation

- **Assess:** *Gather core information (answer the PCP's referral question)*
Screening, clarifying referral question, clinical case review, targeted clinical interview, gathering relevant information
- **Establish:** *determine primary issue*
What is the current symptom, effects of symptoms on functioning?; use reframes for clarifications and focused follow-up questions for understanding
- **Provide:** *make sound and quick recommendations*
Brief interventions supported by self-management strategies, focus on functional outcomes and flexible follow-up, resources and referrals
- **Close and Consult:** *determine plan and collaborate with PCP*
Restate the plan with patients, create follow-up plan. For PCP, clarifying the consultation question, fitting recommendations to providers and primary care setting, effective consultative feedback, appropriate chart documentation

Follow-Up Consultation

- **Assess:** current functioning related to identified issue, adherence to established plan, new developments related to initial identified issue
- **Establish:** barriers to following plan, new or additional issues as related to the initial plan and determine need to adjust plan
- **Provide:** brief interventions, additional skills trainings, resources, referrals
- **Close and Consult:** review plan and agreed upon actions, review new skills, resources and/or referrals, determine follow-up plan. Provide follow-up consultation with PCP and document in chart

Note: Some initial and many follow-up consultations may take place over the phone as necessary.

SPIN

When Talking to Physicians, BHCs Should:

1. Be concise
2. Stick to facts
3. Don't use mental health-specific acronyms
4. Connect issue to physical health symptoms
5. Details should go in the write up for the chart



Level of Care Determinants

One of the many ways Integrated Health Care can impact a transformation in the entire mental health system is to help patients determine the true level of care that is needed. In most states, children who are detected as having some sort of mental health need have two choices: the Community Mental Health system or their Qualified Health Plan (QHP) for managed care of mild to moderate mental health issues. Physicians, not being armed with the most updated knowledge of the system, typically refer straight to a therapy service for a child who is having some difficulty. Unfortunately, this leads to a long and winding road of confusion and frustration on the part of the parent.

Typically, a child will be referred to their local community mental health provider and after a long intake process – full of paperwork – it is determined that the child does not meet criteria. If they are lucky, they might receive a phone screening and be told that their child does not meet eligibility criteria, but then what? They may be referred back to their Qualified Health Plan to start their mental health access journey all over again.

Sometimes the opposite occurs and the child begins to use their QHP benefits only to be told, usually after a therapeutic relationship has been established, that the client requires a higher level of care so they are referred to the Community Mental Health system. It starts to become clear why many parents just give up and their child's needs go untended.

Using their knowledge and experience with the mental health system, a BHC can help determine which level of care and which system the child would be best suited to enter. They also can provide guidance and navigation of the systems up front to the parent so that they know what to expect from each level of care. Ultimately, when the system is balanced there will be less of a backlog because the right children will receive the right level of care.

Finally, the BHC's presence in Primary Care offers a new third option for children, that of Intervention. Not all children need therapy. Some children who receive interventions from a BHC in their Pediatrician's office may not need to enter the Mental Health system at all, further balancing the system and saving money that would have been spent needlessly.

Intervention in Primary Care Environment	QHP Therapy with Outpatient Services	Community Mental Health Services
<ul style="list-style-type: none"> • Health Behaviors (Obesity, Diabetes, Obesity, etc.) • Psycho-education • Referrals • Normalized developmental decisions • Stress • Mild school performance issues • Mild bullying • Mild divorce/family issues 	<ul style="list-style-type: none"> • Generalized Anxiety • ADHD • Mild to moderate Trauma event • Mild to moderate Depression • Mild to moderate symptoms due to bullying • Mild to moderate symptoms due to divorce/family issues • Moderate stress 	<ul style="list-style-type: none"> • Oppositional Defiant Disorder • Bi-Polar Disorder • Major Depression • Suicidal/Homicidal • Frequently missing school • Juvenile justice issues • Repeated violence • Chronic home/parent issues • Chronic runaway • Moderate to severe trauma

*Behavioral Health Consultant***Recommended Trainings**

A BHC is generally Master's prepared and trained on mental health issues, however the medical aspect of whole-body health and wellness will be new for most people, as is the brief model of 15-20 minute contacts. When available, it will be helpful to attend trainings and/or seek out webinars on the following topics, which will be useful in any general medical setting.

1. Motivational interviewing
2. General Integrated Health Care
3. General nutrition
4. Childhood obesity
5. General asthma
6. General diabetes
7. Crisis intervention
8. Autism spectrum
9. Pain management
10. Suicide assessment and prevention
11. Brief interventions in primary care
12. ADHD
13. Child psychotropic medications
14. Cognitive Behavioral Therapy techniques
15. Mindfulness-based interventions
16. Trauma

Trainings offered through:

- SAMHSA
www.samhsa.gov
- The National Council for Behavior Health_
www.thenationalcouncil.org
- American Academy of Pediatrics
www.aap.org
- Michigan Primary Care Association_
www.mPCA.net
- Community Mental Health
- Children's Health Access Programs (CHAP) - Michigan_
www.uwmich.org/michap
- Virtual Center of Excellence_
www.vceonline.org
- The University of Michigan Certificate Program._
www.ssw.umich.edu

Suggested Basic Supplies List for BHC

- Psycho-education materials
- Laptop
- Printer
- Access to a phone
- Screenings
- Book of medications and side-effects
- Community resources



*Behavioral Health Consultant***Resources**

1. **The National Council for Behavioral Health** – web site, weekly newsletters
www.thenationalcouncil.org
2. **SAMHSA-HRSA** – web site; webinars, emails, weekly newsletters
www.samhsa.gov
3. **Linked In** – search Integrated Health Care/Behavioral Health (nationwide network, support group, research information, parent/patient education information, webinar information)
www.linkedin.com
4. **Facebook** – search Integrated Health Care/Behavioral Health
www.facebook.com
5. **National Alliance for Mental Illness (NAMI)** – parent/professional education/resources on a wide variety of mental illnesses, research, etc.
www.nami.org/
6. **American Academy of Pediatrics (AAP)**
www.aap.org
7. **Julieslist.homestead.com** – community resources in/around Detroit
www.julieslist.homestead.com
8. **The Information Center Resource Guide** – web site, referral center, publishes a resource guide available free of charge upon request with a wide variety of local resources for families
www.theinfocenter.info
9. **National Association of Social Workers (NASW)**
www.socialworkers.org.
Michigan Chapter www.nasw-michigan.org
10. **Zero To Three** – good resource/information/training info/education on children zero to three
www.zerotothree.org
11. **Michigan Association of Infant Mental Health (MI-AIMH)** – another good resource for parents/professionals on children zero to three
www.mi-aimh.org
12. **Ages & Stages Questionnaires (ASQ Online)**
www.agesandstages.com/products-services/asq-online

continued

Resources, continued

13. **The Skillman Foundation** at Wayne State University – sign up for newsletters; info on upcoming trainings on a wide variety of Social Work topics; research information
www.skillman.org
14. **Healthychildren.org** – APA sponsored web site with parent/professional information, pamphlets, handouts, educational materials, research on everything from safe sleep to car seat safety and nutrition
www.healthychildren.org
15. **Project Find/Early On** – referrals for evaluation; link to local resources for children with developmental delays or suspected developmental delays
www.1800earlyon.org
16. **Healthfinder.gov** – subscription for weekly updates on medical studies
www.healthfinder.gov
17. **Centers for Disease Control and Prevention**
www.cdc.gov

IDEA

Video: Integrated Healthcare in Practice

Starfish Family Services offers Integrated Health Care to pediatrics practices in the Metro Detroit area. This promotional video features interviews with physicians, behavioral health consultants and patients discussing the benefits of an integrated practice.

Watch the video:

www.youtube.com/watch?v=IfHOBvXYD-o

Learn more:

www.starfishfamilyservices.org/what-we-do/integrated-health-care/



*Behavioral Health Consultant***Job Description****Title**

Behavioral Health Consultant

Primary Purpose

This is a professional position providing mental health and Integrated Health Care expertise to health care providers and patients. This position will be housed in a medical setting and will be integrated into the primary care team.

Education And Experience Required

1. Master's degree in social work, psychology or other related human service field.
2. Registration/licensure as a social worker, counselor, or psychologist. Full License preferred.
3. Medical social work experience preferred.

Knowledge, Skills And Abilities Required

1. Knowledge of the Integrated Health Care model.
2. Experience or specialized training in an Integrated Health Care setting preferred.
3. Specialized training in health issues related to children including asthma, diabetes and obesity or completed within 3 months of employment.
4. Strong assessment skills.
5. Experience working with parents on behavioral management, and child development education.
6. Experience with providing appropriate referrals for aftercare.
7. Experience with multiple major human service delivery systems (FIA, public health, education, etc.) preferred.
8. Ability to demonstrate commitment, caring and respect for children and adults from diverse backgrounds who have multiple needs or problems.
9. Ability to work cooperatively and responsibly as a member of a team with colleagues, supervisors, agency staff and collateral contacts.
10. Ability to develop medical/behavioral treatment plans and coordinate needed services to fulfill plans.
11. Ability to role-model appropriate child-handling techniques to parents and staff.
12. Good understanding of child development, parent/child dynamics, common childhood behavior problems and appropriate interventions.
13. Ability to effectively, appropriately and accurately communicate both orally and in writing.
14. Ability and willingness to abide by all confidentiality policies.
15. Ability and desire for personal and professional growth and skill development.
16. Competence in the delivery of crisis intervention services and in brief and time-limited therapy.

continued

17. Ability to demonstrate compassion and sensitivity and to respect the privacy and special needs of patients.
18. Must be computer literate.
19. Knowledge of community resources and linkages.
20. Knowledge of theory and practice of individual, group and family systems treatment.
21. Ability to make critical decisions independent of immediate supervision.
22. Ability to work flexible hours as needed (i.e. some evenings or weekend work is required).
23. Must have the ability to work with all members of the community regardless of race, age, sex and cultural or ethnic background.

Principle Duties And Responsibilities

1. Assess and educate primary care practices on Integrated Health Care.
2. Develop logistical and workflow procedures involved in an Integrated Health Care site.
3. Provide assessments and referral services to children and youth in their primary care setting that are identified through a screening mechanism by the primary care provider with special consideration for screenings related to trauma environments.
4. Conduct additional screens and assessments.
5. Provide psycho-social education as needed with particular emphasis on childhood development and adolescent development.
6. Provide anticipatory guidance on child/adolescent development, behavioral issues and parenting skills/strategies.
7. Link with provider agencies.
8. Assist in coordination of care and provide referrals to appropriate community agencies as necessary.
9. Follow up on all referrals to ensure contact/link to referral agency.
10. Follow up to ensure progress with suggested strategies.
11. Serve as a mental health consultant to the primary care team.
12. Embrace an integrated approach to patient treatment.
13. Facilitate groups as necessary.
14. Must maintain any client files in order and up to date.
15. Provide training to other professionals.
16. Submit timely and accurate documentation of services, billing data and required paperwork.
17. Work cooperatively as a member of a team with program staff and community resources.
18. Responsible for working with team members, supervisor, child, families and community contacts in a manner that is conducive to the philosophy and mission of the program and agency.
19. Participate in individual and group supervision.
20. Participate in on-going personal and professional development including in-service training, peer review, external workshops and seminars.
21. Adhere to all policies and procedures as it relates to documentation, productivity, training requirements and confidentiality.
22. Must maintain ethical and professional standards at all times.
23. Attend all agency and departmental meetings and training as required.

IHC Interview Questions

1. Please tell me about your overall Social Work/Psychology/Counseling job experience.
2. Please tell me about your experience working in health care.
3. How would you define Integrated Health Care?
4. How would you define the benefits of IHC?
5. What do you think the barriers to IHC might be?
6. What strategies have you/would you develop to work effectively with doctors, Nurses, Medical Assistants (MAs), etc.?
7. How do you envision working collaboratively within the Primary Care site?
8. Please describe your experience working with standardized screening tools for children and adults.
9. Please describe your experience working with Qualified Health Plans.
10. Please describe your general knowledge of working with patients with common health issues such as diabetes, obesity, asthma and chronic pain.
11. Please describe your experience working with patients who have experienced trauma.
12. What strategies have you used to create a team?
13. How would you help a patient gain access to the mental health system?
14. How might you educate a newly diagnosed ADHD patient/parent?
15. What strategies can you think of to provide psycho-education to a patient in a 15 minute contact?
16. Describe a time when you had to manage a challenge involving a colleague with regard to communication.
17. How would you manage disagreements between professionals (between provider and BHC, for example)?

Behavioral Health Consultant

BHC Intervention

The following are examples of how a BHC in an integrated practice can help pediatric patients by assessing mild to moderate mental and physical health issues, by coordinating treatment and by providing interventions, referrals and resources for the patient and their family.

ADHD/ADD

A diagnosis of ADHD/ADD must come from the PCP. In order to obtain a thorough assessment of a child who is suspected of having ADHD/ADD, there are two assessment tools that are currently utilized for diagnostic purposes. These include the Vanderbilt Assessment and the Connors Comprehensive Behavior Rating Scale. In both instances, feedback is obtained from the child's parent(s)/caregiver(s) and their teacher(s). Once these Assessment tools are completed, the family is encouraged to return for a follow up visit to review the Assessment tool with the PCP and the BHC, and to obtain additional information. The parent/caregiver is (are) provided with information on treatment options as well as behavior modification tools that can be used in the home or at school.

The BHC is instrumental in providing psycho-education once a diagnosis is made and can provide additional information and referrals as needed. If the decision is made for the child to begin medication treatment options, it may also be helpful to provide a referral for behavioral health services as well. The BHC may provide up to 5 individual/family sessions and determine the need for additional referrals as needed.

The BHC will typically develop a weekly goal sheet/behavioral health plan with the family and provide additional resources, tips, tools and behavior modification interventions. The BHC can also provide assistance with follow-up consultations regarding medication compliance.

Possible BHC interventions include instructions/guidance on: the importance of establishing a structured schedule, routine, rituals; use of a timer while doing homework to allow for breaks/flexibility in completion of tasks; decreasing amount of television viewing/video games; incorporating concentration/memory games; use of a homework planner on a daily basis; development of organizational skills (use of folders, note cards, etc.), increased communication with teacher via email or daily notes; use of a mood journal; setting weekly behavioral goals; use of rewards/consequences jar in the home; "catch them being good;" diet/nutrition information (decreasing amount of sugar/sweets), etc.

– Examples contributed by Crystal Shilling, LMSW

Common BHC Referrals from Pediatricians

- Milestones and development
- Behavior (e.g. tantrums, picky eating, bullying)
- Bed wetting
- Difficulty sleeping & sleep hygiene
- Mental health: ADHD, depression, anxiety, trauma, mood
 - Suicide/homicide risk
- Chronic illness: asthma, diabetes
 - Medication management
- Substance use
- Healthy lifestyle choices

*BHC Intervention, continued***Autism**

“The essential features of Autistic Disorder are the presence of markedly abnormal or impaired development in social interaction and communication and a markedly restricted repertoire of activity and interests. The impairment in reciprocal social interaction is gross and sustained. There may be marked impairment in the use of multiple nonverbal behaviors (eye-to-eye gaze, facial expression, body postures and gestures) to regulate social interaction and communication. There may be failure to develop peer relationships appropriate to the child’s developmental level that may take different forms at different ages. There may be a lack of spontaneous seeking to share enjoyment, interests or achievements with people or social or emotional

reciprocity may be present (preferring solitary activities, not actively participating in simple social or play games). Often, an individual’s awareness of others is markedly impaired. Individuals with this disorder may be oblivious to other children (including siblings) and may have no concept of the needs of others or may not notice another person’s distress.” (DSM-5)

**BHC Toolbox:
Evidence-Based
Practice**

- Motivational Interviewing
- Cognitive Behavioral Therapy
 - Cognitive restructuring
 - Behavioral activation
- Dialectical Behavior Therapy
 - Mindfulness
 - Diaphragmatic breathing
 - Progressive muscle relaxation
 - Emotion regulation and distress tolerance

– Source: University of Michigan
School of Social Work

Tools used to aid in diagnosis:

- MCHAT- The Modified Checklist for Autism in Toddlers
- The Childhood Asperger Syndrome Test (CAST)
- ASSQ The Autism Spectrum Screening Questionnaire

Once a child has been referred for additional testing, it is the job of the BHC to ensure that the patient schedules an appointment and

follows up with his/her PCP to review the test results. Parents should be forewarned that the evaluation process is quite complex and can take upwards of 4-8 hours. Usually, the hospital will break up the evaluation into 2- to 3-hour sessions. Once the evaluation is complete, the hospital will schedule a separate appointment to discuss the results and will also provide the parent with additional resources and referrals as needed. The BHC may provide care coordination assistance with resources and referrals and additional information and guidance on services available for children diagnosed with ASD.

More information and resources at:

- www.1800earlyon.org
- www.autismspeaks.org
- www.autismnow.org
- www.autism-mi.org

*BHC Intervention, continued***Anxiety**

Anxiety disorders affect one in eight children. Research shows that untreated children with anxiety disorders are at higher risk to perform poorly in school, miss out on important social experiences and engage in substance abuse (www.adaa.org/living-with-anxiety/children).

Young children who suffer from anxiety may report to their PCP that they have a “stomach ache” or complain of “chest pains” or other vague psychosomatic complaints. Typically, PCPs will refer patients to the BHC when all other medical causes for these complaints have been ruled out.

Children who score in the mild/moderate range may receive brief interventions from the BHC. These interventions may include providing information/education on deep breathing techniques, visualization, muscle relaxation exercises, use of stress or worry balls, etc. Children are typically asked to identify what types of things cause them anxiety and together, the child, the parent and the BHC will discuss alternative ways to deal with said anxiety. For example, children who suffer from test anxiety may benefit from an intervention with the teacher (allowing longer time to complete the test, use of breaks, etc.) Children may also be assigned “tasks” or “homework challenges,” such as being asked to raise their hand in class, saying “Hi” to someone they do not know in the hallway, etc.

At each session, the BHC may ask the child to rank his/her anxiety level from 0-10 (with 10 being the highest). If the child’s anxiety level continues to remain at a 7 or higher after 2 or 3 sessions, the BHC may suggest a referral to CMH or QHP for more traditional therapeutic approaches.

Sample Intervention Dialogue

“Hi, my name is Debrah, and I am the BHC on Dr. Smith’s team. I’m trained as a clinical social worker. You see the doctor for any physical health concerns that you may have, but we know that health is a lot more than how our bodies are doing physically – it can also have to do with how we’re thinking, feeling, or acting.

“I am on Dr. Smith’s team to meet with patients for about 15-20 minutes to discuss these specific concerns to ensure that you are feeling as well as you can. I communicate regularly with Dr. Smith regarding your care, and we share the same electronic medical record system. Dr. Smith mentioned that you are concerned about _____ today. Tell me more about that.”

Asthma

According to the American Lung Association (www.lung.org/associations/states/colorado/asthma/asthma-action-plan.html):

- Asthma is one of the most common chronic disorders in childhood, currently affecting an estimated 7.1 million children under 18 years, of which 4.1 million suffered from an asthma attack or episode in 2011.

- An asthma episode is a series of events that results in narrowed airways. These include: swelling of the lining, tightening of the muscles and increased secretion of mucus in the airway. The narrowed airway is responsible for the difficulty in breathing with the familiar “wheeze.”

continued

BHC Intervention, continued

- Asthma is characterized by excessive sensitivity of the lungs to various stimuli. Triggers range from viral infections to allergies, to irritating gases and particles in the air. Each child reacts differently to the factors that may trigger asthma, including:

- respiratory infections and colds
- cigarette smoke
- allergic reactions to such allergens as pollen, mold, animal dander, feathers, dust, food and cockroaches
- indoor and outdoor air pollutants, including ozone and particle pollution
- exposure to cold air or sudden temperature change
- excitement/stress
- exercise

- Asthma can be a life-threatening disease if not properly managed. In 2011, 3,345 deaths were attributed to asthma. However, deaths due to asthma are rare among children. The number of deaths increases with age. In 2011, 169 children under 15 died from asthma compared to 633 adults over 85.

- Asthma is the third leading cause of hospitalization among children under the age of 15. Approximately 29 percent of all asthma hospital discharges in 2010 were in those under 15, however only 20% of the U.S. population was less than 15 years old.

BHCs and PCPs may benefit from utilizing an Asthma Action Plan at each visit. *A sample action plan is available at www.nhlbi.nih.gov/files/docs/public/lung/asthma_actplan.pdf*

BHCs may be asked to provide psycho-education, handouts and other online tools. The BHC may also provide community resources/referrals to WCHAP for an asthma educator. BHCs are NOT authorized to provide demonstrations on use of inhalers or nebulizers.

Bullying

Oftentimes, children who are referred to the BHC for anxiety may also be a victim of bullying. Bullying can be defined as an intentionally aggressive, usually repeated, power difference between the young people involved. Bullying is a problem among youth 18 and under.

There are three main types of bullying: verbal, social and physical. Cyberbullying is verbal and/or social aggression carried out through technology.

Some bullying actions can fall into criminal categories, such as harassment, hazing or assault.

BHC interventions for bullying may include providing information/education on advocacy/speaking up in the school and community, role playing possible altercations, helping Mom/Dad advocate with school officials, self-esteem building exercises, etc.

*BHC Intervention, continued***Diabetes**

“Every year in the United States, 13,000 children are diagnosed with type 1 diabetes and more than 1 million American kids and adults deal with the disease every day.

Diabetes is a disease that affects how the body uses glucose, the main type of sugar in the blood. Glucose comes from the foods we eat and is the major source of energy needed to fuel the body’s functions.

After you eat a meal, your body breaks down the foods you eat into glucose and other nutrients, which are then absorbed into the bloodstream from the gastrointestinal tract. The glucose level in the blood rises after a meal and triggers the pancreas to make the hormone insulin and release it into the bloodstream. But in people with diabetes, the body either can’t make or can’t respond to insulin properly.

Insulin works like a key that opens the doors to cells and allows the glucose in. Without insulin, glucose can’t get into the cells (the doors are “locked” and there

is no key) and so it stays in the bloodstream. As a result, the level of sugar in the blood remains higher than normal. High blood sugar levels are a problem because they can cause a number of health problems.

There are two major types of diabetes: type 1 and type 2. Both type 1 and type 2 diabetes cause blood sugar levels to become higher than normal. However, they cause it in different ways.

Type 1 diabetes (formerly called insulin-dependent diabetes or juvenile diabetes) results when

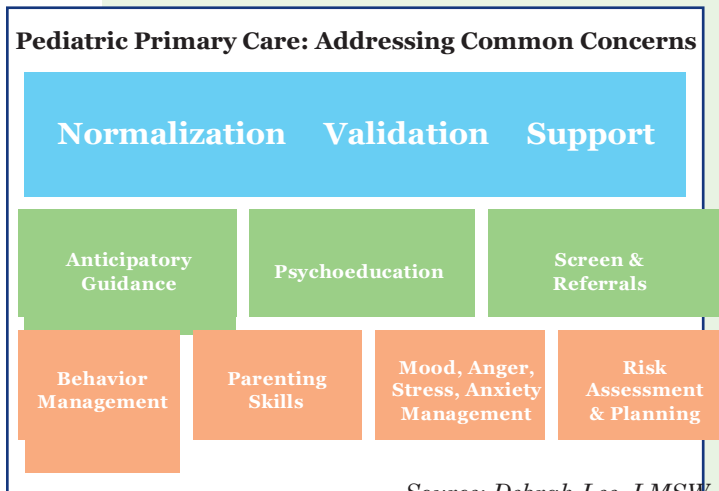
the pancreas loses its ability to make the hormone insulin. In type 1 diabetes, the person’s own immune system attacks and destroys the cells in the pancreas that produce insulin. Once those cells are destroyed, they won’t ever make insulin again.

Although no one knows for certain why this happens, scientists think it has something to do with genes. But just getting the genes for diabetes isn’t usually enough. A person probably would then have to be exposed to something else — like a virus — to get type 1 diabetes.

Type 1 diabetes can’t be prevented, and there is no practical way to predict who will get it. There is nothing that either a parent or the child did to cause the disease. Once a person has type 1 diabetes, it does not go away and requires lifelong treatment. Kids and teens with type 1 diabetes depend on daily insulin injections or an insulin pump to control their blood glucose levels.

Type 2 diabetes (formerly called non-insulin-dependent diabetes or adult-onset diabetes) is different from type 1 diabetes. Type 2 diabetes results from the body’s

continued



Source: Debrah Lee, LMSW

BHC Intervention, continued

inability to respond to insulin normally. Unlike people with type 1 diabetes, most people with type 2 diabetes can still produce insulin, but not enough to meet their body's needs."

– Source: www.kidshealth.org/parent/diabetes_center/diabetes_basics/type1.html#

BHC interventions for children with diabetes may include: providing basic education/information on the type of diabetes the child has; coordinating referrals to local agencies and support groups; arranging for a nurse or MA to demonstrate proper medication/treatment techniques; coordinating a referral to a nutritionist for assistance with diet and food restrictions; and care coordination with school officials post diagnosis. Patients should be encouraged to follow up with BHC in 2 to 3 weeks post diagnosis just to "check in" on the child's progress and follow up on any questions or referral concerns.

Depression

As many as 1 in every 33 children may have depression; in teens, that number may be as high as 1 in 8. Depression isn't just bad moods and occasional melancholy. It's not just feeling down or sad, either. These feelings are normal in kids, especially during the teen years. Even when major disappointments and setbacks make people feel sad and angry, the negative feelings usually lessen with time.

But when a depressive state, or mood, lingers for a long time — weeks, months, or even longer — and limits a person's ability to function normally, it can be diagnosed as depression.

Kids and teens who are depressed are more likely to use alcohol and drugs than those who aren't depressed. Because these can momentarily allow a person to forget about the depression, they seem like easy fixes. But they can make someone with depression feel even worse.

Depression can be treated with psychotherapy, medicine, or a combination of therapy and medicine. A Psychiatrist can prescribe medicine, and although it may take a few tries to find the right drug, most people who follow their prescribed regimen eventually begin to feel better.

BHC interventions for children with depression include: providing information/education on depression to the patient/client and his/her family; providing information/education on psychotropic medication treatment options; coordinating medical treatment/prescription management with PCP, PA or MC3 Psychiatrist; providing appropriate therapy referrals to CMH or QHP specialty mental health therapist and encouraging coordination/follow up 2-3 weeks post prescription for medication management/care coordination with PCP. BHC may also engage in short-term, solution-focused therapy, engage in self esteem building exercises, assess for suicidality, establish safety contracts, and provide assistance with care coordination/referrals as appropriate.

Integrated Health Care Costs

BHC Expenses

A full time BHC can cost anywhere from \$50,000 to 65,000, depending on salary and benefits. I argue that when a practice grows and becomes busier, they will add non-revenue generating positions like front desk staff because they are needed for patient flow, workload and quality so why would a BHC position be any different? I would further argue that once patients are informed about how Integrated Health Care can benefit them and “competition” sets in, the practice with the BHC will be the practice with the most patients. It’s an investment in quality care just like any other investment made into a medical clinic.

IHC Billing

Integrated Health Care billing can be a complicated issue in many states, especially those like Michigan where there is one pot of money for physical health care, one pot of money for mild to moderate behavioral health care and a separate community mental health system. These silos and the difficulty in making any changes in each of them, let alone trying to get them to work together, continue to be a stopping point for many people, Physicians and behavioral health organizations who are considering implementing Integrated Health Care.

The good news is that there are now transformations at least being discussed and changes that seemed daunting at one time can take place when you least expect it. It is for that reason that there is not a large billing section in this manual. It could become outdated between submission of the manual and its publication. It might be more useful to discuss options for sustainability instead since there is no “straight answer” when it comes to financing and billing for Integrated Health Care at this time.

There are a number of “simple” solutions to the financing of Integrated Health Care but they require complete transformation of the health care system, which is unfortunately unlikely. Medicaid health plans and third party insurers could recognize the BHC role and create billing codes to represent their work that would not count against a patient’s 20 mental health outpatient therapy allowable visits. They could recognize a practice that provides Integrated Health Care with a BHC on staff by providing a billing code to add on to traditional physical health care codes for the Physician to use whenever a BHC is utilized.

The transition to value-based payment structure from the fee-for-service model could account for the cost of the BHC as long as the payments are enough to account for the actual services that are provided by the BHC. There are some current physical health care codes that a BHC can use however they are only allowable when the patient has a physical health diagnosis. These 96 codes are useful but they are not the full answer. Any patient with a mental health diagnosis can be provided a service by a BHC in the exam room, however that visit needs to follow traditional outpatient therapy rules via credentialing of the BHC, authorizations, and it could count against the patient’s 20 allowable mental health visits.

Transformation is possible and it is the responsibility of the payors and the State to become informed on the true needs of consumers of health care and respond with the appropriate structure to provide for those needs. It is truly the only way to break down the silos and create a new norm where behavioral health and physical health is viewed and paid for as routine medical care and whole-body health and wellness.

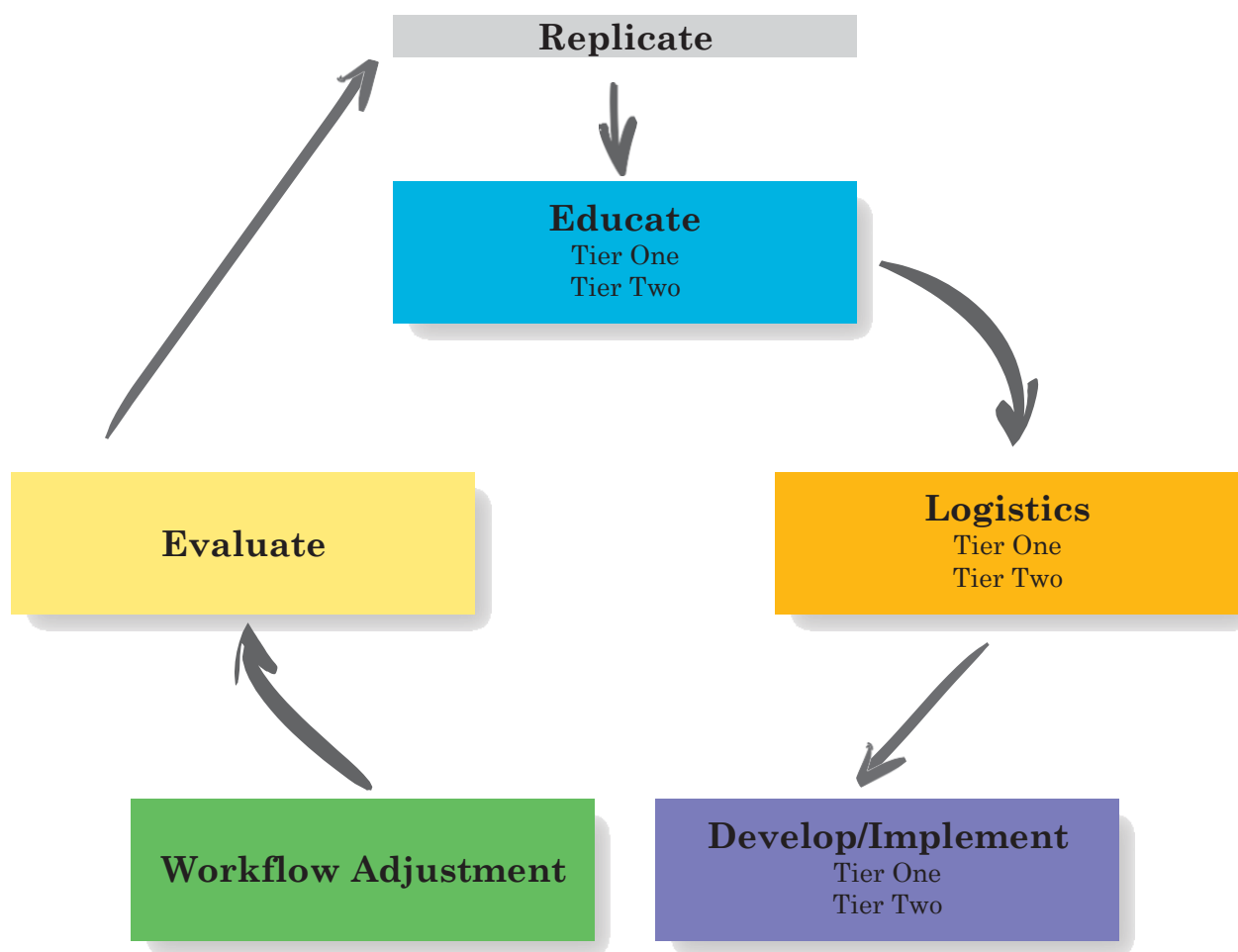
SECTION III: The Model

The definition of a model is a three-dimensional representation of a person or thing, or of a proposed structure, typically on a smaller scale than the original; a system or thing used as an example to follow or imitate.

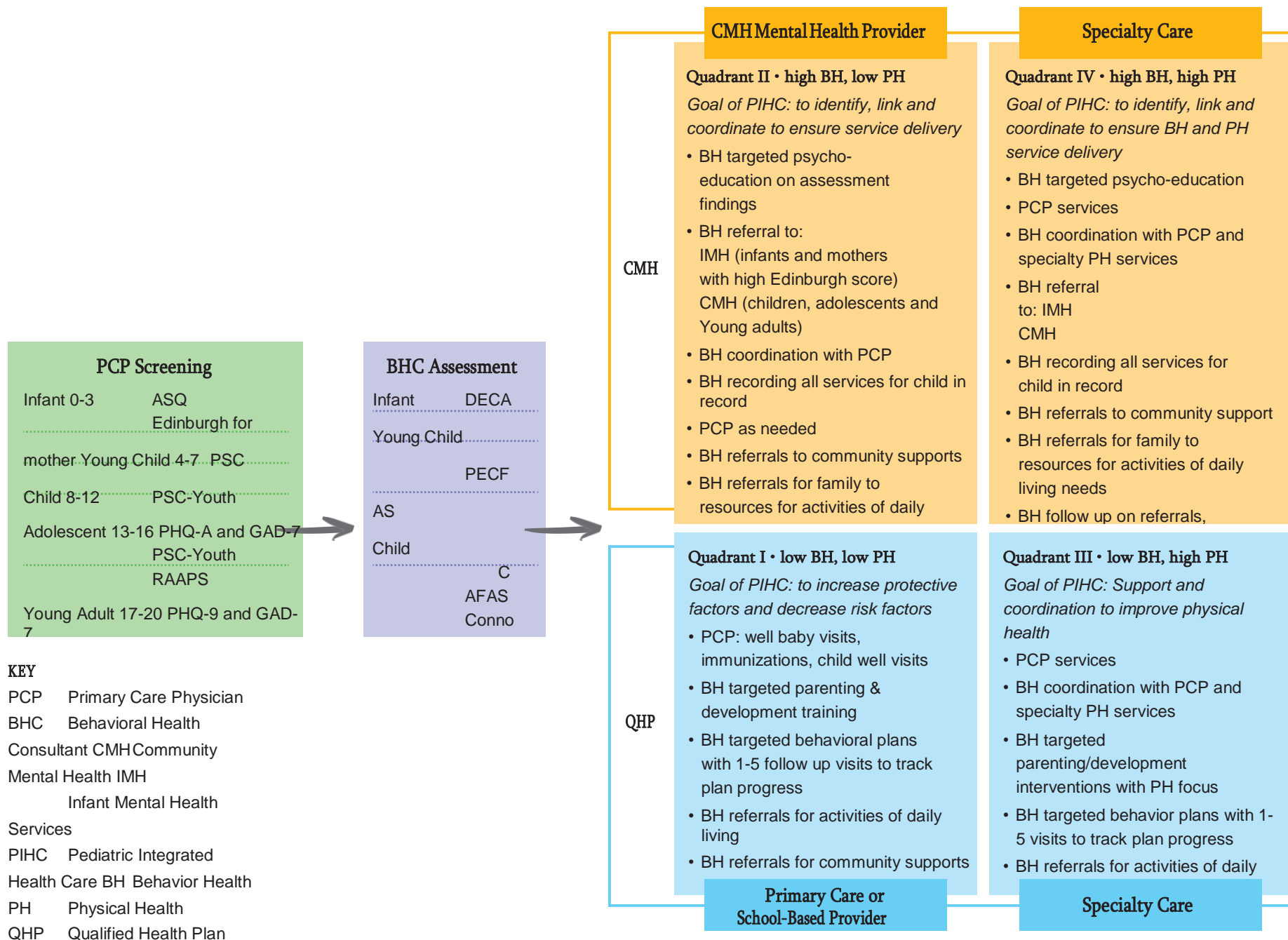
The process of implementation, although not linear, does still follow a certain progression, which is represented in the model. The model itself is more of a logical progression than a step-by-step instruction manual, however there are some steps that naturally follow completion of previous activities in order to move to the next logical goal.

The Integrated Health Care model is created upon this logical process where first we must EDUCATE to the purpose and end results that are possible, then understand the current process (LOGISTICS) in order to see clearly what actually needs to be IMPLEMENTED, DEVELOP those processes through activities, ADJUST as needed and EVALUATE the results.

Activities of implementation of an Integrated Health approach can fit nicely within this logical progression and experience shows that having a model to follow or imitate is of the utmost importance because it can be a tricky, complicated and lengthy process.



Pediatric Integrated Health Care 4-Quadrant Model Diagram



National Council 4-Quadrant Model original concept by NASHMHPD/NASADAD; further developed by Ken Minkoff and his colleagues. (Mauer, Barbara J., Behavioral Health/Primary Care Integration - The 4-Quadrant Model and Evidence Based Practices (Revised February 2006)). Modified for Pediatric Integrated Health Care by Michelle Duprey, LMSW.

Pediatric Integrated Health Care 4-Quadrant Model

The PIHC model can also assist in screening/detecting children/youth's top health issues/risk behaviors (e.g., obesity; asthma; use of alcohol, tobacco and other drugs; and sexual activity) as well as screening/detecting mental health needs and determining the patient's level of care needs.

The model begins with the screenings that can be administered by either the Physician or the BHC in the practice. Many medical practices will use a population health type approach to determine what screening tools they want to utilize. For example, a general pediatric office that determines most of their patients are under the age of 10 might utilize the ASQ and the Pediatric Symptom checklist only. Adolescent-focused clinics may decide to use other screening tools that are more age appropriate for their population. When determining a screening tool, it is important to determine the population served and the developmental issues facing that population in order to achieve the highest level of detection of needs. A list of [available screening tools](#) is included at the end of this chapter.

When a clinic is integrated with a BHC on site, the next level of detection and intervention would be the functional assessment. The functional assessments can assist the BHC in determining which level of care is needed by the patient and which is the least restrictive environment for providing that care. The BHC is determining which quadrant the child should be served in based on the detection mechanism of the screening and the intervention needed based on the functional assessment. A list of [assessments](#) is included at the end of this chapter.

The benefit of having a BHC in the medical practice is that trained mental health professionals are generally the only team members who are able to administer and interpret the results of functional assessments for mental health services.

Quadrant I Goal of PIHC: To increase protective factors and decrease risk factors.

Quadrant I-appropriate children present as: Low behavioral health needs, low physical health complexity/risk, served in primary care with BH staff on site; very low need children are served by the PCP (or within the School-Based Health Center) with behavioral health serving those with slightly elevated health or BH risk.

The medical home is the PCP. The PCP provides primary care services and uses standard BH screening tools identified by developmental age. The role of the primary care-based BHC is to provide formal and informal consultation to the PCP and PCP staff, provide behavioral health triage to the PCP center, referral to community supports and referrals for activities of daily living for any identified patient. For patients with positive screening results, the BHC will provide a behavioral-based screening/assessment based on the child's age and developmental level. Quadrant I is where implementation of Integrated Health Care activities is most common and will be completed with this implementation model.

The BHC and PCP work together using a Stepped-Care Model ([figure 3](#)). The BHC will provide targeted behavioral and developmental training and interventions to address any needs identified by the assessment which may include psycho-education, behavioral plans,

Pediatric Integrated Health Care 4-Quadrant Model, continued

and/or recommended structured activities. One to five follow up visits may be scheduled and should coincide with any follow up PCP visits scheduled when possible.

Quadrant II Goal of PIHC: to identify, link and coordinate to ensure service delivery.

Quadrant II-appropriate children present as: high behavioral health needs, low physical health complexity/risk, served in a specialty behavioral health system that coordinates with the PCP.

The medical home for Quadrant II is the mental health specialty provider and in the best case scenario, the specialty mental health provider has an embedded medical provider. When not bi-directionally integrated, the PCP provides primary care services and collaborates with the specialty behavioral health system through the BHC to assure coordinated care, including any psychotropic medications. The role of the BHC if a PCP is not integrated into the mental health specialty site is to complete the developmentally appropriate assessment, provide targeted psycho-education to the parent on the findings of the assessment and make a referral to the behavioral health specialty provider:

- Infant Mental Health Services
- Community Mental Health Services
- Developmental Disability Services
- Substance Abuse Services

The BHC records all specialty behavioral health services that the child was referred to in the medical record and follows up on the referral with the parent/child until specialty behavioral health services are provided. The BHC will remain the primary contact point for needed communications between the PCP and the specialty behavioral health provider and will coordinate care as needed with the specialty mental health providers care coordinator.

EXAMPLE

Integrated Infant Mental Health

At Starfish Family Services, we embed a BHC in OB/GYN clinics. This BHC supports screenings and interventions for preconception and pregnant women to detect depression, anxiety, domestic violence, substance abuse and trauma. The BHC provides the same Physician consultation, patient psycho-education, intervention, referrals and resources as in Pediatric practices, however the BHC also serves as an Infant Mental Health Therapist for the practice through the Infant Mental Health program at Starfish Family Services.

The BHC can refer to themselves, thus initiating the “hot hand-off,” as the patient has already met and worked with the therapist through her role as a BHC. We have found that the follow-through for the high level of care in Quadrant II is made easier for patients who receive this “hot hand-off.” The early detection and intervention provided by Integrated Infant Mental Health to the mother will naturally also have an impact on her infant.



Pediatric Integrated Health Care 4-Quadrant Model, continued

The BHC will also provide referrals for community supports and activities of daily living and follow up on these referrals until the child receives case management services from the specialty behavioral health provider.

Quadrant III Goal of PIHC: to provide support and coordination to improve physical health.

Quadrant III-appropriate children present as: low behavioral health needs, high Physical Health complexity/risk, served in the primary care/medical specialty system with BHC on site in PCP.

The medical home for Quadrant III is the PCP. The PCP provides primary care services and refers/works with specialty medical providers and disease managers to manage the physical health issues of the child. The BHC participates in a Stepped-Care Model as depicted in [figure 3](#), and provides developmentally appropriate screening/assessments, and targeted parenting/developmental interventions on identified issues. These identified BH issues will have a high probability of being related to the child's physical health needs. Interventions by the BHC could include psycho-education, health education, chronic health condition education, behavioral plans and/or recommended structured activities. One to five follow up visits may be scheduled and should coincide with any follow up PCP visits scheduled when possible. The BHC will also provide formal and informal consultation to the PCP and PCP staffs, provide BH triage to the PCP center, referral to community supports and referrals for activities of daily living for any identified patient.

EXAMPLE

Oncology Specialty Care BHC

Hayli is a Behavioral Health Consultant at a local Cancer Center where she developed an Integrated Health Care model for medical providers and patients receiving oncology treatment.

Embedded on the treatment team, she provides mental health consultation to medical providers and patients, she assists with referrals and resources and most importantly, she strives to meet the goal of Whole-Body Health and Wellness for all participants.

In addition to providing these services, there have been programs created to help patients cope with the emotional impacts associated with living with cancer, such as therapeutic yoga to promote whole-body health and wellness through meditation and deep breathing. Cancer support groups are another example. Support groups provide an opportunity for patients to share their cancer experience and offer emotional and social support to one another.



Pediatric Integrated Health Care 4-Quadrant Model, continued

Quadrant IV Goal of PIHC: to identify, link and coordinate to ensure behavioral health and physical health services.

Quadrant IV-appropriate children present as: high behavioral health needs and high physical health complexity/risk, served both in the specialty behavioral health system and the primary care/medical specialty system.

Either the PCP or the Specialty Mental Health provider may be the medical home. The PCP works with the medical specialty providers and disease managers to manage the physical health issues of the child while collaborating with the BH specialty system in the planning and delivery of the behavioral health clinical and support services. Coordination between the PCP and the behavioral health and physical health specialty services is done through the BHC located at the PCP site.

The role of the BHC is to complete the developmentally appropriate assessment, provide targeted psycho-education to the parent on the findings of the assessment and refer to the behavioral health specialty provider:

- Infant Mental Health Services
- Community Mental Health Services
- Developmental Disability Services
- Substance Abuse Services

The BHC records all specialty behavioral health services that the child was referred to in the medical record, including any follow up and coordination completed with the medical specialty providers and follows up on the referral with the parent/child until specialty behavioral health services are provided. The BHC will remain the primary contact point for any needed communications between the PCP and the specialty behavioral health provider.

The BHC will also provide referrals for community supports and activities of daily living and follow up on these referrals until the child receives case management services from the specialty behavioral health provider.

EXAMPLE

Care Coordination

A BHC can have the responsibility of care coordination on the Pediatric team if there is no one else identified to provide this service. Since the PCP should be coordinating the patient's high physical health services, the BHC should be also coordinating the patient's high mental health needs.

As an example, a local Federally qualified health center has a care coordinator position who is responsible for ensuring access and service provision for the patient for their specialty physical health care, but also coordinates with the patient's community mental health provider to ensure that the patient's high mental health needs are being serviced as well. This position ensures that the Primary Care Physician is aware of all the services the patient is receiving and progress that is being made in each service domain.



Stepped-Care Model

Stepped Care is an approach to patient care that is used in both mental health and physical health environments. It is the general philosophy that the right care for the right person at the right level will provide the best outcomes, but the right care will be different for each person.

In Mental Health, this is generally referred to as the patient's "Least Restricted Level of Care." In other words, there is a continuum of services that are available to patients and the least restrictive to meet those needs is considered the appropriate level of care. Almost the exact same concept is described for chronic illness treatment in the Physical Health environment. Donovan and Marlatt (397-411) defined stepped-care processes as "the least costly, least intensive and least restrictive (that is, requiring the least total life-style change for the individual) treatment judged sufficient to meet the person's needs and goals should be attempted initially before more costly and restrictive treatments are attempted."

For the purposes of use within the 4-Quadrant Model, the Stepped-Care Model describes an approach to patient care that can help Physicians understand the flow of the "least restrictive level of care" for their patients in an Integrated Health Care setting and can help indicate when a patient's needs reach a level of increased intervention and referrals.

EXAMPLE

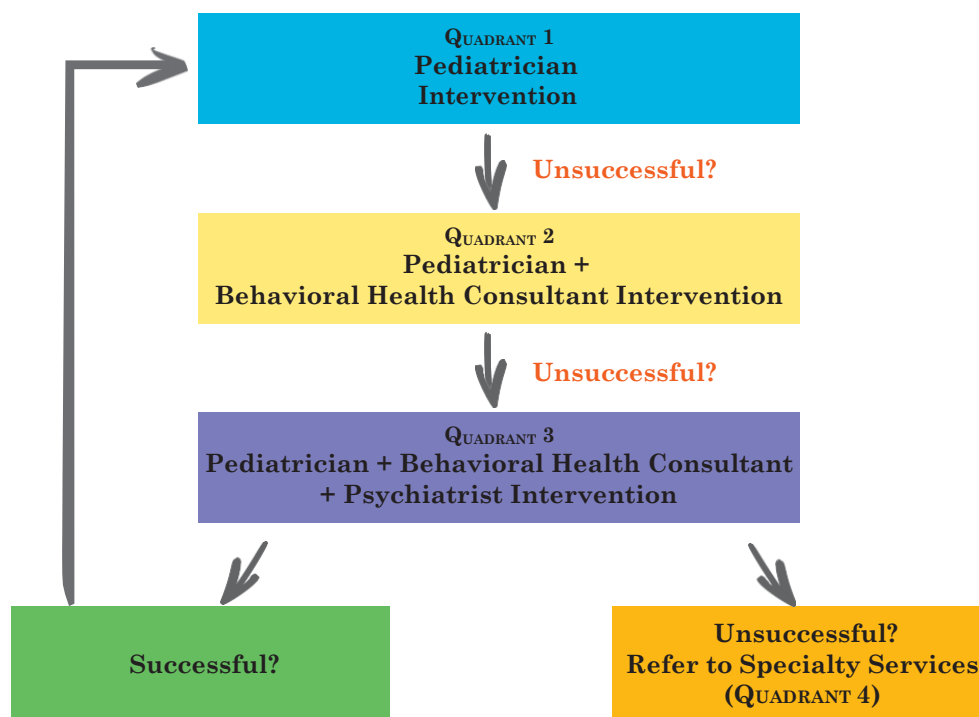
Integrated Intervention Yields

Dr. Jones saw a new patient, a 10-year-old with previously diagnosed ADHD. The mother reported she and the child recently moved from another state where her son's Pediatrician prescribed Adderall and his ADHD has been well managed. New patient Pediatric screening indicated no behavioral concerns. (*Pediatric intervention*)

Three months later: Patient returned to the Pediatrician and mother reported child was having some behavioral issues at school and the medication seemed to "no longer be working." Pediatrician initiated a BHC consult. BHC talked to mother and child and determined behavioral problems may be result of adjustment to recent move. Child indicated he did not have as many friends here as he did at his old home. BHC gave the child and mother some psycho-education on adjustment, making new friends and provided a plan for trying techniques, requesting a follow-up in three weeks. Based on BHC's consultation with the Pediatrician, she decided not to adjust the child's ADHD medication. (*Pediatric and BHC intervention*)

One month after that: After two follow-up visits with the BHC, child and mother report that the child's behavior at school has improved and he is happy with his new friendships. Mother mentions however that the BHC helped her to see the difference between typical ADHD behaviors and behaviors with another source, such as adjustment. She is concerned that the child's ADHD symptoms seem to continue to interfere with his daily functioning. The BHC and Pediatrician agree to a Psychiatric consult with a local Psychiatrist who has a consultation agreement with the practice. The Psychiatrist and the Pediatrician decide on a course of medication change and schedule the child for a follow up visit in six weeks with the parent being reminded to call the BHC if any further behavioral issues or concerns come up before that appointment. (*Pediatrician, BHC and Psychiatrist intervention*)

Stepped-Care Model Explained



1. **Pediatrician intervention:** The work that is done for a patient's health between a Physician and the patient is the foundation of our health care system. This does not change in an Integrated Health Care system. It remains the basis for all other services and referrals made on behalf of the patient. It is only when this dyad is in need of further intervention does the stepped-care model come into play.
2. **Pediatrician plus Behavioral Health Consultant intervention:** This next level of care is the foundation of the Integrated Health Care. This is the level where most of the time of the Physician is taken up with issues for patients that are "other than" medical. This is the point of intersection where research shows patients are coming to primary care for the "other" and primary care is struggling to respond.

National Alliance for Mental Illness (NAMI) found that 63 percent of families reported their child first exhibited behavioral or emotional problems at seven years of age or younger. At these ages the most common point of contact for families with children experiencing these problems is their Pediatrician or Primary Care Physician, yet only 34 percent of families in the NAMI survey said their Primary Care Doctors were "knowledgeable" about mental illness. Another 17 percent said their Primary Care Doctor was "somewhat knowledgeable," with 59 percent reporting their Primary Care Doctors was "not knowledgeable" about mental health treatment. A slightly higher percentage (64 percent) state their Primary Care Doctors were not knowledgeable about local resources and supports for families .(2011)

This is where a Physician can say to a patient "I have someone for that," rather than "let me send you somewhere else for that" and research shows it is effective. This level of intervention includes the Physician and the BHC working together to provide care, services and resources to the patient.

Stepped-Care Model Explained, continued

3. **Pediatrician plus BHC plus Psychiatrist intervention:** As stated in Quadrant 1 of the Pediatric Integrated Health Care 4-Quadrant Model, children who have mild behavioral health needs can be served in the medical setting when the setting is integrated. This is also true even when psychiatric support is indicated. If the Physician and BHC interventions are unsuccessful, a psychiatric consultation can be brought in to the medical practice, which serves to keep the child maintained in the medical clinic for care. A Psychiatric Consult Model can be used here as the next step. The MC3 model (below) is an example of this.
4. **Referral to Specialty Services:** When the use of the team-based and integrated approach including the Physician, BHC and Psychiatric consultation is still not successful, generally the patient would move into the next level care, which would be a referral to a Specialty Mental Health Provider for care with coordination of care being provided by the medical site.

EXAMPLE

MC3 Consult Model

The University of Michigan's Michigan Child Collaborative Care (MC3) program provides psychiatry support to primary care providers in Michigan who are managing patients with mild to moderate behavioral health problems. This includes children, adolescents and young adults through age 26, and women who are contemplating pregnancy, pregnant or postpartum with children up to a year. Psychiatrists are available to offer guidance on diagnoses, medications and psychotherapy interventions so that primary care providers can better manage patients in their practices. Support is available through same-day phone consultations to referring providers as well as remote psychiatric evaluation to patients and families through video telepsychiatry.



Medicaid Screening Policy

A psychosocial/behavioral assessment and developmental surveillance is required at each scheduled Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Well Child visit from birth through adolescence as recommended by the American Academy of Pediatrics (AAP). Surveillance is accomplished by listening to caregiver concerns, asking questions about the child's history, performing an appropriate physical exam and by observation of the child. The Primary Care Physician should screen all children for behavioral and developmental concerns using a validated and standardized screening instrument as indicated by the AAP Periodicity Schedule. The provider may administer:

- **Developmental screening** using an objective, validated and standardized screening instrument must be performed following the AAP Periodicity Schedule at 9, 18 and 30 (or 24) months of age and during any other preventive pediatric health care visits when there are parent and/or provider concerns. Standardized developmental instruments that may be administered include the Parents' Evaluation of Developmental Status (PEDS), Parents' Evaluation of Developmental Status – Developmental Milestones (PEDS-DM) and Ages and Stages Questionnaire (ASQ).
- **Behavioral health screening** is accomplished using standardized screening tools such as Ages and Stages Questionnaire – Social-Emotional (ASQ-SE), PEDS-DM and Pediatric Symptom Checklist (PSC) with appropriate action to follow up if the screening is positive. Social-emotional screening for children 0 to 5 years should be performed whenever a general development or autism-specific instrument is abnormal; at any time the clinician observes poor growth or attachment or symptoms, such as excessive crying, clinginess, or fearfulness; for developmental stage or regression to earlier behavior; and at any time the family identifies psychosocial concerns.
- **Autism screening** is accomplished by administering a validated and standardized screening instrument at 18 and 24 months of age as indicated by the AAP Periodicity Schedule. The Modified Checklist for Autism in Toddlers (M-CHAT) is validated for toddlers 16 through 30 months of age. For children older than 4 years of age (mental age greater than 2 years of age), the Social Communication Questionnaire (SCQ) may be utilized. Surveillance for autism spectrum disorders is accomplished at other visits beginning at 12 months of age when there are parent and/or provider concerns and by observing for developmental lag and "red flags," such as no babbling by 12 months of age.
- **Substance Abuse risk assessment** must be performed at each preventive pediatric health care visit beginning at 11 years of age or when there are circumstances suggesting the possibility of substance abuse beginning at an earlier age. If the risk assessment is positive, appropriate action must follow as indicated by the AAP Periodicity Schedule. A validated and standardized screening instrument such as the CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble) should be utilized.

A maximum of three objective standardized screenings may be performed in one day for the same beneficiary by a single provider.

If the screening is positive or suspected problems are observed, further evaluation must be completed by the primary care provider or the child will be referred for a prompt follow-up assessment to identify any further health needs.

– Source: Michigan Medicaid Manual

Age-Appropriate Assessment Tools

Age Group	Target Symptoms	Assessment Tool	Description	Source
Infants and Toddlers, Ages 0-3	Early Childhood Protective Factors for Optimal Development	Devereux Early Childhood Assessment (DECA)	The DECA is a standardized, referenced, strength-based assessment that assesses protective factor scales: 1) Initiative 2) Attachment/Relationships 3) Self-Regulation (Toddler) 4) Total Protective Factors Scale	LeBuffe & Naglieri, 2009
Young Children, Ages 3-7	Daily Functional Level	Preschool and Early Childhood Functional Assessment Scale (PECFAS)	The PECFAS assesses a young child's day-to-day functioning across critical life domains including: 1) School/Preschool/Day Care 2) Home 3) Community 4) Behavior Towards Others 5) Moods/Emotions 6) Self-Harm Behaviors 7) Thinking/Communication	Hodges, 1994
Children and Adolescents, Ages 7-17; Young Adults, Ages 18-20	Daily Functional Level	Child and Adolescent Functional Assessment Scale (CAFAS)	The CAFAS is backed by 20 years of research supporting the instrument's validity and sensitivity to detecting change in behavior. The CAFAS is used to assess a child's or adolescent's day-to-day functioning across critical life domains and for determining progress over time. Life domain areas include those in the PECFAS assessment (above), plus Substance Use.	Hodges, 1994
Adolescents, Ages 13-17	Adolescent Risk Behaviors	Rapid Assessment of Adolescent Preventive Services (RAAPS)	The RAAPS is a validated, reliable and evidence-based screening tool that screens for adolescent risk behaviors	Salerno et al., 2011

Symptom-Targeted Screening Tools

Age Group	Target Symptoms	Screening Tool	Description	Source
Toddlers, Ages 18 months and over	Autism Spectrum	Modified Checklist for Autism in Toddlers (M-CHAT)	The M-CHAT is designed to screen for Autism Spectrum Disorders in toddlers	Robins, Fein, Barton, & Green, 2001
Infants and Toddlers, Ages 0 to 3	Maternal Depression	Edinburgh Postnatal Depression Scale (EPDS)	The 10-question Edinburgh Scale is a valuable and efficient way of identifying patients at risk for “perinatal” depression. Patients can fill out the screening form while in the waiting or exam room	Cox, Chapman, Murray & Jones, 1996
Infants and Toddlers, Ages 0 to 3	Developmental Performance	Ages and Stages Questionnaire (ASQ)	The ASQ is a series of parent-completed questionnaires designed to screen children's developmental performance in multiple domains of development	Squires, 2002
Infants to Preschoolers, Ages 4 months to 5 years	Social and Emotional Development	Ages and Stages Questionnaire: Social-Emotional (ASQ-SE)	The ASQ-SE is a series of parent-completed questionnaires designed to screen the children's social and emotional behavior; the results allow professionals to recognize if young children are at risk for social or emotional challenges, and the need for further assessment	Squires, 2009
Preschoolers, Ages 4-5; Children, Ages 6-12	Social and Emotional Behaviors	Pediatric Symptom Checklist (PSC), Parent Version	The PSC is a psychosocial screening instrument designed to facilitate the recognition of cognitive, emotional and behavioral problems so that appropriate interventions can be initiated as early as possible	Jellinek, M.S., et al., 1999
Adolescents, Ages 11-17	Social and Emotional Behaviors	Pediatric Symptom Checklist, Youth (Y-PSC)	The PSC-Youth is a youth self-report version of the PCS Parent Version (above), but worded so that the child/youth can fill out the form	Jellinek, M.S., et al., 1999
Adolescents, Ages 13-17	Anxiety	Generalized Anxiety Disorder 7 (GAD-7)	The PHQ-A is a validated, self-administered instrument that screens for anxiety, eating, mood and substance use disorders among adolescents in a primary care setting	Johnson, Harris, Spitzer, Williams, 2002
Adolescents Ages 11-21	Alcohol / Substance Use	CRAFFT	Screening for substance abuse in adolescents; acronym for Car, Relax, Alone, Forget, Friends, Trouble	www.ceasar-boston.org/clinicians/crafft.php <i>Copyright © Children's Hospital, Boston. No Charge.</i>
Young Adults, Ages 18-20	Depression, Mood Disorders	Patient Health Questionnaire A (PHQ-A) (PHQ-9 Modified)	Modified version of the Patient Health Questionnaire, the PHQ-A is a validated, self-administered screening tool used to screen for depression and mood disorders among adolescents.	www.aacap.org
Young Adults Ages 18-20	Depression, Mood Disorders	Patient Health Questionnaire 9 (PHQ-9)	The PHQ-9 is a validated, self-administered instrument that screens for anxiety, eating, mood and substance use disorders in a primary care setting	Johnson, Harris, Spitzer, Williams, 2002

The implementation model is divided into five process, detailed in the following modules, which follow a logical progression. Each section includes definitions, suggested procedures, references, forms and examples that can be used as guidelines for establishing a Pediatric Integrated Health Care practice.

Educate

Logistics

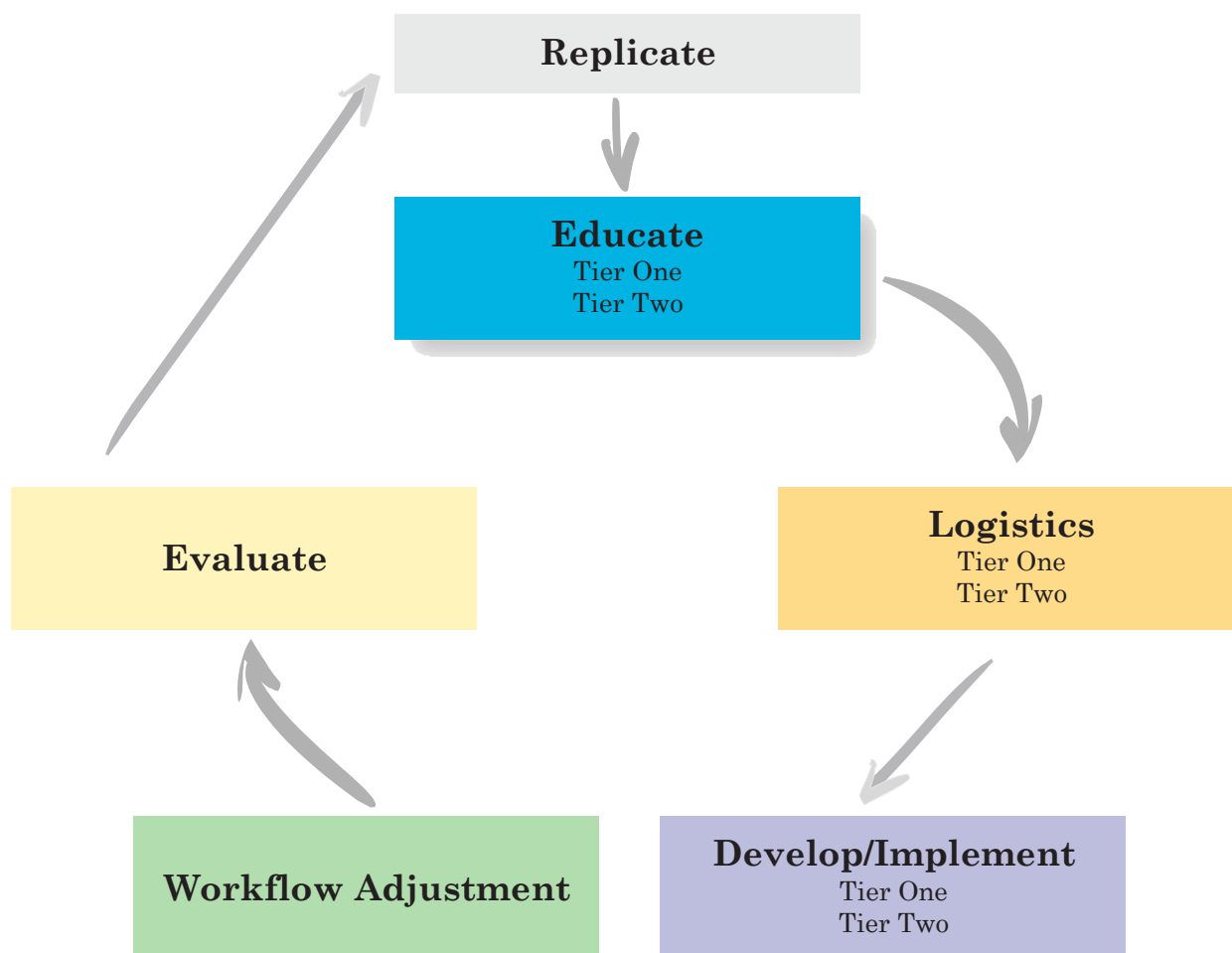
Develop/Implement

Workflow Adjustment

Evaluate

SECTION IV: Educate Module

Teach about Integrated Health Care



What is Integrated Health Care?

For those who are involved in the Integrated Health Care initiatives, the models, philosophies and tasks are well known. There are many providers in the community who may have never even heard of Integrated Health Care or do not fully understand how it operates in the day-to-day. It is very important not to assume that the individuals in primary care practices have a working knowledge of Integrated Health Care. The first step in the Pediatric Integrated Health Care Implementation Model then is to educate all participants in the practice to the global and specific aspects of Pediatric Integrated Health Care. Or, if you are part of a pediatric practice without any outside help, use the example box below to research answers to these questions or visit an integrated clinic like Cherokee or Cherry Health. (See *References*)

Step one: The initial educational meeting

This meeting should involve anyone whose role in the practice involves the strategic planning for that practice. For some practices this may involve a CEO or a Medical Director, for others it might mean an Office Manager and/or one of the providers.

Goal One: Describe Integrated Health Care

It can be very helpful to create a PowerPoint presentation and/or put together a packet of information that includes studies, statistics and additional reading materials that can be referenced to answer common questions like those below.

Goal Two: Learn about the practice's readiness to implement

Indicators of readiness include, but are not limited to:

- The practice has a well thought out desire to integrate
- The practice is able to connect integration to their patients' well being
- The practice has an identified champion of Integrated Health Care
- The practice has already achieved buy-in from major stakeholders, board members and/or high leadership staff

EXAMPLE

All Education Module meetings will serve to answer such questions as:

- How do you currently address behavioral health needs?
- Where did Integrated Health Care come from?
- Who else is currently doing Integrated Health Care in our area?
- How does Integrated Health Care fit into the current National and State perspective?
- How will it help our patients?
- Why should we be integrated now?
- What are the financial benefits and how is it funded?
- What is the evidence that it works?
- How will it affect my department?
- What are the functions of the different roles? How is a therapist role different from a BHC role?"

What is Integrated Health Care?, continued

**Medical
Professionals
+
Mental Health
Professionals
=
Whole-Body Health
and Wellness**

Before moving forward, it is important that each stakeholder has a clear understanding of what Integrated Health Care is and why it is an important way of doing their business. Most importantly, the presenter must be able to communicate effectively that “Integration” is not a one-time event. It is a process of mindset change, cultural blending and the development of something new. Many integration experiments can trace their failures back to the lack of understanding and thus preparation for the immense paradigm shift that must take place over time in order to even have a chance of success. (See *Cherry Health* example below).

Practices will need a good understanding that their participation as leaders is critical to their success. The Implementation Model recognizes and encourages slow, steady and consistent pressure toward the movement required to reach integration goals. This initial phase may take more than one meeting to allow the stakeholders and leaders to create a vision that should generate many questions, leading to better understanding of the process.

continued

EXAMPLE

Taking Care of the Whole Patient: An Integrated Health Care Approach

Cherry Health is an independent, non-profit Federally Qualified Health Center (FQHC) with a primary focus of providing high quality health services. Services provided by Cherry Health include primary care, women’s health, pediatrics, dental, vision, behavioral health, mental health, correctional health and school-based health centers. From their website:

“We take care of the whole patient by working as a team. We are improving what we do by changing the way we care for you. Asthma care is provided as a team. The doctor checks the patient to make sure they have a healthy body. The RN Health Coach teaches the patient and family how to make living with asthma easier.”

“We also have team visits with a doctor and Health Coach for weight checkups. The doctor provides the physical checkup at the visit. The Health Coach teaches the patient and family about healthy behaviors that are part of a healthy lifestyle, and helps the family set healthy living goals.”

“Complete health means taking care of our minds, too. When minds are not healthy, home and school can be difficult. Counseling services are provided on site in a place where the patient and family already feel comfortable. A Psychiatrist is also on site to provide specialized help when needed.”

– www.cherryhealth.org

What is Integrated Health Care?, continued

Step Two: Management-level educational meeting

Once it has been determined that Integrated Health Care is in line with the practice's strategic plan and buy-in to the concept has been achieved, a second meeting should

involve management-level stakeholders of all aspects of the daily workflow including nurse managers, managers over the medical assistant staff, front desk, financial and any others.

Tip: Have each manager determine the questions they think their staff will have about Integrated Health Care and develop an FAQ sheet for the next step from this process.

This meeting will serve to accomplish the same goal as the first meeting, but with more stakeholders so as to begin to address the more far-reaching questions of the overall clinic for each individual practice area (MA, nurse, front desk, etc.). There will likely be many logistics questions from each department. It is important to convey that each department of the clinic is an important piece of the integration puzzle and part of the process will be to examine the current and create

the new, keeping in mind that each “new” will fit with other department changes for the overall integration to be successful.

Remind each manager that the goal right now is to understand the “why” in order to help their staff start to move from the current to envisioning the “new.” From a leadership perspective, it is very important that staff know to the fullest extent possible about changes that are planned and this level educational meeting is to provide the managers with the information they will need to introduce the change, the reason for the change and to generate the positive aspects of the change.

Step Three: Medical provider team meeting

All members of the clinic team are important to ensure an onboarding process, however the medical provider team is ultimately the team that will be most affected by the culture and process changes when implementing an Integrated Health Care model. It is very important to address this team specifically, therefore this level meeting is the most critical.

Many providers may be skeptical and may even have a defensive position when discussing anything that might change the status quo, even if the status quo does not work very well for patient care. Some important points to make that may ameliorate most concerns would be:

- How much more time do you think would be freed up in your day if you had someone who specializes in behavioral health on your team?
- Do you have a recent example of a situation with a patient where having a BHC on your team would have benefited you and/or the patient?
- How frustrating is it to you when you refer a patient to a mental health resource and they do not follow through?
- How frustrating is it to not know all the current resources for mental health and other needs in your community?

Tip: Develop an implementation task force and ask for volunteers from the general staff to help with the next steps of integration. Change can be made much more effective and efficient when all levels and departments are involved in some way with the development of it.

continued

What is Integrated Health Care?, continued

- Have you every referred someone somewhere only to be told by the patient later that the resource no longer exists?
- Do you have someone on staff now who knows the current mental health system and when to refer to the Qualified Health Plan or the Community Mental Health System?

Tip: Put out a question box or develop a shared document in the computer to collect questions from staff that can be addressed at every staff meeting.

- Do you have a high number of patients who are obese, diabetic, asthmatic, etc. and not following the diets and nutrition advice you provide or following through with the specialty referrals you have made?

- When you consider having a partner on your team to address the behavioral health needs of your patients, what positive impact do you envision?

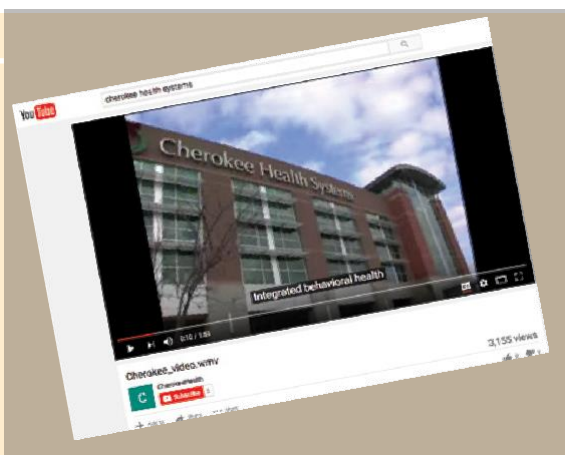
Step Four: General staff Educational meeting

Once the practice leaders and managers are educated about Integrated Health Care and have demonstrated their commitment to the integration process, all staff should then be educated as well. The most effective communication of the integration process would be a meeting that is co-facilitated by one of the leaders of the practice and the person in charge of implementing the Integrated Health Care model.

The first presentation to staff should include an overall look at Integrated Health Care, an attachment to current and future initiatives in the field and benefits to staff and patients to increase the likelihood of buy-in and create an environment of excitement about the next phase. The presentation should also leave plenty of time for questions and clarification. This can be done during a regularly scheduled staff meeting in the practice and can be accomplished in approximately 30-45 minutes.

It can also be helpful to create a Frequently Asked Questions document that staff can take with them from the meeting that simplifies the concepts that have been introduced.

Tip: After the general staff meeting, make sure “Integrated Health Care implementation” is an agenda item for every general staff meeting from that point on. Even if there is nothing to report, the consistency of the commitment is very important.



Show a video of an integrated site like Cherokee Health Systems or others that can be found on www.YouTube.com.

Or view the TED Talk by Dr. Nadine Burke Harris on “How Childhood Trauma Affects Health Across a Lifetime” at www.ted.com

Integrated Health Care and Current Initiatives

When educating members of the pediatric clinic, it can be helpful to show how Integrated Health Care is a common denominator for current national health care initiatives that practitioners might already be familiar with. The pairing of the “new” with the “known” can help non-integrated clinics and practitioners to see the connection and the relevance of the IHC model you are presenting.

Accountable Care Organizations (ACO)	Patient Centered Medical Home	Systems of Care
<ul style="list-style-type: none"> • ACOs create incentives for health care providers to work together to treat an individual patient across care settings including: doctor’s offices, hospitals and long-term care facilities. • The goal of an ACO is to deliver seamless, high quality care. • The ACO would be a patient-centered organization where the patient and providers are true partners in care decisions. • Quality measures in 5 key areas of care: satisfaction, care coordination, patient safety, preventative health and at risk populations. • Accountable care requires better communication between providers, more attention to care coordination and higher levels of patient engagement. • Providers must ensure that all required services are delivered without duplicative or unnecessary services. 	<ul style="list-style-type: none"> • The PCMH is a health care setting that facilitates partnerships between individual patients, their personal Physicians and, when appropriate, the patient’s family. • The primary care medical home is accountable for meeting the large majority of each patient’s physical and mental health care needs, including prevention and wellness, acute care and chronic care. • A designated PCMH must possess 7 features: <ol style="list-style-type: none"> 1. Personal Physician 2. Team approach 3. Whole person orientation 4. Coordinated/integrated care 5. Quality and safety guidelines 6. Enhanced access to care 7. Payment reform 	<ul style="list-style-type: none"> • Systems of care is a service delivery approach that builds partnerships to create a broad, integrated process for meeting families’ multiple needs. • This approach is based on the principles of interagency collaboration; individualized, strengths-based care practices; cultural competence; community-based services; accountability; and full participation of families and youth at all levels of the system. • A centralized focus of systems of care is building the infrastructure needed to result in positive outcomes for children, youth and families.

Medical Homes

The National Committee for Quality Assurance is a private, 501(c)(3) not-for-profit organization dedicated to improving health care quality. The NCQA's Patient-Centered Medical Home (PCMH) 2011 is an innovative program for improving primary care. In a set of standards that describe clear and specific criteria, the program gives practices information about organizing care around patients, working in teams and coordinating and tracking care over time. (NCQA)

The Patient Centered Medical Home is a health care setting that facilitates partnerships between individual patients, their personal Physicians and, when appropriate, the patient's family. Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner. (NCQA)

Many PCP practices have been investigating the benefits of becoming a Patient Centered Medical Home. There are many advantages to becoming certified as a PCMH through the NCQA and the principles of the PCMA align perfectly with a fully integrated primary care practice. If the practice is not currently a Patient Centered Medical Home, it will be very important for the BHC and the leaders of the practice to fully understand the Medical Home concept and how integrated health care and the presence of a BHC can facilitate the completion of becoming a Patient Centered Medical Home.

Connection to PCMH-ACQA Standards

Standard	Summary
Enhance Access/Continuity	<ul style="list-style-type: none"> • Focus is on team-based care with trained staff • Patients have access to care
Identify/Manage Patient Populations	<ul style="list-style-type: none"> • The practice assesses and documents patient risk factors
Plan/Manage Care	<ul style="list-style-type: none"> • The practice identifies patients with specific conditions related to health behaviors, mental health, etc. • Assessing patient progress • Assessing patient barriers to treatment
Provide Self-Care/Support/Community Resources	<ul style="list-style-type: none"> • The practice assesses patient/family self-management abilities • The practice develops self-care plans with resources, tools • The practice counsels patients on healthy behaviors • The practice assesses and provides or arranges for mental health/substance abuse treatment
Track/Coordinate Care	<ul style="list-style-type: none"> • The practice follows up on referrals

Source: NAQA

Measure/Improve Performance	<ul style="list-style-type: none">• The practice identifies vulnerable populations
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Educate • Tier One

Creating the Vision

The leaders of the practice who are embracing the concept and bringing Integrated Health Care to their practice, staff and patients would want to use the Vision Planning Form example (*following*) as a start point. I have learned through experience integrating practices that inspiring ideas in a meeting, when not written down, become forgotten ideas in about 30 minutes. Integrated Health Care is an exciting, inspiring and transformational experience so capturing that and being able to pass it on can make a big difference in completion of the goals.

The leaders would want to brainstorm their overall vision for the practice and document this. A vision statement can be one sentence or longer but the core of it should be future based, experiential and realistic enough for any employee to be able to see it as feasible to create full buy-in to the identified concepts.

To start, the leaders may want to ask themselves about their current values and how their policies and procedures or activities support those values.

Next, discuss what problems or challenges face the current system and the patients who utilize the system. What do you hope to solve immediately? In the next few years? How does Integrated Health Care solve problems for the systems and the patients? What do you hope to achieve on behalf of your patients?

A few examples might be:

“We want our practice to become integrated so that patients are engaged in health care and come to us because we offer the best whole-body health and wellness.”

or

“Our vision is to transform our practice into a community of patients who are able to receive whole-body health and wellness in one location.”

Once the vision is created, take the education piece of Integrated Health Care and the vision to the next level of either management or staff. Walk them through what Integrated Health Care is and present the vision statement. Ask for feedback, understanding and reaction to it; modify as needed to ensure full buy in from all members of the practice.

Ask all staff for help in developing the goals or intentions of the implementation project. Volunteer “champions” from each department should identify all the resources available in the clinic that will be utilized to assist the transformation.

The next step with all staff will be to determine goals that would be achievable in a short duration of time. Short-term goals are more helpful at this stage in order to create and maintain momentum. As previously stated, ensure that this vision and the short-term goals are addressed frequently and posted in the clinic to create continual intention.

Vision Planning Form Example

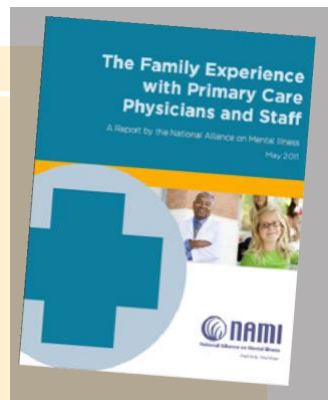
Overall Vision for the Practice:
Implementation Goals and Intentions for the Project/Practice:
1.
2.
3.
4.
Identified Staff Champions:
1.
2.
3.
4.
5.
Practice Resources:
1.
2.
3.
4.
5.
Goal 1:
Objectives:
1.
2.
3.
Time Frame:
Staff Responsible for Completion:
1.
2.
3.

continued

Vision Planning Form, continued

Goal 2:
Objectives:
1.
2.
3.
Time Frame:
Staff Responsible for Completion:
1.
2.
3.

Goal 3:
Objectives:
1.
2.
3.
Time Frame:
Staff Responsible for Completion:
1.
2.
3.

[illegible]

Caring for Children with Behavioral Health Problems*Primary Care Provider Survey***1. For what proportion of your primary care visits is there a behavioral health issue?**

☐ Less than 10% ☐ 10-20% ☐ 20-30% ☒ 30-40% ☐ 40-50% ☐ More than 50% ☐

Rate your agreement with the following statements about caring for patients with mild/moderate behavioral issues.	Strongly Agree	Agree	Disagree	Strongly Disagree
2. I am able to identify mild/moderate behavioral issues in my patients.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am able to convince parents to follow up on referrals for mild/moderate behavioral issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rate your agreement with the following statements about caring for patients with severe behavioral issues.	Strongly Agree	Agree	Disagree	Strongly Disagree
4. I am able to identify severe behavioral issues in my patients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am able to convince parents to follow through on referrals for severe behavioral issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In your practice, to what extent do the following pose a barrier to addressing mild/moderate behavioral issues in children.	Major barrier	Minor barrier	Not a barrier
8. Lack of screening tools for different ages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. My own limited knowledge about strategies to address behavioral issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Lack of time during visits to address behavioral concerns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Parents unwilling to get behavioral/mental health care for their child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Lack of insurance coverage for behavioral/mental health services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Lack of community resources/referral sites for behavioral health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How comfortable are you in talking with patients/parents about:	Very Comfortable	Somewhat Comfortable	Not Comfortable
14. Handling emotions – sadness, anger, frustration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Basic parent techniques (e.g., time-out, giving clear directions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Family conflicts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Screening for behavioral conditions (e.g., autism, ADHD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Problems with school/work or organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. How important is it to have an on-site behavioral health consultant in your practice?

☐ Very important ☐ Somewhat important ☐ Not important

20. What is your: Age: _____ yrs Gender: _____

Thank you for completing this survey. Please return it in the envelope provided.

Educate • Tier Two

Physical Health Referrals

During Tier One implementation, the majority of the referrals to the BHC will tend to be for general developmental, mental health or psycho-stressor reasons. Tier Two activities will focus on educating and reminding Primary Care Physicians that the BHC role can also be used to provide behavioral interventions for strictly physical diagnoses. The BHC process of Assess, Establish, Provide and Close/Consult (see BHC section) can also be used effectively to address physical diagnoses as asthma, obesity and diabetes. A BHC who can work with a patient on how their behaviors are affecting their physical ailment can be a very important addition to the PCP's treatment plan. The BHC should:

- Work with the MAs to determine commonly used specialist referrals and learn the process utilized by the practice.
- Have resources on common topics handy and review.
- Be aware of referral sites for non-traditional medical resources in the area such as Weight Watchers, groups for grief and loss, asthma programs, child diabetes information groups, etc.
- Attempt to create a relationship with the Qualified Health Plan case managers to know what services each plan offers and refer patients as needed.
- Work with the Physician and practice to determine if offering their own wellness groups would be appropriate.

EXAMPLE

Guiding Good Nutrition

BHCs can use their cognitive behavioral and motivational interviewing skills to help children follow diets provided by a Pediatrician. Although a BHC is not a trained nutritionist, they can be trained to provide general nutrition knowledge. A Pediatrician may provide the diet; the BHC can guide the patient and the parent in the implementation of the diet and, most importantly, identify what the patient does not like on the diet and help identify alternative foods.

BHCs can also use their behavioral health knowledge to identify behaviors that impact a child's diabetes and asthma in much the same way.



Educate • Tier Two

Population Health Focus

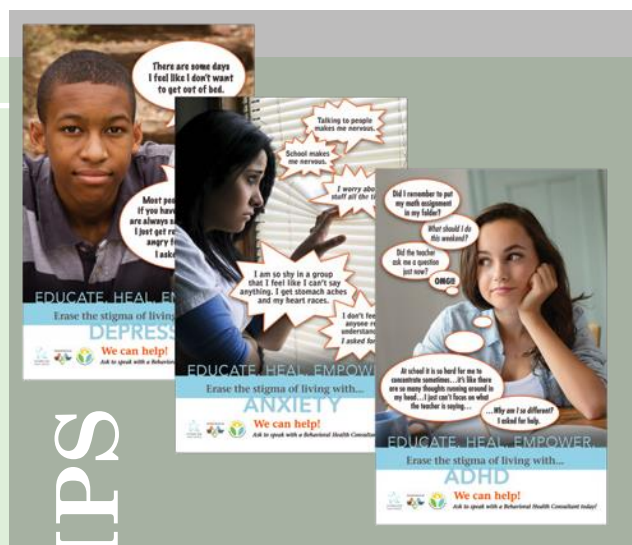
Population health has been defined as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.” It is an approach to health that aims to improve the health of an entire population. One major step in achieving this aim is to reduce health inequities among population groups. Population health seeks to step beyond the individual-level focus of mainstream medicine and public health by addressing a broad range of factors that impact health on a population level, such as environment, social structure, resource distribution, etc.

An important theme in population health is importance of social determinants of health and the relatively minor impact that medicine and health care have on improving health overall. From a population health perspective, health has been defined not simply as a state free from disease but as “the capacity of people to adapt to, respond to, or control life’s challenges and changes”(Frankish et al.) It is important for each practice to begin to create goals and objectives around how their integrated health practice does, in fact, improve the health of not only individual patients, but the population it serves as a whole.

The BHC and/or Specialty Mental Health Provider bring a unique skill set to the practice to help them understand how the environment, socioeconomic status, psycho-social stressors and health disparities can influence a person’s health behaviors.

A fully integrated practice has an awareness of and an approach to a number of Health Indicators for their population including:

- Tobacco use
- Diet and exercise
- Alcohol use
- Sexual safety
- Access to care
- Quality of care
- Education
- Employment
- Income
- Family and social support
- Community safety
- Environmental quality



Possible interventions to address common health issues:

- Provide specific psycho-education materials in the lobby
- Create informational boards on common topics
- Add video sections to the looped video stream that runs in a waiting room
- Offer group discussions, meetings or gatherings on a particular topic
- Create a monthly newsletter for patients on common topics

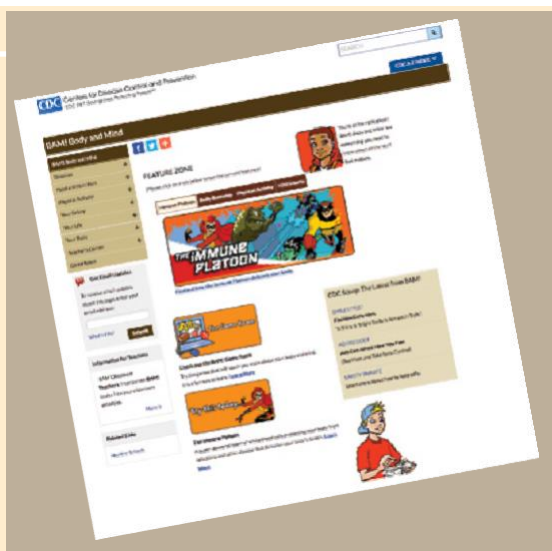
Educate • Tier Two

Mind/Body Connection

One of the main messages of Integrated Health Care is that the mind and the body cannot be separated from one another. It is clear that the siloed approach to the treatment of illness has come at the expense of the overall health of our citizens. Integrated Health Care takes an approach of “My Patient is Your Patient” to assist in the reintroduction of the mind/body connection. The very presence of the BHC on the PCP team is indicative of this re-established partnership focus of an integrated practice. In the Tier Two level of integration, it is important for the practice to set this expectation and show the value of the alliance through role modeling, advocacy and the general messages the practice sends to its patients and the outlying community.

Some examples would include:

- Posters in the lobby, exam rooms and waiting room
- Handouts to patients
- Mailings to patients
- The creation of a practice “motto”
- Integrated paperwork and health questions related to the concept



Interactive Website for Kids

The Centers for Disease Control and Prevention has a program for children called BAM! Body and Mind

The website has a number of resources on health and mental health topics that can be directly viewed by children.

Visit www.cdc.gov/bam

Educate • Tier Two

Staff Development

During Tier One of the implementation, the BHC will be using their existing knowledge to perform their role and assist in the beginning stages of implementation. The goal for the BHC in Tier Two is to expand their knowledge base to include issues relevant to the practice in which they are working. Some examples might include trainings and workshops on:

- Nutrition
- Understanding basic lab work
- The basics of physical diagnoses that are common for the practice, such as obesity, diabetes, high blood pressure, lead poisoning, asthma
- General medical interventions for common health diagnoses
- PATH classes

The BHC can also provide trainings to the practice staff on a variety of topics associate with their general knowledge and skills, including topics such as:

- Mental health first aid
- Understanding the etiology of psychological disorders
- The impact of early childhood experiences
- Trauma responses
- PS reporting/working with DHS Protective Services
- Impact of foster care placements/working with DHS
- ADHD interventions
- Protective services

EXAMPLE

Lunch and Learn Programs

The Pharmaceutical model of bringing lunch to clinics to entice Physicians to listen to a presentation is a familiar one in the medical world. BHCs can utilize a similar technique (providing funding is available) to create lunch and learns for all the staff of the practice to discuss topics above and other topics related to the population of the clinic.

Some BHCs also use lunch and learns to address Integrated Health implementation updates as well.



Educate • Tier Two

Teach Others About the PIHC Model

It is well known that many times, professionals listen most intently to peers from their same profession. One of the many ways that a fully integrated practice can assist with the overall goals of Integrated Health Care is to talk to other practice sites or professional peers about the benefits of an integrated practice and their experience with implementation.

Some ideas for teaching others could include:

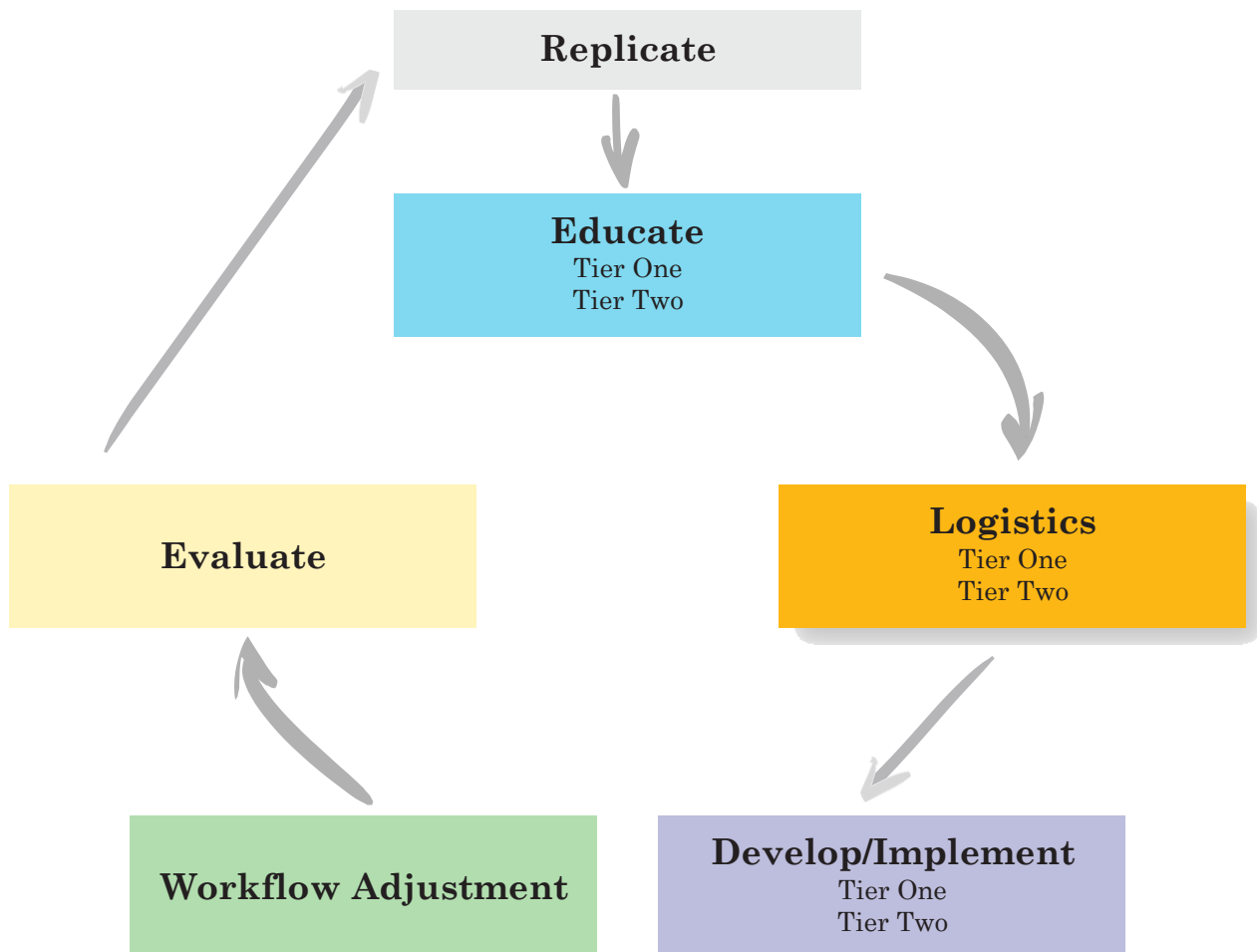
- Having participation from a practice staff on various committees or collaboratives in their community or county. An example would be the MOTION coalition in Wayne County, a coalition focusing on the issue of childhood obesity.
- Participating on state or county task forces or focus groups related to the advocacy of issues related to:
 - Childhood health
 - Mental health
 - General integration
 - Health disparities
 - Infant mortality
 - Substance abuse
 - Smoking cessation
- Speaking at state and local conferences
- Contributing to publications
- Participating in evaluation projects
- Guest lecturing at local medical schools, schools of social work, etc.

Peer-to-peer small group meetings are an effective way of teaching others about the Pediatric Integrated Health Care Model.



SECTION V: Logistics Module

Learn and teach how Pediatric Integrated Health Care fits into the practice



Logistics • Tier One

Pre-Integration Assessment

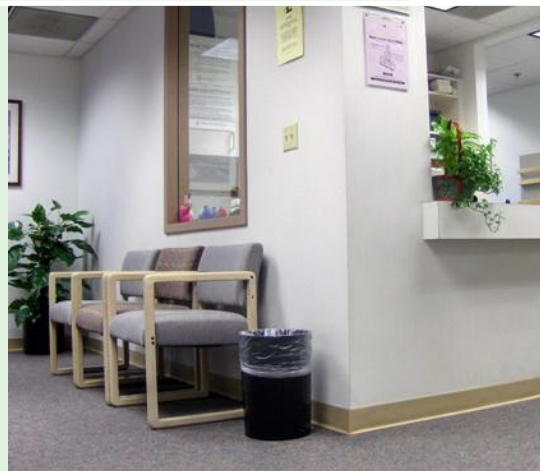
In order to determine the growth and movement from a non-integrated clinic to a fully integrated clinic, a pre-assessment should be initiated by the professional leading the integration. The assessment should cover all aspects of the current functioning of the site prior to any implementation activities. Items can be added to this form to fit the individual site and the pre-assessment should be a physical examination of the site as well as a short interview of medical site personnel.

This pre-assessment will help to connect the vision, goals and priorities of integration that has been developed to all Tier One implementation tasks. It will also serve to show the impact of the implementation activities on the clinic once implementation is complete and can be used in an evaluation of pre-/post-integration. The Pre-Assessment Form example (*on the following page*) is basic and meant to be individualized since all clinics are unique and visions of integration for each practice may differ.

TIPS

Consider the clinic and workflow from the patient's perspective

1. Schedule a physical tour.
2. Consider a “secret shopper” approach, with the clinic’s permission, to have an existing patient attend an appointment with mental health needs to determine the current “real experience.”
3. Normalize results of the pre-assessment and encourage the use of the information as an opportunity to increase quality care and patient experience.



Pre-Assessment Form Example

General Knowledge Level of the Practice of Integrated Health Care (IHC):

1	2	3	4	5
None	Limited	Basic	Advanced	Full

**See Pre-Assessment Goal Plan on following page*

Indicator	YES	NO*
Is there currently anyone in the clinic who consults with the Physician on Behavioral Health (BH) issues for patients?		
Is there currently anyone in the clinic who provides direct and billable Mental Health (MH) services?		
If yes, what is the role?		
Are Screenings currently being completed by PCP?		
If yes, which ones?		
Are more screenings needed?		
Patient Paperwork: MH questions?		
Patient Paperwork: IHC informed?		
Waiting Room: IHC informed?		
Waiting Room: Resources?		
Waiting Room: MH informed?		
Waiting Room: Youth-oriented and informed?		
Exam Room: Youth-oriented and informed?		
Clinic: Psycho-education materials?		
Clinic: Is there a resource book for all patient needs?		
Clinic: Is there a designated role with responsibility for following up on all patient referrals?		
Clinic: Is there a MH crisis policy/procedure?		
EMR: Is there a designated place in the EMR for BH/MH?		
Do patient treatment plans include BH/MH?		
Morning Huddles?		
WCHAP site?		
Clinic Staff IHC informed?		
Trained on NAMI Family Experience Model?		

Pre-Assessment Goal Plan

Any logistical issue marked “no” on the pre-assessment form can be developed into a short-term task toward logistical implementation, including any other issues identified by topic in the Logistics section of the manual. Once this document is completed, the goals and tasks have been identified and the staff can now move toward developing and implementing the basic tasks, workflows and objectives specific to their clinic.

Example Short-Term Goal Plan

Indicator	Need	Task
Screenings	No screening for the adolescent population No substance abuse screening	Research and implement screening for adolescent patients and substance abuse
Patient Paperwork	No mention of whole-body health and wellness No mental health questions	Redo patient intake packet or add a mental health/ Integrated Health Care focused document
Waiting Room	Child friendly but not adolescent friendly	Brainstorm ideas for adolescent-friendly waiting room to attract adolescent patients to clinic
Clinic	No Resources Posted	Create board for patients with local resources. Update monthly.

Determine Integration Model

There are many options related to models of Integrated Health Care that can be researched. This Implementation Model is based on two basic choices: Embedding a Behavioral Health Consultant onto the primary care team only or embedding the BHC and offering an Outpatient Therapist who can bill insurances to the clinic practice as well.

Any outpatient treatment should be mild to moderate in diagnosis in order to be seen in a primary care clinic. Most moderate to severe mental health needs are in need of a higher level of care and thus a higher number of supportive services that can be fulfilled in the local Community Mental Health System. Mild to moderate children's diagnoses can usually be served directly in a pediatric practice due to the level of need that can be addressed in the Pediatric setting, as described in the 4-Quadrant Model.

This is not to say that the team *only* consists of the doctor, the BHC and therapist. Each clinic will need to define their own team that will best meet the needs of their patient population. Most teams will include a medical assistant. Some may include a nurse, a nutritionist, and/or other discipline. The most important aspect of this determination is that it must be developed up front but can change over time.

EXAMPLE

Provider Staff Example (*number of staff*)

At Cherokee Health Systems in Knoxville, Tennessee, they have developed a robust Integrated Health Care team to provide for the needs of their patients. They have over 20 years experience utilizing their integrated approach and not only serve the mild-to-moderate population, but also the Community Mental Health population as well. Below is an example of their team-based approach:

Psychologists - 47

Master's level Clinicians - 78

Case Managers - 38

Primary Care Physicians - 24

Psychiatrists - 12

Pharmacists - 11

Nurse Practitioner/Physicians Assistant (Primary Care) - 39

Nurse Practitioner (Psychiatry) - 9



Memorandum of Understanding/Contracts

Always protect relationships with other organizations through strong Memorandums of Understanding (MOUs) and/or contracts with specific expectations for both organizations' activities.

- **Staff Hires:** Some medical practices may choose to hire their own Behavioral Health staff, either Behavioral Health Consultants and/or therapists to provide traditional therapy. In this case, no Memorandum of Understanding or contract is needed, however the practice must determine specific credentialing criteria and billing allowances for the Behavioral Health staff. Laws in each state differ and are changing rapidly and allowable billing does differ between 3rd party insurance companies and Medicaid.
- **Memorandum of Understanding (MOU):** Usually the MOU is a sufficient agreement when no billing or money is being exchanged for the services of one organization to another. For example, when a Behavioral Health organization receives a grant from an outside source to provide a service to a medical practice. In this case, the MOU will state that the Behavioral Health organization agrees to provide services and the medical practice agrees to a number of activities to assist in the provision of the service. Issues such as indemnity and insurance coverage are also usually addressed in an MOU.
- **Contract:** a contract is usually preferred when there is billing involved by either party and/or there is some sort of payment for services provided by one organization to another. Contracts should be reviewed by executive leaderships and/or their lawyers and will be specific to services provided, money exchanged, etc.
- **Liability Insurance:** it is very important for each agency involved in Integrated Health Care to inform their insurance carrier of the services, contracts and/or MOUs between two provider agencies. If the Behavioral Health Services and/or Specialty Mental Health Services are provided by an agency outside the PCP practice, it is very important to have this fact clearly stated to the patient in the form of signs, business cards, logos on paperwork, etc. One cannot assume that the patient has an understanding of the relationship between two agencies providing services in one location, therefore it is extremely important from a liability standpoint that this is communicated clearly and in more than one method.

What to include in a MOU

1. Purpose
2. Goals
3. Expected outcomes and indicators
4. Beginning and ending dates
5. Activities of the PCP
6. Activities of the Integrated Health Care Provider
7. Leadership
8. Agreements & Consents
9. Liability Waivers
10. Signatures

Logistics • Tier One

Culture and Team

When working to implement a PIHC into a PCP practice, it is important to learn about the practice's overall general culture and team composition. Obtaining an organization chart is a good starting point. Learning about a practice's culture may be a difficult activity, but some good questions for the leaders of the team would be:

- “How would you describe your patient demographics?” (Listen for how they describe their patients, it can be an indicator of their culture)
- “How do you currently address patients’ case management needs?” (Is the answer “we refer” or “we have numerous relationships with other agencies that we refer patients to and our MAs follow up?”)
- “What other agencies in the area do you have relationships with?” (This can show how involved the practice is outside of their own walls)
- Also, take note of the office in general. How do you feel when you are there? Are there areas of the waiting room that provide patient information? Is the office welcoming to patients? What is the patient experience with the front desk? Are the patients talkative or silent? Are the walls colorful and with pictures or stark and white? How were you greeted and treated by the representatives at the front desk area?

Although one observation does not indicate the overall culture of a practice, the combination of questions and observations can make an impression about the culture of the practice.

Patient Demographics

To have a successful Integrated Health Care program that serves the community, it is important for the BHC and/or Specialty Mental Health Provider to know the community in which they are providing services. This involves gaining knowledge about the service area and population such as:

- General demographics
- Social service needs
- Social service resources
- Barriers to services in the community resources and programs in the area that are related to the demographics

Logistics • Tier One

Space

Although a typical specialty mental health office space is not necessary for a BHC, some sort of private space does need to be identified during the logistics phase of implementation.

If the PCP provider is going to implement at Tier One, a separate space is indicated for the Specialty Mental Health Therapist as well. The space necessary for a Specialty Mental Health Therapist would replicate a traditional outpatient office where patients can spend up to 45 minute sessions, uninterrupted, in a relatively quiet and private atmosphere.

Because the nature of the BHC role is to be a working member of the PCP team, their space indicates the need to be close to the PCP, Nurses and MAs. Although the majority of the work of the BHC can be done at a nurse's station or MA station, the BHC does need some private space in which to meet with patients to conduct assessments, provide guidance, create behavioral plans and provide resources in order to ensure patient privacy.

SMTT

Some general needs of the BHC:

- Space to use a laptop
- Use of a printer or space to set up a portable printer
- Storage or display space for psycho-education materials
- Access to a phone
- Access to copy/fax machine



Logistics • Tier One

Current Procedures: Patient Flow

When implementing Integrated Health Care, it is important to be knowledgeable in the current procedures in each practice. It is imperative to understand the current workflow for a patient from entrance to the building to exit in order to develop entryways for the integrated health model into the workflow.

The goal of understanding the current procedures utilized to assess and identify “merge points” where the BHC could facilitate an Integrated procedure and/or opportunities to best recommend interactions with the patient.

Questions to consider include:

- What is the check-in procedure for patients?
- What paperwork does the patient fill out as a new patient and for subsequent visits?
- What are the steps the patient follows once they are called back from the waiting room?
- How long, in general, does a patient wait in the exam room for the PCP?
- How do the MAs/nurses communicate with one another and the PCP during a patient visit?
- What is the checkout procedure?
- How are referrals handled?

It can also be helpful as the BHC or the person in charge of implementation to shadow key members of the team for some time during the day including a doctor, MA, nurse and/or a front desk staff.

Potential Merge Points

The assessment should yield some potential merge points for the BHC:

- Before the doctor arrives in the exam room
- The BHC and Pediatrician enter the exam room together
- BHC is called into the exam room as needed.



Current Procedures: Screenings

What screening protocol is the site currently participating in? Some practices have no developmental or social emotional screenings, some do only developmental screenings at well baby checkups and some practices are providing many different screening protocols.

Because detection through regular screening is an important aspect of Integrated Healthcare, it is advised that the person doing the implementation be aware of the current screening protocols. If practices are in need of additional screening tools, present your recommendations for those tools and secure leadership's approval for the introduction of those tools into the PCP site.

A list of recommended screening tools for all ages can be found in the Model section.

In practices that are currently utilizing screenings, determine the following:

- What screenings are they utilizing?
- What is the current administration schedule?
- What is the current workflow?
 - How does the patient receive the screening?
 - Who does the patient give the screening to when complete?
 - Who scores the screening?
 - How is a positive screening processed?

Mental Health Checkups Are Key to Early Detection

“Routine mental health screening in primary care can detect possible symptoms of depression and other mental illness, much like a blood pressure test can identify possible cardiovascular risk factors. Making mental health checkups routine is key to early identification and critical to prognosis for those who suffer from mental illness.

In a recent study that assessed PCPs' rates of addressing emotional distress with adolescent patients, only 34% of youth reported that their doctors talked to them about their emotional health – with older teens, Latino adolescents and girls more likely to report that discussion than any other group. Although 1 of 4 teens (27%) reported emotional distress, distress was not a significant predictor for teens talking to their PCPs about their emotional health. In another study, 45% of all suicide victims were shown to visit their PCPs in the month prior to their death and 77% were shown to have contact with their PCPs in the year before their death. This stresses the importance of systematic screening for mental health problems in the primary care setting.”

*Source: Medscape Psychiatry: Identifying Mental Illness Early Through Routine Mental Health Screening by John H. Genrich, MD; Leslie C. McGuire, MSW
Disclosures, November 02, 2009*

Medical Records & Technology

When working to integrate a practice, it is necessary to become familiar with the current medical record, how the staff bill services, document services, make referrals, how appointments are scheduled, etc. Most practices utilize an electronic medical record (EMR) but not all clinics have this capability. Whatever process is utilized, the person in charge of the integration must become very familiar with the records and flow of services through the records for the medical site.

It is also necessary to determine the technology needs of the BHC and/or Specialty Therapist. Recommendations include access to their own computer and telephone. They should also be able to print from their computer in order to provide resources and educational materials for patients. In the case where the practice does not use an EMR, determine the following:

- How are appointments made?
- Are there patient reminder calls? If so, who completes?
- What is the workflow for the charts?
- Where are charts kept?
- How does a staff member pull a chart?
- What is the process for adding documentation to the chart?
- What is the communication process with the Physician?
- Is there WI-FI available?

For practices that are able to utilize an electronic medical record, consider the following:

- The BHC will need to have access to the EMR to increase effective and efficient communication with the medical team.
- Are there special arrangements or costs associated with access?
- Is there a confidentiality access determination for MH privacy in the record?
- Are there choices available for how the BHC can document service provision?
- Will the vendor need to work with the BHC to develop BHC documentation?

Utilize Technology

Some BHCs are utilizing current technology like iPads to increase efficiency.

They can also be used for:

- Gathering data
- Satisfaction surveys
- Health-related apps for patients



Logistics • Tier One

Established Provider Meetings

In an effort to fully execute the goals and activities of implementation, it is imperative that all staff are continually educated, updated on current changes and prepared for the next level of change to come. One of the best ways to accomplish this is to know the current meeting schedule for staff meetings that the BHC (or facilitator of the implementation) should attend. It is also helpful for integration for the BHC to be involved in other aspects of the clinic culture when allowable and appropriate to the leadership of the clinic. Representation of Behavioral Health on various committees or workgroups will assist in the consistency of the implementation of Integrated Healthcare at the practice.

It is also recommended that the integration project have a standing agenda item for important staff and management meetings during the implementation process. Once implementation has been achieved, it can also be helpful to maintain an agenda item related to behavioral health in general.

EXAMPLE

Participating In Providers Meetings

“When starting at a clinic, I would determine when the office would have meetings for staff and/or for providers. I would ask to be included in the agenda for each of these meetings to provide an update on the implementation process, which would include information like the number and type of referrals that I was receiving. I would also use this as an opportunity to present my ideas for areas of growth and obtain feedback from the providers and staff.”

- Debrah Lee, Behavioral Health Consultant



Patient Consents and Releases of Information

Policies and procedures related to consents for treatment and releases of information will vary depending on the employer of the Behavioral Health Consultant and/or Specialty Mental Health Provider and will vary depending on the services provided. Most screenings are covered as general medical practice so any BHC involvement with screenings will not need any additional consents.

BHC and/or Specialty Mental Health Provider are employees of the primary physical health practice:

- Medical practices have existing consent forms. The existing form should include a notice to the patient that as an integrated health center, the patient is consenting to receive mental health screenings, assessments and interventions.
- Medical practices also have existing Release of Information forms and policies. These would be utilized by the BHC and/or Specialty Mental Health Provider, with special consideration of HIPPA rules governing protected health information such as HIV status and Substance Abuse services.
- For any traditional outpatient mental health therapy that will be provided in the medical practice, all state mental health code requirements must be met including specific consent for treatment and releases of information for mental health services.

BHC and/or Specialty Mental Health Provider are employees of another agency:

- The number one consideration must be that the patient understand the Integrated Health Care partnership and what it means for the communication of their health and mental health status within the practice.
- In order to maintain the separate nature of the agreement for liability insurance purposes, it is necessary for the BHC and/or Specialty Mental Health Provider to use their agency's consent form and Releases of Information for patients or a consent and release of information form that has both organizations listed and/or logos on the forms.
- It is also advisable that the practice inform the patient that behavioral health services are provided in the practice and include, on the practice's consent form, that the BHC and the Primary Care Physician will be communicating with one another, allowing for a patient to choose to opt out of this arrangement with a separate signature.

Consent Form Example

Patient Name: _____

DOB: _____

I, the undersigned,

1. Voluntarily consent to receive services from a Behavioral Health Consultant (BHC) staff member as recommended by my doctor and fully explained to me by the Behavioral Health Consultant staff member. I understand that I am free to withdraw my consent and discontinue receiving service from the program at any time.
2. Understand that the BHC staff member will be partnering with my medical provider and will be providing a behavioral assessment and sharing with me the results of that assessment. The staff member will make recommendations to me, provide education materials, make referrals for services and follow up with me on those referrals. The BHC will also be sharing the results of the assessment and recommendations with my doctor.
3. Understand that the BHC staff member is not an employee of the _____ office but is an employee of _____
4. Understand that BHC program staff may be required to release information without consent under the following specific conditions:
 - a. Patient threatens harm to self or others
 - b. Suspicion of child abuse and/or neglect
 - c. Medical condition to meet a bona fide medical emergency where there is immediate threat
 - d. Authorized by court order under Sub Part E-Section 2/61
5. My rights while receiving services has been explained to me and I understand that I have the right to speak to the Clinic Director or Recipient Rights Advisor at any time I feel my rights have been violated.

I understand that if I am not satisfied with services I may speak to my assigned worker:

_____ or _____.

This does not mean that I don't have the right to file a Recipient Rights complaint or a Grievance.

Parent/Guardian Signature

Date

BHC Staff

Date

Pediatric Integrated Health Care Implementation Model: One Location, One Visit. Copyright © 2016 Michelle Duprey, LMSW.
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Site Checklist Form Example

- ☐ MOU Completed Date _____
- ☐ Attendance at provider meetings Date _____
- ☐ Integration model determined Date _____
- ☐ Insurance company notified (if req.) Date _____

How do you describe your patient demographics?

How do you currently address patient's case management needs? _____

What other organizations do you have relationships with? _____

Facility	
Assessment	Tasks to Complete
Waiting Room	
BHC Space-Phone-Computer	

Exam Rooms	
------------	--

continued

Site Checklist Form Example, continued

Current Procedures	
Assessment	Tasks to Complete
Check-In Procedure	
Patient Flow	
Exam Room Wait	
MA/Nurse/PCP Communication	
Checkout Procedure	
Screening Protocol	
Forms & Records	
Assessment	Tasks to Complete
EMR	

continued

Provider Meetings	
Patient Demographics	
Patient Consent Forms	

[illegible]

Site Checklist Form Example (Completed)

☒ MOU Completed

Oct. 23, 2016

Date

e

☐ Attendance at provider meetings

Date

☐ Integration model determined

Date

☐ Insurance company notified (if req.)

N/A

Date How do you describe your patient

demographics?

How do you currently address patient's case management needs?

What other organizations do you have relationships with?

Behavioral Health Services available at Pediatric Clinic: 1 pediatric psychiatrist and 2 pediatric therapists - some families go to Behavioral Health Services Provider office if they have transportation

Facility	
Assessment	Tasks to Complete
<p>Waiting Room</p> <ul style="list-style-type: none">• Waiting room is divided into 3 sections– Outer section for “sick” patients– Middle section with chairs with one TV playing children's channel– Other outer section that is identified as children's area – limited toys/activities• Limited wall space for posters• No psycho-education materials currently available	<ul style="list-style-type: none">• Introduce IHC pamphlets and posters – including IHC rack card• Increase educational materials including teen-friendly materials

Site Checklist Form Example Completed, continued

<p>BHC Space-Phone-Computer</p> <ul style="list-style-type: none"> BHC has computer – with EMR access – phone and desk space in nurse triage office (currently one other nurse in office?) Phone: dial “9” to make outside call – phone can be used to call patients; however, incoming calls will automatically go to call center 	<ul style="list-style-type: none"> Phone call management: no separate extension with voicemail option is available – currently discouraged to share direct line Patients/parents must be directed to inform call staff that they are seeking nurse at Pediatric Clinic who can then forward message to BHC through EMR. Per Dr. Smith, because there is no sustainability plan in place, she does not want to create a phone number that patients may continue to call after the end of the grant.
<p>Exam Rooms</p> <ul style="list-style-type: none"> 12 exam rooms (exam room 3 is used as an office space) Exam rooms have computer, magazine rack and a picture – very little color <p>Clinic Space</p> <ul style="list-style-type: none"> Treatment room is available for BHC use if exam room is needed – coordinate with MA/RN providing immunizations Resource room is available to house psycho-education materials – the space is primarily utilized by residents and students PCP have their own offices, which they use for documentation – MA leave pt charts in mailboxes outside of PCP offices 	<ul style="list-style-type: none"> Introduce IHC pamphlets and posters in exam rooms and on bulletin boards Increase educational materials Promote “teen friendly” environment
Current Procedures	
Assessment	Tasks to Complete
<p>Check-In Procedure</p> <p>Patient checked in by CSR – screening tools given for completion in waiting room</p>	
<p>Patient Flow</p> <ul style="list-style-type: none"> Patient is checked in at front desk by CSR Patient is taken to room by MA, vitals taken by MA PCP meets with pt Immunizations/labs given/coordinated by MA Pt released with paperwork and may check back with CSR to schedule any f/u appointments <p>*Labs are done in house</p>	
<p>Exam Room Wait</p> <p>Wait time depends on provider</p>	<p>Pt may meet with BHC/therapist first based on services needed</p>

continued

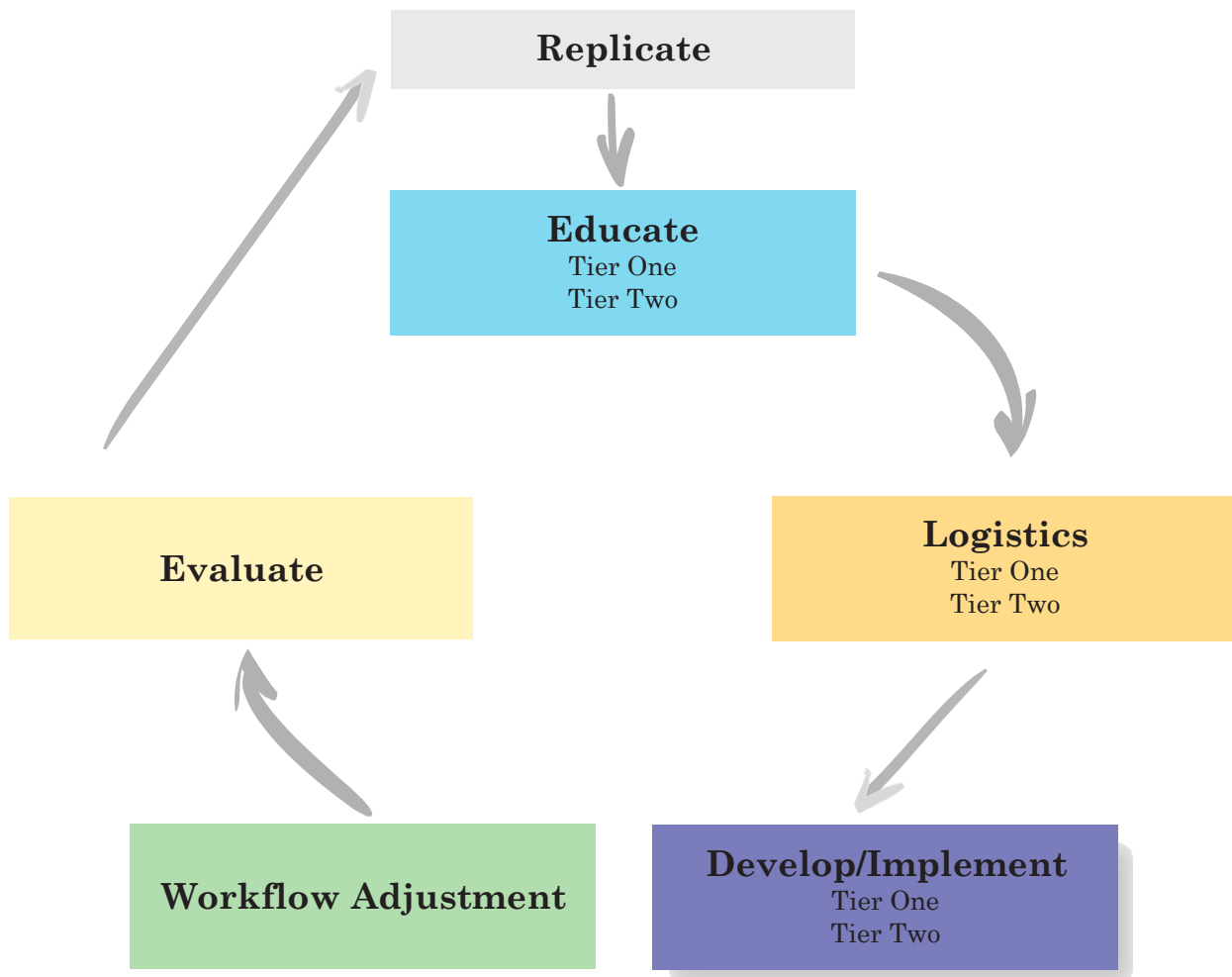
Site Checklist Form Example, continued

MA/Nurse/PCP Communication <ul style="list-style-type: none"> • Verbal communication • Communication through EMR 	Would prefer to "Sign" all EMR notes so that BHC documentation is read
Checkout Procedure	
Screening Protocol Pt is given screening tool during annual physical - given by CSR for completion in waiting room <ul style="list-style-type: none"> • ASQ • M-CHAT • PSC & Y-PSC 	Pediatric Clinic plans to move to an electronic screening portal, they do not want to change screenings until after the transition, however, we have recommended that: Adolescents are given Y-PSC – transition to Pediatric Clinic tool: DASST
Forms & Records	
Assessment	Tasks to Complete
EMR EPIC	-BHCs to route phone encounters to PCP. -BHCs to document all face-to-face encounters and send to PCP via "co-sign"
Provider Meetings Monthly staff meetings on 2nd Monday afternoon of every month from 12-2 pm	
Patient Demographics	
Patient Consent Forms Provided at front desk	-BHC will provide separate MDCH consent form -BHC will request verbal consent for first time phone encounters

Provider questions/issue to be resolved: _____

SECTION VI: Develop and Implement Module

*Develop tools and procedures and
implement a new workflow*



*Develop/Implement • Tier One***Develop Desired Goals/Outcomes:**

Now that current logistics of the practice are understood, it is important for all involved in implementation to have set expectations for what will be accomplished during the implementation phases and overall implementation of the model. It is at this time that initial goals for the Tier One implementation should be developed. Tier Two goals will be developed at a later time.

The Goals and Outcomes should be directly related to the tasks of each module as well as the overall goal of the clinic related to their Integration plan. Most practices will utilize the modules of the implementation model as their goal plan, however some practices may have other goals in mind as well. Goals can be written into an action plan, complete with dates, that can be utilized to keep everyone informed of the progress of implementation. It can be helpful to have a “vision” meeting where stakeholders come together to envision their practice as integrated and identify the staff and resources of the practice that will be utilized to bring the vision to life.

It can also be helpful to create a document or picture representation of the vision created to post throughout the staffing areas of the clinic. In order to continue to build buy-in, it is recommended that the completed goal plan is also shared with each staff member.

In general, Integrated Health Care as a model seeks to achieve the following outcomes: *(See detailed examples on following page.)*

- Improved Access
- Improved timeliness of service provision/intervention
- Improved patient overall health
- Improved patient satisfaction
- Improved cost management/cost savings
- Positive clinical outcomes
- Improved coordination of services
- Improved detection and early intervention of behavioral and physical health needs

These outcomes can be used to guide the vision and/or goals for implementation. Whatever goals/outcomes are identified, an evaluation plan, complete with data points to track, should be developed at this stage. Be sure to separate structural changes for the clinic from how the structural change will impact patients and patient care as these are two separate issues.

General Overarching Integration Goals Examples:

Improved Access:

- Our goal is to improve our patients' access to mental health services by providing a specialist in Mental Health on our provider team
- Our goal is to improve our patients' access to the spectrum of mental health services

Improved timeliness of service provision/intervention:

- Our goal is to provide our patients with real time consultations for behavioral health issues when identified
- Our goal is to provide our patients with a convenient and timely behavioral health intervention
- Our goal is to provide our patients with a one location, one visit experience that meets both their physical and behavioral health needs

Improved overall patient health:

- Our goal is to improve patient health by providing whole-body health and wellness interventions
- Our goal is to improve patient health by providing a team approach to patient care
- Our goal is to improve patient health by addressing physical and behavioral health all at once

Improved patient satisfaction:

- Our goal is to improve patient satisfaction by providing as many services as possible in one visit
- Our goal is to improve patient satisfaction by providing multiple services in one visit and at one location
- Our goal is to improve patient satisfaction by meeting their whole-body health and wellness needs in one visit

Improved cost management/ cost savings:

- Our goal is to improve the efficiency of our providers by adding a behavioral health consultant to the treatment team
- Our goal is to improve the management of services by ensuring the patient receives the right level of all care
- Our goal is to help manage costs through the detection and early intervention of behavioral health needs

Positive Clinical Outcomes:

- Our goal is to provide services that positively impact the physical and behavioral management of a patient's needs
- Our goal is to improve clinical outcomes for patients by providing for their physical and behavioral health needs
- Our goal is to improve self-management of physical and behavioral health care needs
- Our goal is to reduce emergency room visits by providing detection and early intervention for physical and behavioral health care needs

Improved coordination of services:

- Our goal is to improve how services are coordinated within the clinic
- Our goal is to coordinate patient care to ensure the highest quality of care
- Our goal is to provide improved coordination of care to ensure patients' physical and behavioral health care needs are met

Improved detection and early intervention of behavioral and physical health needs

- Our goal is to improve health through early detection and intervention for physical and behavioral health care needs
- Our goal is to provide interventions within the clinic for detected physical and behavioral health care needs.

Samples Goals/Objectives Plan Form Example *(not an exhaustive list)*

Implementation Section	Overall Goal	Action Steps	Completion Date
Educate Approximate Months 1-4	All clinic staff will consistently be educated on the implementation process with opportunities for questions and feedback	Agenda item on all general staff meetings	
		Quarterly integration newsletter for staff	
		Email address set up for ongoing staff questions	
	New staff will be oriented to the Integrated Health Care model for the clinic	Integrated Health Care information will be included in all new staff orientation paperwork	
	End result vision for the clinic is developed and shared with all staff	Create a visual representation of the vision for the end result of the implementation of Integrated Health Care for the clinic.	
Logistics Approximate Months 1-3	Current logistics and workflow will be mapped out for all departments	Completion of logistics tool	
		Meet with all departments of the clinic to determine logistics and workflow	
		Create visual representation of the current workflow	
Develop and Implement Approximate months 3-9	Integrated tools and workflow will be implemented and practiced within the clinic.	Determine where tools and opportunities for Integrated Health Care lie within current workflow	
		Add changes to existing workflow	
		Create visual representation of new integrated workflow	
		Determine and implement data collection parameters and data points	
Workflow Adjustment/Evaluate Months 6-12	Identify all logistics and workflow that need adjustment	Collect patient satisfaction surveys and summarize	
		Collect clinic staff satisfaction surveys	
		Assess workflow from patient perspective	
		Assess workflow from clinic perspective	
	Identify solutions to gaps in services, logistics and workflow	Create new logistics, workflow and services as needed and identified	
	Evaluate data points	Create quality improvement and or quantity improvement for utilization of Integrated Health Care services	

*Develop/Implement • Tier One***Team Development**

Creating an Integrated Health Care team is the point of the process that sounds the easiest but is actually the hardest part of the process. You would think that creating new processes, new policies, introducing new pieces of paper or a new person onto the team would be difficult. Those activities are actually the easy part simply because they are activities. The most difficult task at hand, by far, is the development of a real Integrated Health Care team.

This is the point where many people become discouraged or question whether this was a good idea. This is the time when, because things look good on paper, everyone thinks the medical practice has crossed the biggest hurdle...until a patient comes in who will benefit from Integrated Health Care and they do not get it.

This happens so frequently that it has to be normalized here. The reason for this breakdown is simply the signal that the process is not complete. The team has not been created and there is still much work to be done. It is imperative that whoever is in charge of the implementation understands this signal and responds to it with positive leadership.

TIPS**Creating a Cohesive Team**

- Breakdowns in the utilization of a BHC can sometimes be attributed to the lack of knowledge or attitude change with the medical provider. It takes time for this culture shift to occur. The best way to help the medical provider utilize the BHC correctly is to see how the partnership and team approach helps them and the patient. Keep pushing it and keep pointing out the return on their investment to be open to change.
- Create space for the team to be together during down times. This can help them get to know one another and facilitate group discussions.
- Create a board for the medical providers office where Integrated Health Care success stories or Frequently Asked Questions or articles can be posted.
- Create a team mantra such as “our patient” or a team identity.
- Always use the word “team” in communications. A simple repetition of words can have a strong impact.
- Discuss how to introduce Integrated Health Care and each other to patients. This discussion can also help weed out small but meaningful misunderstandings of roles and expected activities.

Develop/Implement • Tier One

Collaborative Communication

True collaborative communication between the BHC and the PCP is not particularly intuitive so it does take some practice and some patience. Professionals from the medical field and professionals from the social work field are taught very different skills for communicating with patients and one another. Keep in mind that most social workers are trained to “paint a picture” with quite a bit of verbal information, while PCPs are generally trained to get to the point quickly and have targeted verbalizations based on the situation at hand.

Many PCPs will likely become frustrated with a BHC if the BHC is talking too much, giving too much information or discussing issues that are not the immediate focus at the time. It is the responsibility of the BHC to initiate collaborative communication and to assist the other professionals in the practice to learn these skills and to create opportunities for collaborative conversations to take place. Some general ideas include:

- Ask the PCP about their preferred communication style from you.
- Listen for the “trigger” word in the PCPs communication to you about the patient.
- Reframe, pointedly, what you think the PCP is looking for you to do with the patient. For example “You want me to work on the patient’s eating habits related to their obesity diagnosis?”
- When returning to the PCP for a status update, keep in mind what question the PCP came to you with and answer that question. You do not need to go into detail with a long-winded explanation. Tell the PCP what you think they should know and how that information is connected to the original consultation question. If the PCP needs more details, they will ask you for more information.
- Make sure you know the answer to this question before you see the patient: “What does the PCP need from me after I see this patient?” For most BHCs, the referral question from the doctor plus a review of the patients chart will provide the best picture of the patient for the BHC to provide the best service.

Remember that the BHC does not do therapy. The focus of the role and the consultation with the PCP is to improve functioning, provide a whole-body health and wellness approach and intervene on mild behavioral health needs.

*Develop/Implement • Tier One***BHC Schedule**

At this point in the implementation process, those working toward integration have a good understanding of current procedures and workflow and will now begin to develop and introduce new elements into the practice.

In order to have consistent expectations, the BHC schedule should be discussed, negotiated and determined early in the integration process. Many times the first question asked by providers will be “when will you be here?”

The best case scenario for successful implementation is having a BHC full time at the practice. It can be difficult to “sell” the benefits of Integrated Healthcare to providers who do not see the benefits everyday and changes to workflow will take longer to be acclimated if they are not supported by the presence of the BHC daily.

The following will need to be developed:

- A way to notify all staff of the BHC schedule (use any existing schedule post for all other staff when possible)
- Identify how to reach the BHC for key stakeholders/managers
- A workflow and tools developed for patients identified as having a need on a day that the BHC is not in the clinic
- Create a document for staff to use to identify what patient was identified and what the need is
- Identify a space to place documents for the BHC
- Determine a procedure for notification of a manager-level stakeholder for planned time off, sick days and/or emergencies
- If possible, the BHC should identify a secondary contact for the practice to utilize during BHC absences
- Create a list of relevant phone numbers for the clinic in the case of a mental health emergency for a patient, including the number for Child Protective Services
- Ensure the BHC has business cards available to the Physician, MAs and/or front desk to give to patients in the BHC’s absence

Develop/Implement • Tier One

Screenings

During the previous assessment of logistics, if it was determined that the clinic is in need of new or additional screening tools, it would be necessary to introduce those screenings and develop a new workflow to accommodate this process.

Since developmental screenings are an integral part of PIHC and ESPDT for Medicaid recipients, it is important to assess what screenings are currently done at the practice and implement additional screenings into the workflow following the PIHC model for developmental screenings per age.

This introduction of screenings may entail working with the front desk staff to create a workflow for getting the screening forms to the patients. It would also require the introduction of the new process to the MAs/nurses who support the PCP, as well as the PCP.

Depending on the screening tools used and how familiar the staff is with the screening tool, the BHC will likely have to provide some training in the scoring of each tool and indicators for a referral to the BHC.

The best case scenario would entail:

- An indicator in the check-in system when a standardized screening is due per age
- Easy access for check-in staff to distribute the screening and instruct the patient on the purpose and directions for completing
- MA (or point of first contact) to expect a screening document from the patient and ensure that it is completed
- Doctor, nurse or assigned personnel to review and score the screening form and how to interpret the findings
- Standardized response from the doctor, nurse or assigned personnel if screening is negative or positive and timely procedure for warm hand-off to the BHC

Develop/Implement • Tier One

Electronic Medical Records

An integrated practice has a fully integrated medical electronic health record and billing system if indicated. The EMR has space for BHC notes, consents and releases, as well as tabs for the specialty mental health record-required paperwork, such as electronic psychosocial assessments, treatment plans, progress notes and authorizations. For an integrated practice to be most effective, the PCP should have easy access to all services provided by Behavioral Health including plans, referrals and follow-up.

For fully integrated practices (BHC and Specialty Mental Health Provider) billing for specialty mental health services is possible once the therapist is credentialed with the insurance companies. The therapist would go about obtaining authorizations as in an outpatient setting and would be required to complete all paperwork required by the insurance company. It is necessary for the practice's EMR to have all ICD-9 or DSM codes available in the record as well as behavioral health codes for the therapist to utilize in billing services.

EMR and Confidentiality

It is important that a patient's right to privacy related to any behavioral health services be protected. It is recommended for both a Tier One and Tier Two integrated practice that some sort of lock or approved access to a patient's chart containing behavioral health information be created and that access is limited only to those professionals who need the information to provide services. Some EMR systems provide for coding certain records by confidentiality level, others require passwords.

Paper Charts

If the practice does not offer an EMR, documents would need to be created and a space in the paper chart would need to be identified to allow for the Physician to see the BHC services provided to the patient. Once the documents are developed (this should be kept to a minimum, such as a Behavioral Health Note (*following page*) and an Action Plan), a workflow should be developed related to who is responsible for placing the BHC documents in the chart once completed.

Behavioral Health Note Form Example

Date: _____

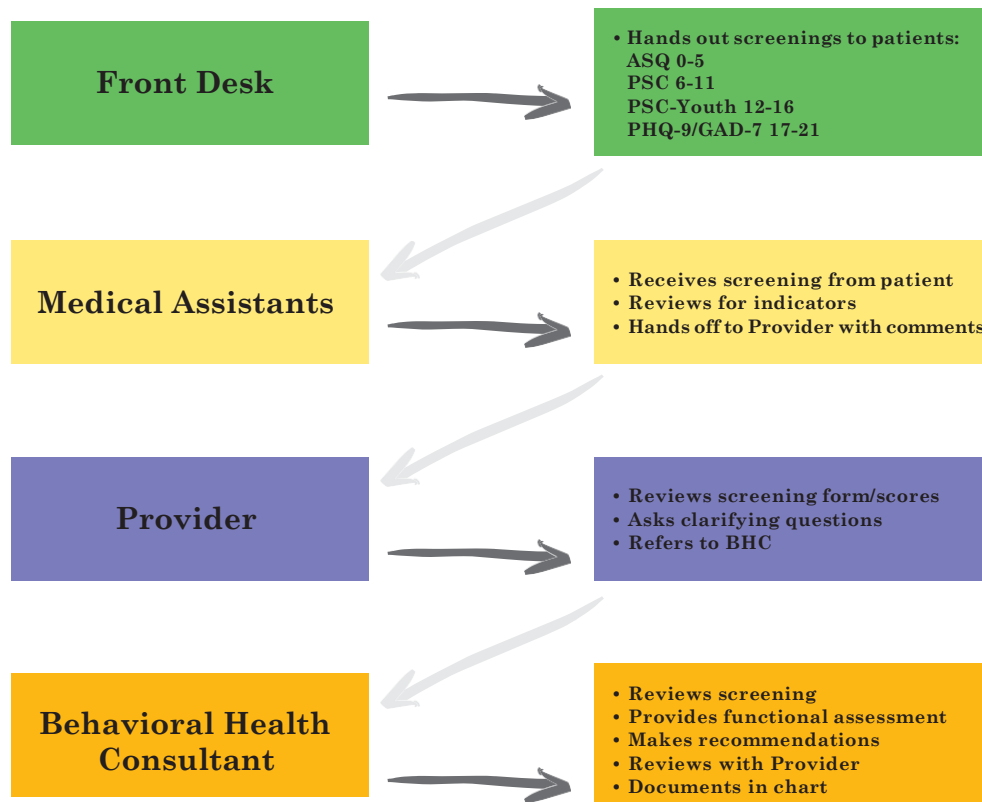
Patient Name (First, Last):	MRN:	DOB:
Others Present at Office Visit: Names/Relationship:		
Parent/guardian (if applicable):		
Phone:		
Address:		
Insurance:		
Contact Type: <input type="checkbox"/> Face-to- Face <input type="checkbox"/> Telephone	Start Time	End Time
Screenings Administered: <input type="checkbox"/> ASQ-3 <input type="checkbox"/> M-CHAT-R <input type="checkbox"/> PSC <input type="checkbox"/> PSC-Y <input type="checkbox"/> CRAFFT <input type="checkbox"/> PHQ-2 <input type="checkbox"/> PHQ-9 <input type="checkbox"/> Edingurgh <input type="checkbox"/> CAGE-AID <input type="checkbox"/> HITS <input type="checkbox"/> OTHER _____		
Presenting Concern:		
Referred by:		
Stressors/Extraordinary Events:		
Change From Last Visit:	Behavior/Functioning:	
Health Status:	Substance Use: <input type="checkbox"/> YES <input type="checkbox"/> NO	
Danger to: <input type="checkbox"/> None <input type="checkbox"/> Self <input type="checkbox"/> Others → <input type="checkbox"/> Ideation <input type="checkbox"/> Plan <input type="checkbox"/> Intent <input type="checkbox"/> Attempt		
Comments:		
Behavioral Plan:		
Behavioral Intervention: <input type="checkbox"/> Psychoeducation/Anticipatory Guidance: <input type="checkbox"/> Problem Solving/Action Planning: <input type="checkbox"/> Behavior Management: <input type="checkbox"/> Resources: <input type="checkbox"/> Referral:		
Progress/Barriers:		
Observed/Reported Changes in Condition:		
STAFF SIGNATURE	SUPERVISING CLINICIAN SIGNATURE (If applicable)	

*Develop/Implement • Tier One***Workflow**

Once the screenings are decided upon and introduced, space is determined and the EMR is set up, the next step is to implement a workflow for the BHC position. The actual workflow will be practice specific so no particular instructions will work for each practice.

However, some general guidelines are important to the overall success of the integration:

- Establish a process for every patient to receive a screening at first visit and a protocol for screening at subsequent PCP visits
- Determine who takes responsibility for the screening forms once the patient is called back for their PCP visit
- Develop a process for how the BHC is notified of a positive screen and/or referral from the PCP
- Determine the procedure for a positive screen and/or referral when the BHC is with another patient
- Ensure the referral process for BHC to specialty mental health if available on site
- Create a procedure for how a follow-up appointment is scheduled
- Create a mental health emergency protocol with procedures for all staff
- Create scheduling protocol for BHC
- Create billing protocol for BHC
- Integrate all BHC paperwork into the medical chart



Develop/Implement • Tier One

Introduce Workflow to Staff

A successful integration must include the entire staff of the practice, not just the strategic planners and managers. As the new workflow is being developed, it is imperative that all staff are given an opportunity to provide information, give suggestions and provide feedback about how Integrated Health Care will fit into their daily routine.

Although there will likely be resistance to what can be seen as an interruption to a staff's daily flow, it is important to hear about this experience while still setting the expectation that integration is the ultimate goal. Most staff will adjust and create new daily habits so long as the practice has a generally positive attitude about integration, sets consistent expectations, keeps the staff informed and provides strong leadership.

- In order to keep implementation moving forward, identify a time on the agenda of any meetings to address behavioral health integration and/or implementation
- Create a new organization chart with the new behavioral health staff represented and add/change as needed
- Post workflows for visual representation; update as needed

IDEA

Centralized Scheduling

In a fully integrated practice, the BHC and/or the Specialty Mental Health Provider should be included in the centralized scheduling system used by the PCP. It is important for patients to be able to see the seamless workings of an integrated system and not have to contact different people for their appointments.

The front desk and/or scheduling staff should be fully aware of the BHC role and services and be able to schedule appointments over the phone or when at the clinic for all services required for their care.

Reminder calls for the BHC and/or Specialty Therapist should also be included in the reminder call procedure that is utilized by the practice



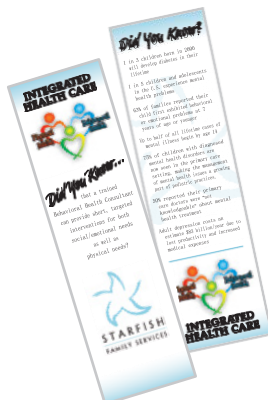
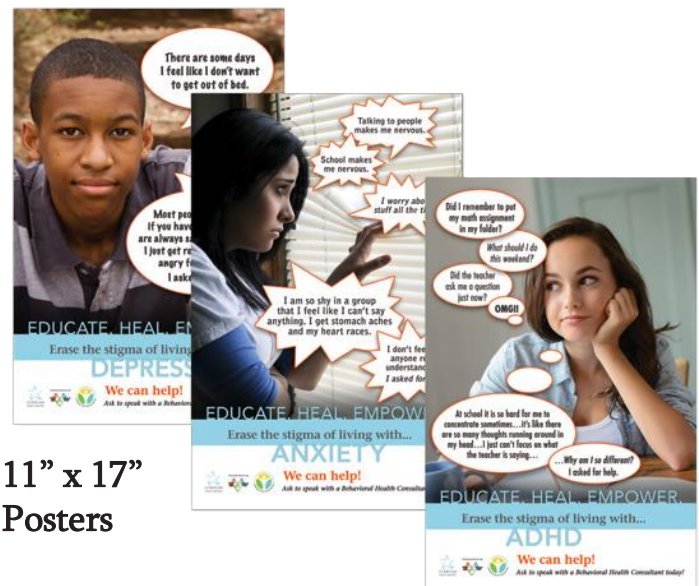
Develop/Implement • Tier One

Introduce PIHC to Patients

Although a lot of work goes into integrating a PCP practice that will ultimately serve the patients of the practice more effectively and efficiently, patients generally won't know or understand what Integrated Health Care is and how an integrated practice will be beneficial to them. During the development phase of the implementation model, sharing the good news with patients is an important step.

Most practices educate their patients with informational banners or boards, brochures and/or handouts. It might also be beneficial to train the front desk staff to direct patients to the new materials about Integrated Health Care for a specific amount of time (one month to one quarter). MAs or nurses will want to remind patients to fill out their screenings as well. Some practices will place the BHC out in the lobby for certain times of the day to talk about BHC or hand out psycho-education materials on relevant topics.

If the practice has a video stream, it can be very helpful to obtain videos to introduce topics such as the importance of mental health and developmental screenings. Getting patients used to this new service will take some time but good news travels fast and soon patients will be requesting BHC services.

18" x 24"
Poster2-Sided Rack
Cards8.5" x 11"
Poster2-Sided
Bookmarks11" x 17"
Posters

Develop/Implement • Tier One

Tracking

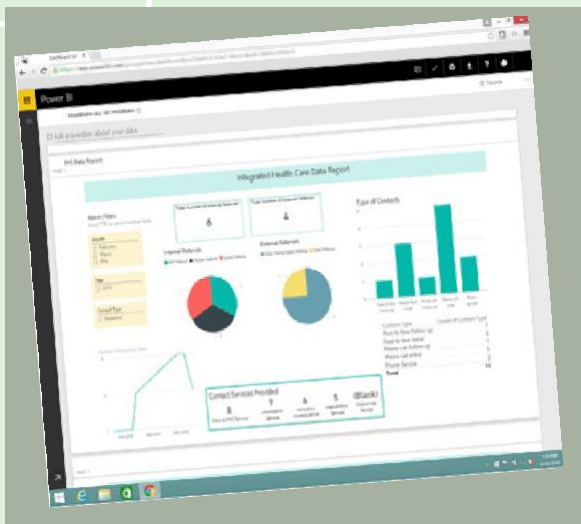
Whether the BHC and/or Specialty Mental Health Provider are grant-funded or not, it is always a good idea to set up some program expectations and methods for tracking those services provided by the BHC and/or Specialty Mental Health Provider. If a position is grant-funded, the grant will state clearly what the outcomes are for the position and will likely have a data collection method already set up.

For positions that are not grant-funded, some traditional items to track include:

- Number of clients served
- Services provided
- Referrals and follow-ups

Tracking of goals and outcomes from the Educate Module should also be included and may address:

- Improved access
- Improved timeliness of service provision/intervention
- Improved patient overall health
- Improved patient satisfaction
- Improved cost management/cost savings
- Positive clinical outcomes
- Improved coordination of services
- Improved detection and early intervention of behavioral and physical health needs



Software, such as Office 365's Power BI, can be used to create a dashboard.

Create a logic model to work from and use to develop reports or scorecards

- Outputs could include number of screenings, number of patients referred to the BHC, number of patients referred to the therapist (if on site), number of OP therapy sessions, number of BHC interventions, number of referrals to outside services, number of huddles, number of presentations by BH staff to clinic staff, etc.
- Outcomes could include patient satisfaction, patients who would not have received BH intervention if a BHC was not present in the clinic, provider satisfaction, provider attitudes about BH detection and intervention, patient self management skills and education, body mass index (BMI), hospitalizations, crisis interventions, etc.

Develop/Implement • Tier One

Modified Logic Model Form Example

Use a spreadsheet software to create a simple modified Logic Model like the one below for tracking the goals and outcomes of your integrated practice.

Child/Caregiver-Level ACTIVITIES									Provider-Level ACTIVITIES						
Clinic Site	BHC or therapist screening	Recruit pts to BHC	Assess pt level of functioning	Provide targeted interventions	Provide psychoed	Develop action plan	Provide referrals and make f/u calls	Keep records in EMR	Collaborate with other Bx health staff	Act as MH consultant to docs	Coordinate w/ supportive services	Assist team in identifying patients	Coordinate psych services	Develop workflow	Provide MH ed to PC staff

Child/Caregiver-Level OUTPUTS									Provider-Level OUTPUTS						
Clinic Site	# referrals to BHC	# of functional assessments	# referrals from Physician	# referred by BHC to Mental Health Services					# clinics providing IHC	# educational presentations by BHC to PC staff	# huddles				

Child/Caregiver-Level OUTCOMES									Provider-Level OUTCOMES						
	# pts who otherwise wouldn't have been seen	# f/u on referral	# f/u on appts w/ BHC	Patient satisfaction	Pt skills in addressing BH	No-show rate			Provider satisfaction	Attitudes on providing BH services	Behaviors in providing BH services				

Mental Health Emergency Policy

There is potential for a mental health emergency in a medical clinic every day that the clinic is open to patients. It is important to create a mental health emergency procedure specifically for each clinic as it is easy to assume that one exists just because a clinic is integrated. Because each clinic is different, below are some general guidelines to assist in creating a mental health emergency procedure. *It is important to train all clinic personnel on any mental health emergency procedure that is developed.*

Incoming Phone Calls:

Occasionally a phone call will come through to the front desk that would qualify as a mental health emergency. A mental health emergency would include a patient who is identifying themselves as suicidal or homicidal.

Other phone calls that would be directed to a behavioral health staff include:

- A patient identifying child abuse/neglect
- A patient identifying themselves as cutting themselves
- A patient who is inebriated

Procedure ideas:

- Person taking the phone call would gather information to determine if the caller is in a current mental health crisis as defined above
- Person taking the call will immediately ask for the caller's phone number
- Person taking the phone call would tell the caller that they will connect them to the person who will assist them and will not place the caller on hold until it is time to transfer the call.
- Person taking the call will seek assistance from an employee to seek out the behavioral health professional on site and inform them of the mental health emergency.

Mental Health Emergency in Clinic:

Occasionally a mental health emergency will occur in the clinic during the Primary Care visit, in the waiting room or while waiting to see a Physician. Mental health emergencies include:

- A patient who has verbalized being suicidal or homicidal
- A patient who is experiencing an active anxiety attack

Some situations require immediate police involvement, including a violent patient.

Some situations require the use of a behavioral health staff as part of a team intervention, such as an inebriated patient.

Procedure ideas:

- Immediately inform BHC staff of the nature of the mental health emergency
- Provide relevant background information
- If patient is violent or threatening, create a team plan; do not just "send" the patient to the BHC
- Understand the commitment process if the patient is an adult

Youth-Friendly Environment

Traditionally pediatric medical care has focused on young children. All one has to do is enter a Pediatrician's office to see that the décor, TV channel and furniture are mostly geared toward making the young child feel comfortable. Unfortunately, this is usually at the expense of the older patient's comfort level and engagement in the Physician/patient relationship at an age when having this relationship can make a difference in some risk-taking behaviors of this population.

For youth and adolescents, having a safe place to discuss their choices, express their experiences with their changing bodies and ask questions about their emotions is key to not only preventing possible risk-taking behaviors, but also teaching them that engagement with health care is a positive and normative experience.

It makes sense that a youth who has positive experiences with health care engagement will be more likely to engage in health care as an adult as well, thus possibly receiving prevention and early intervention for both physical and mental health issues as they age.

Pediatric offices can engage youth and adolescent patients by paying attention to the needs of this population and making a few accommodations. The result may also be increased patient load as word gets around that the clinic is an okay place to go for special youth and adolescent issues.

IDEA

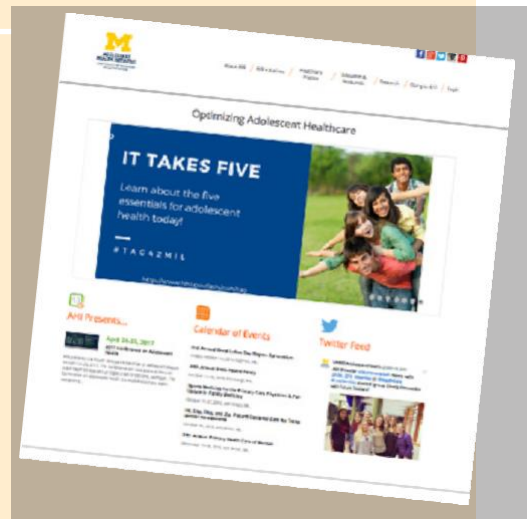
Web-Based Resource for Improving Integrated Adolescent Care

The University of Michigan Adolescent Health Initiative (AHI) offers an online resource for health care providers, health centers, health systems, and youth-serving agencies to improve their care for adolescents.

The site includes information regarding:

- The award-winning **Adolescent Champion Model**, a clinic-wide intervention to guide health centers to become adolescent-centered medical homes. The Champion model includes the Adolescent Centered Environment (ACE) assessment process, quality improvement initiatives and mini-trainings for the entire health center to participate in collectively.
- **Annual Conference on Adolescent Health: Translating Research into Practice**, a national event for multi-disciplinary health professionals.
- **AHI resources** including laws about minor consent and confidentiality, Starter Guides to implement improvement strategies for quality measures and a manual on Creating and Sustaining a Thriving Youth Advisory Council.

Visit www.umhs-adolescenthealth.org/



Implementation Checklist Form Example

Screenings: Protocol for screening distribution created	
Task	Completion Date
ASQ	
MCHAT	
PSC	
PSC-youth	
PHQ-9 Adolescent	
CAGE	
Other	
Workflow from Front Desk to PCP completed for all Screenings	

Goals & Outcomes Workflow	
Task	Completion Date
Goals/objectives plan developed	
Logic model developed	
Information Tracking Data Sheet Developed	

Procedure Workflow	
Task	Completion Date
Front Desk:	
Medical Assistants:	

continued

Implementation Checklist Form Example, continued

PCP:	
BHC:	

EMR Workflow	
Task	Completion Date
EMR: BHC access to chart BHC notes in the chart Directly: notes created in chart By Scan: procedure developed	
Communication via EMR procedure developed	
Use of EMR for BHC schedule? If no, alternative	
EMR lock created for protected information?	
Mental Health Emergency Protocol developed?	

continued

Implementation Checklist Form Example, continued

Communication Workflow	
Task	Completion Date
BHC “in clinic” communication procedure developed:	
BHC “out of clinic” communication procedure developed:	
Huddles: Communicate workflow with Physician:	

Educate Workflow	
Task	Completion Date
Introduce workflow to all staff:	
Introduce PIHC to patients:	

Implementation Checklist Form Example (Completed)

Screenings: Protocol for screening distribution created	
Task	Completion Date
ASQ	No changes to current
MCHAT	screeners at this time
PSC	6/17/16
PSC-youth	
PHQ-9 Adolescent	
CAGE	
Other	
Workflow from Front Desk to PCP completed for all Screenings	May be referred to PCP

Goals & Outcomes Workflow	
Task	Completion Date
Goals/objectives plan developed Created with Medical Director and Nurse Manager	6/5/16
Logic model developed N/A – Team decided Logic Model is not needed at this time	
Information Tracking Data Sheet Developed – Needs to be determined – Meeting scheduled in 2 weeks	

Procedure Workflow	
Task	Completion Date
Front Desk: Will hand out screenings per age to all new patients	
Medical Assistants: – Will receive screenings and give to Pediatrician. – MA may alert BHC if Pediatrician requires BHC. – Will enter screening into chart	

continued

Implementation Checklist Form Example, continued

PCP: – Will receive screening from MA. – Reviews screening and calls for BHC or asks MA to call BHC.	
BHC: – Reviews screening. – Consults with patient, consults with Pediatrician. – Informs MA when consultation with patient is complete. BHC completes note in EMR.	

EMR Workflow	
Task	Completion Date
EMR: Pediatrician and front desk can communicate with BHC through EMR BHC access to chart Yes BHC notes in the chart Yes Directly: notes created in chart By Scan: procedure developed	
Communication via EMR procedure developed Yes	
Use of EMR for BHC schedule? If no, alternative BHC to provide daily schedule for follow-ups at the front desk	
EMR lock created for protected information? Medical Director to create confidentiality levels with EMR Vendor	
Mental Health Emergency Protocol developed? – Developed – Presented to staff	7/20/16 7/31/16

continued

Implementation Checklist Form Example, continued

Communication Workflow	
Task	Completion Date
BHC “in clinic” communication procedure developed: In-clinic referrals to be given verbally. Follow up verbally and through EMR.	
BHC “out of clinic” communication procedure developed: – Out-of-clinic referral forms located in the mailbox area. – Private mailbox labeled for completed referrals. – Referrals can also be sent to BHC via EMR.	
Huddles: Communicate workflow with Physician:	

Educate Workflow	
Task	Completion Date
Introduce workflow to all staff: Formally introduced at staff meeting	6/12/16
Introduce PIHC to patients:	

Develop/Implement • Tier Two

Huddles

A huddle is a planned or unplanned conversation between the treatment team about the upcoming day or events that occur during the day where collaborative conversations need to take place between providers. Huddles allow for information sharing, updates, questions, plans and agreements between providers in relation to the patient's care. This increases the patient's experience even when they are not part of the huddle conversation. By being on the same page, providers can increase efficiency and effectiveness for themselves and their patients.

Providers attending a huddle can include doctors, BHCs, Specialty Mental Health Providers, MAs, nurses, administrators, and Psychiatrists. Huddles can take many different forms but the collaborative conversations must happen for the practice to operate at a fully integrated level:

- Daily, formal meetings, first thing in the morning
- Weekly, formal meetings, first thing in the morning
- Daily, informal, no set time and as needed in frequency
- Daily, informal, a set time

EXAMPLE

Huddles Generally Involve:

- Discussion of patients coming in for the day
- Agreement on patient needs
- Agreement on workflow and services provided



Develop/Implement • Tier Two

Protective Services

One of the many medical and behavioral health culture issues that comes up during integration activities is the proper use of Protective Services. It is important to ensure the medical clinic has up-to-date materials and resources related to Protective Services and that every person understands what the law requires them to do.

Many times all Protective Services decisions are sent to the Behavioral Health Consultant and while their role on the team is a wonderful resource due to their knowledge and experience, the BHC is not responsible for “policing” other professionals or calling Protective Services for other people.

TIPS

Keeping Your Team Up to Date

- Create a ‘Lunch and Learn’ program to provide updated information to all clinic employees.
- Ensure the medical clinic has the most recent and updated materials related to child abuse and neglect.
- Encourage the use of an outside trainer to complete a presentation on reporting child abuse and neglect that will allow for clarifying questions to be asked by the medical clinic personnel.
- Work with the medical practice’s management to set clear expectations and boundaries for each role on the treatment team.
- Encourage open communication with patients about Protective Services. Include the myths associated with Protective Services and role-model effective communication to help educate patients and medical providers.

Develop/Implement • Tier Two

Psychiatry

For medical practices that employ or contract out a Behavioral Health Consultant and a Specialty Mental Health Provider, it is imperative that the site have psychiatric support for the PCP and the Specialty Mental Health Provider. A system of checks and balances should be set up so that the patient is receiving the optimal level of safe and supportive services that optimize the practices' level of integration.

An example practice may have the following procedure:

- A patient is identified by the PCP as being in need of a psychotropic medication.
- The PCP refers to the BHC for consultation on the issue of medication and psychological services need.
- The BHC concurs and refers the patient to the in-house Psychiatrist for a full evaluation and if necessary, to the Specialty Mental Health Provider.
- The Psychiatrist completes a full evaluation and places the patient on psychotropic medication.
- The Psychiatrist and BHC or Specialty Mental Health Provider consult on the progress of the patient.
- Once stabilized on the psychotropic medication, the Psychiatrist refers the patient back to the PCP for ongoing prescribing of medications. The BHC or Specialty Mental Health Provider monitor the patient.
- If the patient requires a change in medication, the PCP refers the patient back to the Psychiatrist for care.

For a practice with only a BHC, having a Psychiatrist on staff would be beneficial, but not necessary for patient care. If a patient is identified as needing a psychiatric evaluation, the BHC would refer that patient out to their local Qualified Health Plan or Community Mental Health for services and would coordinate their results with the PCP by making sure that any medications prescribed would be entered into the patient chart.

IDEA

Tele-Psychiatry: Incorporating Technology-Based Communications

The use of tele-psychiatry or a psychiatric consultation model can be extremely beneficial for medical practices serving the mild to moderate pediatric population as well. In this example, a BHC would consult with the Psychiatrist via a tele-psychiatric evaluation and/or connect the Physician with a Psychiatrist for a phone consultation.



Develop/Implement • Tier Two

Integrated Treatment Plan

A fully integrated Tier Two practice will also provide to patients an integrated treatment plan, combining both the doctor's portion of the plan and the BHC's portion.

In order to accomplish this, the PCP and the BHC must have good collaborative communication and the BHC must have access to the medical record in order to add their portion of the plan. The BHC plan will not be a "surprise" to the PCP.

The integrated treatment plan is the end result of the referral from the PCP, the agreed upon plan between the BHC and the patient and the collaborative communication between the PCP and the BHC. The integrated treatment plan will be easily accessible in the electronic medical record for the members of the treatment team and will be used in tracking the patient's progress as well as huddles in the practice.

The actual treatment plan itself will vary based on the type of EMR each clinic uses in their practice. The challenge of the integrated treatment plan is how much collaborative communication exists between the Physician and the BHC and the requirement of a great deal of trust between them. Some general guidelines include:

- Integrated treatment plans will likely not be developed after the BHC visit. Most Physician plans will indicate a referral to the BHC and then the BHC will complete their own note in the patient's record.
- An integrated treatment plan is usually done if the patient will be receiving on-going Integrated Health Care services in their medical clinic.
- The integrated treatment plan requires some collaborative communication between the Physician and the BHC to discuss each aspect of the patient's needs and what each service to the patient will be.
- Both the BHC and the Physician will need to determine the course of documentation for changes to the plan and progress of the patient.

Develop/Implement • Tier Two

Integrated Health Care Clinic “Look”

An Integrated Health Care clinic has many aspects to it. It is important for each practice to have an “integrated look” to it from the moment a patient enters the doors to their exit after their appointment. Some examples include:

- **Waiting room health posters:** There are many posters available that are made specifically to go into a PCP waiting room. These posters have messages about health and wellness and include social/emotional, developmental and mental health as aspects of overall good health.
- **Waiting room informational boards:** Many integrated practice sites have informational boards that combine resources for physical and mental health.
- **Brochures:** Many integrated sites have brochures that offer information about their site and includes educational information about Integrated Health Care, health home structure and associated services.
- **Paperwork:** The integration of both physical and mental health questions should be included on all practice paperwork.
- **Logos:** Many Integrated Health Care sites will develop and produce documents with a logo that indicates that the practice is integrated and believes in both mental and physical health. Some sites will have their staff wear pins or name badges with a logo representing Integrated Health Care.
- **Exam Rooms:** While the patient is waiting for the doctor and/or BHC, the exam room is an efficient and effective location for a variety of posters, brochures and screenings to be available.
- **Many BHC staff choose to wear the white “consultant” length coat, which is similar to a doctor’s coat when providing services at a practice site. This provides the patient with a sense of credibility and shows that the BHC is part of the PCP’s care team.**



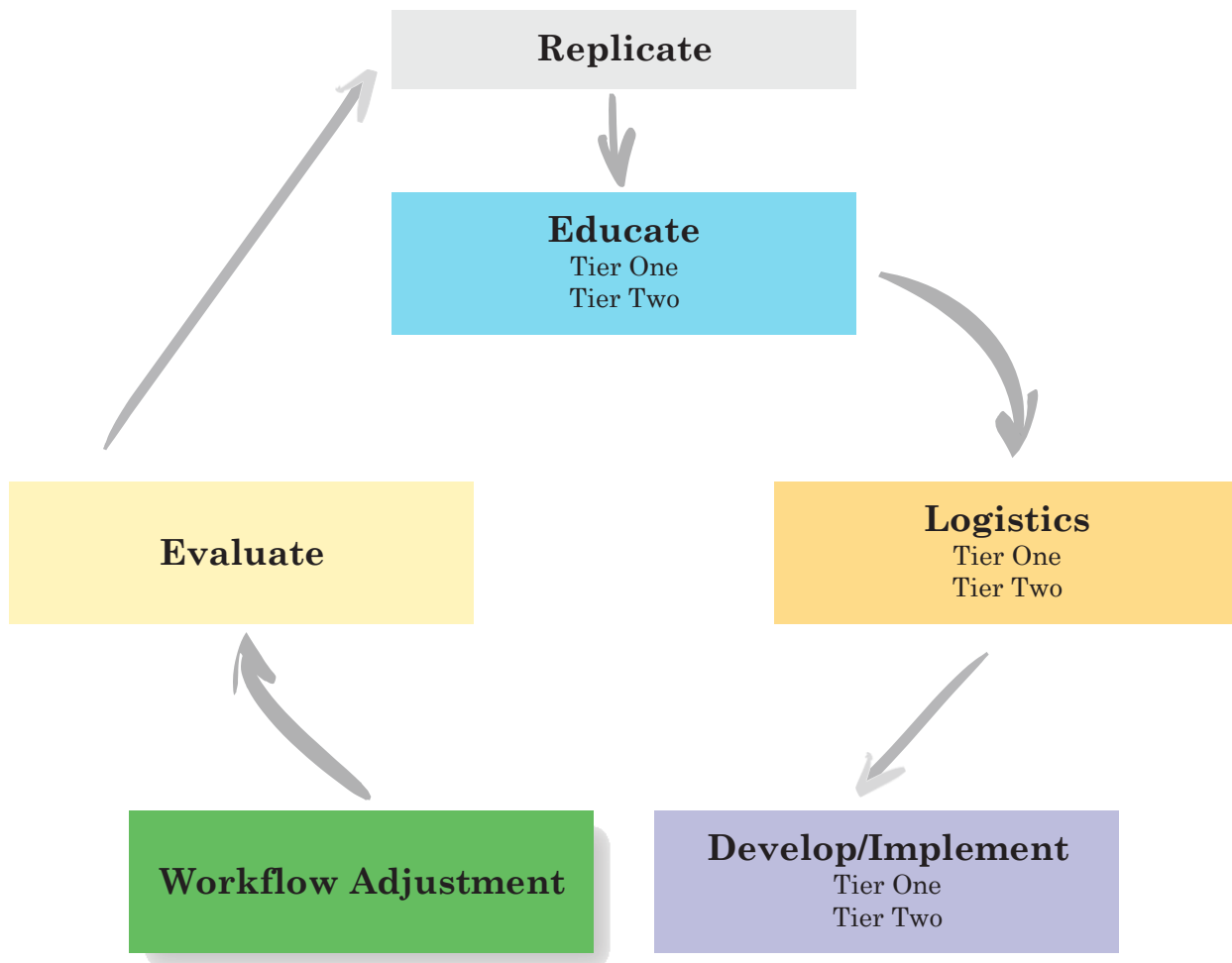
Integrated Health Care Clinic check-in and waiting room areas. Note the brochure rack and also the colorful wall boards that are used to introduce staff..



Photos courtesy Corner Health Center, Ypsilanti, MI

SECTION VII: Workflow Adjustment Module

Plan, Do, Adjust



Workflow Adjustment

Monitor All Newly Introduced Procedures

The goal of ‘Plan, Do, Adjust’ is to ensure that new procedures “take” and over time become the new norm. Without consistent monitoring, reminding and reinforcing, new habits will quickly be discarded for the more familiar old procedures.

By monitoring that new procedures are being followed, one can apply the constant but soft pressure necessary to assist staff in making new procedures their norm. Most people will adjust eventually, especially if the person in charge of implementation is sure to listen to their experience, ask for their suggestions, and include them in the overall process.

Clearly if there are staff members who are unable to adjust to the new procedures despite the best efforts to coach them through it, Human Resources and management should become involved to discuss the situation.

This can be the most time-consuming, yet important, part of the implementation model.

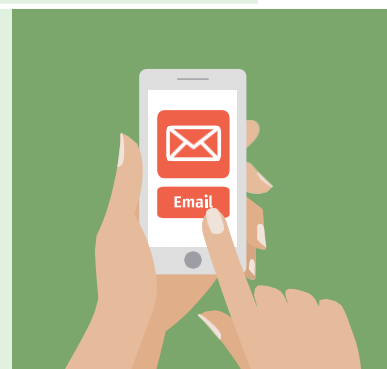
Keeping track of all changes can be confusing for all involved. It can be especially frustrating for some because this is the time to actually be doing all the things that were planned and created during the more ‘exciting’ time.

Monitoring is the longest part of the implementation and can take 4-6 months or longer, because new habits are being formed during this time. Being organized in the monitoring of all the “new” is highly recommended, as is making sure the expectations of all involved are being met.

STT

Keeping up the Enthusiasm

- Create and send weekly emails about how things are working in the newly integrated clinic
- Share publications about other implementations happening around the country
- Share news articles and studies about integration



*Workflow Adjustment***Receive Feedback from Staff and Patients**

At this point of the integration process, new procedures have been created, new steps have been introduced into the workflow and the BHC and/or Specialty Mental Health Provider should be receiving referrals.

- One of the best ways to receive constructive feedback is to simply ask for it. Many people will just assume if they don't receive feedback, things must be working properly. When integrating a site, whoever is in charge of the implementation model must be willing to follow up with everyone in the practice, in person and verbally, about their experience with the new model and workflow.
- Another helpful tool is to be at the site in person to observe the workflow in action. Being able to observe for yourself the patients' experience can be extremely useful in pin-pointing areas where workflow can be adjusted for the benefit of the patient and the practice staff.
- It can also be useful to create a short satisfaction survey for the patients to complete regarding their satisfaction with the new workflow and integrated services offered to them. It is important to acknowledge that this is meant to be a short, purposeful survey and should not be too cumbersome for the patients to complete. (Survey examples follow.)
- Ask for feedback on workflow during provider staff meetings as well and/or approach each division separately to determine how the new workflow is affecting each area individually. (Front desk, MAs, nurses, etc.)
- Share progress towards the goals verbally and visually. Make sure to discuss in meetings but also create some sort of visual to show "movement" to the staff. Any form of fun, colorful visual will work.

The most important aspect of this step is to understand and plan for the fact that some things that have been implemented will not be working and will need to be adjusted. The adjustments cannot be made unless the workflow is done, so just make sure to expect change and encourage flexibility throughout the process.

Patient Satisfaction Survey Form Example

We would like to know how you feel about the services we provide so we can make sure we are meeting your needs. Your response will help us to improve our services. There is no right or wrong answer. We are asking for your honest opinions. In no way will your responses affect your treatment here. Thank you for your time!

Who did you see today?

Doctor ☐

Nurse ☐

Behavioral Health Specialist ☐

INSTRUCTIONS: For statements 1-8, please circle the number that best describes your answer.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Does Not Apply
I am satisfied with the amount of time staff spent with me during my visit	5	4	3	2	1	0
My beliefs about health and well being were considered as part of the help (services) that I received	5	4	3	2	1	0
If I were referred outside of this clinic for mental health services for my child, I would follow through	5	4	3	2	1	0
Any concerns I may have had regarding my child's developmental / behavioral health were addressed	5	4	3	2	1	0
I am comfortable receiving behavioral health services for my child here at this clinic	5	4	3	2	1	0
I received the necessary resources needed to address issues I identified	5	4	3	2	1	0
I would prefer for my child to receive mental health services at the location where he/she receives medical care	5	4	3	2	1	0
I feel I/my child learned new skills	5	4	3	2	1	0

continued

Patient Satisfaction Survey, continued

About how long did you have to wait in the waiting room PAST the time of your scheduled Behavioral Health appointment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did NOT	Less than	5 to 15	16 to 30	31 minutes	more than
Have to wait	5 minutes	minutes	minutes	to 1 hour	1 hour

Was this your child's first visit to the clinic? ☐ YES ☐ NO

What is your child's gender? ☐ Female ☐ Male

What is your child's age? _____

What has helped you the most in dealing with your child's behavioral health concerns? _____

What suggestions do you have for improvement? _____

Teen Satisfaction Survey Form Example

TEENS: Please share your thoughts about our clinic.
This survey is confidential. Please don't write your name on it.

1. What is your: age _____ yrs gender _____

2. Do our providers ...	Definitely Yes	Mostly Yes	Mostly No	Definitely No
a. <u>listen carefully</u> to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. <u>explain things</u> in a way you can understand?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. ask about your physical <u>and</u> mental health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. <u>spend enough time</u> with you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. ask about risky behaviors common among teens?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. talk privately with you (without a parent in the room)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. <u>show respect</u> for what you have to say?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. <u>offer help</u> with all your questions or concerns?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. ask about your <u>emotional</u> health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Our providers are working with a behavioral health consultant who can talk with teens about a variety of issues. What topics might be helpful to you? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> emotions - being very sad or worried | <input type="checkbox"/> problems with schoolwork or organization |
| <input type="checkbox"/> anger/stress | <input type="checkbox"/> parent / family conflicts |
| <input type="checkbox"/> dealing with other kids | <input type="checkbox"/> nutrition/diet questions |
| <input type="checkbox"/> possible referral to a therapist | <input type="checkbox"/> other _____ |

4. When you have a visit at our clinic, do you...	Often	Sometimes	Rarely/Never
a. bring a list of questions you want to ask the provider?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. wish you had more time to talk with a provider?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. feel shy or nervous about asking some questions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. leave with some questions that were not answered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. feel like you didn't get as much help as you wanted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

continued

Teen Satisfaction Survey, continued

How much do you agree or disagree with the following statements about our clinic?				
	<i>Definitely Yes</i>	<i>Mostly Yes</i>	<i>Mostly No</i>	<i>Definitely No</i>
5. I know how to contact my health care provider if I have questions or concerns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I will tell a health care provider my concerns, even if they don't ask.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I talk to my health care provider about different ways to handle health problems or concerns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I am completely honest when talking to my health care provider about my health, personal life and activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I know what health services I can get without my parents knowing or saying it is OK.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The clinic gives me health information that I can use to better understand issues affecting my health.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The clinic is welcoming to teens (reception area, exam rooms, office staff).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I would recommend this clinic to other teens in my school or community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please include any other comments about getting health care at our clinic:

Thank you for completing this survey! Your responses will be kept confidential.

Parents Satisfaction Survey Form Example

PARENTS: Please share your thoughts about our clinic.

This survey is confidential. Please don't write your name on it.

1. What are your children's ages: _____ yrs

2. Do the providers at our clinic...	<i>Definitely Yes</i>	<i>Mostly Yes</i>	<i>Mostly No</i>	<i>Definitely No</i>
a. <u>listen carefully</u> to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. <u>explain things</u> in a way you can understand?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. ask about your child's <u>behavior or emotional</u> health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. <u>spend enough time</u> with you and your child?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. give <u>practical advice</u> about parenting your child?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. address <u>all</u> your questions or concerns?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Our providers are working with a behavioral health consultant who can talk with parents and children about a variety of behavior issues. What topics might be helpful to you or your child? (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> child feeling very sad or worried | <input type="checkbox"/> problems with schoolwork or organization |
| <input type="checkbox"/> temper tantrums / anger | <input type="checkbox"/> parent stress / family conflicts |
| <input type="checkbox"/> getting along with other children | <input type="checkbox"/> autism and/or developmental delay |
| <input type="checkbox"/> ADHD | <input type="checkbox"/> other _____ |

4. When you bring your child to a visit, do you...	<i>Often</i>	<i>Sometimes</i>	<i>Rarely/Never</i>
a. bring a list of questions you want to ask the doctor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. ask about your child's behavior or emotions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. wish you had more time to talk with a provider?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. leave with some questions that were not answered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. feel like you didn't get as much help as you wanted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please include any other comments about behavioral health care at our clinic:

Thank you for completing this survey. Please return it in the envelope provided.

Physician/PM Satisfaction Survey Form Example

Physicians/Practice Managers: Impact of an Onsite Behavioral Health Consultant

To help in the evaluation of the BHC placement at your facility, please complete this brief survey.

1. For what proportion of your primary care visits is there a behavioral health issue?

☐ Less than 10% ☐ 10-20% ☐ 20-30% ☐ 30-40% ☐ 40-50% ☐ More than 50%

With the onsite support of the BHC, rate your agreement with the following statements.	Strongly Agree	Agree	Disagree	Strongly Disagree
2. We are able to identify mild/moderate behavioral issues in my patients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I usually address mild behavioral issues during visits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I know where to refer children with mild/moderate behavioral issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. We are able to convince parents to follow through on referrals for mild/moderate behavioral issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. With the onsite support of the BHC, to what, extent do the following pose a barrier to addressing mild/moderate behavioral issues in your patients.	Major barrier	Minor barrier	Not a barrier
Parents don't bring up behavioral concerns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of time during visits to address behavioral concerns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My own limited knowledge about strategies to address behavioral issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parents don't see the importance of behavioral health.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parents don't want to go to "mental health" provider.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of community resources/referral sites for behavioral health.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limited staff time to coordinate referrals/follow-up with parents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. With the onsite support of the BHC, how well does your practice meet the behavioral health needs of:	Fully	Partially	Not at all
a. Young children (0-5 years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. School-age children (6-11 years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Adolescents (12 and older years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. To what extent did the BHC accomplish the following in your practice? Check all that apply.

<input type="checkbox"/> Update/identify new community resources	<input type="checkbox"/> Address/coordinate referrals for parenting issues
<input type="checkbox"/> Provide useful counseling for families	<input type="checkbox"/> Improve follow-up with referred families
<input type="checkbox"/> Keep providers informed of issues/progress	<input type="checkbox"/> Maintain patient flow

9. When the BHC leaves, how do you plan to maintain those accomplishments? Check all that apply.

<input type="checkbox"/> Advocate for facility resources to hire a BHC	<input type="checkbox"/> Use strategies from BHC in my patient interactions
<input type="checkbox"/> Assign some BHC tasks to other staff	<input type="checkbox"/> Use BHC's resource lists with patients

10. Other comments about the impact of the BHC project:

11. What is your: Age: _____ yrs Gender: _____ Yrs at this facility: _____

*Workflow Adjustment***Adjust Workflow Barriers**

The key to this action is to make the adjustments to workflow quickly, before new habits are formed for the practice staff. Once a barrier is identified, it is important to identify the source of the barrier, problem-solve solutions with identified staff and quickly decide on the alternative.

Processing the barrier quickly will help the staff to make more effective changes and will help to minimize any confusion the patients may have with the workflow adjustment. There may be pushback from staff and/or patients, however the goal is to create the most effective and efficient workflow possible, so keep in mind that temporary resistance is an acceptable price to pay for long-term successful implementation.

This process requires the person in charge of implementation to use effective listening skills to ensure each barrier is understood and excellent problem-solving skills to overcome the identified barriers. Some newly developed workflow processes cannot change, however the ability to communicate with staff the reason for the workflow, the impact on patient care and the overall benefit towards achieving the goals is crucial.

STILL**Monitor Workflow Implementation**

- Review all goals, objectives and identified tasks at least monthly and compare to workflow, procedures and expectations that are actually in place.
- Review all progress with staff by specifically asking for identification of any barriers.
- Watch newly developed workflows in action from check-in to check-out to get a visual look at the experience from the staff and patients' viewpoint.
- Track all barriers that are identified and resolutions for each.

Workflow Adjustment Module Form Example

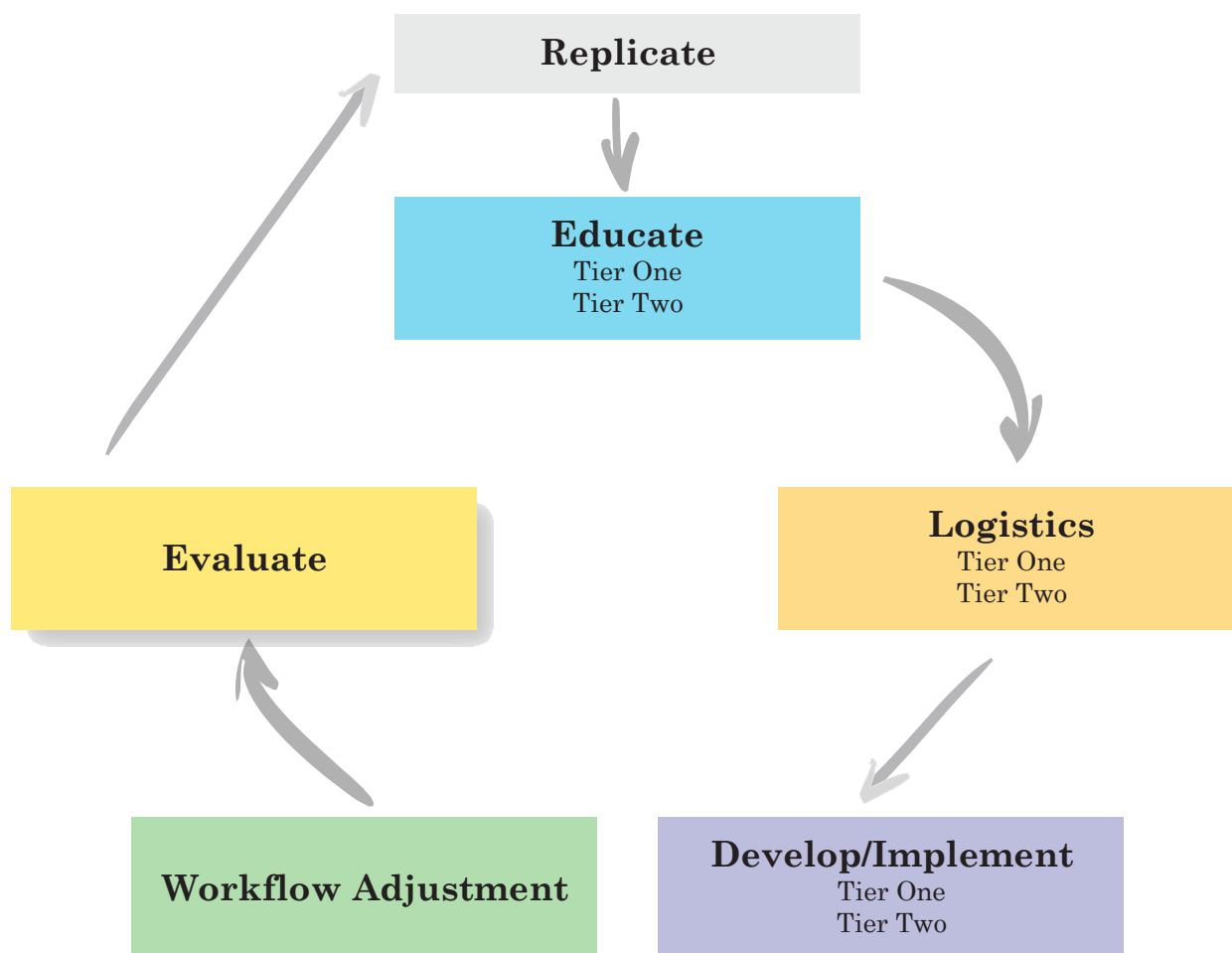
Receive Feedback	
Who, Comments, How Received?	Adjustments
Patients	
Medical Assistants	
Nurses	
Front Desk	
Physicians	
Clinic Stakeholders	
Other Office Staff	

Workflow Adjustment Module Form Example (Completed)

Receive Feedback	
Who, Comments, How Received?	Adjustments
Patients <ul style="list-style-type: none"> • Long wait time before able to see a provider • Concerns with co-pay for behavioral health services • A lot of information is covered during pt visits—including referrals for services 	<ul style="list-style-type: none"> • BHC can meet with pt/parent while they are waiting for the PCP—relevant information will then be relayed to PCP • BHC is able to meet with pts for a limited number of brief intervention sessions • Does not require a co-pay • BHC makes f/u phone calls to ensure completion of referrals/access to resources
Medical Assistants <ul style="list-style-type: none"> • Unsure of BHC's role and appropriate referrals/services 	<ul style="list-style-type: none"> • Increase visibility of BHC in clinic and coordinate with MAS to find BHC when pt is free to meet with BHC
Nurses <ul style="list-style-type: none"> • Helpful to have BHC's schedule readily available 	<ul style="list-style-type: none"> • BHC has a monthly calendar in a designated area indicating BHC's monthly schedule • BHC leaves memo on desk for meetings and other times BHC is out of office • BHC shares workspace with nurses and is able to collaborate with nurses on patient phone calls that are received
Front Desk <ul style="list-style-type: none"> • Concern that the routine screening tools create too much paperwork for patients/parents, as well as difficult for CSRs to remember which screening tools to give for each age group • No procedure in place when patients come to see BHC 	<ul style="list-style-type: none"> • Screening tools are stapled to the routine paperwork that is to be completed by each patient/parent/caregiver • BHC provides CSRs with a list of patients that are exclusively coming to see BHC; CSRs are able to call BHC at desk when a pt has arrived for BHC
Physicians <ul style="list-style-type: none"> • Increase presence/availability of BHC • More promotional/informational materials for pts/families • Interpretation and use of the screening tools • Best use of screening tools—many are incomplete or filled out by parents 	<ul style="list-style-type: none"> • BHC is now at the clinic full time with adjusted schedule for longer clinic days • BHC has provided business cards and rack cards to be distributed to pts/families • BHC has provided scoring guide for screening tools and advised intervention areas that must be immediately addressed by either PCP or BHC • BHC has explicitly indicated on copies of the screening tools that they are to be completed by either the parent or child/adolescent • Information re: appropriate referrals reviewed • Available resources and referrals reviewed
Clinic Stakeholders	
Other Office Staff <ul style="list-style-type: none"> • Difficult to reach BHC by phone 	<ul style="list-style-type: none"> • BHC was provided a direct line with voicemail in the clinic

SECTION VIII: Evaluate Module

Examine all procedures and workflow for effectiveness



Evaluate

Evaluations

There are two levels of evaluation that can be accomplished at this stage. The first is an overall evaluation of the implementation. This would be a multi-level comparison of the vision to the outcome, as well as a deeper dive into the objectives and tasks compared to the new procedures.

The second would be to create an evaluation of the Integrated Health Care business at your clinic that is ongoing. This evaluation would involve financial data, utilization data, patient outcomes data and improved Physician efficiencies.

Each clinic is different, so this evaluation will need to be developed internally. However, most evaluation efforts can be developed easily when considering the overall goals identified for the clinic, Physicians and patients.

General Integrated Health Care Outcomes

Possible outcome measurements.

Improve Quality	Reduce Costs	Improve Patient Experience
<ul style="list-style-type: none"> • Detection of Mental Health (MH) needs: <ul style="list-style-type: none"> – MH referrals – Completed MH referrals • BHC interventions for Mental Health and Physical Health diagnoses • BHC psycho-education • Coordination of care • Integrated Action Plans • BHC follow-up visits • Collaborative communication • Physician perception of improved patient care • Management of mild behavioral health needs in Primary Care 	<ul style="list-style-type: none"> • Physician time spent with patient on Physical Health needs only • Additional open spots due to time savings • Cost of serving patient in medical clinic vs. mental health visits • Efficient workflow • Patient needs met by BHC rather than Physician • Increased number of new patients due to Integrated Health Care services • Decreased no-show rate due to Integrated Health Care services 	<ul style="list-style-type: none"> • Satisfaction surveys <ul style="list-style-type: none"> – Pre-integration – Post-integration results • Satisfaction with: <ul style="list-style-type: none"> – BHC services – Increased time receiving professional services – Addressing health behaviors – Addressing behavioral health • Reports of increased: <ul style="list-style-type: none"> – Engagement in health care – Attendance – Motivation for self management – Medication adherence – Action plan adherence – Follow-through on Physician recommendations

Evaluate

Review the Goals and Objectives

Once the workflow adjustments have been made and the practice is running as an integrated clinic, the person in charge of implementation will want to review the identified goals and objectives of the integrated practice and evaluate whether those goals and objectives are being met. This can usually be done around 6 to 9 months into the implementation.

For a practice to embark on the journey of integration, they would have had set goals and objectives in mind for the outcomes of that integration of the practice. Those goals and objectives should be well known to the person who is in charge of the implementation from the beginning of the process and throughout the work that is being done.

The goals and objectives would be used as the guide for decisions that are being made for the practice and to help keep the staff on track. During the evaluation stage, a meeting with the stakeholders should be held in order to review the overall implementation of integrated care and compare the results with the established goals and objectives. If there are areas identified where the implementation did not reach the stated goals and objectives, a plan can be developed at this time to address those specific issues.

See examples of Quarterly and Final reports at the end of the Evaluate section.

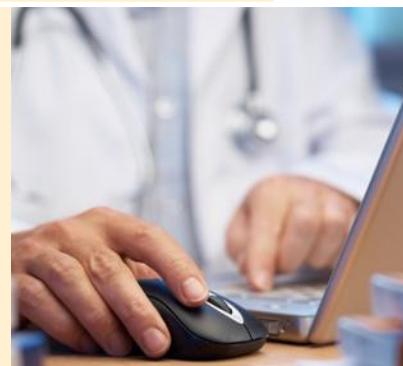
IDEA

Physician Survey is a Useful Evaluation Tool

Create a Physician survey to help determine pre- and post-implementation results of the use of the BHC. Create questions relating to the Physician's general attitude toward addressing:

- Behavioral health needs
- Capacity
- Knowledge of the mental health system
- Knowledge of resources
- Knowledge of mild to moderate issues, such as ADHD, depression, anxiety, etc.
- Comfort prescribing psychotropic medications

Also, understanding the patient volume can be helpful in terms of how much time during a typical appointment is spent on behavioral health needs and how much time is spent on social determinants of health needs such as food, clothing, shelter, etc.



Evaluate

Indicators of a Successful Implementation

In addition to overall outcomes for Integrated Health Care, there are some site-specific indicators that generally mean that the practice has been successfully integrated, including:

- Doctors are talking to patients about behavioral health services.
- Doctors are referring to Behavioral Health Consultants.
- Staff are asking questions about behavioral health.
- Staff are reminding patients to fill out screening forms.
- Screenings are being completed.
- Patients are asking for behavioral health services.
- Integrated workflow procedures are part of new staff trainings.
- Behavioral health services are viewed as a routine component of the practice and the patient experience.



*Evaluate***Generalized Outcomes for Integrated Health Care**

- In general, Integrated Health Care as a model seeks to achieve the following outcomes:
 - Improved access
 - Improved timeliness of service provision/intervention
 - Improved patient overall health
 - Improved patient satisfaction
 - Improved cost management/cost savings
 - Positive clinical outcomes
 - Improved coordination of services
 - Improved detection and early intervention of behavioral and physical health needs
- Determine if the tracking tools that were developed earlier in the process actually work to capture the intended data and information needed to determine progress toward goals and make adjustments based on this assessment.
- Create a midway report to include:
 - Pre-assessment
 - All tasks completed up to this point
 - Existing barriers and recommendations for addressing continued needs and resources/plans to address
 - Patient and staff satisfaction
 - All determined data points with explanation
 - Progress toward determined vision and goals
- Utilize Provider surveys (*Reference [Workflow Adjustment](#) section for examples*)

Quarterly Report Example

Office of Integrated Health Care
Behavioral Health Services Provider
City, State, Zip

Site: Pediatrics and Adolescent Medicine Clinic
Work Plan and Quarterly Report

BHC: Jane Smith, LLMSW
Start Date: 10/28/13
End Date: 1/17/14

Activity: To Educate all stakeholders about Pediatric Integrated Health Care

Presentations to Executive Clinic Staff: **Completed October 28, 2013**
Presentations to Medical Staff: **Completed October 28, 2013**
Presentations to All Staff: **Completed November 1, 2013.**
Provided copies of brochures for youth, patients & parents: **Completed November 1, 2013.**
Brochures continue to be made available in the lobby & within the clinic for distribution to staff, patients & parents as needed.
Provided informational boards/posters for display: **Completed January 10, 2014**

Activity: Identify all Logistics for each clinic

Develop MOU: **Completed October 28, 2013**
Determine space: **Completed November 1, 2013**
Determine schedule: **Completed October 28, 2013**; revised to include 16 hours per week vs 8 hours per week, **November 15, 2013**
Determine EMR access: **Completed November 1, 2013**
Assess current workflow procedures & patient demographics: **Completed November 1, 2013 through December 16, 2013**
Determine data collection: **Completed October 2013**

Develop & Implement: Integrated Health Care Procedures

Screenings: Determined screening tools workflow currently utilized by clinic, **Completed November 1, 2013.**
Obtained a list of screenings used within the clinic & timelines for each, **Completed January 7, 2014.**
BHC provided information to clinic staff regarding follow-ups/appointment setting & requirements, **Completed November 1, 2013.**
Provided PA with information/education on screening tools utilized including PSC & PSC-Y, **Completed November 15, 2013.**
Developed protocol for screening distribution. PCP has agreed to some modifications to screening process. New screening tools to include ASQ SE (2 y/o, 3 y/o & 5 y/o), PSC, PSC-Y & RAAPS), **Completed January 22, 2014.**
EMR & billing: BHC Notes in the chart, **Completed November 1, 2013**; Notes are added as an addendum to the Patient's chart. Physicians review note, sign off on note, note becomes a part of the electronic medical record.
Established communication via EMR. **Completed November 8, 2013:** BHC, PCP's & FD established a procedure for use of EMR to schedule BHC appointments. Appointments with the BHC are scheduled directly with the front desk staff & viewable by BHC. BHC provided FD staff & PCP with BHC contact information for emergencies.

Established workflow from patient entry to exit, **Completed November 1, 2013; Modified November 22, 2013**, modified workflow to include 15 minute consult with PCP prior to Patient meeting with BHC.

Introduce workflow to staff, **Completed November 1, 2013**. Referrals to BHC come directly from PCPs or PA. Appointments for BHC are scheduled with FD staff. When Patient arrives for appointment, they meet first with the PCP or PA for brief consult. Then, the BHC will briefly consult with the PCP or PA prior to consulting with the Patient. The BHC introduces herself to Pt & Family, obtains written authorization & consent & then completes an assessment/screening with Patient After a plan is established & the BHC provides the appropriate education &/or resources, the BHC notes if a follow up is needed on face sheet. BHC carries the clipboard with the face sheet to the front desk for check-out/scheduling. Patient/family checks out. BHC follows up with the PCP or PA to discuss the plan & any recommendations. BHC makes a notation to the data entry log noting Pt's age, screening tool used, assessment used, screening/assessment scores, referrals made, diagnosis code & a brief note. BHC creates a Behavioral Health Note in the EMR. PCP or PA reviews the Behavioral Health Note & signs. The Behavioral Health Note becomes part of the patient's record.

Introduce workflow to patients, Patients will complete/experience integrated health **Completed November 1, 2013 - Present**.

Clinics will be conducting developmental & behavioral health screenings, **Completed 1/22, 2014**.

BHC will be utilized by the PCP, **Completed November 1, 2013-Present**

Youth Advocate visit to Pediatric Clinic, completion of Adolescent Friendly Environment **Self-Evaluation Tool, Completed February 14, 2014**

Track workflow, **Completed November 1, 2013-Present**

Workflow Adjustment: Adjust workflow as needed & identified by staff and/or patients

- ☐ Receive feedback from staff using a meeting format and/or questionnaires, Provided PCP with information on sustainability of IHC & reviewed referral process & workflow. Written satisfaction questionnaires for Staff & Patients/Parents have been created & are distributed daily. **In Progress**
- ☐ Receive feedback from patients using questionnaires. Written satisfaction questionnaires for Staff & Patients/Parents have been created by The Office of Integrated Health Care Staff & are distributed within the clinic daily. **In Progress**
- ☐ Monitor procedures utilizing workflow checklist, **In Progress**
- ☐ Adjust workflow barriers identified, **In Progress**

Evaluate & Monitor: Evaluate & monitor new IHC policies, procedures & workflow

- ☐ Review initial goals & objectives with executive management
- ☐ Determine & review outcomes
- ☐ Analyze financial data
- ☐ Analyze utilization data
- ☐ Create Implementation final review & recommendation report

Replicate

- ☐ Determine needs for continued integration staff
- ☐ Assist clinic with staffing and/or contracting out staff to continue integration

Final Report Example

Office of Integrated Health Care
Behavioral Health Services Provider
City, State, Zip

Site: Pediatrics and Adolescent Medicine Clinic
Final Review & Recommendation Report

BHC: Jane Smith, LLMSW

MOU Completed: 07/31/14

MDCH

Provider

Survey

Completed:

09/03/14

Start Date: 09/04/14

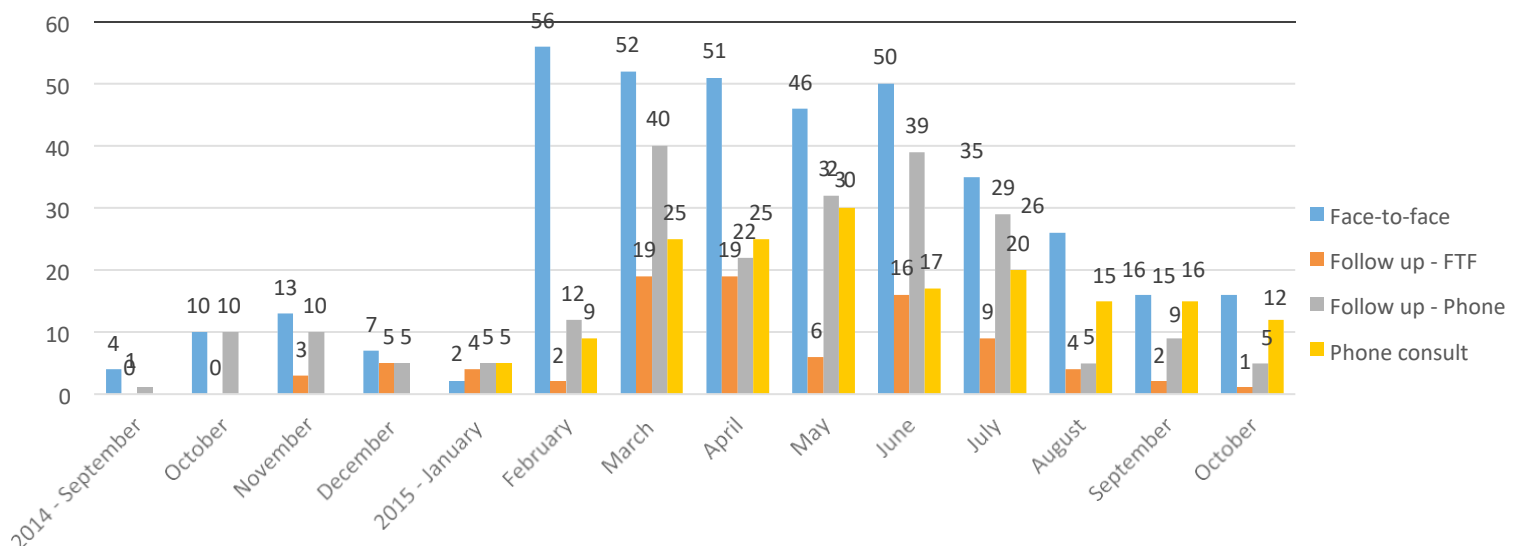
End Date: 10/30/15

Totals:

Total # of new patients seen by BHC:	384
Total # of new adolescents age 12-18:	139
Total number of Functional Assessments provided by BHC:	124
Total # of patients referred to outside services:	154
Total # of completed referrals:	*60 (over 10 referrals were made in the last few weeks and will continue to be monitored)
Total # of face-to-face follow-ups:	120
Total # of phone follow-ups:	229
Patient demographics:	14,457 patients 5,752 Medicaid patients 5,025 commercial insurance 49.5% adolescent patients (age 10 to 21) Average 725 patient visits per week

BHC Productivity

Behavioral Health Consultant Activities



BHC Completed Tasks:Logistics

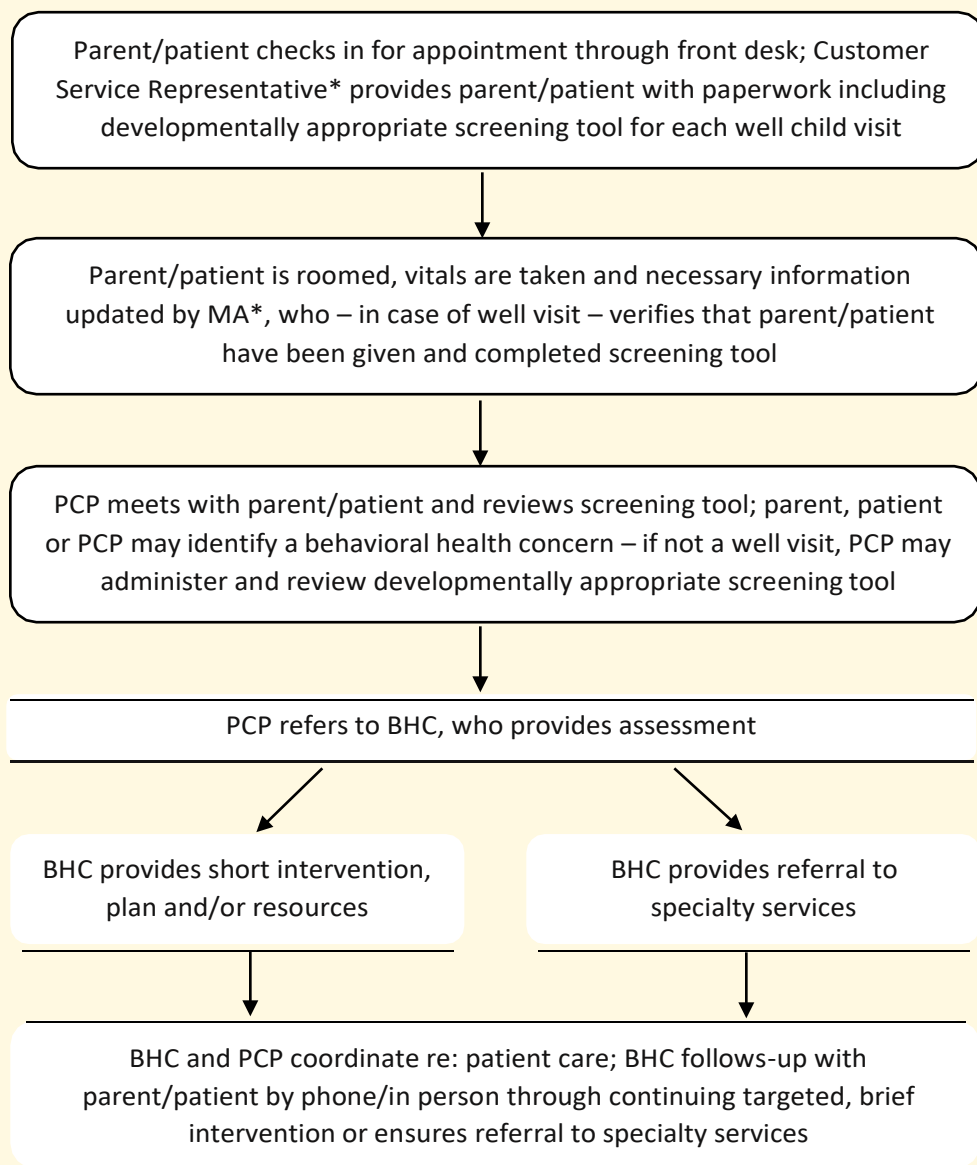
Provided PCPs/staff with information/education/presentation on Integrated Health Care
 Completed stakeholder presentation and management presentation on Integrated Health Care
 Established BHC schedule, use of space and contact (direct phone line)
 Reviewed existing workflow for screenings and provided information/education on additional screening/assessment tools that can be utilized
 Established appropriate workflow to staff and patients
 Utilized data tracking methods (log) for all referrals, follow-ups, screenings and assessments
 Established, provided, and collected copies of consent forms, screenings and assessment tools, baseline data collection sheet, adolescent screenings and clinician/provider surveys for Year 2 and start of Year 3
 Established process/procedure for referrals and patients in need of behavioral health services
 Received access/training in EMR; documentation for all behavioral health consults entered in EMR
 Established Mental Health Emergency protocol for the clinic when BHC is out of office_

Information Sharing

Introduced brochures/pamphlets on IHC; provided posters for every exam room and waiting area; provided clinic with educational pamphlets on a wide variety of behavioral health topics
 Created and distributed rack cards identifying BHC and available services
 Provided information/education on Community Mental Health services, including criteria and referral process
 Participated and presented in staff & provider meetings on topics including referral process to BHC and outside resources; use and interpretation of screening tools; adolescent suicide assessment, intervention, and safety planning
 Provided new, incoming patients/families with information/education on IHC
 Provided information/education on IHC to new, incoming medical students
 Provided staff and providers with copies of baseline data and survey data as received by the University of Michigan CHEAR Evaluation Team
 Met with providers, staff and administration to review initial goals & objectives; reviewed outcomes/data from collected surveys; discussed data and sustainability options; reviewed all satisfaction survey reports as provided by University of Michigan CHEAR Evaluation Team

Integrated Health Care Procedures

Established existing screening tools; provided information/education/training on use of PSC, Y-PSC, RAAPS, and modified PHQ-9
 Developed proper protocol for screenings and use of screening tools previously provided
 Conducted youth advocate assessment utilizing University of Michigan Youth Friendly Clinic Evaluation tool; copy of evaluation and written recommendations/suggestions are included in final report
 Distributed and collected copies of patient, parent and staff satisfaction surveys; results of satisfaction surveys are included in final report
 Discussed sustainability plan with administration/relevant stakeholders

Integrated Health Care Workflow

*CSRs, MAs, and clinic nurses may also refer to BHC when parent/patient identify behavioral health concerns.

- BHC documents every face-to-face and phone encounter with parent/patient in EPIC and messages PCP through EPIC – and relays verbally – updates to patient progress/care

University of Michigan Adolescent Friendly Environment Clinic Self-Evaluation Tool Recommendations

○ Access to Care

- Offer affordable care to adolescent through free or sliding scale services
- Currently, limited support for transportation; bus stop is across Ford Road and the clinic is not easily accessible by bike – no bike racks

○ Adolescent Appropriate Environment

- Have provider names with pictures and credentials clearly displayed in waiting area
- Provide adolescent-oriented materials in waiting area/exam room including magazines, health education posters/pamphlets (e.g. suicide crisis hotline)
 - There are many resources for teen friendly materials including the American Academy of Pediatrics and Journeyworks Publishing
 - Examples of recommended brochures from Journeyworks Publishing include:
 - 50 Things You Should Know About Stress
 - How to Express Anger
 - Anxiety and Depression 101
 - What Does It Mean to Be Lesbian, Gay, Bisexual or Transgender?
 - Pricing: 50 for \$0.44, 100 for \$0.43, 200 for \$0.41, etc.

○ Confidentiality

- Create and clearly display policy on adolescent confidentiality
- Increase visual/auditory privacy for the registration process
- Explore billing procedure/codes that will facilitate adolescents confidential services
- Routinely obtain private call/e-mail for appointment reminders and test results
- Ensure that provider is spending time alone with patients to discuss confidential subjects

○ Best Practices and Standards of Care:

- Create LGBTQ-friendly intake and demographics form (male, female, transgender, other)
- Improve continuity of care by ensuring adolescent sees same provider
- Continue use of risk assessment screening tool (RAAPS)
 - Obtain and utilize electronic version of RAAPS screening tool to improve efficiency and time management as well as measure patient population needs and outcomes
- Develop procedure to prepare adolescents for the transitions from health services designed for youth the adult health services

○ Reproductive and Sexual Health Clinical Practices:

- Offer wide a variety of STI testing methods (e.g. oral mucosal HIV testing, vaginal self-swab for chlamydia testing)
- Screen all sexually active adolescents for STIs – following national guidelines
- Consistently screen sexually active youth for safety around sexual activity (i.e. discussing if sex was consensual, use of drugs and/or alcohol before having sex, if condoms were used, and if they feel safe in their relationship)
- Provide free condoms (male and female), dental dams, and menstrual supplies in private areas (i.e. all bathrooms)

- Staff Attitude and Respectful Treatment:
 - Offer training opportunities for providers on how to discuss sensitive issues with adolescents, such as sexual health, substance use, interpersonal violence and mental health as well as treating adolescents respectfully with a non-judgmental approach
 - Accommodate the adolescent's preferences about attending part or all of the appointment with the support of a friend or partner
- Adolescent Involvement
 - Develop method to routinely gather feedback from adolescent patients and use feedback to improve clinic access, quality and services
- Parent Engagement
 - Offer information and workshops to help parents talk with adolescents about sexuality and other sensitive health issues
- Outreach and Marketing
 - Provide youth with an opportunity to be leaders in outreach activities
 - Use social media to communicate with adolescents and promote services
 - Include adolescent resources on clinic website

Clinic Strengths

Providers and clinic staff are a welcoming and cohesive team – very supportive of BHC
 Identified integrated health care champions among PCPs and clinic staff

Consistent referrals with regard to behavioral health concerns

- ☐ Normative child/adolescent development
- ☐ Parent behavior management (e.g. effective discipline, parenting skills, etc.)
- ☐ Concern with thoughts, emotions and function (e.g. difficulty with emotion regulation/coping skills)
- ☐ Anxiety, depression, ADHD, grief
- ☐ Functional assessment to determine level of care & coordination of care
- ☐ Referral for additional services
- ☐ Crisis management

Areas for Growth

- Continued revision of workflow to improve use of screening tools and referrals to BHC
 - Providers were varied in use of screening tools and referrals while parent/patient were present in the clinic
 - It is best for BHC to make immediate face-to-face contact with parent/patient rather than follow-up phone calls
- Re-education of providers/staff re: appropriate referrals to BHC
 - Types of referrals that were given to BHC improved over time; however, continuing education is necessary given the unique needs and situations of parents/patients
- Limited number of referrals related to health behaviors such as medication adherence, obesity/nutrition, risk behaviors, reproductive health, etc.
- Clinic/community may benefit from interactive educational groups that address common behavioral health concerns expressed by parents and patients

Recommendations

- Consistent use of screenings at all scheduled well child visits (ASQ, M-CHAT, PSC, PHQ-9 and RAAPS) to flag developmental concerns and facilitate appropriate referrals to BHC
- The creation of marketing materials and/or website inclusion noting the availability of behavioral health services with links to a variety of resources on behavioral health topics such as ADHD, anxiety, etc.
- Continuing the integrated health care model through collaboration with existing resource for Behavioral Health Services
 - Create a foundation for collaborative care through co-location of Pediatrics and Adolescent Medicine Clinic and Behavioral Health Services Provider.
 - Integrate a provider from Behavioral Health Services full time to act as BHC to the primary care team
 - As demonstrated in the productivity chart, BHC referrals significantly increased once BHC was available full time – there were fewer referrals when BHC was functioning part-time
 - Based on clinic flow, BHC may also be able to see/bill patients for therapy when not providing services as a consultant (assessment, brief intervention, etc.)
 - Patients/parents may be receptive to behavioral health services provided directly out of primary care office due to stigma associated with mental health
 - New workflow and logistics (space) will need to be determined should BHC assume dual role
 - BHC needs to be someone who is outgoing, proactive, flexible, has strong communication skills and patience
 - BHC continues to act as a guide to appropriate services, advocate for integrated care and is an integral member of collaborative care team
- Clinic would benefit from creating dedicated case management position to provide support with advocacy, resource management and service facilitation
 - In absence of case manager, BHC assumed some tasks with managing resources and addressing concerns with basic needs – dedicated case manager would have expertise to manage concerns within that domain and enable BHC to work more efficiently within specified role
 - Case manager and BHC may coordinate care to ensure that patients/parents basics needs are being address in order to facilitate optimal integrated health care

Submitted by: Jane Smith, LLMSW
 Behavioral Health Consultant
 November 18, 2015

SECTION IX: Conclusion

Positive Outcomes of PIHC

To quote Warren Buffett, “In a chronically leaking boat, energy devoted to changing vessels is more productive than energy devoted to patching leaks.”

Pediatric Integration is an important change in the overall health service delivery to children. It is not a stretch to say that children with undetected and untreated health needs will become adults with more extensive and expensive health needs. By embedding a Behavioral Health Consultant onto the Primary Care team, more children’s behavioral health needs will be identified and more children will receive intervention for behavioral and physical health needs.

Detection and early intervention will improve the overall health outcomes for children as they mature, thus impacting the overall health and wellness of our communities. The current system of silos in mental health and physical health is a social failure on an individual, community and overall population level with dire consequences on each of those levels.

Even though Integrated Health Care is not “mandated” by anything other than common sense as of today, it will likely be an issue of competition in the future. When patients are well informed of all the benefits to themselves and their families from an integrated practice and they have a choice between a clinic that is integrated and one that is not, which one will they choose?



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- National Center for Quality Assurance. 1100 13th St., NW Suite 1000 Washington, D.C. 20005.
- Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Integrated Health Solutions. www.samhsa.gov/cihs.



starfishfamilyservices.org

Pediatric Integrated Health Care Implementation Model

One Location, One Visit

Developed by Michelle Duprey, LMSW

Integrated Health Care Director, Starfish Family Services

Stony Brook Children's Hospital

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Telligen

See attachment for response.



Telligen.pdf

Thank you for this opportunity to provide a response to the Request for Information on Pediatric Alternative Payment Model Concepts. Telligen is a nationally known health care organization with over 30 years of experience in the clinical quality measure arena. We are a leader in the collection, warehousing, and analysis of health care data across multiple industry segments. For our government clients, we have developed complex hierarchical models to fairly compare providers relative to the quality of care they provide to members. The results of such comparative analysis can be considered for pay-for-performance models as well as incentives for low performing providers. Our analytic team and specialized program evaluator staff has experience in evaluating programs (national and local) and implementing value-based purchasing programs. In addition, our analytic team has created meaningful provider-level reports, developed and formally maintained measures, generated measure specifications, and submitted measures to National Quality Forum (NQF) for endorsement.

Since 2012, Telligen has worked with CMMI to support the development and testing of innovative health care payment and service delivery models. Our work with CMMI includes:

- Comprehensive Primary Care Initiative Design & Operations
- Comprehensive Primary Care Plus Implementation
- Oncology Care Model Implementation and Monitoring
- Accountable Care Organization Program and Analysis
- Consolidated Innovation Center Development and IT Management
- Practice Transformation Network
- Transforming Clinical Practice Initiative

Telligen is currently the vendor for the Massachusetts Medicaid Pay for Performance Program for acute care hospitals where our responsibilities include being an active partner in providing recommendations for selecting and maintaining adult and pediatric measures.

We would like to respond to specific questions within our domain of experience, found in SECTION II: OPERATION OF INTEGRATED SERVICE MODEL and SECTION IV: PEDIATRIC MEASURES.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

- 3. *What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?***

Alternative Payment Models for Pediatric Patients will benefit greatly from Medicaid Management Information Systems (MMIS) that support interoperable information exchange and the integration of clinical services, technical services, and business services. State MMIS systems should continue to work toward a Service Oriented Architecture (SOA) based on standardized XML-messaging, as described in the Medicare Information Technology Architecture (MITA) White Paper found at <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/downloads/mitasoa.pdf>. More effective use of a SOA would allow an Enterprise Service Bus interface that integrates the flow of information across the Medicaid Enterprise and participating stakeholders to support population health management strategies; the integration and coordination of behavioral health services, human services, and clinical services; and the delivery of high value care to pediatric patients.

For this to work effectively, national data standards will be required for management systems to exchange information with the MMIS (electronic health records, health information exchanges, human services systems). The adoption of these national standards would ultimately allow all relevant stake holders access to clinical data, resulting in a major opportunity to analyze outcomes, improve clinical decision-making, improve healthcare outcomes, and support more efficient care delivery.

SECTION IV: PEDIATRIC MEASURES.

- 1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.***

The current Pediatric Core Measures address a variety of areas, including primary care access and preventive care, maternal and perinatal health, care of acute and chronic conditions, behavioral health care, and dental and oral health services. With the transition to alternative payment models, measures that include coordination of care among a beneficiary's caregivers become important.

We agree with the MAP recommendation for the addition of NQF#0480 (PC-05, Measure Steward TJC) Exclusive Breast Feeding during the birth hospitalization. This would strengthen the maternal and perinatal core measures in several ways. Exclusive breast feeding has well known short and long term health benefits to both mother and baby. It is applicable to the large majority of healthy infants born ≥ 37 weeks, a population currently targeted in the core measures with only one measure regarding audiological evaluation. Successful breastfeeding may rely upon the coordination of the physician, nursing, and lactation support staff. It is important to the Medicaid/SHIP population, and collection is feasible, as evidenced by its collection by TJC and Massachusetts Medicaid.

The Care Coordination Measure Set, NQF#0646, 0647, 0648 (Measure Steward AMA-PCPI) addresses Reconciled Medication List Received by Discharge Patient, Transition Record Received by Discharge Patient, and Timely Transmission of the Transition Record to the next provider of care. The importance of care coordination is underscored in alternative payment models such as ACOs, and is especially important for patients with chronic conditions. A successful transition can eliminate duplication of services, ensure that needed services and medications are obtained and appropriate follow up performed. This leads to better short and longer term outcomes (i.e. readmissions and ED visits). This measure would apply to all beneficiaries, is important, and collection is feasible, as evidenced by its collection by Massachusetts Medicaid since Rate Year 2013.

The addition of NQF #2797 Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia (Q_METRIC-University of Michigan) would target a chronic condition which results in complex health needs and high utilization of services. This is a process measure that looks at screening of children with sickle cell anemia to identify those at high risk of stroke. This is a high-risk population and ultrasound screening is currently the only way to identify this risk. This measure affects both long and short term health outcomes in terms of being able to prevent an acute event and reduce long term consequences from stroke.

In providing person and family centered care, social determinants of health should also be addressed. In order to optimize a child's growth and development, issues of food security, stable housing and access to care and services need to be addressed. Measures that address these social determinants of health become more important in medical home and ACO health delivery models.

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long term outcomes.

The PC-05 Exclusive Breast Feeding Measure is part of the TJC perinatal measure set. It is also collected at a hospital level for the Massachusetts Medicaid Pay for Performance program starting in Rate Year 2016. It is a chart based measure and the data elements and specifications are published by TJC. Data is abstracted from the charts and submitted in XML format through a secure web portal.

The Care Coordination Measures are collected by Massachusetts Medicaid. For Massachusetts Medicaid, it is collected at a hospital level for all beneficiaries age two and older, and the specifications are published by Massachusetts Medicaid. Modifications to data elements include limiting the requirement for a copy of the Advance Care Plan to those patients 18 years and older, and extending the timeframe for the transmission of the transition record from one

to two days. Data is abstracted from discharge documentation or the EMR Summary of Visit document and submitted in XML format through a secure web portal.

Thank you for this opportunity to provide our comments. Telligen is passionate about transforming American healthcare, and for four decades has been at the forefront of national initiatives changing the way healthcare is paid for and delivered. Clients rely on our clinical and technical expertise to help them assess, measure and improve performance under changing healthcare regulations. If you have any questions, please contact Cindy Sacco, MD, FAAP at Telligen,

Tenet Healthcare

See attachment.



Tenet
Healthcare.pdf



April 7, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Dear Mr. Billioux:

Thank you for the opportunity to comment on the Pediatric Care Improvement Request for Information (RFI). As active participants in many of the Centers for Medicare & Medicaid Services (CMS) demonstration models, including the Medicare Shared Savings Program (MSSP ACO), Next Generation ACO, Pioneer ACO, Transforming Clinical Practice Improvement Practice Transformation Network (TCPI PTN), Bundled Payment for Care Improvement Initiative (BPCI) and Comprehensive Care for Joint Replacement (CJR), we appreciate the steps CMS has taken to develop and advance new models of payment which create stronger incentives to improve the health of children and youth covered by Medicaid and CHIP. We offer our comments, perspective, and experience in CMS value-based care programs in anticipation that CMS will create a value-based alternative payment model (APM) opportunity for the pediatric provider community.

Across our national portfolio, Tenet Healthcare leads the way in partnering with Medicare to explore new payment models. In 2017, our organization participates in two Next Generation ACOs and eight MSSP ACOs. Today our ACOs coordinate care for nearly 200,000 Medicare Fee-For-Service beneficiaries and have produced over \$43 million in savings to CMS since the inception of the ACO program. In addition, our participation in value-based programs is not limited to the adult providers. Over 400 of our pediatric aligned providers are preparing to participate in CMS value-based programs through the PTN clinical transformation model.

We first offer several overarching comments on the agency's approach to this RFI and then offer recommendations to improve specific design elements and provide our unique perspective on pediatric integrated outcomes. From a broad perspective, we advise CMS to weight their program development decisions to reflect the following suggestions and priorities:

1. We support CMS' vision to create an ACO opportunity specific for pediatric providers and children covered by Medicaid and CHIP.
2. A new Pediatric ACO Model should allow participating providers to qualify for Advanced Alternative Payment Model status under CMS' new MACRA Quality Payment Program.
3. We encourage the agency to adopt the adult CMS ACO program mechanisms that have led to improved quality and cost outcomes.

4. In order for ACOs to effectively deliver high quality care coordination, CMS must provide participating Pediatric ACOs with historical and ongoing claims data.
5. ACOs and integrated service programs should have greater flexibility, with aligned incentives, to partner and deliver more effective collaborative care.

Integrated Pediatric Service Model Payment and Incentive Arrangements

As an operator of multiple ACOs, including clinically integrated networks with robust pediatric providers in Detroit, El Paso, and San Antonio, we know the importance of the infrastructure required to appropriately manage transitions of care, establish relationships with post-acute care providers and build communication channels and incentive structures to support physicians who care for patients during acute and chronic episodes of care.

- We recommend that CMS construct Alternative Payment Model ACOs in which upfront funds are available for ACOs and community partners to develop collaborative and holistic care coordination approaches.
- Given the upfront capital requirements, we believe that CMS must ensure that programmatic requirements and financial incentives are aligned. We recommend CMS introduce a non-risk shared savings methodology with a 25/75 shared savings split. It is unrealistic to expect long-term sustainability without an appropriate shared savings distribution.
- We encourage CMS to adopt high-value CMS adult ACO program rule specifications. This includes:
 - Prospective patient alignment
 - Self-selection of minimum savings/minimum loss rates
 - Availability of applicable waivers offered in CMS adult ACOs
 - Benefit enhancements including care coordination rewards
 - Alternative payment options, including: FFS + monthly infrastructure payments, population-based payments and all-inclusive population-based payments
 - Access to historical and ongoing attributed patient claims information

Operation of Integrated Service Model

We would like to use to this opportunity to directly answer CMS' question regarding identifying potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs. In addition, we outline where streamlining of eligibility and/or alignment of program requirements is achieved among Medicaid/CHIP and health-related social service programs.

Integrating and coordinating care for children with complex medical needs offers great potential for improving access and quality outcomes while lowering costs. Children with medical complexity, those with multiple and varied diagnoses, are not only cared for by pediatricians but also continuously see multiple pediatric medical and surgical specialists and receive other services such as occupational therapy, physical therapy, speech therapy, etc., through early adulthood. These patients range from those with congenital heart disease and childhood cancers to those with cerebral palsy, cystic fibrosis, mental health conditions, sickle cell disease or those who have experienced traumatic injury, among other conditions. Children with these types of conditions require access to care in pediatric centers of excellence and also require additional support services both within and outside the health care system.

These services may include expensive medication, private duty home care nursing, high-tech durable medical equipment, behavioral health care, transportation and school supports.

According to the Children's Hospital Association, about two thirds (2 million children or 6 percent of all children on Medicaid) of all children with medical complexity are covered by Medicaid and represent about 40 percent of the costs.ⁱ Children with complex medical needs often travel regionally and across the state for care, sometimes seeking care outside the state for specialized services. While the current health care system has the expertise to care for these patients, the processes to streamline care for them, which includes effective care and treatment coordination for their multiple needs, is complex and inefficient. Families of children with medical complexity and their children's pediatrician have to maneuver a vast array of services, specialists and coverage parameters that often limits access, duplicates services, and results in multiple appointments and repeated travel for care which can drive up costs and often cause strain and stress for families.

Our Detroit pediatric network, Children's Hospital of Michigan Premier Network (CHMPN), has developed and is implementing a model to improve care coordination for children with medical complexity that provides members with access to care coordination services while optimizing access to treatment and streamlining processes for patients, families, and caregivers. CHMPN members use the Exeter Pediatric Associates "Homes" Complexity Index to identify patients within their practices for medical complexity. Once identified, patients with medical complexity are referred to CHMPN's Care Coordination Program (CCP) or "hub" for support in managing all the services a child may require for their ongoing health care.

Services and expertise included within the CCP encompass social work, registered nursing, community navigators, psychiatry, and program administration.

We have taken this opportunity to specifically outline where streamlining of eligibility and/or alignment of program requirements is achieved among Medicaid/CHIP and health-related social service programs. Moreover, we are addressing CMS questions on the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

Tenet's most robust pediatric programs have several methods to support patients and families with eligibility and enrollment in Medicaid/CHIP. The hospital's Medicaid Application Team (MECS) supports patients that are already within our facility or scheduled for outpatient services within the hospital (surgery, diagnostic testing, etc.). Patients seeking emergency care are treated, and if identified as uninsured, will receive information while in our Emergency Department from a patient management clerical associate (PMCA) about the availability of the Medicaid program. Patients scheduled for hospital outpatient services are pre-registered and will receive information from a PMCA in advance of service about the Medicaid program when identified as uninsured. The MECS team works with the family to complete an application and will submit it electronically on behalf of the family and/or submit forms to add a baby to the mother's health plan, when applicable. The PMCA acts as the liaison between the family and the case worker to assist with obtaining and submitting additional information as needed to determine eligibility.

Certified Application Counselors (CAC) are available to assist families in our community, and we refer to them when families receiving services within our ambulatory facilities may not have insurance coverage. Identified patients are provided with information on how to setup an appointment with a CAC or we work to coordinate a call/appointment to review insurance options for them. Educational material is provided to families in our facilities and through other outreach programs. Care managers (CM) and social workers support patients during hospitalization and assist families with education and enrollment for the state programs for children with special and/or complex medical needs where available. In coordination with the patient access team, care managers and social workers screen uninsured patients and help determine whether the patient would likely qualify for state based programs, address family concerns, and assist with the application process.

We suggest that with an ACO program, if the state program had an onsite medical reviewer, the hospital could pull additional documentation to submit with the application. There is also a financial application form that if not sent with the Medicaid Eligibility Review Forms (MERF) will be sent to the parent to complete and return by CSHCS. It would be helpful and less complex to require this application to be submitted with the MERFS. It would also be ideal if there was a way for the hospital to see the status of applications submitted online for patients that it supports through the process.

With Medicaid, a significant challenge occurs when hospitals receive Medicaid approval for an application that has been submitted for traditional Medicaid. The parent has 60 days to choose a Medicaid managed care plan before the state, assigns a plan for the family if nothing is selected. This means the hospital cannot process any outstanding services, because if an MCO plan is assigned to the family, the claim would be rejected. This can also delay care for outpatient/elective services as providers are waiting on coverage to be elected before seeking the authorization requirements for any non-emergent services.

We thank you for the opportunity to comment on the Pediatric Care Improvement Request for Information. In summary, we support the agency's efforts to create a pediatric ACO program. We believe the ACO framework provides the pediatric clinical community, including health-related social services organizations, the structure to achieve CMS' triple aim – better care for individuals, better health for populations, and reducing per-capita costs.

Sincerely,

Joseph Egan
Director of ACO Business Operations
Tenet Healthcare

Tennessee Strategic Planning and Innovation Group

See attachment.



Strategic Planning
and Innovation Gro

April 7, 2017

Ms. Seema Verma
Administrator
Centers for Medicare and Medicaid Services

Dear Ms. Verma,

Tennessee appreciates the opportunity to respond to CMS' Request for Information on Pediatric Alternative Payment Model Concepts.

Tennessee has been at the cutting edge of innovations in health care for over 20 years. With the support of a State Innovation Model: Model Test Award, Tennessee is implementing an aligned, comprehensive Patient Centered Medical Home (PCMH) model to reduce health care costs and improve the quality of primary care services in our state. We are also implementing Tennessee Health Link, a Health Home model designed to help coordinate health care services for TennCare members with the highest behavioral health needs.

Given our experience designing and implementing our PCMH and Health Link programs, we are responding to the following questions in the RFI on Pediatric Alternative Payment Model Concepts.

Section III: Integrated Pediatric Service Model Payment and Incentive Arrangements, Questions 2a-c

Tennessee's PCMH program encourages pediatric Medicaid providers to collaborate with health-related social service providers, behavioral health providers, home and community based service providers, and others, in order to maximize their shared savings for outcomes for children and youth covered by TennCare. Our PCMH program is voluntary, upside only, risk-adjusted, and participation does not require direct integration with any service providers. This allows us to give providers the appropriate incentives to collaborate and coordinate with all service providers that can impact a child's health, while expanding our PCMH model more quickly and to more pediatric providers across Tennessee.

Given our experience designing a broad-based PCMH model, we feel strongly that CMMI's new pediatric health care payment and service delivery model should include an option for participation for providers who are not connected to large, integrated health care systems. In CMS' own ACO experience, the quality and financial results for the ACOs participating in the Medicare Shared Savings Program and the Pioneer ACO model during 2015 showed that smaller, physician-led ACOs were more likely to improve quality and lower cost enough to earn shared savings.¹

Some of the most impactful changes a pediatrician can make for their patients are to better coordinate with behavioral health services and improve connections to community-based social services. To this

¹ Muhlestein, D., Saunders, R., & McClellan, M. (2016). Medicare Accountable Care Organization Results for 2015: The Journey to Better Quality and Lower Costs Continues. *Health Affairs Blog*. Retrieved April 6, 2017, from <http://healthaffairs.org/blog/2016/09/09/medicare-accountable-care-organization-results-for-2015-the-journey-to-better-quality-and-lower-costs-continues/>

end, Tennessee's PCMH and Health Link programs share most quality and cost measures. Providers are expected to meet or exceed statewide thresholds set by the state for quality, and the TennCare Managed Care Organizations for cost. By aligning behavioral and physical health quality and cost measures, we further reward collaboration between these two provider groups and continue to strive for the best health outcomes for children. For example, both Health Link and PCMH providers are measured on the percentage of members 3-17 years of age who had an outpatient visit with counseling for nutrition during the measurement year. Both groups of providers are also measured on the percentage of enrolled members 12-21 years of age who had at least one comprehensive well-care visit during the year.

Tennessee's PCMH and Health Link programs demonstrate how primary care and behavioral health providers can be held accountable for cost and quality outcomes and encouraged to provide collaborative services.

TennCare is able to determine whether providers have achieved savings and improved quality because in 2015, TennCare put in place a policy to ensure that only one primary care provider organization is uniquely responsible for each member's primary care. TennCare had always attributed a primary care provider to each member, but since 2015 only the attributed primary care provider can be reimbursed for services for the member (members are allowed to change providers at any time). TennCare's attribution policy ensures that primary care attribution reflects the actual utilization of members.

Section IV: Pediatric Measures, Questions 1-2

The lack of alignment across quality measures can be a major barrier to health system transformation. Tennessee is already using nine quality measures from the 2017 Core Set of Children's Health Care Quality Measures for Medicaid and CHIP for its PCMH and Health Link programs and an additional six measures are included that impact participating pediatric providers.

The following measures in our PCMH and Health Link programs are used to measure providers serving children and are currently not included in CMS' Child Core Set:

- Percentage of patients 7-11 years of age who had one or more well-child visits with a PCP during the measurement year
- Percentage of patients who turned 30 months of age during the measurement year and who had one or more well-child visits with a PCP by 18, 24, and 30 months of age
- HEDIS (IPU): Number of acute inpatient admissions per 1,000 member months
- HEDIS (MPT): Inpatient mental health services during the measurement year per 1,000 member months
- Number of ED visits for ambulatory care sensitive conditions (ACSC), per 1,000 member months, based on ACSCs as defined by the Institute of Medicine
- Member admissions for inpatient psychiatric services per 1,000 member months during the measurement year

In order to capture all well-child visits aligned with the Bright Futures periodicity schedule (W15-CH, W34-CH, and AWC-CH), the state created two custom measures represented by the first two bullets above. The three HEDIS measures in CMS' Child Core Set do not include well-child visits for children in these age ranges. We feel strongly that a standardized quality measure, that can be collected electronically, must be created to capture children in these age ranges.

April 7, 2017

Page #3

At this time, all quality measures for our PCMH and Health Link programs are collected through claims. Participating PCMH and Health Link provider organizations receive quarterly progress reports on their cost and quality performance from the TennCare Managed Care Organizations.

Since our Health Link and PCMH programs launched December 1, 2016 and January, 1 2017, respectively, we do not yet have enough data to evaluate their impact on short and long-term cost and quality outcomes. A robust evaluation of these programs will take at least one and a half years from the time of launch. We plan to evaluate these programs annually and report the results to all of our stakeholders.

The Tennessee Health Care Innovation Initiative has also been designing episodes of care since 2013 as a way to move from paying for volume to paying for value. Similar to our primary care transformation work, we believe episodes to be one of the most broad-based, feasible to implement, and transformative ways to move the needle on health care spending. An evaluation of our first three episodes of care (Perinatal, Asthma, and Total Joint Replacement) in the first year demonstrated a cost savings of \$11.1 million, which accounts for a 3 percent increase in spending in the absence of this initiative. At the same time, the quality measures tied to the rewards payment demonstrate that quality of care for these three episodes was maintained. We have currently designed and implemented 20 episodes of care and plan for over 75 episodes by 2020.

Again, we appreciate the opportunity to comment on this RFI and look forward to ongoing engagement with CMS' on Pediatric Alternative Payment Model Concepts.

Sincerely,

A handwritten signature in black ink, appearing to read "B-D", followed by a horizontal line.

Brooks Daverman
Director of Strategic Planning and Innovation
Health Care Finance and Administration

Teradata

Good morning,

Attached is Teradata's response to the above subject RFI related to Pediatric Alternative Payment Model Concepts for the

Center for Medicare and Medicaid Innovation.

Please let me know if you have any questions and kindly confirm receipt.

Thank you,



Teradata.pdf

Center for Medicare and Medicaid Innovation

Request for Information on Pediatric Alternative Payment Model Concepts

Submitted By:

Teradata Government Systems LLC

March 28, 2017

This response includes data that shall not be disclosed outside the Government and shall not be duplicated, used or disclosed--in whole or in part--for any purpose other than to evaluate this response. If, however, a contract is awarded to this offeror as a result of--or in connection with--the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to the restriction is contained in all sheets herein.

March 28, 2017

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Sir or Madam:

Teradata Government Systems LLC (Teradata), a wholly owned subsidiary of Teradata Corporation, is pleased to submit our response to the Pediatric Alternative Payment Model Concepts Request for Information (RFI) in support of the Center for Medicare and Medicaid Innovation.

Our submission consists of the following files:

- RFI response in PDF format

Thank you for this opportunity and Teradata looks forward to participating in the upcoming phases of this procurement.

If you have any questions, please do not hesitate to contact me directly at

Respectfully submitted,

Catharine Evans
Healthcare Independent Consultant

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Center for Medicare and Medicaid Innovation
Request for Information on Pediatric Alternative Payment Model Concepts

On behalf of the Teradata Corporation, we would like to thank the Center for Medicare and Medicaid Innovation (CMMI) for this opportunity to provide input on Pediatric Alternative Payment Model (Ped APM) concepts. Teradata specializes in making data tell the truth. As CMMI seeks to answer critical questions about the design of Ped APMs, we would like to offer ideas from 30 years of experience helping our customers use data to establish better business practices - enhancing care, cutting costs, and improving efficiencies.

The most important insight we wish to share is this: The design of Ped APMs needs to be patient-centered from the outset in order to be successful and compelling to Medicaid clients. Creating new models won't be helpful if the families that need those services can't or won't choose to become engaged. The development of any new payment model should begin with, and proceed from, data-driven analysis of pediatric patients today and the informal networks which are already in place around those children and their families. To understand the social services that are supporting good health outcomes now, and how Ped APMs can build upon and enhance those successful networks, CMS needs to take a comprehensive look at the data. Ped APM goals should be evidence-based to support existing high-performing systems and encourage the adoption of best practices everywhere. In complex data such as social service inputs and health outcomes, comprehensive data analysis will be able to find patterns that more limited methods would miss.

This complex information is not easily accessible today. However, if data about social programs— now almost inaccessible due to silos and lack of organization— is gathered into a powerful, integrated data warehouse with health outcomes data and analyzed with tools we can find existing patterns and predict successful outcomes. Though this seems like a daunting task, we have done it before.

Teradata has been helping the Centers for Medicare and Medicaid Services (CMS) gain insights into a vast scope of data for over 10 years as part of the Integrated Data Repository (IDR). We integrated over 152 billion claim lines, dating back to 2006, across 65 disparate data sources/CMS programs into the IDR and have used it to conduct queries and analysis for a wide variety of functions and groups across CMS. We are beginning to align state data in the IDR along with the existing CMS data.

In 2010-11, Teradata removed barriers to the sharing of data and helped to support the transformation of Medicaid for the State of Michigan. We helped the State migrate data from ten agencies, integrate it with other resources, and build a new Enterprise Data Warehouse (EDW) that was drawing data from 120 distinct statewide sources and holding 12.13 + terabytes of data in 18,706 tables from 660 databases upon completion. Michigan used the Teradata EDW to implement the nation's first statewide vaccination registry. They have improved the administration of healthcare services and used the EDW to look across data from medical and

health-related social service providers to develop a more comprehensive understanding of their citizens and how to coordinate medical and health-related social services to meet their needs.

Once CMS has defined Ped APMs, there are significant data integration and analytic needs that the Ped APMs will need to operate. We have identified those for your consideration as well.

SECTION 1: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

1. As the federal landscape of funding for Medicaid shifts risks for increasing costs onto states, all states will need to find more ways to share accountability for the total cost of care with health-care and health-related social service providers. States have already had some success with sharing accountability for the health of older populations in Medicaid by using contracted arrangements between state Medicaid agencies and managed care organizations (MCOs). MCOs can coordinate and deliver Medicaid program health care services to their beneficiaries, states can reduce Medicaid program costs and better manage utilization of health services, and together they can improve health plan performance, health care quality, and outcomes.

If given adequate information resources, flexibility to integrate information from multiple agencies, and technical and financial assistance, states can offer similar contracted arrangements for the pediatric population of Medicaid and CHIP in Ped APMs. States will need resources to define, identify, and manage the eligible enrollee populations and the necessary health-care and health-related social service providers for Ped APMs. They will need substantial technical assistance to collect, rationalize, and utilize the data required to support and to evaluate patient-centered Ped APMs. They will also need flexibility in two key areas: 1) to adapt structures to the needs of particular populations, and 2) to access data in a way that respects patient privacy but does not inhibit health-related social service providers from coordinating care with health care providers.

2. Ped APMs will require health-care and health-related social services beyond the Medicaid mandatory benefits. A case study (Perrin JM, Zimmerman E, and Hertz A, et al. "Pediatric Accountable Care Organizations: Insight from Early Adopters." *Pediatrics*. 2017; 139) of five pediatric accountable care organizations (ACOs) found that pediatric specialists and subspecialists, mental health, behavioral health, multidisciplinary care teams for children with medical complexity, and telehealth were important parts of the ACO network. These ACOs found that mental health services to address autism, ADHD, and maternal depression were particularly important to meet the needs of pediatric populations. Their populations benefitted from case management that
 - a. educated patients and families on appropriate use of health care resources,
 - b. assisted with appointment scheduling,

- c. made linkages to community services and addressed transportation needs and resources for medication discounts,
 - d. made linkages with other health providers (eg, dieticians, behavioral health therapy), and
 - e. addressed the needs of family members whose health may also impact the index patient.
3. If ACOs are implemented for the pediatric population, CMS should re-consider the standards that set high minimum numbers of attributed patients that were established for similar APMs, such as the Medicare Shared Savings Program ACOs. Current approaches to evaluating the cost and quality of MSSP ACOs rely on larger numbers of attributed patients to ensure accuracy. If pediatric ACOs have high minimums for the number of attributed patients, many rural and underserved communities could be excluded. Advanced analytics could be applied to increase the accuracy of evaluations of cost and quality with fewer attributed lives. Alternative payment models such as medical homes and care coordination should be considered as options to bring integration of care to pediatric populations in rural and underserved communities. In those instances, better data-driven measurement and analysis could also be applied to better-measure the cost and quality impacts of these payment models.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

1. As noted in (Perrin JM, Zimmerman E, and Hertz A, et al. "Pediatric Accountable Care Organizations: Insight From Early Adopters." Pediatrics. 2017; 139), there are very few integrated, accountable organizations serving the pediatric population.
2. Integration has included pediatric specialists and subspecialists, mental health, behavioral health, multidisciplinary care teams for children with medical complexity, and telehealth.
3. Infrastructure and information technology systems will be vital to successful Ped APMs

This RFI contemplates interaction and integration of multiple and diverse state/local medical and health-related social service programs. The success of any Ped APM will require a significant amount of data exchange; care coordination will be dependent on accurate, timely and complete data. Accessing and using data will likely be one of the single biggest structural challenges for any Ped APM.

We believe there are two distinct business functions which necessitate not only a data warehouse for data sharing, but an organized, flexible data analytics platform for deriving answers from the data:

- i. Design and Structure of Payment Models: CMS should use the entire available data set to understand the CHIP population better in order to inform the decisions around specifics of payment models. This approach provides data driven decision making.
- ii. Operational activity of Ped APMs. Ped APMs need to have access to the data in order to provide coordinated and appropriate care to individual children. Ped APMs should also be provided access to data analytic dashboards or tools to perform analysis geared toward improving the structure of the Ped APMs.

There are four main challenges for CMMI to consider:

- i. Data Use Agreements, Security and Access Control Systems. Each of the health-related social services programs mentioned collect data for specific purposes and States/CMS should be aware that setting up the sharing agreements with these organizations will be critical to a larger initiative. These agreements can often be time consuming and challenging to negotiate. Additionally, once data is aggregated, a role based access control system should be implemented to ensure appropriate access is maintained.
- ii. Data Considerations:

Integration – Each of the programs identified in this RFI will have different data schemas and identifiers. For CMS to analyze the data or Ped APMs to use this data it must be consolidated, so that—for example—the identities of participants in school lunch programs can be attached to the identities of the same children in Medicaid. Teradata advocates an integrated data approach to drive effective reuse in support of high-value analytics and not simply focused on data storage. The value comes from being able to access, analyze and use the data to design or improve payment systems or to operate APMs. The value of reuse isn't just having data in one place - value comes from data that is organized and applied. Merely “dumping” un-integrated data together and sending it to the Ped APMs will not be useful because the effort of integration requires too much work and intimate knowledge of source systems for each APM to perform that work themselves. This is the same challenge with data matching that exist today between Medicare and Medicaid data and must be resolved through clean, ongoing integration of data.

Data Types – While much of the information coming from various programs/systems will be structured data, it is likely that some of the most useful data for understanding individuals' needs will be non-structured (text based case worker notes, clinical records, etc). CMS should consider the need to perform complex analysis using free text in conjunction with traditional, structured data.

- iii. Data Warehouse: CMS should seek to ensure that the MMIS data warehouses that are being created as part of the 90/10 initiative are selected and built to focus on flexibility and extensibility. We have noted a recent trend in MMIS Data

Warehouse/Bi tool RFPs to place significantly more emphasis on pre-built MMIS and HEDIS reporting capabilities than on the ability of the underlying technology to meet the changing needs of Medicaid and population health over time. While this is certainly understandable, these warehouses need to be extensible to integrate and analyze non-Medicaid data so that a 360 view of the citizen can be understood. This includes a non-medical data model that would be suitable to health-related social services data.

- iv. Allowing the data to reveal patterns in addition to traditional hypothesis testing with data analytic tools, pre-build analytics and business intelligence capabilities:

Typically, research begins with a hypothesis, the hypothesis is tested, and the results of the test are reported to the researcher. This approach can be enhanced with data analytics that allow unanticipated outcomes and unknown results.

Allowing the data to reveal patterns allows exploration of the data without a pre-conceived hypothesis, for example, in situations when you may not even know the question; you have not identified the data that may provide the hidden insight, and you recognize that what you learn may be very different than what you expected.

Most analytic exploration begins with a hypothesis, such as, "We believe that the increase in Heroin addiction in the 35-45 age group is directly attributable to irresponsible prescribing practices of physicians that lead to the initial opiate addiction." If an adequate analytic discovery engine exists, a query is submitted against the data warehouse, operational databases, appropriate 3rd party data sources and Hadoop system, if applicable, with perhaps a few unique identifiers, indexes or attributes. The question does not have to be perfect, because advanced analytics is an iterative process, and "fast fail" capability is important. Recognizing quickly if the analyst is on the wrong track saves time and money, and allows a redirection.

CMS and State Medicaid organizations need to reconsider the responsibility for integrating data to operate Ped APMs. Ped APMs will need to share and analyze data that will come from widely varied sources and look very different from standard medical claims. Merging data sets is both

costly and can be very complex. Data integration, protection, management and storage for the programs considered in this RFI would be cost prohibitive for all but the largest of the individual Ped APMs to build and would drive up the overall cost of care.

The most cost efficient and productive way to provide the data required to operate Ped APMs is to provide state-level shared resources. This data resource would be incredibly valuable to many programs, not just the Ped APM providers. Our experience with the state of Michigan tells us that as more data sources become integrated, the more state organizations come to depend on that information. It becomes exponentially more valuable. Ideally, to ensure that cross-department information and data warehouse sharing take place, Medicaid should not be the only organization to fund the data infrastructure; some funding should come from other departments such as Agriculture and Housing.

4. Integrated data across Medicaid, CHIP, and health-related social service programs has been critical to achieving administrative cost savings and coordinating eligibility and program requirements. Substantial administrative cost savings can accrue from using integrated data to fight fraud and abuse in these programs: in a recent presentation, US Attorney Joan Hartman called CMS' integrated data system, the IDR, "the most significant contributor" to fraud investigation in her career. Michigan estimates that "the advanced analytics and actionable insights [provided by the Teradata EDW] help achieve \$1 million per business day in financial benefits," including program integrity benefits.
5. One possible outcome is decreased administrative costs through decreasing churn (briefly losing and re-gaining eligibility). Advanced analytics can help administrators predict which patients who are dropping out of a medical program or a health-related social service program today will be back in less than 30 days, and could choose to save money by maintaining their eligibility instead of disenrolling and re-enrolling. We conducted a study for a commercial client to predict the characteristics and the paths of client who were most likely to disenroll from their commercial service. We used a large database of events over time and discovered that certain series of events—or "paths"—were associated with disenrollment. Our client developed new, targeted communications for those people, increased engagement, and prevented many of them from dropping out. If similar patterns could be found among children in school lunch programs, for example, then strategies to prevent those children from losing access to adequate nutrition could be developed and their health could be better-maintained than it would have been if their access to nutrition were suspended briefly and re-instated later.
6. Privacy and interface are obstacles when information is needed by health-related social services providers. If data systems are built to narrow specifications bounded by the restrictions of personal health information and privacy, then it becomes almost impossible for non-medical providers to access the appropriate, non-protected information that is also in such data bases. Instead, good data integration that looks across medical and non-medical data should be the foundation of efforts to enable and

support Ped APMs. In addition to building the data set with medical and non-medical users in mind, the administration of the data base should include flexible data use agreements that allow the right provider to access the appropriate data at the right time.

7. Payment model design within CMS has traditionally been “top down” – where CMS has used its own expertise and requested information and guidance from industry leaders to craft payment models. We believe that one of the most exciting opportunities for CMMI in Ped APMs is the opportunity to take a “bottom up” approach to payment model design – looking at the actual, current, behaviors and practices of the Medicaid and CHIP population to inform the process. The parents, caregivers and children whose participation will be critical to the success of any Ped APM have ***already established*** patterns and needs – physicians, conditions (ADHD, depression, etc), health-related social service providers, and habits, etc. This information is contained in the data that CMS expects the Ped APMs to use. While the purpose of this RFI is to solicit responses to the question “how should Ped APMs be different from Medicaid MCO’s”, CMMI should first let the data show the care patterns and health-related social service “neighborhood” of the target population and then tailor a payment model to support that structure and encourage the replication of that structure elsewhere.

Data can drive the design of payment models. Once an integrated data set is built, then CMMI could use it to discover relationships between medical and health-related social services and to measure the impact of health-related social services on medical outcomes to inform whether—and what kind—of social service providers should be included in Ped APMs. An integrated data set would enable prediction and segmentation analysis. Prediction could find the factors that lead to better outcomes for pediatric populations now; payment models should be designed to incentivize or require those factors. Segmentation could identify populations with unique needs; payment models should offer flexibility to accommodate the needs of populations.

Data-driven analysis could determine whether existing APMs are good approximations of the networks of medical and health-related social services that have already been built through the extraordinary efforts of families currently navigating the systems and obtaining good outcomes for the family’s health. Tools to discover whether APMs are a good fit would use geographic location data, time series data (claims, encounter data, service utilization, pharmacy), text data (clinical notes, case workers notes, descriptions of services), etc. and use statistical techniques, text analysis, time series analysis, and segmentation to investigate the data set. From this analysis, CMMI could identify groupings of regional services and providers that exist now and achieve good outcomes. This data-driven approach would then be applied to verify that current APMs are a good fit or that different models should be considered instead.

8. As discussed in our response to question 7 in this section, we believe that CMMI should use a data-driven approach to discover the best networks that have already been grown

by successful communities around the and let the data tell us which Ped APM is the most like the successful networks that exist now and could incentive and reward the formation of similar networks in other communities.

9. Medical homes, bundles, case management might be better than ACOs. Rural and underserved communities may need different models of care because transportation and access issues might have driven very different networks of providers than we will find in dense, adequately served geographies.

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

1. Integrated data and analytics could show us who are high-risk pediatric patients. CMMI could apply behavioral analytics against more comprehensive data sources to predict the paths of patients and find those who are most likely to experience negative outcomes. The path of a patient is the series of events that lead to poor outcomes, such as poor nutrition, followed by obesity, followed by a trigger, ending in an avoidable trip to the emergency room. Integrating data that includes health care and health-related events in time sequence can support analytics to discover these paths and predict outcomes. Further analysis evaluates and identifies segments that can be explanatory factors that drive outcomes, such as specific patient populations, therapies, prior patterns and provider behavior.

Together, paths and segments can point us towards the factors that lead to negative outcomes and identify patients that need targeted intervention matched to their risk factors.

2. Health care providers could be incented to participate in Ped APMs if the state makes data access and analytic assistance contingent on participating in Ped APMs. The state must be able to demonstrate that these data and analytics will allow providers to more-effectively manage their patients. In the new value-oriented payment environment of merit-based incentive payments for physicians and value-based payments for providers, all providers are facing penalties and risks for the quality of patient care and will be interested in using proven ways to improve patient care, avoid payment penalties, and earn quality bonuses. The state is able to provide some analyses that would be beyond the capabilities of smaller providers—especially the health-related social service providers.

Ped APM adoption will be better achieved through incentives like access to better data and through financial bonuses than by imposing a punitive penalty for non-participation. For example, the study (Perrin JM, Zimmerman E, and Hertz A, et al. “Pediatric Accountable Care Organizations: Insight from Early Adopters.” *Pediatrics*. 2017; 139)

found very little down-side risk amongst current pediatric ACO models, mostly up side incentives.

Ramp-up of Ped APMs should include rapid-cycle tests of change on iterations of payment models—this will require dashboards with close to real-time feedback from the state on outcomes. Again, we recommend that the process be data-driven. If the process is based upon integrated data and analytics, the length of the ramp-up can be much shorter than if top-down design is used to impose models of care that might be very poor fits to the actual patterns of care for medical and health-related social services for the pediatric population.

The best approach to designing patient attribution is data-driven discovery. Analyses of segments of the pediatric population is very likely to reveal that patterns of service use and outcomes vary widely by pediatric age and condition. The design could also be informed by the models of churn as we suggest in our response to question II. 5, above. Whatever patient attribution model is designed, providers should be given dashboards so that Ped APMs have a good approximation, at any given time, of the identities of patients who are likely to be attributed to them.

If the rate of churn will be high, CMMI should consider prospective attribution—this could be especially attractive for families with multiple children so that their children can all participate in the same Ped APM. There is precedent for prospective attribution and assignment in adult MCOs which typically use assignment with flexible enrollment periods; assignment with the option for patients to pro-actively join a different APM strikes a positive balance between patient-centered choice and a high level of predictability in their attributed patient population for providers.

Texas Academy of Pediatric Dentistry

Good morning! I am a pediatric dentist that is serving as Secretary/Treasurer for the Texas Academy of Pediatric Dentistry. I am requesting further information about the Pediatric Alternative Payment Model Concepts.

Thank you.

The AmeriHealth Caritas Family of Companies

See attached.



The AmeriHealth
Caritas Family of Coi



[Submitted via

March 28, 2017

Seema Verma
Administrator
Centers for Medicare & Medicaid Services
Department of Health & Human Services
Hubert H. Humphrey Building

RE: Request for Information on Pediatric Alternative Payment Models

Dear Ms. Verma,

On behalf of the AmeriHealth Caritas Family of Companies, I am writing to provide comments on the Center for Medicare and Medicaid Innovation's Request for Information (RFI) on Pediatric Alternative Payment Model (APM) Concepts. With more than 30 years of experience, AmeriHealth Caritas is one of the nation's leaders in health care solutions for those most in need. Operating in 17 states and the District of Columbia, AmeriHealth Caritas serves more than 5.7 million Medicaid, Medicare, and CHIP members through our integrated managed care products, pharmacy benefit management and specialty pharmacy services, behavioral health services, and other administrative services.

AmeriHealth Caritas supports CMS' effort to explore the development of a new pediatric health care payment and service delivery model. We are committed to helping our members access health-related social supports as demonstrated through our strong partnerships with community organizations in each of our markets. We appreciate the opportunity to provide comments.

In the design of the pediatric APM, **we recommend that CMS consider the structural and operational challenges that may impact implementation.** Information sharing will be critical to the success of the pediatric APM, as envisioned in this RFI. However, pediatric health providers and health-related social service providers do not have a shared data platform for referrals, let alone an infrastructure to collect and exchange meaningful information about the patient. This obstacle is significant and requires careful consideration as CMS tests these models. The overarching goal should promote an interoperable system between pediatric providers and social service providers that can be replicated throughout the country, rather than investment in systems that work for one community and patient population but not another.

We encourage CMS to promote the collection of social determinant data through electronic health records using new ICD-10 classification Z Codes for "Factors influencing health status and contact with health services (Z00-Z99)." Z Codes can be used collect social determinant of health data and track patient needs. We believe the use of these codes are imperative to integrating pediatric health care and health-related social service providers, and are vitally important for pediatric providers to successfully manage an APM contract.

We recommend that CMS develop the pediatric APM specifically for children and youth with complex needs. We believe this segment of Medicaid and CHIP beneficiaries has the most significant need and would benefit greatly from more alignment with health-related social service providers. Unfortunately, as you are aware, there are patient privacy protections in place that inadvertently create barriers to data sharing between physical health and behavioral health providers. We are concerned that these barriers will have greater implications as health-related social service providers are integrated in the model. We look to CMS to review and modernize the existing regulations to promote greater data sharing to support integrated models of care.

CMS should consider other pediatric APMs to help pediatric providers transition to more sophisticated delivery models. To achieve this, **we encourage CMS to promote the integration of pediatric health care with oral health care.** Children with asthma are more likely to suffer from dry mouth, due to the use of inhalers, which can result in plaque-causing bacteria to multiply, increasing the risk of tooth decay and gum disease. In our experience, strong linkages between pediatric and oral health providers enable increased education about the importance of dental care for those with chronic conditions and how the management of oral and dental disease has been proven in many cases to facilitate improved outcomes and better control of chronic conditions.

Thank you for considering our comments. AmeriHealth Caritas strives to deliver the best care for our members, and sees significant value in the APM approaches indicated in the RFI. We hope that these comments are helpful to you and your team in determining next steps to implementing pediatric APMs.

If I can provide any additional information, or address any concerns or questions you may have, please do not hesitate to contact me at

Sincerely,

A handwritten signature in black ink, appearing to read "Andrea Gelzer".

Andrea Gelzer, MD, MS, FACP
Senior Vice President & Corporate Chief Medical Officer

The Children's Partnership

Thank you for the opportunity to provide suggestions. Please find attached The Children's Partnership's comments.



The Children's
Partnership.pdf



DATE: March 28, 2017

SUBJECT: RFI Comments on Pediatric Alternative Payment Model Concepts

TO: CMS Healthy Children and Youth Division

Thank you for the opportunity to share our suggestions for pediatric alternative payment model concepts. The Children's Partnership is a non-profit child advocacy organization that pursues policies that help children thrive. We seek strategies to improve access to quality care that is tailored to children's needs. We welcome CMS' attention to exploring various payment models to encourage integrated children's health care through Medicaid.

Some suggestions from The Children's Partnership:

Quality Measurement:

First, with health plans providing a growing share, if not most, of the care for Medicaid children, an essential element of for integrated health is health plan monitoring of outcomes and quality. This is seemingly rudimentary and yet, we do not have reporting on some of basic measurements or indicators of Medicaid children's health care under managed care plans. For example, States should require Medicaid-contracted health plans to report participation in the recommended periodic childhood development screenings at all stages of the child's life (first year, first to third years, fourth through sixth years etc). These screenings serve a core measurement of whether children have been tested for preventable health conditions. Currently, States have the option to require this information be reported by their Medicaid-contracted health plans. Similarly, states can voluntarily report as part of the child Core Set, measures such as developmental screenings. But not all states do.

On this issue of reporting but in general, this effort to identify concepts for pediatric alternative payment models could be enhanced in its design and implementation if it is coordinated with CMS' division implementing the new Medicaid managed care regulations. There are several new tools and opportunities to highlight that could be applied to children's integrated care in the context of Medicaid managed care.

Horizontal Integration:

In addition, integrated care, particularly for children, necessitates horizontal integration among other support services for children such as WIC, cash

assistance, housing, and food programs). Medicaid and the ACA offers several strategies to not only expedite enrollment within the context of health care delivery (e.g. presumptive eligibility from hospitals) but also expediting and coordinating enrollment into Medicaid from the application into other support services with similar eligibility criteria, such as SNAP or WIC. Another valuable policy would be to allow for expedited enrollment into these other support services from a child's enrollment into health coverage, such as SNAP enrollment or WIC enrollment based on Medicaid enrollment. Similarly, because children must renew their Medicaid coverage annually, continuing Medicaid based on renewal in other support services offers assurances of continuity of care for those children without an administrative break in coverage.

As with the horizontal integration of coverage enrollment and support service programs, horizontal integration plays a critical role directly delivery of health care: Pediatric developmental screenings should incorporate assessments of other social determinants of health including assessments of trauma and toxic stress in children. To ensure that these screens are conducted and are meaningful, providers need to be trained in the appropriate screening tools and in referrals available to non-health related support services (e.g. housing, environmental triggers, food security etc).

Example of Effective Integrative Health and Alternative Payment.

By way of a specific example of integrative care through horizontal integration, we provide the following recommendation relating asthma hospitalization reduction and in-home air quality remediation:

Many children with asthma have reoccurring episodes triggered by environmental factors in the home. For example, mold, pests or poor circulation of air through the house can create poor air quality where children spend most of their time. Health providers caring for asthmatic children team up with community based organizations and home performance specialists. The certified asthma-education community workers, based on a referral from a health provider, would assess the child's home for asthma triggers and provide recommendations for home remediation (such as removal of moldy carpeting or pest control) and education to the family on ongoing mitigation as well as medication management. In some cases, home performance specialists may be required to provide structural modifications (sealing duct work for better air flow in the house). The CDC has documented multiple studies demonstrating the remarkable return on investment of integrating in-home asthma remediation with medical asthma management. At a macro-level, state Medicaid programs and Medicaid health plans could similarly partner with sister agencies working on home performance or energy efficiency to implement integrated care model for Medicaid asthma patients triggered by in-home air quality. Medicaid could supplement the uncovered cost of in home remediation in return for reaping the hospitalization savings from reduced asthmatic attacks.

Child Welfare:

A number of questions posed in the RFI raise the issue of how to ensure good outcomes for children and youth in the child welfare system, since the questions ask about how to integrate social services with health care services. Specifically, II -- 2 and 3 and III -- 1 address the challenges in integrating health with social services. Children and youth in the child welfare system would benefit disproportionately from social service/health integration. This population experiences higher than average chronic conditions and extremely poor outcomes related to health and mental wellness. (Link:

http://www.childrenspartnership.org/wp-content/uploads/2016/06/Top-Reasons-Why-Electronic-Care-Coordination-Can-Help-Children-and-Youth-in-Foster-Care-Beat-the-Odds_November-2014.pdf) This situation demands better planning as between social workers and a child's health and/or mental health provider.

However, where social service providers have partnered with health care providers to provide appropriate, effective care, their efforts are often challenged by lack of information sharing across sectors. A youth-focused integrated service model must address the information-sharing challenges that such efforts currently face.

Currently, when a child comes into foster care, he/she goes to a physician and is treated without a health history or any background health information (unless the biological parent extensive health information as their child was being taken away from them). However, since most children entering the foster care system have been served by Medicaid, Medicaid claims data could be leveraged to create a background health record that supports the initial health visit. Such data could facilitate a health provider's ability to provide child-centered care that effectively meets the child's needs. Further, as a child moves through the child welfare system, health providers would benefit greatly from being able to exchange information among themselves, whether through an available health information exchange (HIE) or through the child welfare services case management system. For a vision of this option, see:

<http://www.childrenspartnership.org/research-list/improving-care-coordination-for-californias-children-and-youth-in-foster-care-using-integrated-personal-health-records-a-strategic-plan-of-action/>

Our experience working in California to develop information exchange between social services (child welfare agencies) and HIEs (which house relevant health data that could benefit a child's care), have been challenged by laws and guidelines that overly restrict information exchange that is necessary to coordinate care. To address such challenges, federal law and guidance could create a presumption that information should be shared, as between child welfare and health care professionals, for purposes of care coordination. New CCWIS rules go a long way toward creating such a presumption. However, additional rules and guidance is needed to alleviate data-sharing challenges,

where it is in the best interest of the child. The best interests of children in foster care include care coordination and treatment as between social services and health care.

Again, thank you for the opportunity to provide comments on these important questions. The delivery of quality care for children certainly depends upon customized structures that meet the specific needs of children and their unique form of care as well as the financing mechanisms the incentivize promising approaches to delivery.

The National Alliance to Advance Adolescent Health

To whom it may concern:

I am writing to inquire if it would be possible to extend your deadline for comments on the Request for Information on Pediatric Alternative Payment Model Concepts to April 5th. This CMS announcement came to my attention very late in the process, and I want very much to submit a thoughtful response, with review and input from several organizations. I understand also that the American Psychiatric Association and the American Academy of Child and Adolescent Psychiatry requested additional time.

Thank you for considering my request

The Oral Health Forum | A Partner of Heartland Health Outreach

Good Afternoon,

My question concerns the limitations children experience in receiving oral health care as recipients of Medicaid. In Illinois, benefits allow for one dental exam every 6 months. Children in our Oral Health Case Management Program are experiencing barriers to accessing dental services after being seen in their School's School-Based Oral Health program. The school district bills Medicaid for the exam services, and children who are identified to be living with cavities, abscesses, or pain are unable to see a dental provider for 6 months to have those conditions addressed because the dental provider will not be reimbursed for services rendered.

Is there a way around this? There are a limited amount of FQHCs in the most underserved areas in Chicago and only 2 have dental clinics. The need is high and the resources are low. Any insight is appreciated.

For more information about our program and services, please see our website:
www.heartlandalliance.org/oralhealth

Best Regards

The University of Chicago Medicine

See attachment.



The University of
Chicago Medicine.p

Department of Medicine

SECTION OF
GENERAL INTERNAL MEDICINE*Finding Answers: Solving Disparities
Through Payment and
Delivery System Reform*Marshall H. Chin, MD, MPH, FACP
*Director*Scott Cook, PhD
Deputy Director

Mar. 28, 2017

To the Center for Medicare and Medicaid Services,

Finding Answers: Solving Disparities Through Payment and Delivery System Reform is a Robert Wood Johnson Foundation-funded initiative designed to examine and promote interventions aimed at reducing health disparities in the context of payment innovations. Our current work grew out of an earlier project that also focused on reducing health disparities and out of which was developed [The Roadmap to Reduce Disparities](#). *The Roadmap* is a six-step framework for healthcare organizations to improve health inequities. Presently, three grantees within the ongoing Finding Answers initiative are using *The Roadmap* in conjunction with payment reform to enhance efforts to reduce disparities.

The lessons learned thus far through *Finding Answers* can inform efforts to design alternative payment models focused on children and youth covered by Medicaid and CHIP as described in Request for Information (RFI) released earlier this month. Specifically, we wish to comment on *Section IV Pediatric Measures* and also on *Section V Other Comments*.

SECTION IV: PEDIATRIC MEASURES

Finding Answers Project Director Marshall Chin, MD, MPH published an article in the Journal of General Internal Medicine¹ outlining a business case for achieving health equity. Although not targeted to any specific population, his recommendations are applicable to the treatment of children and youth through the Medicaid and CHIP programs.

- 1. Require providers to report clinical performance data stratified by race, ethnicity and socioeconomic status.**
 - a. The organizations we worked with often reported not recognizing the existence of disparities until they were measured and reported on regularly. While providers serving Medicaid and CHIP patients often work extensively with vulnerable populations,

¹ Chin, MH. Creating the business case for achieving health equity. J Gen Intern Med. 2016; 31:792-6.

- b. aggregate reporting of performance can mask underlying disparities among subgroups of patients. Stratification of performance data can provide evidence of the existence of previously unexamined disparities and can motivate providers to adopt efforts to improve equity.
- c. We encourage CMS to consider requiring pediatric healthcare providers to stratify their performance measures by variables known to be associated with disparate outcomes (race, SES, geography, etc.) in order to better identify health inequities.

2. Incorporate equity accountability measures into payment programs.

- a. Our findings demonstrate that team-based, culturally tailored care in combination with case management can be an effective model for reducing disparities. We need to incentive and support preventive care and primary care, and strongly encourage Center for Medicare and Medicaid Services' exploration of activities to integrate services and payment across health and social service sectors.
- b. Our work also highlights the lack of attention that payment reform efforts pay to disparities reduction. When designing new payment models, it is imperative that payers like CMS explicitly incentivize the reduction of health disparities by adopting equity accountability measures.
- c. Providers will be more responsive to equity accountability measures if they are not being asked to by multiple payers to track and monitor different data. We encourage CMS to take the lead in developing a set of equity measures that can be standardized across multiple payers.

SECTION V: OTHER COMMENTS

- a. We are currently examining both the use of and the interplay between extrinsic and intrinsic drivers of individual and team motivation. Extrinsic motivators such as financial incentives have as a potential downside that they could diminish intrinsic motivators such as professionalism or altruism. We caution that any potential negative consequences of reliance on financial incentives should be considered when designing alternative payment models
- b. The majority of the health care organizations participating in our equity-focused health care delivery and payment redesign programs encountered electronic health record, utilization and reimbursement information transfer systems that required significantly more database intervention and programming than originally anticipated. We strongly encourage CMS to allocate sufficient time and resources for organizations to obtain the technical expertise needed to successfully integrate services and to share accountability across sectors.

We appreciate having had the opportunity to provide these comments to CMS in response to your request for information.

Sincerely,

Marshall Chin, MD. MPH
Richard Parrillo Family Professor of Healthcare Ethics in the Department of Medicine
Project Director

Scott Cook, Ph.D.
Deputy Director

The University of Chicago Medicine

ThoughtSwift Medical Assessments

I was alerted that you are looking for information on a new APM model for pediatric physicians. Currently, my company enables providers to meet quality benchmarks in 26 states. Working to align physicians to MACRA and CPC+ I can deliver new ideas to enable a painless alternative to adoption.

I would appreciate an opportunity to share how CMS can implement the quality measures for this new APM program seamlessly within a provider's practice without having the practice hire a person specifically to manage the paperwork using innovative technology.

Through innovative technology, I am able to improve training time and improve reporting with all pediatric clinics. My solution would be nationwide adoption, cost effective, culturally relevant, provide better patient care for adolescents 12-21, and easy to implement for providers.

If responding to this RFI is appropriate, I will send an outline, otherwise would you please direct me to where it would be appropriate to submit my concept.

Thank you for your help.

TransactRx

My recommendations for improving pediatric care are related to immunizations.

1. No two state registries are the same and many are very complicated. There should be one registry and it should be written in a format that supports easy integration with physician EHR. Most EHR vendors provide an interface to state registries, but the fees can be high and the implementation process can be complicated.
2. The registry should be established to provide patient (parent/guardian) reminders.
3. Education materials and support tools should be easily accessible to parents through an on line application.
5. Parents/guardians should be able to log into the registry and pull their child's immunization record.
6. The registry portal can be expanded to provide health tips for children by age. Incentive tracking tools for weight and activity could easily be incorporated.
7. Outreach programs to underserved areas should be supported by the web based portal application. Patient information can be tracked and patients can be provided educational information and historical records. Currently most outreach programs must rely on the patient's (guardian's) recall of their immunization history.

I hope you find these suggestions helpful.

Trust for America's Health

Good morning,

The Trust for America's Health (TFAH) and Healthy Schools Campaign (HSC) are pleased to provide the attached comments in response to the Center for Medicare and Medicaid Innovation RFI on pediatric alternative payment model concepts. TFAH and HSC commend the Innovation Center for the opportunity to comment on this request for information. Please continue to keep us in mind if we can be of further assistance as this work moves forward. If you have any questions, please contact Anne De Biasi, Director of Policy Development.

Best regards,



Trust for America's
Health.pdf

March 28, 2017

Center for Medicare and Medicaid Innovation
Centers for Medicare & Medicaid Services
Department of Health and Human Services

SUBMITTED ELECTRONICALLY

RE: Request for Information (RFI) on Pediatric Alternative Payment Model Concepts

Introduction

The Trust for America's Health and Healthy Schools Campaign are pleased to provide the following comments on the draft model concept focused on improving the health of children and youth covered by Medicaid and CHIP through state-driven integration of health care and health-related social services with shared accountability and cost savings.

When designing a new pediatric alternative payment model (APM), it is critical to support the infrastructure to facilitate collaboration between schools, health care providers and other child-serving agencies and programs. While the ideal situation is one where each child has a patient-centered medical home, as noted in the RFI, vulnerable children are not always able to access the optimal combinations of programs and services to meet their short and long-term needs. Yet the vast majority of children attend school, and schools are motivated to meet the needs of children and families to ensure academic success.

Research shows that health care provided in school settings can reduce health care costs and improve access to and quality of care.ⁱ For example, increasing access to school health services has been shown to reduce students' emergency room visits, resulting in significant health care savings.ⁱⁱ In addition, school health providers can facilitate enrollment in public health insurance programs including Medicaid and the States' Children's Health Insurance Programs.

Educators know that healthy students are better learners and that health care provided in schools can serve as a powerful support for education. Schools, therefore, present a prime opportunity to support the infrastructure and services to ensure that children's needs are met.

Section I: Integrated Pediatric Health Care and Health-Related Social Service Delivery Model

Some of the most exciting things happening in health policy include tighter connections between health and education/early education for the purposes of improving outcomes in both sectors. For example, New York State is considering how to tie value-based payments to kindergarten readiness.ⁱⁱⁱ Oregon's Coordinated Care Organizations (CCOs) are required to work with early learning programs and school health providers in their communities and are sharing several metrics, including development screening and enrollment in a medical home.^{iv} These incentives are driving CCOs to invest in child-focused health promotion programs and services such as Help Me Grow and Reach Out and Read and to deliver services in new ways, such as via peer family navigators and by placing community health workers in schools.^v

These are examples of recent initiatives where health care providers and insurers are taking accountability for the health and wellness of children and youth and sharing that accountability with health-related social services provider partners. Additional examples of partnerships between schools and health care providers to support both the health and learning of students include:

- Mancelona, MI;^{vi}
- E3 Alliance's In-School Flu Vaccine Initiative;^{vii}
- Pacific Center for Special Care at the University of the Pacific and The Children's Partnership Teledentistry Demonstration Project;^{viii}
- Alameda County's Asthma Start;^{ix}
- Drew Charter School;^x
- ProMedica and Toledo Public Schools;^{xi}
- Austin Independent School District and Dell Children's Hospital;^{xii} and
- Spectrum Health System's School Health Program in MI.^{xiii}

Section II: Operation of Integrated Service Model

Health care services are increasingly delivered in school settings in an effort to get kids the services they need and ensure they can be at school, ready to learn, every day. Schools provide an ideal setting to provide prevention, screening, and treatment services to traditionally hard to reach children—including comprehensive universal screenings for Medicaid and CHIP beneficiaries. Many schools, however, lack the workforce and data capacities needed to provide these services themselves. In designing a new model, CMMI should consider supporting the infrastructure needed to ensure all students have access to health care during the school day and support partnerships between schools and health care providers in the community to expand access to Medicaid services in schools. The following examples provide greater details into the ways partnerships between schools and health care providers are working to address these capacities issues and opportunities, including:

- payment for services provided in schools;
- data systems to link data between schools and health care; and
- broader collaboration with other community entities.

Payment for services provided in schools

Investing in health programming and service provision in schools, including primary prevention such as social and emotional learning programs, provides a return on investment for both the education and health sectors. Granting flexibility to braid Medicaid dollars with other federal, state and local funding streams is critical to sustainability of these initiatives. Examples of current initiatives and programs include:

Trillium Community Health Plan Coordinated Care Organization: Good Behavior Game^{xiv}

Trillium Community Health Plan Coordinated Care Organization (CCO) and Lane County Health and Human Services have a shared goal of advancing health equity, preventing tobacco use, slowing the rate of obesity, preventing substance abuse and mental illness, and improving access to care.^{xv} Through a partnership between these two entities, Trillium CCO provides payments to Lane County HHS to provide the necessary staffing and implementation of population-based prevention activities and programs. Trillium generates these funds through a \$1.33 per member/per month investment, resulting in nearly one million dollars for prevention-related activities per year.^{xvi} Recognizing the demonstrated return-on-investment of evidence-based social and emotional learning programs, Trillium currently allocates a portion of these prevention funds to support teacher training and implementation of the PAX Good

Behavior Game in Lane County schools. As of 2015, over 200 teachers in 14 districts in Lane County had been trained to use the program.

Nationwide Children's Hospital: PAX Good Behavior Game in Columbus City Schools^{xvii}

Through a partnership with Columbus City Schools (CCS), Nationwide Children's Hospital provides the licensed mental health professionals and training for school personnel to implement evidence-based school-wide prevention programs for students and teachers. Nationwide Children's Care Connection initiative places behavioral health clinicians into first and second grade classrooms to help teachers administer the evidence-based PAX Good Behavior Game with their students. In addition to schoolwide mental health promotion, Nationwide Children's also provides therapeutic services—including individual and family counseling, as well as primary care services through their Care Connection school-based clinics and mobile care centers. In providing services in schools, the Care Connection initiative creates an additional access point to establish a medical home for families who may otherwise have trouble accessing services in their community.

St. Paul Public Schools^{xviii}

Saint Paul School District is currently contracting with three of the Medicaid managed care providers in Minnesota (Medica Choice Care, UCare and Health Partners) to provide immunizations and minor services to students. The district was able to get a provider agreement through the Minnesota Department of Human Services which enables the district to bill for these services. Given the percentage of low-income students in the district, the district felt it was worth the effort of becoming a provider and billing Medicaid.

Data systems to link data between schools and health care

Because of their daily interactions with students, teachers and school nurses possess a wealth of information and data on student health—particularly around factors contributing to chronic health conditions. Our current system does not do enough to leverage this information to assess at-risk students in part due to limited workforce and data capacity issues. Examples of data sharing partnerships between schools and health care include:

Escambia Community Clinic: Wellness Cottage at Weis Elementary^{xix}

The Wellness Cottage at Weis Elementary operates in partnership with the Escambia Community Clinic--a federally-qualified health center, the Escambia County School District, the University of West Florida, and the Children's Home Society. The school-based clinic is staffed by a Pediatric Advanced Nurse Practitioner (ARNP) and support staff and provides an access point to services for children by meeting families where they are in the community. The Wellness Cottage provides sick child visits, well child visits, immunizations and other services to children throughout the regular school day, reducing time spent out of class. Through a unique data sharing agreement, the Wellness Cottage and Weis Elementary have teamed up to help track and reduce rates of absenteeism. When a child is enrolled in the clinic, parents sign a release to allow the school to share absenteeism data with the clinic staff through an opt-out process. This allows Weis Elementary staff to share the attendance records with the Wellness Cottage, allowing health center staff to reach out to the families of absent children to inquire the cause of the absence and, if applicable, determine if the child needs to schedule an appointment at the clinic to remedy the issue.

Nemours and Delaware Schools^{xx}

Nemours has a strong interest in improving the delivery and coordination of health care to children. As part of this effort, Nemours has developed NemoursLink, which provides community-based primary care

providers, referring providers, and school nurses secure electronic access to select portions of their patients' medical records. NemoursLink is a confidential, easy-to-use Internet-based tool that can be used by community providers and school nurses from their offices. NemoursLink allows school nurses a read-only view into the student's records. School nurses who work in Delaware public schools can use NemoursLink to access a child's plan of care and see information about every visit to Nemours/Alfred I. DuPont Hospital for Children or a Nemours office in Delaware. School nurses can only view a child's records if a parent or guardian has signed a form in advance.

Broader collaboration with other community entities

Schools often serve as hubs for other social service providers and organizations within the community. Examples of collaboration between schools and other community entities include:

Bellin Health: Live Algoma Coalition^{xxi}

The Live Algoma Coalition is an initiative created by and for the local Algoma community to improve health and well-being across seven dimensions: physical, social, environmental, intellectual, spiritual, emotional, and financial. The coalition brings together community agencies, the local school district, local government, local businesses, and the Bellin Health System to help build community capabilities to improve population health through community-driven approaches. Live Algoma focuses on five domains—Healthy Children, Healthy Individuals, Healthy Community, Healthy Employers, and Healthy Commons—with the school district at the center of the community. In 2015, Bellin Health and other businesses and private donors partnered to build a community wellness center within the local school that provides access to all community members both during and outside school hours. Bellin Health helps to operationalize and staff the community wellness center and provide CPR training to local students and community members.^{xxii xxiii}

E3 Alliance: Regional Flu Immunization Campaign^{xxiv}

In Texas, school funding is based in part on average daily attendance, providing a financial incentive for districts to determine the causes of and directly address absenteeism among students.^{xxv} A 2011 study by E3 Alliance—a regional, data-driven education collaborative based in Austin, Texas—revealed Central Texas school districts experience over 2.4 million student absences per year, and increasing average attendance by 3 days per year could save the districts over \$34 million per year.^{xxvi} In 2013, E3 Alliance conducted a second study to investigate the causes of these absences in Central Texas schools. The study revealed that acute illnesses accounted for 48 percent of absences among students in Central Texas, with the flu as the single largest contributor.^{xxvii} To address this issue, in 2014, E3 Alliance as a part of broad coalition of health providers, state and local health departments, and local school districts launched the Regional Flu Immunization Campaign to deliver free flu immunizations in Central Texas schools. In the first year, the program administered 6,500 immunizations and in 2016, over 52,441 immunizations were administered in 396 elementary, middle and high schools in 17 districts across Central Texas.^{xxviii}

Conclusion

TFAH and HSC commend the Innovation Center for the opportunity to comment on this request for information. Please continue to keep us in mind if we can be of further assistance as this work moves forward.

Sincerely,



John Auerbach
President and CEO
Trust for America's Health



Rochelle Davis
President and CEO
Healthy Schools Campaign

Endnotes:

ⁱ Lear, J. G. (2007). Health at school: A hidden health care system emerges from the shadows. *HealthAffairs*, 26(2), 409- 419. doi: 10.1377/hlthaff.26.2.409

ⁱⁱ Lear, J. G. (2007). Health at school: A hidden health care system emerges from the shadows. *HealthAffairs*, 26(2), 409- 419. doi: 10.1377/hlthaff.26.2.409

ⁱⁱⁱ Presentation by NYS Medicaid Director Jason Helgersen at the Campaign for Grade-Level Readings' meeting, Health Determinants of Early Success: Leveraging Medicaid for Impact, November 17, 2016.

^{iv} <http://www.childinst.org/news/blog/813-why-this-cco-makes-k-readiness-a-priority>, <http://www.ccooregon.org/media/uploads/documents/SchoolReadinessMaxineFookson.pdf> and <https://public.health.oregon.gov/ProviderPartnerResources/HealthSystemTransformation/Documents/success-stories/case-study-lane.pdf>

^v Presentation by Peg King of HealthShare in Oregon at the Campaign for Grade-Level Readings' meeting, Health Determinants of Early Success: Leveraging Medicaid for Impact, November 17, 2016.

^{vi} http://healthyamericans.org/health-issues/prevention_story/it-takes-a-village-how-mancelona-michigan-worked-together-to-improve-health-and-education/

^{vii} <https://healthyschoolscampaign.org/policy/fighting-chronic-absence-with-a-flu-shot/>

^{viii} <https://healthyschoolscampaign.org/policy/teledentistry-reducing-absenteeism-by-supporting-student-health/>

^{ix} http://healthyamericans.org/health-issues/prevention_story/improving-lives-saving-money-by-extending-care-from-the-clinic-into-the-community/

^x http://healthyamericans.org/health-issues/prevention_story/purposefully-building-a-community-that-addresses-health-education-and-violence/

^{xi} <https://healthyschoolscampaign.org/policy/what-happens-when-every-school-has-a-school-nurse/>

^{xii} <https://healthyschoolscampaign.org/policy/unique-partnership-ensures-austin-students-have-access-to-school-health-services/>

^{xiii} http://healthyamericans.org/health-issues/prevention_story/how-embedding-health-access-and-nurses-in-schools-improves-health-in-grand-rapids-michigan/

^{xiv} <https://public.health.oregon.gov/ProviderPartnerResources/HealthSystemTransformation/Documents/success-stories/case-study-lane.pdf>

^{xv} <https://public.health.oregon.gov/ProviderPartnerResources/HealthSystemTransformation/Documents/success-stories/case-study-lane.pdf>

^{xvi} <https://public.health.oregon.gov/ProviderPartnerResources/HealthSystemTransformation/Documents/success-stories/case-study-lane.pdf>

^{xvii} <http://www.nationwidechildrens.org/care-connection>

^{xviii} <https://healthyschoolscampaign.org/wp-content/uploads/2015/12/Free-Care-Meeting-Summary-with-Attendees.pdf>

^{xix} <http://www.ecc-clinic.org/locations-and-hours/ecc-at-c.a.-weis-elementary-school>

^{xx} <https://www.nemours.org/health-professionals/nemourslink/student-health-collaboration.html>

^{xxi} <http://livealgoma.org/about/>

^{xxii} https://www.bellin.org/press_releases/2015/44085

^{xxiii} https://secure.wpsic.com/sales-materials/files/27951_arise-algoma-wellness.pdf

^{xxiv} <https://healthyschoolscampaign.org/policy/fighting-chronic-absence-with-a-flu-shot/>

^{xxv} http://tea.texas.gov/Finance_and_Grants/State_Funding/Manuals/School__Finance_Manuals/

^{xxvi} <http://missingschoolmatters.org/>

^{xxvii} <http://missingschoolmatters.org/wp-content/uploads/2015/06/E3-Alliance-Absence-Reasons-Study-Summary-vH.pdf>

^{xxviii} <http://e3alliance.org/2017-blueprint-progress-report/>

UCSF Department of Pediatrics

See attachment.



UCSF Department
of Pediatrics.pdf

March 27, 2017

Centers for Medicare & Medicaid Services
Center for Medicare and Medicaid Innovation

RE: Request for Information on Pediatric Alternative Payment Model Concepts

Dear CMMI Leadership and Staff,

I am glad to have the opportunity to provide comments on the Request for Information (RFI) on Pediatric Alternative Payment Models issued by the Center for Medicare and Medicaid Innovation (CMMI). CMMI has been a leader in driving payment model and delivery system transformation, encouraging increased collaboration and coordinating key stakeholders in the healthcare system with the aim of advancing higher quality, higher value care.

I am a pediatrics resident physician at the University of California, San Francisco with a deep interest in payment models that enable delivery of high quality, low cost, total care. The views represented in this letter are my own. My relevant experience includes assisting a primary care clinic in an urban-underserved community in becoming a Level 3 patient-centered medical home; serving in a consulting role on the formation of a clinical data research network between eight pediatric academic medical centers; and providing primary care in a public safety-net health system to children primarily insured through Medicaid. Most importantly, I believe that all children deserve to thrive in our healthcare system.

This letter includes comments on the following points:

- A. I respond to CMMI's request to submit comments related to what role ACOs, particularly ACOs for Medicaid-eligible children, play in the pediatric setting. (RFI Section II: Question 8)
- B. I have identified a potential sub-group of Medicaid and CHIP beneficiaries that might provide an opportunity for producing savings and "improving outcomes by receiving services from integrated health care and health-related social services systems" (RFI Section III: Question 1)
- C. I discuss a common challenge faced by entities that are pursuing alternative payment models like ACOs. (RFI Section V)

A. Overview of ACOs for Medicaid-Eligible Children (in response to RFI Section II: Question 8)

Although there are several examples of Medicare and commercial ACOs that serve adults, there are far fewer examples of pediatric ACOs. Part of this scarcity is explained by the fact that pediatric care represents a small percentage of overall healthcare costs. For example, in a 2014 analysis of New York's Medicaid program, the average cost per child was \$4,253 versus \$11,154 for each adult. 48.5% of the enrolled children had an "annual expenditure at or below \$2,288" (Bailit 2016). Furthermore, when considering the annual cost per person of beneficiaries in the

top 1% of spending, it was \$94,491 for children versus \$203,141 for adults (Bailit 2016). This difference was driven by an increased rate of in-patient hospitalization for adults at 12.3% versus 5.8% for children (Bailit 2016). As demonstrated by this example, pediatric ACOs exclusively serving Medicaid-eligible children face a unique context characterized by a markedly lower baseline rate of in-patient hospitalization for children which results in a much lower total cost of care per patient. As a result, traditional cost containment mechanisms that largely center on driving down the rate of in-patient hospitalization by providing intensive services to high-utilizer populations in an adult context do not yield a similar magnitude of total cost savings when applied broadly to the pediatric context. Nonetheless, efforts directed at decreasing hospitalization, particularly when applied to certain pediatric sub-populations are still a critical means of decreasing cost while maintaining health outcomes. Below I examine two examples of pediatric ACOs for Medicaid-eligible children to provide an overview of the ways in which organizations have approached the unique challenges of the pediatric healthcare context.

Example 1: Partners for Kids – Nationwide Children’s Hospital

One of the oldest examples of a pediatric ACO exclusively for Medicaid-eligible children is Partners for Kids (PFK). PFK was founded in 1994 at Nationwide Children’s (NCH) as a joint venture between NCH-employed physicians and contracted, community physicians (Kelleher et al 2015). The ACO is responsible for 330,000 children via partnerships with five managed care Medicaid plans. The professional workforce of the ACO includes 100 NCH primary care physicians, 200 community pediatricians, 700 NCH specialists and 50 community specialists. These providers are in performance-based contracts and are paid incentives quarterly. PFK receives capitated payment for each child in the ACO and is then responsible for all medical costs across the spectrum including costs incurred at non-member providers. These rates are adjusted for age and gender (Bailit 2016).

A 2015 study assessing PFK’s effectiveness in cost saving and improving quality of care found that PFK demonstrated cost savings over managed care in per-member per-month (PMPM) costs (Kelleher et al 2015). Specifically, PFK cost \$67.03 PMPM less than FFS Medicaid and \$23.75 PMPM less than Medicaid managed care (Kelleher et al 2015). In addition, the rate of cost growth was significantly lower than FFS Medicaid with PFK PMPM costs increasing by 15% over a 5-year period compared to estimated 16% to 22% increases for FFS Medicaid (Kelleher et al 2015). These gains were accomplished by a statistically significant reduction in in-patient admissions and bed days. Specifically, there were improvements in the pediatric gastroenteritis admission rate and decreased NICU days. However, these gains were not without tradeoffs. For example, there was a worsening in short-term admission rates for diabetics though there was no change noted in the average HbA1c (a measure of glycemic control) of enrolled children. Of course, a dramatic reduction in in-patient admissions cannot occur in isolation. These changes were accompanied by an increase in well-child checks in the patient population suggesting increased utilization of primary care services in the ACO. Importantly, a slight though non-statistically significant reduction in emergency department visits and hospital readmissions was observed for children enrolled in PFK meaning the ACO does not lead to increased use of the ED or incentivize unsafe discharges. The study authors posited that additional likely contributors to PFK’s success included a shared EMR, care coordination embedded in the care teams, more face-to-face contact, and on-site quality improvement training.

Example 2: Integrated Health Partnership – Children’s Hospitals and Clinic of Minnesota

In 2013, the Children’s Hospitals and Clinic of Minnesota (CHC) entered into an ACO contract with the state Department of Human Services (DHS) covering 20% of all Minnesota’s pediatric Medicaid enrollees in the Integrated Health Partnership ACO (Christensen and Payne 2016). CHC’s contract delineated a 50% upside and downside risk for the organization. This meant that CHC was able to retain half of all savings associated with children receiving care through IHP but was also responsible for 50% of costs above the expected target unless costs exceeded a catastrophic cap of \$200,000 for an individual patient. DHS was exclusively responsible for costs over the catastrophic cap. Among the covered population, 96% lived in the Twin Cities metropolitan area, the mean age was 7.5 years with a standard deviation of 5.2 years, and the average number of “body systems [affected by] a chronic condition” was 1.8 (Christensen and Payne 2016).

In a 2016 study assessing 28,794 unique pediatric patients enrolled in IHP, it was found that the mean duration of patients’ coverage by the ACO, referred to as the length of attribution, was 12.7 months with a standard deviation of 7 months (Christensen and Payne 2016). The same study noted that continuous attribution to the ACO of 2 or more years was associated with a 40% decrease in inpatient days, a 23% increase in office visits, a 5.8% increase in ED visits, and a 15.3% increase in pharmaceuticals. In addition, there was a 15.7% reduction in cost associated with these changes in healthcare utilization patterns. However, these changes were not apparent at a population level because a large percentage of patients had relatively short durations in the ACO. Reductions in cost were most pronounced after 13-18 months of a patient being enrolled in the ACO with reduced returns after this point.

In addition, there was no significant change in cost for children with zero to two body systems with a chronic condition but rather the cost decrease was driven by children with three body systems with a chronic condition. The conclusion in the study was that enrollment in the ACO was a proxy for continuous participation in a primary care practice. While the gains noted in the study were most evident in patients with continuous enrollment for greater than two years, similar trends were seen in all patients enrolled in the ACO for greater than six months whether their enrollment was continuous or interrupted.

While these two examples provide valuable insights, literature on Medicaid ACOs, especially those exclusive to the pediatric population, is limited (Christensen and Payne 2016). As CMS explores strategies to stimulate the development of innovative payment models for pediatric care, it will be critical to fund evaluations of those models to inform the field. As these two studies illustrate, ACOs are a promising model of providing high-quality pediatric care cost-effectively to Medicaid-eligible children.

B. Children with Chronic Conditions are a Potential Sub-group of Medicaid/CHIP Beneficiaries that Might Provide Opportunity for Savings and Improved Outcomes (in response to RFI Section III: Question 1)

The IHP study identified children with chronic conditions as a group that had unique utilization patterns. These children were less likely to leave the ACO and more likely to return to it if they had left. In addition, the ACO's impact of reducing hospitalization was more profound in children with several chronic conditions. For example, children with five or more body systems with a chronic condition had a 41% reduction in inpatient days after two years of enrollment in the ACO compared with a 20% reduction in inpatient days for children with zero to two body systems affected by a chronic condition.

The cost saving implications of this result are significant when considered in conjunction with Bailit Health's recent analysis of New York's pediatric Medicaid population. In this analysis, children receiving Supplemental Security Income (a federal program that provides assistance to several low-income subpopulations including those with disability which can be used as a proxy for children with chronic conditions) were found to have an average cost 4.6 times greater than the overall average for a pediatric enrollee. This finding is consistent with a 2011 study of the national Medicaid population which showed that while children with medical complexity accounted for approximately 6% of the pediatric Medicaid population, they accounted for a disproportionate 34% of total costs for children with Medicaid (Berry et al 2014). As previously stated, the largest driver of cost of care in the pediatric population is in-patient hospitalization. Therefore, the finding that participation in the IHP ACO led to reductions in hospitalizations among patients with chronic conditions is noteworthy. There is an opportunity for policy initiatives that prioritize the enrollment of children with these conditions in pediatric alternative payment models. Initial research suggests that these models have the potential to decrease the total costs of care by decreasing the rates of in-patient hospitalization in children with complex medical needs.

The California Children's Services (CCS) program provides funding via Medicaid (known as Medi-Cal), state, and federal sources for services for children with complex care needs (Medi-Cal 2014). These services are reimbursed largely on a Fee-for-Service basis by Medi-Cal though there are some Medi-Cal managed care CCS plans (Medi-Cal 2014). While recent proposals were made to transition these services to Medi-Cal Managed Care plans, these proposals have been postponed until July 2018 due in part to concerns about the need for more specific implementation guidelines for managed care organizations about how to administer these plans and what special protections need to be in place for the CCS population (California Department of Health Care Services). The existence of the CCS program illustrates the importance of designing interventions specifically to reduce costs in the children with several chronic medical conditions, a challenge that has been noted in other parts of the country. Both the current structure and future plans for the CCS program will be helpful to consider in designing alternative payment models for children with complex medical needs.

C. Patient Retention is a Common Challenge Entities Face in Pursuing Alternative Payment Models such as ACOs (in response to RFI Section V)

As the IHP study demonstrated, retention of patients participating in an ACO was a major challenge with only 50% of the initially covered patients still covered by the ACO twelve months later and only 30% after two years. Furthermore, there was movement even on a month-to-month basis where on average “5% of patients left the ACO, 3% returned after previously leaving the ACO, and 3% joined the ACO for the first time” (Christensen and Payne 2016). Unfortunately, because the benefits associated with changes in healthcare utilization patterns are primarily realized after at least six months of enrollment in an ACO, these frequent transitions in the ACO population meant that the healthcare utilization benefits of ACO enrollment were not apparent at the total population level. Strategies that support continuous enrollment in ACOs with minimum enrollment of at least six months should be prioritized.

One recommendation for supporting continuous enrollment in ACOs is to strengthen ‘continuous eligibility’ for the Children’s Health Insurance Program (CHIP) and Medicaid. Continuous eligibility allows states to provide twelve months of continuous coverage to children enrolled in Medicaid or CHIP even if their family’s eligibility changes during the course of the year (Medicaid.gov). Unfortunately, sixteen states offer continuous eligibility for only one program, either Medicaid or CHIP (Medicaid.gov). One state does not offer continuous eligibility for either program (Medicaid.gov). Incentivizing states to adopt continuous eligibility for both Medicaid and CHIP would help to mitigate frequent transitions in the covered population. The subsequent improved patient retention would increase the likelihood of seeing the healthcare utilization benefits at the population level.

In summary, incentivizing patient retention by encouraging at least six months of continuous enrollment and strengthening initiatives dedicated to managing the costs of children with complex medical needs will be critical to the success of any attempts at creating and pursuing pediatric alternative payment models.

Sincerely,

A handwritten signature in black ink, appearing to be 'Ad', followed by a horizontal line.

Abimbola Dairo, MD

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3. California Department of Health Care Services. California Children's Services (CCS) Whole Child Model (WCM).
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UNC-Chapel Hill School of Nursing

RFI -- CMMI, Pediatric Alternative Payment Model Concepts

Hi!

I was reviewing the Request for Information on Alternative Payment Model Concepts and thought it sounded similar to my "Recommendations and Implications for Policy and Practice" section of a manuscript that I published in the Journal of Nursing Law in 2008. I wanted to share this manuscript with the CMMI team that is working on this initiative.

Thanks so much.



UNC-Chapel Hill
School of Nursing.p

Evaluation of Policy Change and Strategies to Improve Health Care Delivery to Low-Income Children in North Carolina: Part II, Outcomes and Recommendations

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In January 2006, children ages 0 to 5 years with family incomes between 100% and 200% federal poverty level were transferred from the State Children's Health Insurance Program (SCHIP) to Community Care of North Carolina (CCNC), the state's Medicaid managed care program. Beginning March 2007, 6- to 18-year-old children enrolled in SCHIP were also given access to the CCNC Medicaid managed care program while remaining enrolled in the traditional SCHIP program. Both groups of children were expected to benefit from being linked with a usual source of primary care and other CCNC services. This evaluation uses program data and key informant interviews to determine whether expected outcomes of these policy changes have been achieved. Recommendations for process and system improvements are also outlined. The objectives of this study are to determine whether eligible children have been linked with primary care providers and are receiving timely well-child and preventive services, and whether operational systems in the program support these goals. Findings from this study suggest that efforts are underway to achieve program goals. However, the process of linking eligible children to CCNC services should continue to be improved through enhanced collaboration between involved agencies, more streamlined and integrated data management systems, and population-based strategies.

Keywords: State Children's Health Insurance Program; Medicaid; children; policy; population-based

North Carolina operates a hybrid public financing system for providing health insurance coverage for low-income children (Kenney & Yee, 2007). The hybrid system consists of a separate State Children's Health Insurance Program (SCHIP) called Health Choice and a relatively new SCHIP Medicaid expansion program. All children ages 0 to 18 years, with family incomes at or below 100% of the federal poverty level, are eligible for coverage through Medicaid and its managed care program, Community Care of North Carolina (CCNC) (North Carolina Division of Medical Assistance [NCDMA], 2007a). As of January 1, 2006, children ages 0 to 5 years, with family incomes between 100% and 200% federal poverty level, became eligible for coverage through CCNC Medicaid as a SCHIP Medicaid expansion program in lieu of Health Choice. This

transition was implemented with the intent of insuring a larger number of children (North Carolina Institute of Medicine, 2003) and providing these children with access to CCNC's enhanced primary care case management structure. The third group of children, those between the ages of 6 and 18 years with family incomes between 100% and 200% federal poverty level, are eligible for coverage through the Health Choice SCHIP program. However, beginning March 1, 2007 the 6- to 18-year-old children enrolled in SCHIP were also given access to the CCNC Medicaid managed care program while remaining in and receiving the benefits of the SCHIP program.

A major goal of the CCNC program is to "improve access to primary care and provide a more cost efficient health care system for Medicaid recipients" (NCDMA,

2007b). An additional goal of CCNC is to improve access to primary preventive care (NCDMA, 2007b). These goals are expected to be accomplished through the enhanced primary care case management organizational structure, linking Medicaid recipients with primary care providers (PCPs) who deliver and coordinate care programs, case management, disease management, and other program initiatives. The CCNC program is described in Part I of this report.

Highly effective operational systems are needed to optimally achieve the goals of linking children with PCPs and improving access to nursing case management and primary prevention services within the CCNC Medicaid program (Hinman, Saarlal, & Ross, 2004; McAfee & Thompson, 1998). The goal of this evaluation of a policy change is to review several operational domains of the transition of 0- to 5-year-old children from Health Choice to CCNC Medicaid and offer recommendations for process and/or systems improvement. The specific objectives of this policy evaluation are to: (a) estimate the proportion of children who have been linked with PCPs within CCNC; (b) evaluate children's access to primary preventive services; (c) describe and critique the operational systems that support the PCP linkage process and access to primary prevention services; and (d) develop recommendations for process and system improvements. This evaluation of a major state policy change is expected to inform future efforts to improve primary prevention services and link children with PCPs in the SCHIP Medicaid Expansion program as well as with 6- to 18-year-olds who will remain in Health Choice but also utilize CCNC networks and services. Nurse attorneys and nurse-policymakers are ideally positioned to move forward the recommendations from the evaluation of this policy change as the CCNC program relies on nursing systems and nursing-based case management and disease management services and to improve the health of populations.

METHODS

This evaluation was conducted using primarily qualitative methods, such as interviews and review of program documents, as well as analysis of administrative data to assess the success of SCHIP and Medicaid policy changes that were implemented during 2006 (Majchrzak, 1984). The study was reviewed by the Public Health and Nursing Institutional Review Board at the University of North Carolina at Chapel Hill and determined to be exempt from further review on June 19, 2007 (Study #07-1066).

Requests were submitted to the North Carolina Division of Medical Assistance and Health Choice to obtain

frequencies of children linked with PCPs. The requested frequencies included: SCHIP eligibility and enrollment; SCHIP-eligible children who were transferred to CCNC Medicaid; and use of specific enrollment strategies to link children with PCPs. Monthly data were requested, stratified by age group (0 to 5 years, and 6 to 18 years).

Key Informant Interviews

Structured key informant face-to-face and telephone interviews were performed individually with a convenience sample of CCNC administrative staff, CCNC directors, medical directors and case management directors, county-based health check coordinators, and department of social services caseworkers. Interview participants were asked open-ended questions about the strategies used to link children with PCPs, the perceived relative success of each strategy, and suggestions for improving the process of linking children with PCPs. Interviewees were also questioned about the availability and use of tracking systems to monitor activities and success related to linking children with PCPs. In addition, interviews focused on strategies used by individual primary care practices, counties, state offices, and CCNC networks to improve patient utilization of primary prevention services and compliance with health promotion activities and well-child checks. The interviews were audio-taped, word-processed, and summarized by question and major theme.

Medicaid and SCHIP Program Documents

North Carolina Medicaid and SCHIP program documents were reviewed to supplement and validate program and systems descriptions that were ascertained through key informant interviews. The reviewed program documents included SCHIP (Health Choice) annual reports, program descriptions, press releases, and the health check coordinator position description. Previously collected and summarized public data were used to examine patient utilization of clinical preventive services and well-child checks as well as patient health behaviors. These data included Health Plan Employer Data and Information Set (HEDIS) measures and results from the North Carolina Child Health Assessment and Monitoring Program (CHAMP) survey (National Committee for Quality Assurance [NCQA], 2007; NCDMA, 2007b; North Carolina State Center for Health Statistics [NCSCHS], 2007a).

HEDIS Data

The National Committee for Quality Assurance (NCQA) sponsors HEDIS, a standardized set of performance

measures that allows comparisons between health plans of performance in several key areas, such as well-child checks and immunization delivery (Bardenheier, Kong, Shefer, Zhou, & Shih, 2007; NCQA, 2006). The utilization of PCPs for routine well-child visits and preventive care was briefly assessed by performing a limited review of HEDIS measures, comparing CCNC Medicaid programs with Health Choice, North Carolina fee-for-service Medicaid, national averages, and 2006 Medicaid HEDIS 90th-percentile benchmarks, as available.

Child Health Assessment and Monitoring Program Data

The CHAMP survey was implemented by the North Carolina State Center for Health Statistics in January 2005 (NCSCHS, 2007a). This survey measures access to care, health characteristics and status, and health promotion behaviors of children ages 0 to 17 years. Eligible children for the survey are drawn each month from the Behavioral Risk Factor Surveillance System random telephone survey of North Carolina residents aged 18 and older in households with telephones (NCSCHS, 2007b). A set of measures relating to health promotion behaviors, health status, and access to care were summarized, including: weight status, tobacco use, sun safety, child safety and injuries, school absenteeism, and access to a regular source of dental care (NCSCHS, 2007b). Responses to the CHAMP survey are sorted by health insurance status (Medicaid, Health Choice, and other insurers) to facilitate comparisons.

RESULTS: EVALUATION OF A POLICY CHANGE

Linkage of Children With Primary Care Providers

The Processes for Linking Children With PCPs and Potential Barriers. The primary responsibility for formally linking children who were transferred from SCHIP to CCNC Medicaid with a PCP resided with the county-based and county-employed Department of Social Services caseworkers. These caseworkers generally did not have a direct reporting relationship with the central (state) CCNC administrative offices or CCNC networks. Therefore, state-level goals of linking children with PCPs were delegated to employees who were accountable for meeting the goals of their respective counties, not those of the state. Supplemental mechanisms were added to try to increase the proportion of eligible children who were appropriately linked with PCPs. Health check coordinators, based in

88 of 100 counties, were provided with lists of children, from the North Carolina Division of Medical Assistance, who were transferred from SCHIP to Medicaid. The health check coordinators were asked to assist with the linkage efforts. This new role complemented the existing job expectations, which included: assisting families with obtaining medical benefits and other services needed by children; educating families about Medicaid and Health Choice; helping enroll eligible children; and following Medicaid-enrolled children in their respective counties to assure that they receive well-child checkups and recommended follow-up care (NCDMA, 2007c). The third strategy for linking eligible children with CCNC PCPs involves primary care physician practices. These physician practices were provided with brief mail-in forms and instructions to help formally link children who already come to their practice for care with PCPs.

Perceptions of caseworkers about the potential advantages and disadvantages of linking children with CCNC Medicaid PCPs may have influenced the diligence with which the linkage process occurred. Results of key informant interviews suggest that there may have been resistance to linking children with PCPs because some may believe they are advocating for children by encouraging them to “exempt out” of linking with PCPs. Some caseworkers expressed the belief that by linking children with PCPs they are limiting care choices for patients. In addition, some caseworkers viewed the “exempt out” process as less time-consuming than the linkage process.

Information Management Systems Utilized Within North Carolina Medicaid and SCHIP. It was determined, from review of program documents and transcribed key informant interviews, that a number of distinct and non-integrated information systems are used within North Carolina Medicaid and SCHIP programs. These systems serve to document and manage eligibility and enrollment, linkage of children with PCPs, CCNC case management activities, disease management and registry functions, and efforts to facilitate compliance with well-child screenings, immunizations, and referrals for special health care problems. In general an electronic information system exists for each primary activity or each major employee group instead of utilizing one integrated information system. For example, the State Eligibility Information System is used by Department of Social Services caseworkers to formally link enrollees with PCPs during Medicaid eligibility determinations and re-determinations. Second, the Automated Information and Notification System is used by health check coordinators to track

Medicaid-eligible children from birth through 20 years of age (NCDMA, 2007c). This system provides lists of those Medicaid-eligible children who are receiving regular well-child screenings and immunizations. Third, the Clinical Management Information System supports case management and disease management activities within the CCNC Medicaid networks. Fourth, some CCNC Medicaid networks utilize their own databases to manage similar client information.

Key informants described additional potential limitations of the information systems. The Medicaid eligibility database, used by Department of Social Services caseworkers for linking patients with PCPs, was reported to lack real-time tracking, at the client level, of enrollees who had been linked with a PCP versus those not yet linked. In addition, PCP linkage efforts were not electronically documented to facilitate monitoring and evaluation of the relative success of each strategy. Access to the Medicaid eligibility database to link enrollees with PCPs was reported to be restricted to the Department of Social Services caseworkers and is not available to others who work on linkage efforts.

Frequencies of Enrolling and Linking Children With CCNC Primary Care Providers. As of July 2007, of the 1,217,262 Medicaid recipients in North Carolina, 1,122,637 were eligible to be enrolled in North Carolina Medicaid managed care programs. Of those, 77.4% were enrolled in managed care programs (NCDMA, 2007d). In July 2007, county-specific managed care enrollment for all Medicaid recipients ranged from 45% to 88%. Data were not reported separately for children enrolled in Medicaid.

During July 2007, 39,471 children, 0 to 5 years of age, were eligible for CCNC Medicaid through the SCHIP Medicaid expansion program (NCDMA, 2007e). During the Federal Fiscal Year 2006, the unduplicated number of children enrolled at any time during the year in the SCHIP Medicaid Expansion was 53,180 (NCDMA, 2007f). The specific proportion of children age 0 to 5 years in the SCHIP Medicaid Expansion program who were linked with PCPs was not available. Anecdotal reports indicate that there were difficulties in getting the 0- to 5-year-old children linked and the process was incomplete. As of June 2007, of the 115,866 children (6 to 18 years) enrolled in North Carolina SCHIP only 23.3% were enrolled with a PCP. County-specific proportions of 6 to 18 year olds in SCHIP linked with PCPs ranged from 3.5% to 39.9%. The number and proportion of children who were linked with PCPs, stratified by linkage strategies, were not available.

Routine Well-Child and Preventive Visits, Access to Care, and Health Behaviors

Systems to Promote Use of Primary Care and Preventive Services. The CCNC Medicaid and SCHIP programs have implemented a Medical Home Campaign to emphasize to patients the importance of having a “medical home” that provides preventive and primary health care services (NCDMA, 2007b). The North Carolina Health Check Program, administered by the Division of Medical Assistance, also supports this goal through efforts of 105 health check coordinators. The health check coordinators are expected to follow eligible children to encourage participation in preventive health screenings and services through reminder and recall efforts (NCDMA, 2007c). Yet, several interview respondents mentioned that CCNC focuses on chronic diseases and does not actively focus on preventive services.

HEDIS Performance Measures. *Children's access to PCPs* is generally defined within HEDIS as the percentages of persons 12 to 24 months, 25 months to 6 years, 7 to 11 years, and 12 to 19 years of age who had a visit with a PCP during the measurement year (NCDMA, 2007g). North Carolina SCHIP measures exceeded CCNC Medicaid measures by 1.2 to 5.7 percentage points for three of four age groups. Both North Carolina programs exceeded national averages on access for each age group in the years 2003 through 2005 by 2 to 11 percentage points (NCDMA, 2007g). Yet, 2005 CCNC rates were 1.3 to 8.2 percentage points lower than the 2006 Medicaid HEDIS benchmarks (90th percentile) (NCDMA, 2007d). During 2005, almost 97% of the CCNC sampled enrollees, age 12 to 24 months, had a visit with a primary care practitioner during that year. The 2005 proportions drop to 82.0% for 12 to 19 year olds (Figure 1).

Well-child visits in the first 15 months of life is defined within HEDIS as “the percentage of persons who turned 15 months old during the measurement year and had zero, one, two, three, four, five, or six or more well-child visits with a PCP during the first 15 months of life” (NCDMA, 2007g). Within the CCNC networks during 2005, 62.8% of children had six or more well-child visits with a PCP during the first 15 months of life (NCDMA, 2007g). This exceeds SCHIP (39.0%) and the HEDIS national mean (45.0%), yet is less than the 2006 Medicaid HEDIS benchmark of 68.6%.

Adolescent well-care visits is defined within HEDIS as “the percentage of persons who were 12 to 19 years of age who had a least one comprehensive well-care visit with a primary care practitioner or an OB/GYN during the measurement year” (NCDMA, 2007g). The CCNC

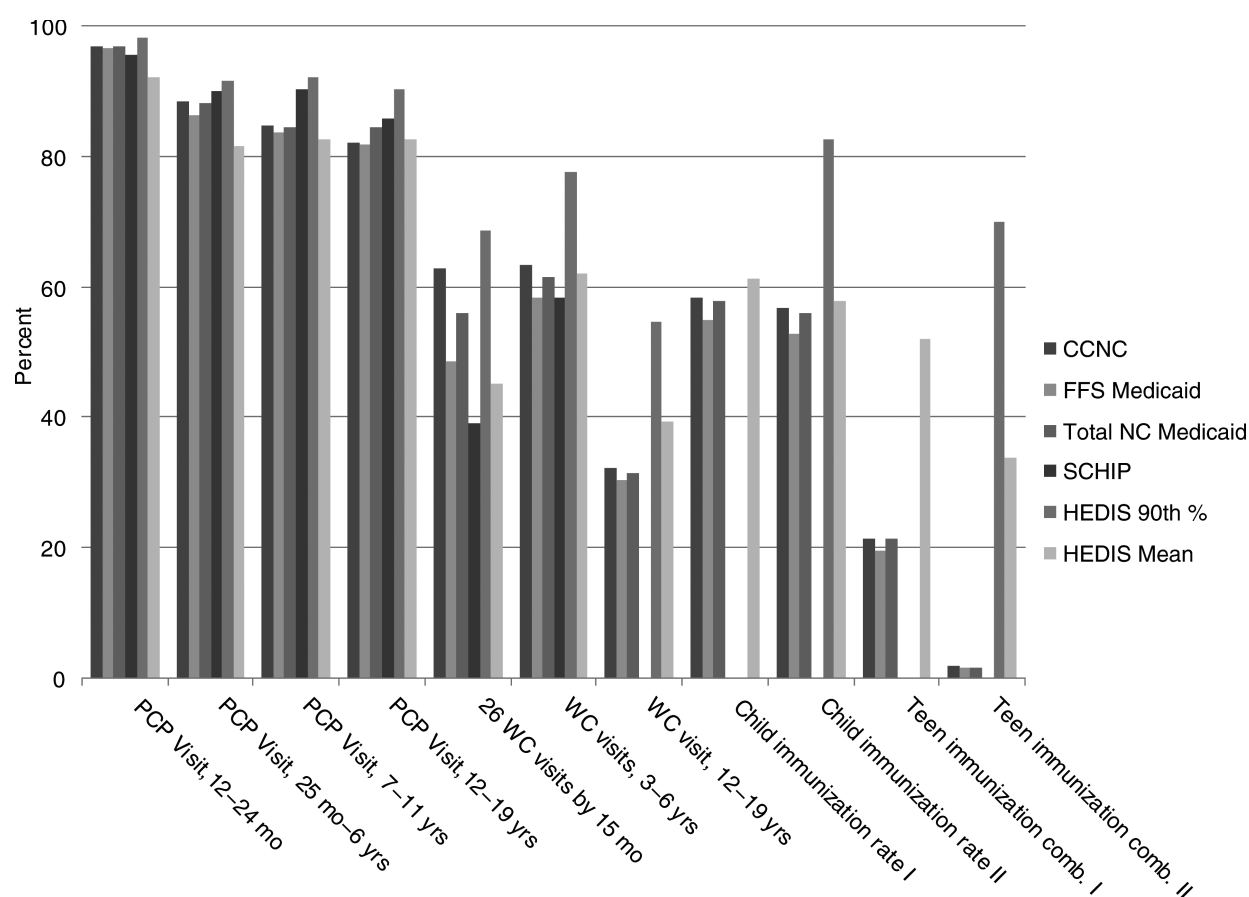


Figure 1. Health Plan Employer Data and Information Set measures of children's access to primary care and utilization of preventive services.

Note. CCNC = Community Care of North Carolina; HEDIS = Health Plan Employer Data and Information Set; FFS = fee for service; NC = North Carolina; PCP = primary care physician; SCHIP = State Children's Health Insurance Program; WC = well-child.

program did not meet HEDIS national mean values during 2003 through 2005. Only 32.2% of CCNC adolescent enrollees were reported to have received a well-care visit during 2005.

Childhood immunization rates are defined within HEDIS as the percentage of enrolled children who turned 2 years of age during the measurement year and who received all appropriate immunizations by their second birthday. Childhood immunization rates in CCNC were slightly lower than the national HEDIS average in 2004 (Figure 1). The 2004 CCNC Child Immunization Rate II was 26.1 percentage points lower than the 2006 Medicaid benchmark of 82.7%. No comparable data were available for SCHIP.

Adolescent immunization rates are defined within HEDIS as the percentage of children who have received the appropriate immunizations by age 13 years (NCDMA, 2007g). In 2004, CCNC reported an Adolescent Immunization Rate I of 21.3%, less than half of the HEDIS

national mean value of 51.9%. The 2004 CCNC Medicaid Adolescent Immunization Combination II rate of 1.9% is 59.6 percentage points lower than the 2006 Medicaid HEDIS benchmark rate. No data are available for SCHIP for these measures.

In summary, the reported HEDIS data suggest that North Carolina SCHIP exceeded CCNC Medicaid on several standard performance measures of well-child and preventive services, CCNC Medicaid performed better than SCHIP on others, and data were missing for SCHIP for some measures. For non-immunization measures CCNC Medicaid generally met or exceeded the national average performance levels, but often fell short of the 90th percentile benchmark levels. For immunization measures, CCNC did not meet the 2006 Medicaid 90th percentile benchmark or national mean values. The CCNC measures for adolescent health were generally lower than national means and benchmarks.

Child Health Assessment and Monitoring Program Measures. The CHAMP survey results help to identify key areas for health improvement in North Carolina children in general, as well as for children enrolled in North Carolina Medicaid and SCHIP. For example, more than 30% of Medicaid and SCHIP children evaluated were at risk for overweight or obese (Figure 2) (NCSCHS, 2007a). Several key contributing factors for overweight include an increased prevalence of sedentary lifestyles, increased TV or other screen time, and consumption of sugar-sweetened drinks (Ebbeling et al., 2006; Friedman & Fanning, 2004; Johnson, 2006). Despite the need for lifestyle changes to reduce risks for significant health problems, 28% of Medicaid and 37% of Health Choice respondents reported that they are *not* trying to encourage their children to engage in more physical activity or limit screen time (Centers for Disease Control and Prevention, 2006; Friedman & Fanning, 2004). Approximately one-third of responding parents of children in North Carolina Medicaid indicated that their children smoke cigarettes, exceeding the Health Choice rate by 15.1 percentage points (NCSCHS, 2007a). More than half (53.8%) of responding North Carolina Medicaid parents report that their children do *not* use sunscreen with a SPF of 15 or more when outside on a sunny summer day for more than 15 minutes between the hours of 10 a.m. and 4 p.m., compared with 36.8% of Health

Choice parents (NCSCHS, 2007a). Approximately 14% of Medicaid children missed at least 2 weeks of school in the prior 12 months because of injury or illness, compared with 16.8% of Health Choice children. And, about one-third of children in North Carolina Medicaid (of responding parents) did not have a usual dental care provider, compared with 16.5% of Health Choice children.

In general, for the health behaviors listed in Figure 2, the North Carolina SCHIP parents were more likely to report healthier behaviors for their children than North Carolina Medicaid parents. Many factors could account for these differences, including those which are independent of health care service delivery.

Limitations of Policy Evaluation and Results

The results of this study may be limited in that it focuses only on one state. However, this program is a model for the country; and this evidence would be very important for any states attempting to replicate or build a primary care case management network that is enhanced with nursing-based services. The use of population-based approaches that are supported with well-integrated information systems is an important strategy for documenting and monitoring progress and improving performance within any health system (Halpern & Boulter, 2000). The study is further limited in that some PCP

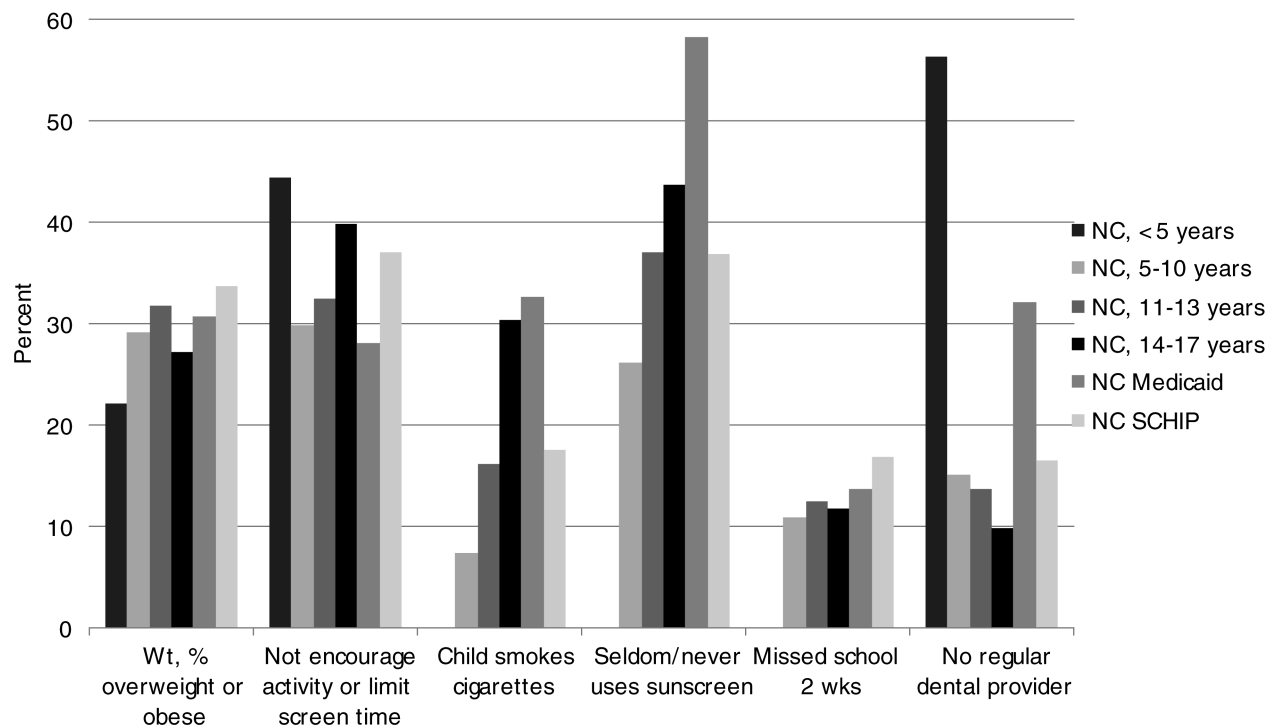


Figure 2. Subset of North Carolina Child Health Assessment and Monitoring Program survey results, 2006. Note. NC = North Carolina; SCHIP = State Children's Health Insurance Program.

linkage data were not available, including a comparison of which strategies were most successful for linking children with PCPs. Yet, this lack of data further strengthens the recommendation to enhance information systems for evaluating strategies and monitoring outcomes. The key informants were not selected randomly. Instead, investigators intentionally selected persons who were expected to know the program and systems as well as others who were geographically dispersed within the state. This potential limitation was addressed in part by validating some responses with official program documents that supported the descriptions of systems.

RECOMMENDATIONS AND IMPLICATIONS FOR POLICY AND PRACTICE

Based on a review of program documents, interviews, and related literature, several recommendations have been developed with the intent of enhancing systems that are likely to improve CCNC's success with linking children with PCPs and increasing compliance with well-child and preventive care services. The first recommendation is to encourage CCNC Medicaid networks, through future contractual requirements, to work collaboratively with Departments of Social Services and health check coordinators in their geographic service areas to develop, implement, and evaluate annual strategic plans to link children with PCPs and promote the CCNC systems and medical home concept. One step in this process should address efforts to educate Department of Social Services caseworkers and health check coordinators about the advantages of the CCNC health care delivery system and the concept of the "medical home." Second, the CCNC program should develop a formal mechanism that creates a reporting relationship or accountability between county Department of Social Services caseworkers and CCNC. One proposed strategy would involve partial payment of DSS caseworker salaries by CCNC to compensate counties for linking children with PCPs. An alternative strategy would involve compensating counties on a per case basis for linking children with PCPs. Third, the North Carolina Division of Medical Assistance should explore the use of new or enhanced integrated information systems to be utilized by caseworkers, health check coordinators, nursing and other case managers, and others involved with linking children to PCPs and promoting the health of this population (Follen et al., 2007). The information systems need to support and facilitate the linkage process, provide mechanisms for tracking linkage efforts, monitor the relative success of alternative linkage strategies, and

support a population-based approach to delivering health care services (Halpern & Boulter, 2000). Creating a more fully integrated information system that can be used and viewed by all involved with the linkage process and care delivery is likely to improve communication and collaboration (Follen et al., 2007; Hinman et al., 2004).

A fourth recommendation is to make primary prevention a higher priority within the North Carolina Medicaid program (McAfee & Thompson, 1998). The CCNC Medicaid networks are uniquely positioned to expand their existing population-based strategies to focus on improving access to primary and preventive health care services and thus improve the health of enrolled children. The recommendation to develop an enhanced and integrated information system could be used to support population-based approaches. CCNC Medicaid has implemented a population model in its nursing-directed disease management programs. It is recommended that CCNC Medicaid expand the capacity to implement population-based strategies and apply this model to primary care and prevention-based services to meet the overall goals of its program to benefit all children in the CCNC program, including those transferred in from SCHIP. The "population health" approach is described more fully in Part I of this report (O'Connor & Pronk, 1998).

A fifth recommendation is to monitor health behaviors of enrolled CCNC Medicaid children through existing data sources as part of the population-based approach to delivering care. For example, the CHAMP survey, or a subset of it, could be administered to parents of all North Carolina Medicaid and SCHIP children, potentially through an electronic method in the primary care setting. In addition, the state's immunization registry could also be used to support population-health approaches by identifying those children in need of immunizations (North Carolina Division of Public Health, 2007).

DISCUSSION

This study evaluates a major policy change to the North Carolina SCHIP program to assess whether operational systems were sufficient to support the goals of the program, including linking children with a medical home and improving access to well-child care and preventive services. North Carolina has taken significant action to help ensure appropriate and affordable coverage for low-income children through the transfer of 0- to 5-year-old children from SCHIP to the CCNC Medicaid program. And, providing access to the services available through the CCNC managed care networks offers another opportunity to provide more comprehensive

coverage for these children and focus on preventive care, which is expected to be beneficial for both the individuals and the state. This evaluation of the policy change suggests that policy-related goal achievement has been somewhat successful. However, it is evident that system enhancements are needed to support population-based strategies that are likely to improve the success rate with linking children with PCPs and increasing utilization of well-child checks and other preventive services.

If the overarching goal of public financed health programs is to help populations achieve optimal health, increasing access to care and a usual source of primary care is one important step in this process (Lambrew, Defriese, Carey, Ricketts, & Biddle, 1996). North Carolina's recent policy change of providing children in SCHIP with access to the CCNC Medicaid managed care initiatives is a positive step toward increasing such access to primary care and preventive services. Yet, within our fragmented and complex health care systems enrolling children in health plans is not sufficient for improving health of populations. The integration of health information is essential for identifying population health priorities, monitoring interventions and outcomes, and improving quality of care and health status (Follen et al., 2007; Hinman et al., 2004). Health care systems must be supported with sufficient infrastructure to meet health care goals. However, new information technology and other systems-focused infrastructure often compete with new and costly treatments for limited financial resources.

To move this agenda forward and gain support and additional resources for systems development that facilitates population health improvement, it is imperative for nurse attorneys and nurse policy makers to advocate for additional state-based policy changes within the SCHIP and Medicaid programs. The priorities for the nursing profession include protecting, promoting, and optimizing health (American Nurses Association, 2008). The recommendations in this policy evaluation support the priorities and roles of nursing in improving the health of populations. Health care systems need to address the reasons for relatively poor performance; the implementation of integrated health information technology is one critical component in the health care quality solution (Commonwealth Fund, 2008).

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UNH Institute for Health Policy and Practice (IHPP) & NH Pediatric Improvement Partnership (NHPIP)

Dear Centers for Medicare and Medicaid Services Innovation Center,

The New Hampshire Pediatric Improvement Partnership (NHPIP) commends the Centers for Medicare and Medicaid Services Innovation (CMS Innovation Center) for requesting input about the design of alternative payment models focused on improving the health of children and youth covered by Medicaid and CHIP. NHPIP (www.nhpiip.org) is a state-level multi-disciplinary collaborative of private and public partners from primary care, state government, insurance, academia, and child-centered not-for-profits dedicated to improving healthcare quality for all NH children through the use of systems and measurement-based quality improvement processes. The response below was compiled from NHPIP stakeholder feedback as well as our staff's experience conducting pediatric quality improvement projects in NH. If you have any questions regarding the below, please do not hesitate to contact us.

Sincerely,



UNH Institute for
Health Policy and Pr

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Sincerely,

Holly **Tutko**, MS

*Samantha House, DO, MPH
Medical Director, NHPIP*

*Josephine Porter, MPH
Research Director, NHPIP*

1. What might be opportunities and impediments to extending and enhancing integrated service model concepts like accountable care organizations (ACOs) to the pediatric population?

OPPORTUNITIES

Children's health relies heavily on the effective integration of a number of agencies and organizations to address physical, mental, and social aspects of care. Linking these systems is complex; a value-based system may uniquely encourage stakeholders from multiple domains to come together at a single table to ensure high quality care is being delivered to pediatric populations. Coordinating this care is not incentivized in many current payment structures. A model not based on relative values units (RVU's) or other markers of productivity will encourage providers to spend time creating these important linkages. Below are specific examples of how integrated service model concepts could improve care quality and ultimately child health and functioning.

- Value based care arrangements could provide both the vehicle and incentive to improve identification and treatment of developmental delays. Numerous organizations and agencies; including state and local early intervention programs, local head start programs and schools, and pediatric primary care and specialty care; all play important roles in screening, diagnosing, and treating children with a developmental delay. Value-based care arrangements could serve as a catalyst to improve coordination of services to ensure all children are screened and that children with delays receive appropriate, effective, and timely treatment by changing the model from payment of discrete, individually billable services to a more holistic approach that rewards value tied to quality of care, across the systems.
- Value-based care arrangements could also assist with ensuring children in the state juvenile justice or foster care system receive coordinated, high quality care. Children in these systems are typically insured through Medicaid. They have been found to be subject to care practices that may not be entirely evidence-based, likely secondary to the complex behavioral health

issues that sometimes manifest. For example, this population has documented high use of antipsychotic medications. Examining care in this population has the potential to improve outcomes and control costs, particularly if integrated behavioral health, psychiatric consults, and adequate social services are in place.

- Accountable care models could also support improved care coordination to medically complex children. This population often sees many different specialists, in addition to receiving services from state and local agencies and organizations (for example, state special medical services agency, early intervention, etc.). An integrated care delivery model could facilitate shared care planning to assure that care is coordinated, responsive to changing needs, as well as facilitates a pathway when the time comes for transition to the adult care system.

IMPEDIMENTS

- Quality measurement in pediatrics is particularly challenging with fewer care guidelines, fewer vetted measures (particularly outcome measures), and incomplete datasets addressing pediatric care. This creates challenges for defining high-value care. All-payer claims data are becoming increasingly available and are helpful but limited to the medical treatment aspects of pediatric care. Processes to develop evidence-based pediatric care quality metrics as well as acquire the data to support them is critical.
- The CMS Innovation Center could consider developing a core set of pediatric quality metrics on which all practices or systems participating in value-based payment models would report. This approach would mitigate measurement burden and fatigue, particularly for insurers and providers that straddle state boundaries. The initial metric panel could be built by reviewing existing pediatric quality measures used by Federal and national programs (CHIPRA Initial Core Set of Children's Health Care Quality Measures, MCH 3.0 performance metrics, uniform data set measures, HEDIS, etc.) and vetting them against a set of agreed upon criteria. State Medicaid programs could also be allowed to add a limited number of state-specific measures that align with current state priorities and/or Medicaid Waivers (see bullet below regarding alignment with existing Medicaid waivers/benefits).

2. Flexibilities and supports states and providers may need in order to offer such models of care to a state's pediatric population.

- The CMS Innovation Center should build in resources and time to educate pediatric providers about what value based care is, how it is going to affect them (especially, how it can it help providers), and key skills need to navigate this new care delivery model (especially leadership and quality improvement skills). In speaking with clinicians in our state, many are not familiar with concepts of value based payment, stating "my practice manager/senior leadership deals with this, not me."
- The CMS Innovation Center should capitalize on existing resources, including the National Improvement Partnership Network (www.nipn.org) and the Transforming Clinical Practice Initiatives (TCPI) Practice Transformation Networks (PTN) to support the development and implementation of value based care models for pediatric populations. Roughly 25 pediatric improvement partnerships (PIP) exist across the nation and are demonstrated effective vehicles for improving pediatric care quality. PIPs serve as neutral conveners of pediatric stakeholders to address salient systems issues relevant to pediatric care delivery as well as conducting various

types of quality improvement projects including needs assessment and learning collaborative. PIPs have the relationships and QI skills to support practices in their transformation efforts.

- Funding to help pediatric practices build the infrastructure needed to support value-based care delivery is vital. In NH, we have a predominance of hospital-owned practices and a scattering of independently owned practices. Both organization types face challenges to transform to value-based care. Given the relatively low overall costs of care for younger populations, pediatric care typically presents less opportunity for cost-savings than care to adults. Because of this, pediatric initiatives are generally lower priority for large health systems in terms of competing resources for investments in infrastructure needs such as information technology and care management. Funding for projects through the CMS Innovation Center could provide additional incentive to invest in infrastructure supports focused on pediatric populations.

3. Approaches for states and providers to coordinate Medicaid and CHIP benefits and waivers with other health-related social services for children and youth.

Coordination of pediatric integrated care delivery model services and measurement with existing state Medicaid waivers, as well as other state pediatric health improvement work, is key. For example, New Hampshire is implementing a Delivery System Reform Incentive Program (DSRIP) waiver in Medicaid and SAMHSA Systems of Care grant through the Department of Education. The DSRIP waiver focuses on integrated care for mental health and substance use disorders. The Systems of Care grant centers around developing coordinated care and supports for NH youth with diagnosable serious emotional disturbance (SED) and their families. Both these efforts have a focus on the use of high fidelity wrap-around care for children and youth with serious emotional disorders. The CMS Innovation Center efforts to promote value-based models could align well to the focus of these – and other efforts -- to use integrated care models to meet the needs of complex populations.

Holly Tutko, MS

Clinical Assistant Professor, UNH Institute for Health Policy and Practice (IHPP)

Project Director, NH Pediatric Improvement Partnership (NHPIP)

UNH School of Law

Hours: Tues, Wed, Thur

United Hospital Fund

Hello,

I am writing on behalf of the United Hospital Fund to share with the Centers for Medicare and Medicaid Services our response (attached) to the Pediatric Alternative Payment Model Request for Information. Thank you for the opportunity to comment.



United Hospital
Fund.pdf

United Hospital Fund (UHF) Response to Center for Medicare and Medicaid Innovation (CMMI) Request for Information on Pediatric Alternative Payment Model Concepts

March 28, 2017

Thank you for the opportunity to submit comments on this important topic. The United Hospital Fund (UHF), based in New York, applauds CMMI's interest in integrating health care and social services and its recognition that transforming children's health care warrants a look independent of largely adult-focused transformation efforts.

The mission of UHF is to build a more effective health care system for every New Yorker. An independent, nonprofit organization, we analyze public policy to inform decision-makers, find common ground among diverse stakeholders, and develop and support innovative programs that improve the quality, accessibility, affordability, and experience of patient care.

In 2016 UHF launched a Children's Health Initiative, which aims to strengthen primary care's capacities to promote healthy early childhood development, thereby improving not only the health and well-being of children but also their long-term socio-economic trajectory. This work includes a particular focus on how child-serving primary care practices can identify and address the social determinants of children's health, especially those associated with poverty and early childhood trauma, and the ways in which Medicaid policy and payment can support those efforts.

The Children's Health Initiative focuses on three core strategies:

- Partnering with primary care practitioners to build sustainable early childhood development programs focused on social determinants.
- Informing Medicaid and CHIP payment and delivery system policies in support of healthy early childhood development.
- Integrating the perspectives of parents and early childhood educators in the design of pediatric primary care efforts.

In responding to CMMI's Request for Information on Pediatric Alternative Payment Model Concepts, we elected to comment specifically on sections and questions that touch on topics with which we have significant experience, rather than comment on all questions.

More information about UHF and the Children's Health Initiative can be found at www.uhfnyc.org. CMMI may also directly contact the authors of this comment:

Chad Shearer

Vice President for Policy

United Hospital Fund

Suzanne Brundage

Program Director, Children's Health Initiative

United Hospital Fund

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

1. What is the level of interest of states and tribes for a child and youth-focused care delivery model that combines and coordinates health care and health-related social services? Please comment on challenges and opportunities in service delivery for all pediatric beneficiaries and for those with higher needs (i.e., those at-risk for developmental, social, emotional, behavioral, or mental health problems, and those with complex and/or chronic health conditions) and the level and range of technical assistance entities might require to support an effective model.

The United Hospital Fund (UHF) has been involved in three efforts to date related to pediatric health care and health-related social services in New York State: (1) conducting qualitative research on pediatric primary care delivery system innovations; (2) managing the NY Medicaid program's Children and Adolescent Value-Based Payment Subcommittee/Clinical Advisory Group; and (3) developing and leading the *Partnerships for Early Childhood Development* grant initiative and learning collaborative, which aims to strengthen the capacity of hospital-affiliated primary care practices and community-based social service organizations to work together to address unmet needs in young children. Collectively these efforts have led us to conclude that there is a high level of interest in the state for child and youth-focused care delivery models that combine and coordinate health-related social services.

In 2016, we published a paper entitled "Seizing the Moment: Strengthening Children's Primary Care in New York,"¹ which states:

Pediatric primary care providers [in New York] are increasingly experimenting and redefining their role in promoting healthy development by incorporating lessons from brain science and adopting efficacious program interventions. This role has expanded to new service areas beyond diagnosis and management of developmental delays, the traditional province of pediatric primary care. Examples of early childhood approaches being tested in New York City include coaching parents in how to read to their children, screening for and treating maternal depression during well-child visits, applying motivational interviewing techniques to encourage pro-social parenting, and developing strong referral systems to community-based resources such as supplemental nutrition, lead abatement, and asthma remediation programs. However, many of these efforts are pilot programs in separate silos, without long-term strategies for sustainability or scale.

In addition, our paper identifies challenges—at the practice and system levels—as well as opportunities in service delivery for all pediatric beneficiaries and for those with higher needs. These challenges and opportunities are presented below quoted directly from the paper (inset paragraphs) with additional commentary based on the whole of our experience in New York.

Practice level-challenges include (1) primary care practice constraints, (2) provider training and comfort, and (3) referrals.

Practice-Level Challenges

Primary care practice constraints. Pediatric practices, many of which are small private practices in New York, have numerous constraints that currently limit their ability to play an enhanced role in early childhood development. The economics of running a pediatric practice are challenging. Providers often need to see a high volume of patients to stay financially viable, resulting in relatively short visits between pediatricians and patients. It is also challenging for pediatric practices to integrate new preventive early childhood development services into their clinic work without a clear benefit requirement or payment mechanism encouraging them to do so. In Medicaid—the largest payer for children in New York, particularly for at-risk children—the Early and Periodic Screening, Diagnosis, and Treatment benefit (EPSDT, also known in New York as the Child/Teen Health Program) is an important childhood benefit, particularly for supporting periodic visits and screenings, but it does not specifically address or require many of the evidence-based early childhood development interventions described in this report, even though they would arguably be allowable under federal guidelines. The state and its Medicaid managed care plans may want to re-examine EPSDT guidance and consider adjusting payment to encourage adoption of these evidence-based practices. And while costs associated with implementing early childhood development interventions need not be high, equipping practices to expand their role in early childhood would require additional financial and technical resources.² These resources are needed to support new personnel, cover the costs of additional services and the adoption of health information technology that enables care management of at-risk kids, and create work flows that systematize early childhood efforts.

Provider training and comfort. Some providers may need additional training and education on the importance of early childhood development and the specific methods through which they can support a child's social, emotional, and cognitive growth. Child health care providers may not feel equipped to address parental health problems and may require additional medical education in those areas. Cultural sensitivity, particularly when addressing diverse parenting techniques, may present additional challenges.

Referrals. Providers will require reliable systems to connect children and their families to additional clinical and community-based services. The mere existence of referral sources will not be enough; providers will need assurance that referral sources are high-quality and have sufficient capacity to meet their patients' needs. Confidence in a strong referral system will likely be a prerequisite for convincing providers to screen for parental health or social needs.

System-level challenges include (1) the absence of a clear framework or set of standards that providers can widely embrace and implement, (2) practice transformation capacity, (3) a need for sustained investment and commitment, and (4) measurement.

System-Level Challenges

Absence of a clear framework or set of standards that providers can widely embrace and implement. New York is currently flush with early childhood innovations that child health providers could choose to adopt in their practices. These approaches vary in their evidence base and suitability for practices of different sizes and structures. However, there is no generally accepted framework or standard—akin to the Wagner Chronic Care Model—that identifies the

essential functions of a pediatric practice that encourages healthy early childhood development using the latest available science and techniques. Such a framework is essential for orienting practices to the kinds of activities they could be providing, and for helping practices identify evidence-based approaches for fulfilling those functions. Any such framework would have to take into account the suitability of different evidence-based approaches for primary care practices of different sizes and organizational needs.

Practice transformation capacity. As noted above, some primary care providers could need significant assistance in incorporating an early childhood approach into their practice. Demand for such assistance would need to be met by an organized supply of practice transformation services that could help providers develop new skills and capacities. Such practice transformation capacity exists for helping (primarily adult) primary care providers reach medical home status or meet quality improvement targets, but an analogous New York capacity to assist with early childhood development functions in pediatric primary care has not been created. The Vermont Child Health Improvement Program might hold important lessons for how such a support system could be developed, structured, and sustained.³

A need for sustained investment and commitment. Early childhood programs have two distinct investment challenges. First, future savings associated with reduced prevalence of physical and behavioral health challenges are only likely to emerge after multiple years. This is different from many investments in adult primary care, which are predicated on achieving savings within a year of implementation, as in the Medicare Shared Savings Program. Second, when returns do materialize, the savings are often spread across multiple systems, including education, child welfare, and health. The dominant payers for pediatric primary care are public programs—Medicaid and Child Health Plus—that will have to adopt a long-term investment approach and concede that, in the interest of improving the outcomes for a future generation, savings will likely accrue to public systems beyond health care.

Measurement. As a whole, the development of strong, universal quality indicators for child health has lagged behind adult indicators. Assessment and measurement of early childhood development outcomes is even more complex. Pediatric providers working in this field target a wide range of outcomes, and use a variety of approaches to measure whether they have been successful in their efforts. Some use social-emotional screening tools as a proxy for functional outcomes. Others use process measures that assess high fidelity to interventions that are closely aligned with outcomes. And some are optimistic that biomarkers of toxic stress and overall development (e.g., stress hormone levels) may become available in the near future. Regardless of which approach is taken, an agreed-upon set of outcomes and their associated measures will be needed to advance the field.

The many opportunities in service delivery for all pediatric beneficiaries and for those with higher needs include (1) reducing intergenerational transmission of trauma, (2) coaching parents on positive parent-child interactions, (3) addressing two-generational health challenges, (4) directly promoting early learning and literacy, and (5) connecting to more intensive services and community resources to address social determinants of health.

We believe the most effective pediatric primary care model would incorporate all five of these elements. This RFI has expressed specific interest in the latter capacity of combining and coordinating

health-related social services; “Seizing the Moment: Strengthening Children’s Primary Care in New York” highlighted the following New York efforts in this domain:

Connecting to more intensive services and community resources to address social determinants of health. New programs and systems are also being developed to help pediatric primary care providers connect children and their families to high quality community services. Examples of such programs include Health Leads, located in several NYC Health and Hospitals Corporation outpatient clinics, which connects families to resources to address needs such as heating or nutritional assistance; Volunteers of Legal Services, which provides pro-bono legal services to families seen in hospital outpatient departments; and Help Me Grow, a national program being piloted in Western New York that attempts to systematize help for families through centralized referrals to support services. Linkages to environmental health programs that remove hazards in the home, including lead abatement and asthma remediation services, are another potential area of impact.

Since the release of “Seizing the Moment: Strengthening Children’s Primary Care in New York”, we have learned about other promising initiatives in New York, including several that have recently emerged. These programs include:

- (1) *GROW-Rochester*, a comprehensive citywide initiative led by The Children’s Institute that integrates screenings across clinical and community settings for three-year-olds to identify needs in hearing, vision, dental health, language and speech, cognitive, and social-emotional development;⁴
- (2) New York State Office of Mental Health’s *Healthy Steps for Young Children* pilot, which integrates a child and family development professional into pediatric and family medicine doctors’ offices to help identify, monitor and treat emerging behavioral and developmental health concerns in young children – including by linking families of young children to community services and supports that can help minimize the occurrence of Adverse Childhood Experiences and environmental stressors;⁵
- (3) Millennium Collaborative Care, a Performing Provider System participating in New York’s Delivery System Reform Incentive Payment (DSRIP) Program, which pays community-based home visiting programs on a pay-for-performance basis to reduce avoidable poor pregnancy outcomes and improve child health outcomes in the first two years of life.⁶

Additionally, UHF’s recently launched Partnerships for Early Childhood Development grant initiative and learning collaborative also focuses on opportunities to build strong connections between pediatric primary care sites and community-based social services. Thirteen NYC-based health care systems applied for grant support through this initiative; eleven were accepted. Grant recipients are required to identify one or more risks to early childhood development that is prominent among the grantee’s young child caseload; meaningfully engage a community-based partner that has the capability and interest in supporting children and families identified as in need of services; and conduct activities that will help them initiate, expand, or improve screening, referral, and feedback systems focused on connecting families to needed community-based services.

While health care systems proposed to focus on a wide range of social needs that could interfere with healthy early childhood development, the social services of most interest were nutritional supports, parenting programs, and high quality child care and early education. All of the health care systems selected psychosocial needs that could be reliably identified through an evidence-based screening tool

such as Hunger Vital Signs, the Survey of Well-being in Young Children, and WE CARE. While the learning collaborative to support grantee efforts is just getting started, we anticipate grantees requiring significant technical assistance related to engaging community social service providers as equal partners in systems design and goal setting; achieving universal screening; setting up robust referral arrangements with adequate information feedback loops; and exchanging data across clinical and community sites to track process and outcome measures.

2. Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits (including EPSDT; please be specific about what pediatric populations were targeted)? For example, in the case of oral health, what services have partners included beyond the Medicaid mandatory benefits? What health and health-related social services outcomes have been achieved and over what timeframe (including the time to “ramp up”)? Additionally, what program integrity strategies were employed where these partnerships exist?

3. What policies or standards should CMS consider adopting to ensure that children, youth and their families and providers in rural and underserved communities such as tribal reservations have an opportunity to participate? How might pediatric care delivered at Rural Health Clinics best be included as a part of a new care delivery model for children and youth?

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

1. To what extent is service integration occurring for children and families at the state, tribal and local levels, including all sectors of government, non-profit and private endeavors? What challenges are associated with operating with multiple state agencies (e.g. State Medicaid agencies and health-related social services agencies)?

a. Please comment particularly on service integration with programs such as Head Start; child welfare programs; Children’s Mental Health Initiative programs; Healthy Transitions grantees; Safe Schools/Healthy Students; foster care programs; the Maternal, Infant, and Early Childhood Home Visiting Program; Individuals with Disabilities Education Act, Part C programs; Healthy Start projects; and other state, tribal, and federal programs.

2. Where pediatric health care providers have partnered with health-related social service providers, how have these partnerships operated and integrated service delivery?

a. Which health-related social service providers have been or should be included in a child- and youth-focused integrated service delivery model?

b. What potential exists for increased partnership for provision of home and community-based services?

3. What infrastructure development (electronic medical records (EMRs), health information exchanges (HIE), and information technology (IT) systems, contracts/agreements, training programs, or other processes) has been needed to integrate services across Medicaid enrolled providers and health-related social service providers? Please include specific details of stakeholder engagement and

collaboration, timeline, and costs to operationalize integrated services and how could that experience be improved through a potential model?

4. Where streamlining of eligibility and/or alignment of program requirements has been achieved among Medicaid/CHIP and health-related social service programs, how has this been accomplished? Please be specific about the role of Medicaid or other waivers, any administrative savings, reporting, tracking, and adherence to program integrity requirements in integrated services.

5. Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs?

6. What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome?

7. What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered?

8. What role do models of care such as ACOs play in the pediatric environment?

a. Are pediatric ACOs commonly understood to represent payment arrangements (i.e. shared savings), care delivery models (improved care coordination within and across care delivery sites), or both?

b. How are pediatric ACOs the same or different from adult-focused ACOs?

c. What opportunities do pediatric ACOs have for integration with community and health services systems?

d. Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?

9. What other models of care besides ACOs and MCOs could be useful to implement to improve the quality and reduce the cost of care for the pediatric population?

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

1. What Medicaid and CHIP beneficiary populations/participants offer the greatest opportunity for generating savings and/or improving outcomes for children and youth receiving services from integrated health care and health-related social services systems?

a. Are there specific high-need, high-risk populations that should be included in an integrated care model (including but not limited to children with or at risk for developmental, social, emotional, behavioral, or mental health problems including substance use disorder, and those with complex and/or chronic health conditions)?

To support emerging State efforts around value-based payment for child and adolescent populations, UHF has analyzed service use and costs for children (ages 21 and under) enrolled in New York Medicaid with a view towards pursuing integrated health care and health-related social service systems. Our 2016 report entitled “Understanding Medicaid Utilization for Children in New York State”⁷ found that children

in New York Medicaid are generally healthy, as evidenced by low rates of hospitalization, and that the vast majority child enrollees generate little medical expense. While our report focused on New York Medicaid, national data suggests that our findings are reflective of child enrollees nationally. With reference to this large, healthy population, then, the focus of integrated systems should be improving outcomes for children rather than generating savings. The objective of simultaneously improving outcomes while generating savings could apply to the small percentage of children with complex conditions and physical and developmental disabilities that account for a large portion of overall expenditures. Finally, the report concluded that opportunities to improve outcomes change over time as children's needs and contact with the health care system evolve. For example, prevention and respiratory diseases require more focus in early childhood, while an increased emphasis on behavioral health is appropriate for adolescents.

b. What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth?

While it is important for children of every age to be included in integrated care models, UHF believes it is especially important for children ages five and under to be included in such models. Adversity, including that caused by unmet social needs during the first five years of life, has the potential to disrupt healthy development and interfere with the foundation of all lifelong health and learning. Research has shown that early childhood interventions can lead to lower medical spending in the long run and improved lifelong health. In addition, children enrolled in Medicaid and their families typically have the greatest access to primary care providers in the child's first five years of life, as nearly all such children make frequent visits to pediatricians. The large body of supporting evidence is provided in our 2016 paper entitled "Seizing the Moment: Strengthening Children's Primary Care in New York."⁸

2. How could health care providers be encouraged to provide collaborative services with health-related social service providers for a designated pediatric population's health and social needs?

a. What payment models, such as shared savings arrangements, should CMS consider? Please be specific about the methodology for attribution and determining whether different providers have achieved savings. Please also comment on risk, upside (potential savings) and/or downside (potential costs), including appropriate "ramp-up" periods relative to the payment models.

UHF's 2016 commissioned report by Bailit Health entitled "Value-Based Payment Models for Medicaid Child Health Services"⁹ presents a framework for pediatric value-based payment models. Based on insights gained from expert interviews, literature reviews, data analyses and practical experience with a range of value-based payment models, Bailit Health recommends two distinct payment models for two different groups:

"For a primary care payment model, we recommend a capitated model supplemented by a care coordination payment and a performance incentive bonus. For children with medical complexity, we recommend using a total cost of care model."

As presented in the report, the details of the models are as follows:

1. Primary Care Payment

We recommend a primary care payment model with three primary elements: capitation, care coordination, and performance bonus.

Capitated payment for most services delivered to children by pediatric and family medicine practices is our preferred model. While capitation is sometimes viewed as a payment model for managing costs by controlling service volume, we believe it is attractive for primary care because of a) its removal of the harsh financial incentive to generate office visits, and b) its corresponding liberation to provide new services and use non-office-visit modalities.

We recommend that primary care capitation be structured in the following fashion:

- a. The rate should be based on historical costs that are adjusted upwards, if necessary, to assume:
 - i. delivery of care consistent with the Bright Futures guidelines,¹⁰
 - ii. screening for social determinants of health and other risk factors, including parental screening, and
 - iii. physician time for telephone calls.
- a. The rate should exclude vaccine costs, as well as those pediatric services delivered by some but not most practices (e.g., suturing). Payers and practices could also agree to exclude from capitation specific services about which there may be serious concern regarding underutilization. All of these residual services should be reimbursed on a fee-for-service basis.
- b. The rate should be adjusted downward for a given practice if experience shows the practice to be making higher-than-expected use of emergency department, urgent care, and physician specialist services.
- c. The rate should incorporate behavioral health services for primary care practices with co-located and operational integrated behavioral health care.
- d. Children with complex health needs should be excluded from primary care capitation.

Primary care capitation should be complemented with a **care coordination payment**, probably paid on a per-patient-per-month basis. The care coordination payment should fund care coordination for children within the practice with medical and social risk factors.¹¹ The payment would cover care coordination activities such as coordinating specialist referrals, tracking tests, and doing patient follow-up, as well as care coordination services associated with connecting families to a robust network of community-based agencies that can help with addressing social determinants. One interviewee described these care coordinators as performing “upstream” work, linking families with community-based resources. For many children and families, the care coordinators could be social workers or community health workers. For ease of administration, the PCP capitation payment and the care coordination payment could be combined into a single payment stream.

The capitation and care coordination payments should be risk-adjusted. Risk-adjustment criteria should include clinical risk (e.g., chronic condition, behavioral health diagnosis, and foster care status) and, ideally, socioeconomic risk. Because there are no well-established means for adjusting care coordination payments for socioeconomic risk, proxies may be necessary in the short term.

The final pediatric primary care payment component is a performance incentive bonus. We feel that it is important that there be an explicit incentive and reward for the delivery of high-quality and efficient care. Research suggests that potential rewards should approach 10% of compensation to provide sufficient motivation.¹² Both excellence and improvement over time should be rewarded.

Performance measures should be evidence-based and drawn from national measure sets. Measures should ideally be adopted on a multi-payer basis as has been done in Minnesota and elsewhere to support the practices in attending to shared priorities.

The goal of this model is not to place financial risk on the clinician, but to adequately fund traditional and non-traditional services, provide delivery service flexibility, and provide incentives to continually improve the quality of care provided.

2. Payment for Children with Medical Complexity

We recommend that care for children with medical complexity—estimated to make up no more than 5% of the pediatric population and most of whom are supported by care teams at tertiary referral centers—be paid using a total cost of care model, unless the provider organization is already contracting on a total cost of care basis for its total patient population. Our rationale for this model is a) that it provides financial flexibility for the attributed provider as with primary care capitation, but to a far greater degree because the budget is so much larger; and b) that it provides a financial incentive to reduce unnecessary care and to find better ways to meet patient and family needs. Interviewees with direct experience serving this population felt that significant opportunities exist for supporting them with more efficient care. This is supported by research finding that children with medical complexity account for 40.1% of all hospitalizations for ambulatory care-sensitive conditions in children covered by Medicaid.¹³

The total cost of care model for children with medical complexity should have the following characteristics:

- a. There should be a sufficiently large population to ensure an accurate assessment of financial performance; and
- b. The total cost of care model should evolve from shared savings to shared risk, but should not become a full-risk model due to the impact of high-cost outliers.
- c. Eligibility for distribution of any earned savings should be predicated on accessible performance relative to a pre-negotiated measure set that addresses measures relevant to the health status of the target population, with increased distribution linked to higher performance.

As with primary care payment, the total cost of care model should be complemented by a care coordination payment. Care coordination resources should include individuals with higher clinical credentials than would be needed for children without medical complexity, and should reflect the intensive care coordination activities associated with caring for these children.

b. What specific approaches to attribution and risk-adjustment should be considered in a care delivery model encompassing all children and youth in a population in order to support addressing the needs of high-risk, high-need individuals and avoid adverse selection pressures?

As described in the above models, risk adjustment criteria should include “clinical risk (e.g., chronic condition, behavioral health diagnosis, and foster care status) and, ideally, socioeconomic risk. Because there are no well-established means for adjusting care coordination payments for socioeconomic risk, proxies may be necessary in the short term.” UHF agrees that attribution is an important issue to resolve, but our research to date does not address this issue in depth.

c. Please be specific and explain the relative advantages and disadvantages of any such payment arrangements. We are particularly seeking comments on whether methodologies should be changed to account for smaller provider entities or rural providers who may have coverage responsibility for a small percentage of the providers’ patients.

d. Are different payment models appropriate for different potential health care and health-related social service providers? Please be specific about which payment approaches would be appropriate for specific patient populations and service providers.

3. To what extent are financial incentives and funding streams currently aligned across health care and other health-related service providers serving children and families at the state, tribal and local levels, including through public and private endeavors?

a. Please comment on the challenges states, local government, or other private/public entities face in aligning on outcomes for children and youth across health care and health-related social service providers.

b. What factors are essential to the success of this alignment?

c. Based on the current experiences, please provide details on the data sharing models and infrastructure used to track outcomes and funding streams.

4. How could states and tribes and providers coordinate incentive payments, state and federal grant funding, and hospitals’ community benefit dollars be combined to support an integrated care delivery model?

5. In addition to Medicaid’s mandatory benefits (including services and supports required under the EPSDT benefit), what other services might be appropriate to incorporate in any new integrated service delivery model?

a. While these are currently available to states and tribes, what barriers exist to states and tribes using more of these options?

b. What benefit, if any, might come from combining a subset of authorities vs. using only one or two in isolation?

c. How could the Health Home model be further adapted to better meet the needs of a pediatric population? Are there particular “bundles” of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

6. How might CMS, states and tribes, and health care and health-related social service providers calculate the savings in Medicare, Medicaid, and CHIP expenditures from an integrated pediatric service model?

SECTION IV: PEDIATRIC MEASURES

1. What additional measures are appropriate for beneficiaries aged 0-18 years or 0-21 years? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes? We are interested in health care measures as well as measures reflecting overall health and well-being.

This question is being actively deliberated by the New York Medicaid program’s Children and Adolescent Value-Based Payment Subcommittee/Clinical Advisory Group. The group is keenly aware that the majority of health care measures in present day use insufficiently capture pediatric primary care’s ability to improve or maintain a child’s healthy developmental trajectory. The group is currently in the process of assessing measures that are most appropriate at different stages of childhood development and how to connect those measures with newly proposed and existing payment models. There is particular interest in the development of a kindergarten readiness measure that reflects the cumulative contributions of high quality primary care in the first five years of life, inclusive of physical and social-emotional health. New York’s *All Albany Kids Ready* pilot, coordinated by Albany Promise, is currently testing whether Albany County pediatricians can positively affect regional kindergarten readiness scores (collected by the education system) through an increased focus on developmental screening and referral. There is also significant interest in the development of a “secure parent attachment” measure, particularly for use in the first year of life.

2. Are these measures currently collected, and at what level (provider, health plan, state, tribe or other)? Please be specific about data elements, data systems employed to collect the data elements, what private and/or public entities currently collect these elements, and any predictive validity evidence for long-term outcomes.

UHF is actively working with the New York State Department of Health to assess the current collection, validity, and feasibility of a broad range of children’s measures for purposes of applying them to Medicaid value-based payment arrangements. Upon completion of this process in summer 2017 UHF would welcome the opportunity to brief appropriate CMS staff on the development of the measure library, the subsequent measure selection process, specific data elements, next steps for implementing the measure set, and recommendations for measure development and/or measure alignment between health care and other child-serving sectors.

SECTION V: OTHER COMMENTS

1. What are the critical success factors and barriers to effective partnership between states, tribes, communities, providers and others to achieve better health outcomes for children and youth?

2. As we consider a model to improve care and health outcomes for children and youth, are there other ideas or concepts we should consider? Please be as specific as possible.

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UnitedHealthcare Community & State

SECTION 1: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Challenges and Opportunities in Service Delivery and Necessary Technical Assistance *[Question 1]*

A key challenge facing the Medicaid and CHIP programs is states' ability to invest in infrastructure and new models within the confines of their budgets. Similarly, it is difficult to develop value-based models that demonstrate short-term savings. This is particularly true with the pediatric population, which often is less complex and less immediately costly than adults. As a result, states with limited budgets may be unwilling or unable to finance programs that require dollars today but do not pay off for many years, which often is the case with the pediatric population. These disincentives may be less prevalent among programs addressing pediatric beneficiaries with higher and more immediate needs, and targeted efforts such as a focus on children in homes with multi-generational issues like abuse, children in foster care, or children with certain chronic conditions like asthma and hemophilia, may be more successfully implemented using limited state funding.

Another key challenge in developing and implementing programs targeting the pediatric population is that, while the child is the "patient," the responsive adult caregiver often is the individual interfacing with the health care and social services system. The Innovation Center could consider targeting programs by age group to reflect children who are more independent and may be more engaged in their healthcare decision making, e.g., 12 years and older, than younger children (target populations are discussed in more detail below).

Additionally, data sharing across the various partners engaged in integrated healthcare/social services programs will be challenging, as these entities' systems typically do not interface or "communicate" with one another. In some cases, providers may have extremely limited or no health information technology infrastructure to facilitate communication with other providers. Furthermore, there are no standardized approaches or measures for successful outcomes across these various provider types, and the regulations governing each of these entities will differ, particularly regarding data sharing. It will be important for CMS to consider these variations, as well as those that naturally occur across each state, in developing a core approach to integrating services and reporting on and measuring outcomes for the pediatric population.

Finally, we encourage the Innovation Center to consider what role schools might play in the broader efforts to coordinate health care and health-related social services. School-based delivery models may offer an opportunity to reach vulnerable pediatric populations who otherwise would be unable to travel to a provider's office, or who are exposed to food insecurity (etc.) outside the school environment. This may be particularly beneficial among states with lower Medicaid reimbursement rates where pediatrician participation in Medicaid may be low and access to care is limited.¹ Additionally, school-based models may benefit the low-income adolescent population, which has been found to receive disproportionately fewer preventive visits, a lack of confidential services with

their providers, and low levels of “anticipatory” (i.e., healthy behavior) guidance.² Studies have found that SBHCs result in increased levels of patient engagement, improved healthy behaviors, increased access to mental health services, and reduced Medicaid reimbursements.^{3,4}

As of 2014, there were more than 2,300 school-based health centers (SBHCs) across 49 states and the District of Columbia. These programs typically are staffed by both a primary care provider and behavioral health care provider, and often serve family members of students, out-of-school youth, and students from other schools. More recently, these programs have begun providing expanded services such as nutrition, health education, and social services.⁵ An important challenge to note is that these programs often have limited or no experience working with managed care organizations and as a result, may require additional technical assistance and engagement in the early stages of a program.

Additional Medicaid Benefits [Question 2]

Benefit carve-outs are a common barrier to delivering integrated care in the Medicaid and CHIP programs, with states varying in the services and populations included in their managed care programs. In particular, services such as behavioral health and long-term services and supports, and populations such as those with intellectual and/or development disability or individuals dually eligible for Medicare and Medicaid, may operate within a state’s fee-for-service system or be managed by separate prepaid health plans. This leads to unnecessary fragmentation across the system and inhibits the ability to provide whole-person care. It also leads to inequitable access to services and care coordination by state and makes cross-state comparisons difficult. To mitigate the challenges that carve-outs create, we encourage CMS to consider a model similar to that used in the PACE program, where all necessary services are included in the demonstration regardless of their carve-out status in the state. For the pediatric population, this would include behavioral health, long-term services and supports and other waiver services, and oral/dental health.

Additional potential Medicaid benefits also are addressed below.

Ensuring Participation Opportunities [Question 3]

As part of this broader integration effort, it will be important for CMS and managed care organizations to work with children and providers “where they are,” accommodating anticipated difficulties that may arise due to lack of family resources or a provider’s ability to participate in value-based payment models and services integration. Specifically, the Innovation Center should consider several incentives and methods to increase provider and pediatric participation, including:

- **Aggregating practices for total cost of care calculations.** Similar aggregation occurs in the CMS Comprehensive Primary Care Initiative and is an opportunity for rural providers who otherwise will not have adequate panel sizes to participate in value-based payment models.
- **Including transportation, mobile health, and telehealth services as part of model.** Innovative healthcare delivery methods are critical in disadvantaged populations, and services that bring care to a patient can improve access, patient compliance, and health outcomes.

- **Engaging schools.** As noted previously, SBHCs can mitigate the pediatric “patient” dependence on adult caregiver schedules, increase access to care, and facilitate confidential patient-provider engagements that may be critical in abusive or other situations.
- **Identifying and supporting multicultural competency.** Given the racial and ethnic diversity in the Medicaid and CHIP programs, engaging providers sensitive to these populations’ cultural needs is important in ensuring successful healthcare delivery and outcomes. This is particularly true given the provider interaction with parents in addition to the pediatric patient.

¹ For example, see Berman S, Dolina J, et al. Factors that influence the willingness of private primary care pediatricians to accept more Medicaid patients. *Pediatrics*. Aug 2002.

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SECTION 2: OPERATION OF INTEGRATED SERVICE MODEL

Existing Service Integration [*Question 1*]

Currently, many of the social service programs serving the pediatric population are locally-based and as a result, there is considerable variability in how they are managed and funded, as well as their infrastructure capabilities, target populations, and outcomes. Because this fragmentation likely will create challenges in a program targeting national integration efforts, we encourage CMS to consider a phased integration approach rather than incorporating the full continuum of services at the program’s inception. For example, CMS might focus on populations and services for which the highest degree of complexity exists, and where dedicated staff already facilitate coordination across healthcare and social service providers, such as foster care or justice-involved youth.

The Innovation Center also should aim for a single, pooled funding source to mitigate cost shifting, reduce administrative burdens, afford synergies across the various partners, ensure care continuity, and improve patient experiences. This approach should be accompanied by a single program administrator to further coordination, reduce burdens, and provide technical assistance for providers, pediatric participants and their families, communities, and managed care organizations.

Partnerships across Healthcare and Social Service Providers [*Question 2*]

As the Innovation Center contemplates potential providers to include in an integrated service delivery model, we recommend that model development considers research surrounding adverse childhood experiences (ACEs). Such experiences are strongly correlated with poor health outcomes including high risk of substance use, disruption in neurodevelopment, cancer, chronic obstructive pulmonary disease, and other poor outcomes.⁶ Specifically, CMS could screen families for ACE vulnerabilities and overlay these findings with the health-related social service interventions a child receives. Specific services could then be bundled and tailored to children based on family risk scores, severity of risk, and access to existing services. This focus would complement our earlier recommendation to target the model to programs addressing intergenerational challenges, as ACEs

often are passed along from parent to child. Additionally, we encourage the Innovation Center to pilot ACEs models separately from models that target the broader population, as objectives, participants, and partner organizations will differ across the populations.

As part of addressing ACEs, the Innovation Center should consider partnerships with programs, services, and providers such as home visiting, federally-qualified health centers (FQHCs), SBHCs (discussed previously), child care, and Women, Infants, and Children (WIC).

- **Home Visiting.** Home visiting programs provide an effective and early-intervention support system for responsive adult caregivers not equipped to provide basic care and support to meet the emotional, physical, or developmental needs of young children. Such programs facilitate connections with the community and social services, while simultaneously providing caregivers with access to education, and have been found to reduce emergency department visits, decrease cases of abuse and neglect, decrease accidental injuries and poisonings, and improve parental discipline methods of children.^{7,8,9}
- Home visiting programs can be costly however, and as a result, the Innovation Center should consider targeted options such as perinatally through three or six months of life. After the initial targeting, at-risk families such as those with children at risk for developmental disability or with high ACEs risk should be allowed additional in-home visits. Additionally, because of the limited availability of full home visiting programs that are evidenced-based (and their reliance on nurses, which may not be in adequate supply in some regions), we encourage the Innovation Center to focus on select elements of the program that would meet the goals of health care and social services integration rather than requiring the full program. For example, New Mexico's *First Born Program* leverages "trained home visitors" in addition to registered nurses, local health care providers, and social service agencies to provide family education, identify family vulnerabilities such as substance dependency and developmental delays, and coordinate community resources. Families participating in this program score higher on measures of family resiliency (e.g., social support and family interaction) and demonstrate decreased "personal problems that would affect parenting."¹⁰ The program also has resulted in lower emergency department use and increased primary care utilization.¹¹
- **FQHCs.** We encourage the Innovation Center to consider FQHCs and health commons (single locations that include providers, social supports, child care, etc.) as key partners in any models developed to integrate across healthcare and social services for the pediatric population. Such partnerships can increase access to physical and mental health services, particularly if the model allows for same-day behavioral health and physical health billing, and deliver trauma-informed strategies to families to address ACEs in an integrated environment. FQHCs also may serve as SBHCs, which could bolster the delivery model and facilitate collaboration across partners.
- **Child Care.** The Innovation Center should consider the role of child care in the implementation of a pediatric healthcare and social services model. While the RFI does not address this explicitly, access to child care is an important component of pediatric health and well-being. For example, children with less predictable childcare arrangements (i.e., those with an increased number of different care arrangements) have been found to have higher risks for ear infections, gastrointestinal illnesses, and asthma. Additionally, research documents long-term positive effects of high-quality child care on cognitive and social

development. Access to child care, coupled with investments in early learning such as HeadStart, may become increasingly important in Medicaid programs that elect to limit services or enrollment in the evolving marketplace.

- **WIC.** The Women, Infants and Children (WIC) program has demonstrated its successes in improving the nutritional and health status of low-income children across the country. The program also reduces fetal death and infant mortality and facilitates the delivery of prenatal care, which may be particularly important in a pediatric integration program that includes teen pregnancy.¹² The Innovation Center should consider the role the WIC program can serve in a pediatric integration demonstration, including through educational opportunities, alignment in program eligibility, and as a direct service partner.

Necessary Infrastructure Development [Question 3]

As noted earlier, a key challenge with integrating healthcare and social services is the diversity in and potential lack of health information technology infrastructure among many providers. Furthermore, obtaining data addressing the social determinants of health can be difficult, as this information typically is not captured in encounter data or enrollment forms. The ability to share data, particularly behavioral health data, also is limited by regulations specific to different entities and influenced by state flexibilities.

CMS should consider the advantages of leveraging a common population health platform that healthcare and social services providers can interface with, and across which data exchange is protected and permitted. Several states have implemented or are interested in similar efforts in their Medicaid programs. However, it is important that the system fit into existing workflow patterns and not layer onto existing systems and requirements but rather, complement them. The Innovation Center might consider engaging providers and states directly in determining the potential to implement a common system, and what that system should include.

Streamlined Eligibility and Aligned Program Requirements [Questions 4 and 5]

Given the social services programs CMS is considering leveraging, there are opportunities to streamline eligibility systems similar to state efforts with programs such as the Supplemental Nutrition Assistance Program (SNAP). This alignment also affords administrative cost savings and burden reduction, and can increase program participation by preventing unnecessary paperwork by vulnerable families. As we noted above, we also encourage CMS to determine the degree to which health information technology systems can be aligned across programs, as well as program financing and quality measures.

Obstacles to Integration [Question 6]

As we have noted throughout this response, integrating health care and social services has several key challenges the Innovation Center will need to consider as it develops and implements this program (**Exhibit 1**).

Exhibit 1. Challenges in Healthcare and Social Services Integration and Potential Mitigation

Strategies

Challenge	Potential Mitigation Strategy
Different administrative and oversight agencies at the community, state, and Federal levels	<ul style="list-style-type: none"> • Employ joint operating agreements across agencies to promote integration through aligned performance goals and oversight, and clearly identified responsibilities
Disparate financing streams leading to cost shifting and administrative burdens	<ul style="list-style-type: none"> • Create an aligned, front-end reimbursement method through back-end arrangements between CMS, states, and local programs
Small provider size (particularly in social services)	<ul style="list-style-type: none"> • Aggregate small providers into a larger group that works together to achieve a pool of incentives.
Limited social services network capacity	<ul style="list-style-type: none"> • Scale integration efforts to capacity of networks involved and include capacity growth as a goal for within the integration models
Fragmented delivery system across state, county, community, and volunteer-based programs	<ul style="list-style-type: none"> • Braid funding at the state level and allow organizations such as MCOs to provide services across historically fragmented organizations
Disparate HIT systems and degree of sophistication using these systems	<ul style="list-style-type: none"> • Focus on a core set of consistent measures • Create information exchange platforms
Various eligibility thresholds and eligibility “churn” across programs	<ul style="list-style-type: none"> • Establish core, consistent eligibility standards for the demonstration that may be more/less generous than existing programs • Ensure 12 months of continuous eligibility for all demonstration participants regardless of changes in income, etc.
Pediatric “patient” dependent upon responsive adult caregiver, transportation, etc.	<ul style="list-style-type: none"> • Leverage social service providers and SBHCs that ease the burden on responsive adult caregivers • Allow for innovative delivery methods such as telemedicine and mobile care

Different or unaligned quality metrics (e.g., same metric may apply in one program to children 0-13 and in other 0-18)	<ul style="list-style-type: none"> • Develop a core set of standards through a collaboration with program provider partners and MCOs
Difficult to demonstrate short-term medical cost reduction	<ul style="list-style-type: none"> • Focus on incentivizing quality and social welfare metrics that have been shown to drive long-term
with relatively “healthy” pediatric population	healthy and sustainability

Managed Care Organization Lessons Learned *[Question 7]*

A key challenge facing Medicaid MCOs targeting social services is that the majority of social services are not reimbursed through the managed care capitation payment. For those services that are reimbursed, the sources of reimbursement often are spread across multiple agencies within a state, resulting in fragmented financing, onerous administration, and cost shifting. Related to reimbursement, many social service providers may not be equipped to collect and report on “encounters.” As a result, states may rely on MCOs to track and fund these services without adequate reimbursement. This approach causes programs not to be sustainable, does not allow for the full goals of these programs to be realized, and is exacerbated by the timeline required to fully realize managed care savings in a pediatric population. This approach also does not allow for effective implementation of value-based payment models that focus on whole person care. Medicaid managed care rates need to reflect broader program goals and account for services of any models the Innovation Center implements to ensure the models are sustainable and successful. As we noted previously, CMS should consider the development of a single funding stream for this program to mitigate these fragmentation and cost shifting challenges. We recommend the Innovation Center work with states and community partners to ensure that funding is sufficient to cover enhanced services as covered benefits, or that alternatively, payment rates should reflect the administrative costs associated with connecting and integrating social services. A possible future funding model could reallocate a portion of social services and public health funding, including a “population health” supplemental capitation payment to cover nonmedical services in Medicaid managed care payments.

Additionally, as noted in **Exhibit 1**, above, eligibility churn has created challenges aligning across Medicaid and programs targeting similar populations. Many individuals’ income levels and employment situations are such that they transition frequently between Medicaid and qualified health plan (QHP) or employer-sponsored coverage. For example, California has reported that 5,000 – 10,000 individuals transition between Medicaid and QHP coverage monthly, Kentucky has reported 13,000 such individuals over the course of a year, and Washington has reported 30,000 such individuals across a year.¹³ These transitions are costly to the state Medicaid programs through

increased administration with continual re-enrollment, as well as through increased unmet needs during periods of non-coverage. This also creates challenges for managed care organizations as a result of the lack of a longitudinal view of an individual, which leads to delays in identifying risk and potential duplication of services.

Finally, the Innovation Center should consider the challenges that emerge with disparate program administration across the many partners that would be involved in integrating healthcare and social services. In addition to the complexity created by separate funding streams, each entity also has unique leadership, different reporting and performance measures, and distinct vulnerabilities to funding cuts and staffing reductions. To mitigate challenges associated with this fragmentation, in addition to the points listed above in **Exhibit 1**, CMS should ensure that all partners are committed to delivering this program in its entirety. For example, CMS might require that the levels of staffing and resources required to deliver this program are maintained.

Accountable Care Organizations and Other Models of Care [Questions 8 and 9]

Commonly, alternative payment models (APMs) and delivery mechanisms such as ACOs tend to focus on the adult population, whose predictable utilization and cost data facilitate the development of accurate and appropriate measurement targets. For example, adult populations tend to have high prevalence rates of specific chronic conditions that are readily targeted through an APM (e.g., diabetes), and as a result, the effects of adult APM efforts and investments often are attainable within a shorter period of time than are preventive efforts targeting children. However, pediatric populations are increasingly being included in these models as managed care organizations look toward quality-based incentives and metrics around well-visits, immunizations, medication adherence (e.g., for asthma), treatment of children with significant emotional and behavioral challenges, and treatment of conditions such as ADHD.

We encourage the Innovation Center not to leverage traditional total cost of care ACOs that focus on reducing acute spend for the pediatric population but rather, focus on models with pediatric groups and local schools that, as noted above, initially emphasize quality-based incentives rather than shared savings. While adult ACOs commonly target outcomes such as utilization of inpatient and emergency room services, pediatric ACO outcomes more often address well-visits, screenings, oral health, and immunizations.

Also, a key challenge with the pediatric population requires engagement of the child *and* the responsive adult caregiver, as children rarely are able to travel to appointments independently or understand and follow medical advice. Providers may have to navigate abusive home situations and complicated arrangements of child protective services. As a result of these challenges, we emphasize the potential inclusion of SBHCs in Innovation Center models targeting the pediatric population, particularly around ACO metrics such as well-child and adolescent well-care visits, child immunizations, and biometric screening (e.g., obesity). Similarly, home visiting should be included for consideration in APMs as this method of care delivery can address transportation challenges and facilitate metrics such as well visits in the first 15 months of life. As provider groups become more sophisticated in their ability to bear risk for a pediatric population, and as patient panel size increases, CMS might consider models such as bundled payments (e.g., for teen maternity, asthma)

as well as retrospective episodes. It is important to note however, that the coordination of social services can be costly and beyond the typical clinical scope of providers. The coordination can be undermined without appropriate reimbursement and funding, particularly as ACO-based models continue to look to providers to create this connectivity.

Regarding the relationship between managed care organizations and ACOs, managed care organizations offer broad capabilities and tools that support the advancement of value-based models such as data analytics support, real-time clinical information, evidence based practice education tools, risk stratification, and clinical transformation strategies. Managed care organizations wrap around provider groups, assisting with the components of care that the ACO is not able to provide on their own. In this way, managed care organizations help ACOs that are not sophisticated or large enough to make all of the investments on their own. They also help ACOs advance over time by creating flexible partnerships that complement providers as they evolve. Implementing value-based programs outside of managed care can create undue provider burden and dilute program effectiveness by minimizing the volume of impacted patients in value-based arrangements.

Finally, we recommend that the Innovation Center not prescribe contracting requirements for ACOs and managed care organizations, but rather, allow ACOs to develop innovative approaches to evaluating partnerships based upon capabilities and customized to ACO needs with quality metrics to ensure managed care organization attainment of goals and objectives in an effective and efficient manner. This encourages ACOs to develop partnerships that advance practice sophistication through focused support and investment in areas most valuable to the practice and their patients. These partnerships should be developed within parameters set by the Innovation Center to drive consistency across the system. For example, UnitedHealthcare has a history of developing customized relationships with ACOs to retain, as needed, key administrative functions such as claims processing, utilization management, and quality measurement. Such flexibility is responsive to the diversity in provider capability and readiness to participate in an ACO and allows us to align with provider needs to ensure program success.

⁶ For a compendium of research on ACEs and health outcomes, see the CDC website, <https://www.cdc.gov/violenceprevention/acestudy/journal.html>

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¹² For a summary of WIC's successes and links to evidentiary research, see <https://www.fns.usda.gov/wic/about-wic-how-wic-helps>.

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SECTION 3: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

Target Populations [Question 1]

As CMS contemplates populations for inclusion in an integrated program, it is important to recognize challenges that will be encountered as a result of small population sizes, particularly if there are models

targeting lower prevalence conditions such as hemophilia or cancer. Thus, the Innovation Center might first consider broad quality incentives that promote population health while recognizing the delay in financial impact in a “healthy” pediatric population. This broad population includes cost drivers for the future if not well managed. CMS can leverage lessons learned from the use of quality incentives in the broader pediatric population to then identify ACOs or more-targeted cohorts to include in incentive arrangements, such as high-intensity and/or high- prevalence cohorts like foster children, the justice-involved, children with ADHD or asthma, as well as teen-pregnancy. This is common to clinical models employed by managed care organizations, which often carve specific high-risk cohorts out of ACO arrangements initially to allow for high-intensity management.

Also, as noted previously, CMS should consider age thresholds that capture a child’s ability to care for him/herself independently. While the demonstration should not include or exclude children based on this age threshold, outcome measures and evaluation methods should account for the differences across cohorts. Extended study periods (e.g., 5-7 years) with younger children would provide valuable and necessary information on the longer-term impacts of integration and value-based strategies on a pediatric population.

Finally, it is important to note that program outcomes should not be measured solely by cost savings. CMS should recognize that there likely will be an increase in utilization in these cohorts as a result of meeting well-visit and immunization targets, and that savings in these populations tend to be downstream. Rather, the Innovation Center could consider the degree to which additional metrics such as rate of justice involved, graduation, school attendance, academic performance, substance use, parent training, etc. can be captured.

Payment Methods to Encourage Provider Collaboration [Question 2]

UnitedHealthcare leverages “Transformation Consultants” to engage our ACO partners in providing collaborative services across the spectrum of member needs. Transformation Consultants coordinate various initiatives with our ACOs to improve quality and reduce costs, provide day-to-day process improvement consulting around care coordination and member engagement, and provide ongoing training to ACO staff on our web-based platform to facilitate care coordination. We have found ACO providers very receptive to this Transformation Consultant relationship, and to collaboration around optimizing member social services. Our Transformation Consultants and ACOs work together to identify how various community interventions can drive better member health and better payouts on value-based payment models. For example, assisting with transportation coordination can increase compliance with recurring healthcare visits, which in turn improves quality measure attainment and reduces emergency department visits and hospitalizations. In particular, FQHCs tend to be well-equipped to address social barriers and coordinate across the healthcare—social services continuum. CMS could consider a similar model to encourage provider engagement. Such large scale efforts around coordinating social services require significant up-front investment which can be relayed to the ACO in the form of a per-member/per-month (PMPM) care coordination payment if the managed care organization is properly funded for such an investment.

We have found the following two payment streams (in addition to the standard fee- for-service) to be successful in our current pediatric ACO value-based payment model:

- Quality PMPM payment earned for each of four HEDIS quality targets achieved by the ACO. These are primarily well-visit quality measures that track key touchpoints that can be used to intervene both medically and socially with a member.
- PMPM payment earned based upon where the ACO's Benefit Cost Ratio (BCR) stands. BCR is a proxy for total cost of care and can reward a practice for efficient care and the impact that this care has outside of their practice walls (reducing ER visits, reducing hospitalizations, minimizing medication redundancy, etc.).

In our experiences, pediatric ACO arrangements work best with provider groups with >1,000 total members, at least 80% of which are pediatric. However, there are approaches that can be taken with smaller provider groups ready to participate in value-based arrangements, such as provider group aggregation for total cost of care as well as quality-based incentives rather than risk sharing. CMS should be aware of potential provider sensitivities to implementing this approach when aggregated providers do not have an established, trusting relationship.

Our existing pediatric ACO model provides for upside-only incentive payment for quality and efficiency. For reasons previously discussed (e.g., low morbidity and unpredictable cost trends), we do not currently offer a pediatric ACO model with shared savings or shared risk around total cost of care. However, larger pediatric groups (>5,000 members) may qualify for "adult" value-based payment models (with pediatric quality measures) due to higher volume. This approach allows shared savings and shared risk as options. We also consider risk adjustment in our various value-based payment models, particularly those that measure utilization of services like emergency department and inpatient. The key adjustment for BCR models is a \$100K stop loss per-member/per-measurement period (including baseline) which prevents large, unpredictable, and often unavoidable cases that can skew financial outcomes.

Regarding attribution models, in general, attribution should maximize the number of Medicaid and CHIP beneficiaries assigned to practices participating in alternative payment partnerships or accountable care systems. The attribution method should have sufficient sensitivities to detect patient movement such as utilization trends or residence changes, and should have tolerance for the establishment of a minimum number of attributed lives per practice. Attribution also should be supported through technology and/or data infrastructure to enable visibility to utilization data across the entire accountable care system and provide the analytical capability to track patient movement. In our Medicaid and CHIP products, UnitedHealthcare uses "assignment" rather than attribution for our ACO models, through which members retain their primary care provider or are auto-assigned a primary care provider at enrollment. This approach typically is mandated by state Medicaid programs.

We encourage the Innovation Center to afford flexibility to providers and managed care organizations participating in this program to define their specific ACO—MCO relationship. We have found that providers have varying degrees of sophistication and ability to bear risk, and that a continuum of APM options is necessary to accommodate this variation. Sufficient flexibility allows the program to meet practices where they are in the evolution of their practice in accepting value-based payment for Medicaid services. Additionally, allowing for a range of alternative payment models maximizes the number of participating practices and appropriately aligns the value-based payment model to the unique characteristics of the practice (e.g. skills, practice capacity, transformation goals, sophistication with valued based models, etc.).

Challenges with Aligning Financial Incentives and Funding Streams [Questions 3 and 4]

Financial incentives and funding streams across healthcare and social services programs generally are highly misaligned, administered across individual entities with distinct requirements, administration, etc. Models that have succeeded in reducing this misalignment often are rooted in a common interest or “call to action” by a state that requires meaningful alignment. For example, grant requirements, state-funded programs, and incentives for hospital-based community investments all target a central goal, which aligns interests at the state level and facilitates collaboration and necessary combination of funding. When this common goal and combined funding are missing, programs must rely heavily on data to demonstrate the value and shared savings to the broader system and all of its partners, which can be difficult to manage and may not be realized for several years into a program. This approach can exacerbate misalignment and add administrative costs to the program.

To facilitate a single front-end funding stream, the Innovation Center could leverage a coordinating entity for the demonstration, similar to a governing board. This entity would include representatives from each funding entity and oversee the coordination of the various funding streams so that the expenditures are aligned with the goals of the demonstration program, as well as with the separate goals and performance expectations of each partner. Additionally, each funding partner could seek exceptions from its grantors or oversight agency that would allow the funds to be spent for the purposes of the demonstration program with an evaluation to be delivered at different points during the demonstration. The Innovation Center could be instrumental in gaining these exceptions from federal grantors.

Integrated Services across Authorities [Question 5]

As the Innovation Center considers the services to include in an integrated model, the Center should focus on core outcome goals such as reduced teen pregnancy, ACEs intervention, graduation attainment, and reduced institutionalization (as examples). With these goals in mind, the Innovation Center should target proven delivery concepts while recognizing the administrative burden that might be faced in select states based on their existing benefit structure. Through this demonstration, CMS could create the necessary authority to test such benefit concepts that would otherwise be administratively-impossible, such as the inclusion of benefits that address social issues like housing, food (in)security (e.g., through a partnership with WIC), home visiting, and education.

Other services CMS could consider include child care, support programs targeting teen parents, and behavioral health.

Savings Calculation [Question 6]

As noted earlier, program outcomes should not be measured solely by cost savings as a result of initial increases in utilization of well-visit and immunization targets. Rather, the Innovation Center could consider the degree to which additional metrics such as rate of justice involved, graduation, school attendance, substance use, parent training, etc. can be captured. Additional non-financial metrics that would measure success in driving near-term and long-term cost reduction include the following:

- Reduction in avoidable ER visits
- Reduction in avoidable inpatient admissions
- Reduction in readmissions
- Reduction in ER “frequent visitors”

- Improved pediatric HEDIS measures
- Quarterly primary care visit compliance for high-risk members
- Reduced “no shows” for primary care visits
- Reduction in teen pregnancy rate
- Reduction in childhood obesity

The Innovation Center also should consider well-being surveys that collect data on social and emotional aspects such as an individual’s sense of hope, stress management, resilience, perceptions of home life (and/or school and community life), and positive/negative emotions and behaviors.

SECTION 4: PEDIATRIC MEASURES

Additional Quality Measures [Questions 1 and 2]

We encourage CMS to streamline measures to the extent possible across existing programs and any partners included in the demonstration. However, there are several quality measures the Innovation Center can consider as it develops an integrated healthcare-social serves program. The following measures currently are used to assess performance at the provider, health plan, and state levels. Within these current measures, there is a heavier emphasis on preventive care.

- Adolescent Well-Care Visits
- Ambulatory Care - Emergency Department (ED) Visits
- Audiological Evaluation No Later than 3 Months of Age
- Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment
- Child and Adolescents' Access to Primary Care Practitioners
- Immunization Status for Children and Adolescents
- Children/Adolescents - BMI Percentile All Ages Total
- Children/Adolescents - Nutrition Counseling All Ages Total
- Children/Adolescents - Physical Activity All Ages Total
- Chlamydia Screening in Women
- Dental Sealants for 6-9 Year Old Children at Elevated Caries Risk (DQA = measure steward)
- Developmental Screening in the First Three Years of Life (OHSU = measure steward)
- Follow-Up After Hospitalization for Mental Illness - 7 Day Follow-Up
- Follow-up Care for Children Prescribed ADHD Medication - Continuation Phase
- Follow-up Care for Children Prescribed ADHD Medication - Initiation Phase
- Medication Management for People With Asthma - 75% Compliance
- Pediatric Central Line-Associated Bloodstream Infections - Neonatal Intensive Care Unit and Pediatric Intensive Care Unit
- Percentage of Eligibles Who Received Preventive Dental Services
- Use of Multiple Concurrent Antipsychotics in Children and Adolescents
- Well-Child Visits in the First 15 Months of Life - 6+ Visits
- Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life
- Other measures are used at a state or regional level, but not frequently linked to health plans or medical providers include:
 - Percent of Children and Adolescents Receiving all Eligible Benefits
 - School Attendance/performance (academic growth)/Graduation
 - Teen pregnancy – potential as a measurement (but who is accountable);

- Percent of Children and Adolescents Diagnosed with Substance Use Disorder

As the Innovation Center establishes details of specific metrics, it will be important to determine the interconnectivity and access to data across the partner programs to ensure that each metric can be calculated. Additionally, the Center should consider whether some metrics are appropriate for evaluating overall success rather than provider or managed care organization accountability, such as rates of teen pregnancy, substance use disorder, and graduation.

SUMMARY

UnitedHealthcare applauds CMS' interest in integrating healthcare and social services for the pediatric population. While there are numerous challenges in the existing system and infrastructure, we believe that with the appropriate stakeholder engagement, expectations, and financing, the Innovation Center can implement a program that successfully improves the health and well-being of children and adolescents. Should CMS have any questions regarding this response or require additional information, we are happy to engage in further discussion.

University of California San Francisco

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

University of Chicago

Thank you for soliciting comments on improving the value of pediatric care for the Medicaid/CHIP population. This is an issue that is of central interest to me as a pediatric health services researcher and safety net pediatric provider.

My comments pertain mostly to the challenge of incorporating the ACO model into the care of children, but have broad applicability to other interventions like medical homes.

1) One of the most difficult aspects of improving health care value in pediatrics is that outcomes of care are often delayed. This delay drives the fact that there is little evidence to support many prevention-based interventions in pediatrics like annual well-child visits (prevention is undoubtedly important, but proving that well-child visits are worthwhile requires longitudinal data that are rarely available). There are undoubtedly a few interventions that result in more immediate effects (e.g., better management of children with chronic diseases like asthma), but these are relatively few and far between since children with chronic diseases are relatively rare themselves. Therefore, I suspect that any ACO that includes children may not be able to target improvements in outcomes that take many years to manifest, unless the time horizon for demonstrating quality improvement is several years instead of one year.

2) A related point to #1 is that children are mobile and will not always stay with the same ACO. Therefore, if the time horizon for quality improvement bonuses is several years, ACOs that invest a lot up front in prevention will lose some children who may have benefited from these investments, thus attenuating improvements they would have seen had those children remained attributed to the ACO. There may need to be some way to globally track children so that their outcomes can be followed and so that ACOs can “get credit” for improvement in outcomes that occur when the child has left their ACO.

3) It seems counterproductive to pursue pediatric-only ACOs, since the health of children is so intrinsically dependent on the health of their family. The family unit is the more logical target for ACOs.

4) I can imagine a situation in which ACOs could become intricately linked with social and community-based programs, including Early Intervention, schools, nutrition programs, transportation programs, legal aid, etc. Consideration should be given to creating methods to encourage the integration of ACOs with the community (e.g., bonuses for improving population health-based measures).

5) As in adult medicine, there will need to be careful consideration of the market implications of promoting ACOs. In many markets, pediatric care is even more concentrated than in adult care (e.g., due to the presence of large tertiary children’s hospitals). The promotion of ACOs may exacerbate oligopoly and raise prices.

6) There will need to be an expansion of data systems so that policymakers are able to measure what is most important for ACOs to improve. Rewarding an ACO for improving on process measures is easy because it is easily measured given existing data systems, but process measures cannot be the only quality measures for ACOs. To assess important outcomes like quality of life, disease-free days, missed school, and other vital outcomes for sick children (e.g., asthmatics), ACOs will need to invest in survey infrastructure. To assess important outcomes like overuse, which is difficult to measure in administrative data and therefore often requires detailed clinical data available only by undergoing a time-consuming review of electronic medical records or charts, it will be important to invest in natural

language processing algorithms that can read charts, as well as increase the availability of claims databases linked to electronic medical records (which are currently prohibitively expensive).

7) Unlike Medicare claims, claims data in pediatrics are maintained by many stakeholders, including CMS (Medicaid MAX data and some Medicaid-expansion CHIP states), states (Medicaid data and stand-alone CHIP programs), and a variety of proprietary vendors of commercial claims (Truven, Optum, IMS PharmMetrics), etc. The Medicaid population often has private coverage so a full assessment of their utilization/spending will require better linkages across these various databases.

Please feel free to contact me if I may be of additional assistance in your important effort.

Sincerely,

University of Kansas Medical Center

I heartily endorse the 3/28 comment letter submitted by CAPC.

University of Kentucky

Dear Colleagues:

It is time to address the problem of dental caries in children with a public, school-based model using dental therapists that has been successful throughout the world. Attached are three articles, one describing the international experience, one that documents the superb success of such a program that existed in the Province of Saskatchewan in the 1970's-80s, and finally one that is general advocacy for school-based dental care. The current model of essentially private care in dentists' office has not been effective in addressing the epidemic on dental caries in our nation's children. It is also not efficient and is extremely costly. In recent years, HRSA has been funding the expansion of pediatric dentists, I assume in thinking this would address the problem; it has not and will not. We simply do not need highly trained (10-11 years) and expensive (incomes of over \$300,000/year) pediatric dentists to provide basic primary care for children. Pediatric dentists should be specialists to which to refer complex cases requiring advanced care, such as children with special health care needs.

I encourage you to carefully read the accompanying articles to gain a vision of what could be accomplished in the oral health care for children, were we to challenge the assumptions of our current delivery system.

Thank you for your consideration.

University of Miami Health System

Folks:

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

The health care maze is entirely overwhelming for families who are struggling with children with complex chronic disease. The ability for access to palliative medicine specialists provides an incredible layer of support that enhances interdisciplinary communication and management of very complex symptomatology.

It is crystal clear that much work remains to be done. Even with systems in place for concurrent care, there remains a dearth of knowledge in how to use these resources appropriately. Technology speeds forward, yet the ability to care for our pediatric patients with complex and life-threatening illness remains fraught with roadblocks.

Our health care system is inundated with patients in need and overburdened programs. I have personally witnessed how palliative care programs provided excellence in enhancing coordination of care. I also had to console tearful parents who were devastated when a for-profit hospice dropped a most effective palliative medicine program.

I wholeheartedly endorse the need to ensure access to pediatric palliative care.

Respectfully submitted,

University of Miami Leonard M. Miller School of Medicine

The University of Miami, Department of Pediatrics is interested in responding to the RFI on Improving Pediatric Care through tele-connectivity in three settings. The approach both extends and enhances an integrated service model and offers an improved model of care in new settings to assist states with continuity of care, particularly for Medicaid and SCHIP covered children.

Briefly, the University of Miami has utilized telehealth in a variety of settings. These include connectivity to provide care to medically complex children in rural settings, link families cared for on a mobile health unit with needed sub-specialists at an academic health center and expand primary care in the school setting to schools without providers on-site. We seek to evaluate the effectiveness, cost effectiveness and health outcomes of telehealth additions to three settings:

- 1) Use of tele-health extension in Child Care Centers
- 2) Use of tele-health for comprehensive – family involved care in the School Setting
- 3) Use of tele-health for quality primary and afterhours care

The University of Miami would partner with the Early Learning Coalition of Miami-Dade and Monroe (ELC), which provides child care (including Head Start) to over 50,000 children in two counties, trains providers and assures quality and licensing standards. With ELC, we would provide services connecting child care providers and parents to child health providers, for acute care, management of complex health needs, developmental and behavioral consultation. Pediatric patients would be referred back to medical homes as assigned. This approach would be evaluated for medical home connectivity, preventive care, HEDIS measures, provider and parent self-efficacy, time to diagnosis, ED utilization.

In addition, the University of Miami, which currently provides care in nine school health centers would extend its partnership with Miami-Dade County Public Schools, the fourth largest school district in the nation, to connect providers with patients and their parents, wherever they are, allowing for consenting, family input on history, improved adherence and follow-up. Three way communication will support continuity of care as it can extend also to existing providers. Both the Child Care and School options will function better with waivers to the existing managed care model, allowing for care where children are, but not disrupting these assignments for a medical home.

Finally, the University of Miami would propose to implement tele-health in the primary and after hours setting and evaluate its parameters as appropriate in the pediatric population, in terms of symptoms, diagnosis, parental-provider communication benefits and limits. These modalities can be applied not only for healthy ambulatory patients, but to those recently discharged from the hospital and those with chronic and complex diagnoses.

We would be very interested in partnering with CMS to further develop this approach and evaluation.

Please contact me with any questions or concerns.

University of South Florida College of Public Health

Good morning,

Our group at USF Chiles Center is putting together a response to the RFI. We received notice about it late last week - is it possible to send our response by the end of this week?

Thanks very much.

University of Utah

Intermountain Healthcare is a Utah-based, not-for-profit, integrated delivery system that includes 22 hospitals, physicians, clinics and services, and health insurance plans from SelectHealth. With a mission of helping people live the healthiest lives possible, Intermountain is widely recognized as a leader in transforming healthcare.

We are pleased to provide comments on pediatric Alternative Payment Model (APM) concepts. We are the largest Medicaid Accountable Care Organization in Utah and have a long history of providing performance based rewards to providers through our Medical Home and Quality Improvement programs, and are committed to improving the health of the communities we serve. In 2011, Intermountain Healthcare and SelectHealth launched Shared Accountability, an organization-wide strategy to improve population health, deliver consistent evidence based care, and make health care more affordable. As part of this strategy we have launched several APMs.

- In 2013, we implemented a shared risk APM between organizations to align incentives, and improve quality and service.
- In 2014, we piloted a physician APM with commercial enrollees, which was fully implemented and expanded to Medicaid and Medicare enrollees on January 1, 2016.
- In 2016, we launched a shared risk APM with Intermountain Primary Children's Hospital and the University of Utah pediatric sub-specialists, where pediatric specialists take risk for the services provided to Medicaid and commercial enrollees. We call this APM Pediatric Specialty Services (PSS), which now covers 180,000 children including 90,000 Medicaid enrollees.

We also participate in the Health Care Payment Learning and Action Network (LAN), and supports the LAN's mission to accelerate APMs. The LAN's mission aligns with the Intermountain Shared Accountability model. A key strategy in our model is aligned financial incentives, and we are committed to having 60% of all insured member enrollment in a shared-risk payment model by 2020 (category 3 and 4 APM). We participate in the LAN national APM data collection effort, and will use this as a methodology to measure progress.

Payers and pediatric healthcare providers have been slower to adopt APMs and there is no consensus APM approach among pediatric ACOs. We applaud CMS in taking leadership to consider approaches that will improve children's health.

We look forward to working with you to develop and diffuse ACO models to improve child health. If you have any questions on our comments, please contact us.

Sincerely,

University of Washington School of Medicine

See attachment



University of
Washington School

To Whom It May Concern,

As a child clinical psychologist, Professor in the University of Washington School of Medicine, mental health services researcher, parent, and foster parent, I would like to applaud CMS's pursuit of novel payment and policy mechanisms to support coordinated health, behavioral health, and related social services.

I have studied coordinated care models for over 20 years, with a specific eye to provider organizations' and states' capacity to design integrated, research-based services for youth with the most complex – and costly – care. The bottom line is that there is significant interest among states to develop a child and youth-focused health delivery model that combines physical, behavioral, and social services. As we documented in Sather & Bruns, 2016, Wraparound-type service integration initiatives tend to successfully integrate Mental Health (the number one agency involved at 98%), followed by Child Welfare (92%), Juvenile Justice (88%), and Education (78%). However, Substance Abuse (49%), Developmental Disabilities (45%), and Health (43%) are less frequently involved in service integration initiatives, highlighting the need for payment and other mechanisms that encourage such cross-system integration.

We have worked with dozens of states that have developed various strategies to ensure that children and youth with behavioral health issues receive care coordination that can accommodate their intensity or complexity of need. Our research shows that this is especially important for children and youth with multiple system involvement (i.e., child welfare, juvenile justice, and/or special education) who account for 50-70% of total pediatric + behavioral health system costs. However, federal policies, incentives, and guidance are needed to reinforce these critically important policy and practice directions.

The specific area in which I focus my research is development of a defined system- and practice-level approach to coordinating care for youth with complex behavioral health needs. This model, often called wraparound care coordination (Bruns et al, 2010), is an individualized, team-based care planning process intended to improve outcomes for children and youth with complex behavioral health challenges and their families. Wraparound is not a service per se; it is a structured approach to service planning and care coordination and adheres to specified procedures (e.g., engagement, individualized care planning, identifying and leveraging strengths and natural supports, and monitoring progress and process). The Wraparound model incorporates a dedicated full-time care coordinator working with small numbers of children and families (e.g., 1:10) and access to family and youth peer support.

Methods such as wraparound are desperately needed to better coordinate and integrate all the care received by these youths. It is estimated that roughly two-thirds of children served in intensive care coordination models using high quality Wraparound are involved in child welfare and/or juvenile justice, and 60 percent are involved with special education. (Pires, 2013). Looking at our service and costs data, it is clear that this population costs us the most and suffers the worst outcomes. Children using behavioral health care represented under 10 percent of the overall Medicaid child population, but an estimated 38 percent of total spending for children in Medicaid; Children in foster care and those on SSI/disability together represented one-third of the Medicaid child population using behavioral health care, but 56 percent of total behavioral health service costs; Almost 50 percent of children in Medicaid who were prescribed psychotropic medications received no identifiable accompanying behavioral health treatment.

These findings point to significant opportunities for quality improvement in the organization, delivery, and financing of care for children with behavioral health needs in Medicaid. (For complete study findings, access the full report, *Faces of Medicaid: Examining Children's Behavioral Health Service Utilization and Expenditures*, at www.chcs.org.)

Center for Health Care Strategies | Advancing innovations ...

www.chcs.org

CHCS is a national nonprofit health policy resource center focused on advancing innovations in health care delivery for low-income Americans.

Barriers to be overcome through CMS and other federal and state efforts are considerable, but we are making progress. Specifically, the novel mechanisms you are seeking must address the following:
Provider and network adequacy: Significant behavioral health workforce shortages persist, especially among child-serving providers who are able to offer culturally and linguistically competent, family-centered care.

Administrative burden: Providers face significant administrative burden in contracting with MCOs.

Payment/rate setting: States do not consistently support evidence-based practices (EBPs) by aligning reimbursement with service delivery (e.g., paying a higher rate for providers who adhere to EBPs).

Combination of service rules and/or other regulations prohibit or limit same-day behavioral and physical health services.

Embedding family voice at the system and service-delivery level. For example, funding for family and peer support is uneven across states and agencies within states. Youth Peer can be effectively integrated into the system of care to complement primary care and other social services. However, inability to directly bill for peer support in a number of states poses a major barrier to more widespread implementation.

Legal: Social and other service systems have legal mandates governing the care of children such as that when children enter foster care, they must receive health and behavioral health screens within certain expedited timeframes. For court-involved children, judges often play a role in determining care; and special education plans specify the services a child will receive. Based on the experience of intensive care coordination models using high quality Wraparound, it is the coordination among these systems, as well as among behavioral health providers, which consumes care coordinators time, rather than the interface with primary care.

Financing for first episode psychosis: Supported employment, case management are not typically covered by private insurance. Medicaid coverage can be difficult for supported employment, depending on the state environment. Training, team meetings, supervision, data collection, outreach, and program administration are not always billable services, or such services must be built into a case rate for services. Developing infrastructure requires initial, upfront investment not available in many states and/or to many providers (Dixon et al, 2015).

According to our research, examples of successful state and local efforts are abundant, but still represent the exception rather than the norm. Common to such systems are uniform screening and assessment protocols developed specifically for children with behavioral health disorders. The protocols are used across child-serving systems to determine appropriateness for referral and within the Initiative to determine appropriate level of care and to support the individualized service planning process for children referred to care management organizations. The instruments address strengths and needs of both children and their caregivers, cut across life domains, and address multisystem issues, such as child welfare, juvenile justice, and school issues.

NJ's 1115 waiver permits presumptive enrollment for children needing behavioral health care if they are Medicaid eligible, eligible for NJ Family Care (State Children's Health Insurance Program), or eligible as a Children's System of Care Initiative child (i.e., a child who has a serious emotional disorder and is involved or at risk for involvement in multiple systems). Regardless of whether the child is eligible for the system of care through a Medicaid or non-Medicaid-eligible route, and regardless of the other systems in which the child may be involved (e.g., child welfare, juvenile justice, etc.), he/she is assigned a "system of care" identifier number that is tracked through the State Medicaid agency's management information system. In addition, the state allows for designation of a child with a serious disorder as a "family of one" to qualify for Medicaid-reimbursed residential treatment services.

Wraparound Milwaukee uses a combination of state and county agencies, including the Bureau of Milwaukee Child Welfare, the County's Delinquency and Court Services, and the State Division of Health Care Financing, which operates Medicaid, to provide funding for the system. Funds from these agencies are pooled to create maximum flexibility and a sufficient funding source to meet the comprehensive needs of the families served. Part of the County's Behavioral Health Division, Wraparound Milwaukee oversees the management and disbursements of those funds acting as public care management entity. A common quality assurance plan is used as well <http://wraparoundmke.com/wp-content/uploads/2013/09/2014QAQIAnnualReport.pdf>.

In the end, encouraging integrated delivery systems that include a continuum of care could realize cost savings by preventing duplication of services via the Wraparound approach that use a coordinated, team-based approach to develop a single, cross-agency plan of care. Combining the single plan of care with home- and community-based services that meet low, mid, and high needs of children and youth with data sharing (as in New Jersey, through a single dashboard) ensures appropriate and expeditious care delivery regardless of initial service eligibility.

Our research shows that the evidence for effectiveness of Wraparound-driven care coordination is now robust, with 22 controlled studies now published in peer reviewed journals (Coldiron, Bruns, & Quick, 2017). Examples include Bruns, Rast, Peterson, Walker, & Bosworth, 2006; Carney & Buttell, 2003; Clark, Lee, Prange, & McDonald, 1996; Evans, Armstrong, Kuppinger, Huz, & McNulty, 1998; Grimes et al., 2011; Hyde, Burchard, & Woodworth, 1996; Mears, Yaffe, & Harris, 2009; Pullmann et al., 2006; Rauso, Ly, Lee, & Jarosz, 2009. In 2009, a meta-analysis of seven of these studies (published at the time of the review) found significant effects of Wraparound across all five domains examined, including maintenance of youth in community residential placements (Cohen's $d = .44$), mental health outcomes (0.31), overall youth functioning (0.25), school functioning (0.27), and juvenile justice outcomes (0.21) (Suter & Bruns, 2009).

In sum, I am enthusiastic that CMS is pursuing action on this issue. Youth with complex needs suffer the worst outcomes, often unnecessarily being placed in restrictive settings that also hamper our systems' ability to invest in "upstream" prevention, early intervention, and treatment services. I look forward to seeing how CMS and other federal agencies lead on this critical issue.

Sincerely, Eric J. Bruns, Ph.D.

Professor, University of Washington School of Medicine

Co-Director, Washington State Evidence-Based Practice Institute and National Wraparound Initiative

University Pediatric Association

Since FQHCs get paid an exorbitant amount to provide care to Medicaid children, dwarfing state based payments to independent practitioners which are grossly inadequate, why don't you require states to grant non-profit status to all providers who have more than a certain percentage of patients on Medicaid, thus saving us independent practitioners the large amount we spend on state sales taxes and franchise taxes. This would result in better financial attractiveness to take on further Medicaid patients. How is that for innovation that makes sense in the real world.

UPH Government & External Affairs

See attached.



UPH Government &
External Affairs.pdf



April 6, 2017

Seema Verma, Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services

RE: Request for Information on Pediatric Alternative Payment Model Concepts

Submitted electronically via

Dear Ms. Verma:

UnityPoint Health (UPH) is pleased to provide input in response to the Centers for Medicare & Medicaid Services' (CMS) Request for Information relating to Pediatric Alternative Payment Model Concepts. UPH is one of the nation's most integrated healthcare systems. Through more than 30,000 employees and our relationships with more than 290 physician clinics, 32 hospitals in metropolitan and rural communities and home care services throughout our 9 regions, UPH provides care throughout Iowa, Illinois and Wisconsin. On an annual basis, UPH hospitals, clinics and home health provides a full range of coordinated care to patients and families through more than 4.5 million patient visits.

In terms of pediatric care, UPH offers a continuum of services from pediatric inpatient services, including a dedicated Children's Hospital, to a variety of pediatric ambulatory services through dedicated primary and specialty clinics as well as home health services. Specifically, Blank Children's Hospital is the flagship of our pediatric acute care services. In operation since 1944, Blank Children's operates a 96-bed pediatric acute care hospital and outpatient clinics, staffed by 94 pediatric primary care and pediatric specialty providers. Medicaid represents almost one-half (47.7%) of Blank charges within the inpatient hospital setting and 65% of charges for the pediatric outpatient clinic population. Many of the children with complex health needs served by the specialty clinics at Blank Children's have private insurance coverage, and Medicaid as secondary coverage. Medicaid is a vital coverage safety net for children in Iowa. Aside from Blank, each UPH region has inpatient pediatric units in our senior acute care hospitals and two regions offer separate pediatric inpatient psychiatric units. UnityPoint Clinic has 16 pediatric clinics that employ 66 pediatric physicians and ARNPs. UnityPoint at Home is our home health agency, which in several regions is the only agency providing home health services to complex pediatric patients. UnityPoint at Home serves approximately 125 medically complex patients with 180 FTEs and another 17 professionals under contract. Due to the chronicity of children in home health, their length of stay is ongoing. For Home Health services, 86% of charges are attributed to Medicaid, with the remainder of charges paid by commercial plans or school districts.

As an integrated healthcare system, UPH believes that patient-centered care is best supported by a value-based payment structure that enables healthcare providers to focus on population health instead of volume-based episodic care. UPH's commitment to population health and value-based care is evidenced by our status as an early adopter of an Accountable Care Organization framework. We appreciate that CMS is seeking stakeholder input to inform its planning and development of pediatric alternative payment models. With Medicare ACO models first out of the shoot, we believe that there is great opportunity for improved care coordination and holistic service delivery for the pediatric population which comprise nearly half of the Medicaid population, encompassing 30 million children in the United States. We respectfully offer the following comments to this Request for Information.

INTEGRATED PEDIATRIC HEALTHCARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

UPH supports child- and youth-focused care delivery that includes the continuum of healthcare services as well as wrap-around, health-related social services.

An integrated model presents opportunities to address social determinants of health and impact individual and family quality of life by leveraging community resources and other public funding streams. The continuum of services are particularly important in a pediatric setting because children are absolutely dependent on their families and impacted by the family setting; therefore services need to be structured and implemented in the context of the entire family.

While there are always challenges with coordinating among unrelated entities (such as between healthcare organizations and social services agencies), pediatric healthcare organizations themselves have internal challenges which create barriers to care for their clients. The most significant internal barriers include pediatric workforce issues, inadequate reimbursement, and inconsistent health plan service coverage/authorization.

The pediatric workforce shortage is exemplified in the Home Health arena. The Des Moines area is the most populated region in the State of Iowa, yet UnityPoint at Home is the only comprehensive pediatric home health service provider in this area providing intermittent services, in-home therapy, hourly nursing, home medical services, infusion services, and hospice. In this region, UnityPoint at Home has a waiting list of 25 clients, with some placements taking months before services can begin. In many cases, wait list clients are in costly acute care settings pending placement. Even as the only pediatric home health provider in the service area, we cannot recruit enough providers / staff with a pediatric skill set and this shortage is heightened in rural areas – starting only 20 miles outside Des Moines. Because Medicaid reimbursement is relatively low, wages are depressed and not competitive. Any service delivery reform should incorporate support to assure access to adequate healthcare resources, whether through adding healthcare professionals and/or allowing virtual access to professionals.

As a predominantly rural state, Iowa has access and underserved challenges related distance and travel barriers. In general, state Medicaid programs should receive enhanced match rates for rural beneficiaries. To support primary care, we recommend establishing a per-beneficiary payment for each primary care practitioner to compensate in part for ongoing, non-face-to-face care coordination for a panel of patients rather than discrete encounters. To support specialty care, we recommend establishing incentives for telehealth infrastructure. We also recommend instilling flexibility within the 340B Drug Pricing Program

to allow stand-alone Rural Health Center to participate.

OPERATION OF INTEGRATED SERVICE MODEL

Infrastructure Development: To effectively coordinate care, the timely sharing of information/data with community partners is critical. Ideally, this requires the capability to electronically share Social Determinants of Health (SDH) and Health Risk Assessment information. Traditional EHR systems have not included this information and often mechanisms are limited to enable community partners to view and/or edit this information. To customize EHRs and to provide access to external partners is costly, and should be considered and funding supplemented, if these integrated models are to be developed and encouraged.

In Iowa, Public Health has been a leader in collecting and tracking SDH information. We would refer CMS to Webster County Health Department and its customization of Champs EHR as a potential model for SDH collection, tracking and reporting. Without customization, Champs includes fields that track multiple SDHs: Income; Education level; Housing; Living alone status; Language spoken; Translation needs; Race; Ethnicity; Literacy (e.g. reading and comprehension level); Medical home designation; and Pharmacy home designation. Webster County Health Department has further customized Champs to include: Health literacy (e.g. ability to understand health-specific terminology related to diagnoses/conditions); Transportation; Abuse screenings; Parenting assistance; Food access; Utility assistance; and Social support. The Champs EHR permits licensees to individually customize the software, at will and upon need, to track other items and perform reporting functions. It also allows the tracking of referrals to healthcare providers/organizations and other community resources as well as the tracking of referral follow-up. To assure successful collaboration between healthcare providers and community organizations, timely and throughout information sharing is crucial and data sharing/interoperability incentives have not been extended to all healthcare providers or community organizations.

Potential for Improved Outcomes: In our rural state, outcomes are most often improved when opportunities for timely access are increased. To enhance access to specialty care, including behavioral health, we support the use and further expansion of telehealth reimbursement to mitigate provider shortages and distance barriers. To enhance access, Blank has been slowly expanding our telehealth portfolio - child psychology, child development, autism services, nephrology, etc.

Another approach to enhance client access is through a “one-stop shop” concept. We support this concept that permits clients to access multiple services during one visit. In 2015, the Blank Primary Care Clinic launched the Connections in Primary Care model to co-locate Visiting Nurse Services (VNS), the regional Maternal and Child Health agency, and Iowa Legal Aid within the clinic. The VNS Family Outreach Specialist provides home visitation, resource referral, family support, more extensive developmental assessment, and early mental health diagnosis and intervention. In the first two years of implementation, the Connections Program has served 615 children through home visiting, enhanced developmental needs assessments and referral/connection to community resources. The Blank Medical Legal Project, in conjunction with Iowa Legal Aid, addresses legal issues impacting patient health; for instance, a child with asthma living in substandard housing. This co-location model has been very effective in providing immediate access to community-based services. Legal needs impacting patient health typically fall into

five categories: Income/Insurance benefit eligibility denial or coverage denial; Housing issues; Education and employment accommodation issues; Legal status issues; and Personal safety issues. The Blank Medical Legal Project has served 316 families with health harming legal needs in the past two years. The basis of both programs at Blank is to intervene upstream to address the social determinants of health which negatively impact child and family health. Additionally, partnerships with the Children's Community Mental Health Center provider is being explored to create integrated mental health within the primary care clinic and foster care clinic at Blank. Crucial to the concept of co-location or embedded services is that payment methodology must be structured to acknowledge the variety of services that may be provided on the same day, unlike the current episodic-based model.

Accountable Care Organizations: Although UPH does not operate a distinct pediatric ACO, UnityPoint Accountable Care is our affiliated ACO which has contracts with public and private payers. ACOs are defined the same despite any targeted population focus such as pediatrics; they are provider-driven organizations that coordinate efforts of groups of healthcare providers to accept responsibility for the providing high quality and total cost of care for targeted populations. ACOs are both the signatory on payer contracts and the driver of service delivery coordination. Our present ACO structure can accommodate targeting distinct populations, such as children and youth, without creating separate population-specific ACO entities, although clarity would be sought regarding overlap for dual eligibles in our Next Generation ACO. However, pediatric encompassing ACOs should accommodate the services and payment methodologies needed to meet the unique needs of the pediatric population. For example, limiting services for prevention, early identification or early intervention for a young child is counter-productive to the long-term goal of minimizing the impact of treatable, complex health conditions and reducing the dependence on future health care services. Considerations for a free-standing pediatric ACO or an ACO encompassing pediatrics should include recognition that children's costs are often concentrated in the first years of life (unlike adult expenses which occur at the end of life). Special consideration should be given to newborns needing Neonatal Intensive Care services given a pediatric ACO may not be able to impact the child's health pre-delivery if the mother is not served by the ACO. It also should be noted that volume for more intensive and costly pediatric services is much less than it is for adults, therefore pediatric ACO models should accommodate the regional nature of pediatric specialty care. Pediatric health outcomes should be broad, but tailored to children, and measured over a much longer term than adult outcomes (i.e. more than ten years) to reflect the rapid development and milestones achieved early in the life of a child, and a preventive focus across the future impact of adult health. Finally, special attention should be given to the transition from pediatric care to adult care by the ACO to ensure a seamless transition in care. Adolescents and young adults often do not maintain routine, preventive health care services which may have a significant future impact on health outcomes and health care costs.

We also want to clarify the roles of ACOs versus MCOs in response to the questions: "Are states interested in having MCOs be part of an ACO, the ACO itself, or not involved? What responsibilities might MCOs have relative to ACOs and vice versa?" ACOs are healthcare providers responsible to providing services; MCOs are healthcare payers that administer health plans (contracts) – MCOs do not deliver care but offer a variety of covered services under their health plan. In the public arena, MCOs take the place of CMS in claims processing and administration. Where the waters are muddied is that ACOs and MCOs both

promote efficiency and high-value service through care coordination efforts – ACOs engage in care coordination through a provider lens, whereas MCOs engage in care coordination through a health plan lens. It is our belief that providers and not insurers are better positioned to drive care delivery innovation and to streamline care for patients. From an efficiency stand point, it makes more sense to have providers voluntarily agree to be responsible for determining optimal care processes, then having this dictated by multiple health plans (MCOs) with different and changing cost-reduction initiatives requiring different and changing administrative mandates and data reports.

In Iowa, the transition to Medicaid MCOs in 2016 has drastically increased provider administrative burden and also further depleted our health professional workforce shortages as MCOs have hired hundreds of nurses and social workers in support of their individual care coordination and efficiency functions. Since providers and health plans are distinct, we do not believe that these roles should be combined; in fact, we would advocate that for risk-bearing ACOs, that they be exempt from MCO care delivery initiatives. Removing health plan care coordination requirements for two-sided risk ACOs would enable these ACOs to continue to innovate and drive high-quality care without being forced to deviate from their provider-driven care delivery models and would support and encourage provider participation in Advanced Alternative Payment Models in furtherance of MACRA and Quality Payment Program goals.

Other Care Models: We wholeheartedly support the integration of behavioral and physical health in care delivery. Blank Primary Care Clinic and the Regional Child Protection Center are currently exploring partnerships with Orchard Place, a non-profit agency providing residential, outpatient, in-home and care coordination programs for children and youth age 0 to 22 in Des Moines. This partnership is evaluating the Massachusetts Child Psychiatry Access Project (MCPAP) to determine its appropriateness and our ability to replicate in central Iowa. We encourage CMS to consider support pilots that encourage the integration of behavioral health and innovative models which address the child psychiatry shortage in the United States, especially within rural America.

In the same vein, we are also exploring the expansion of a tri-navigational model of care, which we have developed in our rural northwest central Iowa region to address social determinants of health. This vulnerable population model (1) targets (a) children and (b) medically complex persons and/or persons with multi-occurring behavioral health conditions; (2) partners primary care, behavioral health, and public health and (c) has utilized Iowa State Innovation Model funding. This model recognizes that individuals may have different health/social determinant needs, which consequently require different medical homes with distinct supports – public health, primary care, or behavioral health. For high-risk individuals, the primary need often require supports from all three disciplines. Stakeholders include safety net providers, county social services, community funders, and community action agencies; with involvement from key community partners – schools; correctional facilities; law enforcement; area agency on aging; community paramedicine; and faith-based organizations, including the Salvation Army. This rural model has resulted in timely referrals, maximized patient outcomes, and leveraged scarce community resources. As an example, for asthmatic children or children with complex diagnosis, 100% have been referred to the Community Care Coordination (C3) program and received high-risk assessments. Assessments include a health and psycho-social assessment, and, when appropriate, medication reconciliation services. In Webster County, 130 Action Plans have been developed and implemented in coordination

with the school district, public health, and healthcare providers.

INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

Perhaps the largest barrier to holistic care delivery is the current reimbursement structure. Although we are supportive of innovative service delivery initiatives and payment alternatives, we are concerned that pediatric care currently operates on a thin operating margin including supplementary philanthropic support. Present Medicaid Fee-For-Service rates are often below cost or break-even at best. Table 1 compares a state's Medicaid physician fees relative to Medicare fees in each state using 2014 data. It should be noted that this comparison does not incorporate Iowa's transition of Medicaid to managed care in April 2016. Since this transition was intended to save \$50 million in the first year, we expect comparison rates in Iowa to be significantly reduced. In addition, we anticipate further downward pressure on Medicaid rates nationally if per-capita and/or block funding are implemented by ACA repeal efforts. As a result, we caution CMS against using current Medicaid Fee-For-Service rates as benchmarks for alternative payment models.

Table 1. Medicaid-to-Medicare Fee Index – National and UPH States

Location	All Services	Primary Care	Obstetric Care	Other Services
United States	0.66	0.59	0.76	0.74
Illinois	0.62	0.53	0.85	0.70
Iowa	0.82	0.75	0.83	0.98
Wisconsin	0.71	0.58	0.82	0.92

Source: The Henry J. Kaiser Family Foundation, Medicaid-to-Medicare Fee Index, accessed on March 22, 2017 at <http://kff.org/medicaid/state-indicator/medicaid-to-medicare-fee-index/>

While broader service delivery models may enhance care coordination to avoid some duplication, support appropriate level of care determinations, and assist to efficiently leverage existing funding streams, payment models for this population need to reflect long-term benefits and cost-avoidance associated with preventive care as well as overutilization of services. When defining demonstrations, we urge the use broad, risk-stratified populations, instead of disease-specific populations. We also prefer an extended age range to define pediatrics – 0 to 25 and perhaps beyond for individuals with chronic complex conditions. For instance, a primary care pediatrician may have a provider relationship with a developmentally delayed or autistic individual since birth. It would seem arbitrary to force a new primary care relationship when a patient turns 18 or 25 years old.

At-Risk Children: Blank's Connections in Primary Care model is an example of a comprehensive medical home for pediatric primary care that incorporates community partnerships and targets children ages 0 to 5. The targeted clinic includes children experiencing poverty, exposed to childhood adverse events, and of immigrant and minority status and addresses social determinants of health head-on. As a preventive strategy, the challenge is to account for downstream cost-avoidance and quality of life or success factors (such as kindergarten readiness) alongside immediate service costs.

High-Need, High-Risk Children: UnityPoint at Home provides care to complex children and youth, such as

ventilator-dependent children. There are limited subacute beds in Iowa. These children may remain for extended period of time in acute care settings while waiting for a home health slot to open. Once in home health, the challenge is how to appropriately value this service. Beyond simply the home health costs, impact should examine avoidable days in acute care and the impact of inpatient versus home health care on quality of life and family disruption/satisfaction. Additionally, integration of behavioral health as well as other social services in the home setting should be similarly examined.

PEDIATRIC MEASURES

In general, payer contracts require healthcare providers to track and report on a multitude of measures to demonstrate value-based performance. The infrastructure required to support this reporting involves significant investment in technology and equipment, in-house personnel, vendor support, and outreach to providers and staff. At UPH, we track and report more than 150 measures for our six largest value-based contracts, including numerous similar measures with definitional variances requiring distinct collection and reporting rules. These measures include approximately 21 pediatric-specific measures (i.e. identified with age ranges that include below 18 years of age but exclusive of measures for all ages), such as immunization and BMI measures; however, there is not an industry consensus on a recommended pediatric measure set.

UPH requests that CMS avoid the temptation to excessively measure the pediatric population to account for intricacies related to its heterogeneous nature, the large divide between at-risk and high-need, high-risk populations, and the significant portion of relatively healthy children requiring few medical / health services. Instead of endorsing specific measures, we instead offer the following guidelines for their adoption. While UPH understands the need to identify some pediatric-specific measures, we urge CMS to identify only a small number of QPP-compliant measures. These measures would meet processes and guidelines set forth in the CMS Quality Measure Development Plan, use established CMS quality domains, and enable providers to meet MIPS or Advanced APM requirements. For evidence-based pediatric measures, the National Academies of Health, the Health Care Payment and Learning & Action Network (HCP-LAN), and the Pediatric Measures for Accountable Care (PMAC) committee should be consulted. When new measures are identified, they should be examined in light of current CMS measures with a trend towards less reliance on self-reported measures. The administrative burden associated with the collection of self-reported data is significant as providers must extract information either manually or via specially built EHR reports. UPH has consistently made comment to CMS that required measure sets should be streamlined and data sources should be utilized that reduce further administrative burden, particularly for providers in risk-bearing relationships.

Although not specific to pediatrics, UPH also encourages CMS to incorporate mental health status and social determinants of health within its overall population health strategy. We cannot overstate the importance of health risk assessments and appropriate, timely referrals in the promotion of overall health and well-being. We would expect that the CMS assessment and referral strategy would span the age spectrum (pediatric – adult – elderly), although the assessment/screening tools used may be age-specific.

Finally, UPH supports the use of outcomes or long-term goals beyond health status. For example, kindergarten readiness could be used for at-risk children age 0-5. We echo the comments of the Children's

Hospital Association that suggest that selected long-term performance targets, such as various school grade reading levels or graduation rates, should support improvements in adult health and well-being.

COORDINATION OF CMS POPULATION HEALTH INITIATIVES AND ALTERNATIVE PAYMENT MODELS

UnityPoint Health has been actively engaged and an early adopter of alternative payment methodology with both public and private payers. UPH is a current Next Generation ACO Model Participant having joined during the first cohort in 2016. From 2012 through 2015, UPH had regional participation in both the Pioneer ACO Model and the Medicare Shared Saving Model. In addition, UnityPoint Health affiliates are participating in the CMS Bundled Payments for Care Improvement Initiative (model 2), the Mandatory Episode Payment Model and the Medicare Care Choices Model. In terms of Medicaid, UPH has been involved in the Illinois Care Coordination Innovations Project (for Seniors and Persons with Disabilities) and Iowa Medicaid Health Home Program. As CMS considers pediatric payment alternative models, existing models and demonstration projects should be canvassed so as to glean best practices and also streamline processes, data reporting and collection, and other administrative requirements. This will enable providers that are participating in other models to also participate here. CMS should embed service delivery flexibility and defer to provider expertise to develop efficiencies. This should include programmatic waiver authority as well as waivers to the Stark law and certain HIPPA requirements. CMS should create models that permit providers to qualify as an Advanced Alternative Payment Method to capture payment reimbursement advantages under MACRA.

On behalf of our pediatric patients and their families and caregivers, UnityPoint Health appreciates the opportunity to provide input related to this Request for Information. In addition, Blank Children's Hospital is a member of the Children's Hospital Association (CHA). We support the comments submitted by CHA and are committed to participating with the CHA to further strengthen services and supports for the pediatric population. UnityPoint Health looks forward to participating in shaping future alternative payment models and other pediatric-related stakeholder forums. To discuss UPH comments or for additional information on any of the addressed topics, please contact Sabra Rosener, Vice President and Government Relations Officer, Government & External Affairs at

Sincerely,



Stephen R. Stephenson, M.D.
President, Chief Operations Officer
Blank Children's Hospital



Margaret VanOosten, RN, BSN
VP, Chief Clinical Officer
UnityPoint at Home



Sabra Rosener, JD
VP, Government & External Affairs
UnityPoint Health

Vanderbilt University Medical Center

A novel method or uniting healthcare and community programs

To: CMS

Prior to being employed by VUMC nine years ago, I spent 25 years directing social service programs. The attached slides and business model describe an approach that was before its time...or so I'm told.

I'm pitching this model to Vanderbilt leadership and hope to resurrect it. Adding pediatric supports has always been the plan.

Any assistance with networking would be appreciated.



Vanderbilt
University Medical C



Vanderbilt
University Medical C

ACO Co-op (Medical Home Support Services)

PROBLEM

More than 70% of health care resources are consumed by less than 20% of patients who have chronic illnesses and are high risk for deterioration of health. Besides medical factors, these patients often struggle with socioeconomic problems such as lack of transportation, poor access to healthy foods/prescription medications and a lack of family and friends nearby, particularly in the case of frail elders.

The Patient Centered Medical Home (PCMH), a key component of Accountable Care Organizations (ACOs), is designed to facilitate the delivery of holistic care through the patient's primary care physician and care team. Unfortunately, few physician groups are large enough to afford the ancillary social services staff required to meet this broad range of patient needs. Even certified PCMH practices that receive financial incentives are challenged to make full use of the medical neighborhood and available community resources in their area.

Adequate communication between the care team and the patient at home is extremely important for addressing both psychosocial and medical needs. Without frequent face-to-face contact, new or changing symptoms go unreported while care plans and medication routines are often not followed.

For these reasons, innovative solutions such as affordable (coordinated) patient transportation and low cost, technology-enhanced home visits must become part of the PCMH's capabilities, thereby enhancing the cost effectiveness of ACOs.

THE MODEL

Nurse technicians (mobile techs) equipped with portable telemedicine are stationed within specified zones (ZIP codes) to provide brief mini-visits to high risk patients who are elderly, disabled or chronically ill. The mobile-tech, a certified medical assistant, works in tandem with a central call center, which also makes safety and wellness checks by phone. Supervised by a nurse practitioner, these call center staff specialize in specific disease categories, including but not limited to: congestive heart failure, diabetes, COPD, stroke and perinatal complications. They make outbound calls on a fixed schedule using evidence based treatment scripts.

Both methods of contact are calibrated to each patient's need as determined by the primary care provider and/or care team coordinator. Social service needs, including affordable transportation (see below), are also addressed in the patient's comprehensive care plan as required by certification standards for PCMH.

In this model, a non-profit cooperative called ACO Co-op proposes to become an extension of the care team to assist with the following patient support functions:

1. Safety/Wellness Home Visits and Phone Checks
2. Disease Management and Care Plan Compliance
3. Medical Transportation
4. Home Delivery of Groceries and Prescription Medications
5. Social Services for Critical Needs, e.g., Housing/Utilities/Employment

When appropriate, medical providers request that mobile-techs use portable telemedicine gear to transmit HIPPA secured vital signs, heart rhythm, blood O2 levels, video (e.g., post-op wound healing), etc., back to the call center's server. The patient's provider can then download these clinical measures at any time. Portable diagnostics including mobile X-ray, bone density scans and ultrasound imagery are also provided.

OUTREACH AND COLLABORATIVE CASE FINDING

The ACO Co-op helps maximize efficiency and cost savings by identifying large numbers of at-risk patients who live in the same general area. These geographic concentrations ("clusters") of patients are identified and served face-to-face with minimized travel time. Postal ZIP codes provide a simple but effective platform for collaborative case finding across all payers and providers of healthcare.

The end results include better communication between provider and patient, fewer unnecessary clinic visits, and earlier detection of symptoms such as depression, weight gain or loss, infection, etc. These brief visits also offer more opportunities for early detection of environmental risk factors such as, isolation, fall hazards, lack of food or medicine, disconnected utilities, etc.

The mobile techs are also available to support work site clinics, schools, assisted living centers and other facilities within the ZIP code catchment areas. They can also be of value to the Department of Homeland Security, FEMA and other agencies in the event of a pandemic, terrorist attack or natural disaster.

In addition, the co-op will draw on the Memphis Model of recruiting faith-based and community organizations to host or sponsor group health-coaching sessions for specific disease groups. These organizations can also provide health and human services navigator functions and organize volunteers for patient support projects such as building wheelchair ramps or modifying homes for patient safety.

LOW COST PATIENT TRANSPORTATION

Although home visits and telephonic care support can minimize the need for patient travel, medical appointments will still be necessary. Long distance transportation for specialty health care is particularly challenging for Tennessee's aging population in rural areas. The ACO Co-op will achieve shared ride cost savings using a web-based appointment scheduling system (MedZIP), elements of which were developed and tested in Nashville's midtown district in 2003.

Under the MedZIP system, all clinics located within a given hospital zone will set patient appointments according to their home ZIP code and available transport, rather than at random. The clinic's staff will consult a web-based ZIP code decision tree of recommended days and times for any given ZIP code within 100 miles (e.g. 37060 on Mondays and Wednesdays at 10:30 a.m.).

If a match is possible, clinic staff refers the patient to the appropriate transit agency, and the patient schedules the trip. This occurs *before* the appointment is set, enabling transit providers to influence appointment setting to fill empty seats on vehicles already committed to a hospital zone from that patient's area. Patients may facilitate this process by using a phone app linked to this same information.

The Co-op's medical transportation specialist at the call center consults daily with all public and private transit resources in Tennessee and southern Kentucky to constantly update the MedZIP website for prospective patients.

Co-op as Broker

The co-op's transportation specialist also brokers patient transportation solutions that are unique to specific hospital zones and patient subgroups. For example, all five hospitals in Nashville's midtown area serve patients who require 10 minute radiation treatments 5 days per week for a period of six weeks.

The "broker" knows that transportation providers will offer lower rates per passenger when they can dedicate vehicles to pick up groups of passengers using a daily fixed route in a particular zone. The fare is further reduced because of the quick turn-around time for the return trip home, thereby reducing the cost of driver down time. Other patients with short appointments can also be added to these same routes. An example would be patients who require monthly blood draws to check Coumadin levels, a procedure that takes a few minutes.

ADA Patient Transportation

In addition to the systemic brokerage and coordination activities described above, the transportation specialist also assists patients by phone to secure additional support via ADA eligibility. This includes patients who are *not* permanently disabled but who may experience mobility problems caused by short term medical conditions. The specialist communicates with the PCMH care team to document patient limitations, then uses satellite imagery to identify barriers between a patient's home address and fixed-route bus service to enable more patients to qualify for this underutilized transportation resource.

CO-OP DEVELOPMENT

It is proposed that the Tennessee Hospital Association (THA) facilitate the development of ACO Co-ops by communicating with its member hospitals and other healthcare providers in urban and rural areas of Tennessee. The initial catalyst for forming the cooperatives will be affordable transportation for an aging population who will need healthcare more, while driving less.

The hospital zone in Nashville's midtown area is a logical alpha site because transportation elements of the model were first field tested there in 2003 in an initiative called Project Access. The project was managed by the Case Management Support Center and was funded by grants from the Center for Healthcare Strategies (Princeton, N.J.) and the HCA Foundation, as well as support from Metro Social Services, the Metro Transit Authority (MTA) and other sources. Participants included VUMC, the V.A. Hospital, Centennial Medical Center, Baptist (now called St. Thomas at Midtown), and many independent clinics and physician groups in the midtown area.

CO-OP SERVICES AND POTENTIAL PARTNERS

- **Home Delivered Groceries, Prescriptions, Emergency Supplies:** Kroger, Walmart
- **Mobile Tech Telemedicine:** United Telehealth Services, Inc.
- **Mobile Diagnostics:** Quality Mobile X-ray Services, Inc.
- **Telephonic Disease Management:** Mountain States Health Alliance (Call Center Services)
- **Social Services/ Community Resources:** Metro Nashville Social Services, Area Agency on Aging & Disability
- **Technical Support:** CSI, Inc. and e-TransX, Inc., CivicHealth, Inc.,
- **Health Navigator /Disease Group Coaching (Memphis Model):** White House Office for Faith and Neighborhood Based Partnerships, Values Partnership, Inc.
- **Emergency Response (Pandemic, Natural Disaster, Terrorism):** Homeland Security, FEMA
- **Rural Infrastructure, Food:** USDA
- **Co-op Development:** Tennessee Hospital Association
- **Transportation:** RTA, MTA, HRA Rural Transit Programs (9), South Central Development District Transportation, Gray Line of Tennessee, Taxi USA, Special Transportation Services, Inc.
- **Substance Addiction /Telephonic Support:** James R. McKay, PhD, Center on the Continuum of Care in the Addictions, University of Pennsylvania.

BUSINESS MODEL

The Co-op (call center and mobile-techs) will operate as a shared resource across payers and providers of health care based on a pro rata share of a fixed budget. The entity will be formed as a shared governance not-for-profit 501(c)3 corporation and will contract out most of its initial services to strategic partners. The model will leverage what is already reimbursed (e.g. transportation, community services, etc.) by serving as a facilitator and will deploy the appropriate level of in-home services needed based on the directives of the medical home care team. Patient support services, such as home delivery of groceries and prescription medications, will be facilitated by the co-op's ability to identify large numbers of "customers" within a targeted zip-code area. A similar approach has been pilot tested in a joint project involving Kroger, Metro Social Services and the MTA.

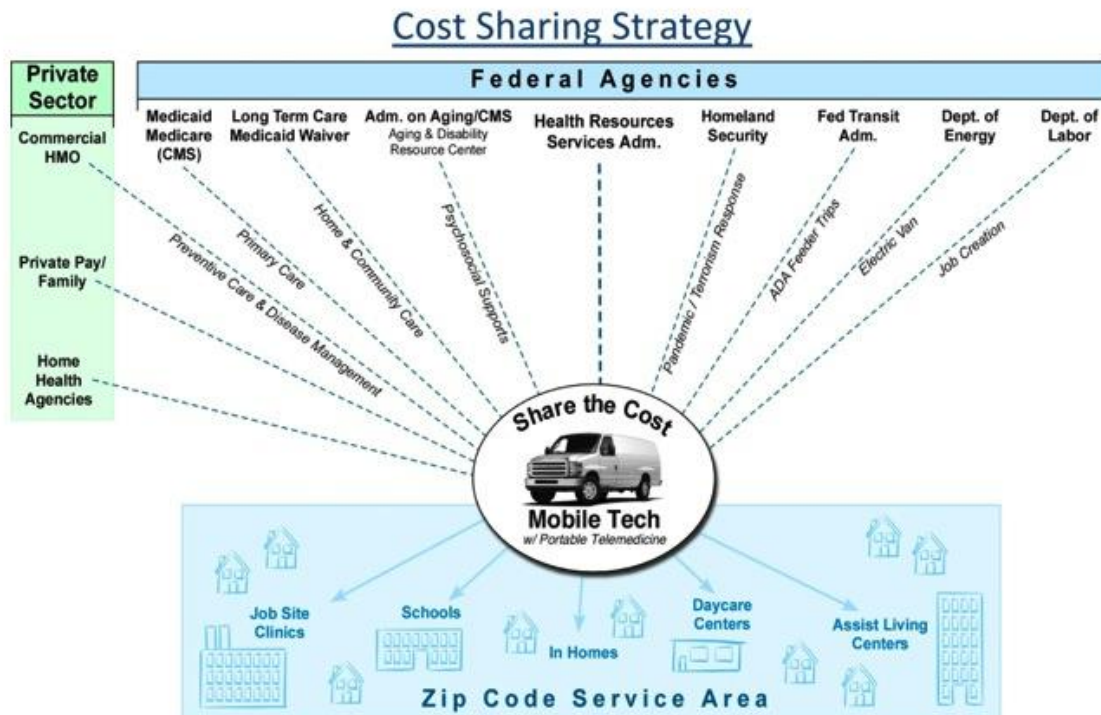
Expansion/ROI

Once public and private payers of health care realize savings, the model will expand to neighboring ZIP codes. The unique scalability of this zone-based model will allow quick recovery of the modest startup investment, which can then be rolled into adjacent ZIP codes and eventually reduce health plan premiums across the region.

Finally, additional cost sharing will be explored with the Department of Homeland Security, FEMA and other agencies that could benefit from prepositioned mobile-techs capable of responding to pandemics, natural disasters, terrorist attacks, etc. The ability to identify and reach vulnerable patients during such events as Nashville's massive flood of 2010, for example, could save lives. In addition, the mobile-techs will also be available to contract with work site

clinics, schools, assisted living centers and other facilities located within the zip-code catchment areas.

A pilot to be funded by the participating organizations is proposed for the Antioch area of Nashville (Zip codes 37211 and 37013) and one rural Zip code to be determined. The Med-ZIP transportation component will initially focus on Nashville's midtown hospital zone and all patients from Tennessee and southern Kentucky who seek medical treatment here.



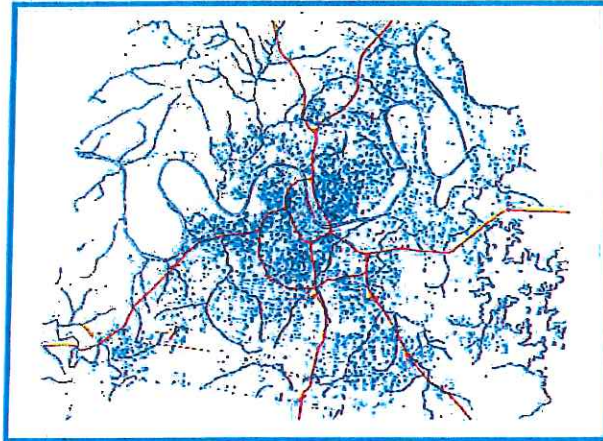
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CONCLUSION

The ACO Co-Op Model is a community health /shared-cost initiative. It presents proven cost-saving solutions at the right time for Tennessee. For a small initial investment, this population health support infrastructure could save lives as well as yield millions of dollars in return in the form of reduced hospitalizations and unnecessary clinic visits, more efficient transportation use, and prolonged productivity for patients.

CMS CENTER

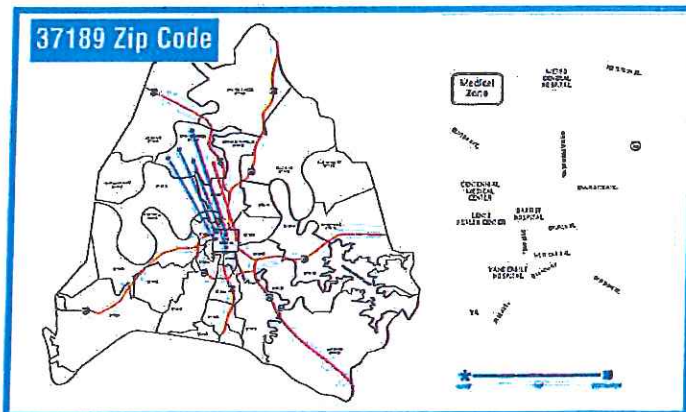
The Case Management Support Center has identified more than 7,000 Nashvillians who are homebound or mobility impaired due to age, disability or chronic illness.



CMS Center negotiates (brokers) low-cost services on behalf of all people with similar needs living in the same ZIP code.

For example...

Low-Cost Medical Transportation



Taxi minivan rates drop from \$1.80/mile to \$.35/mile on certain days and times for each ZIP code. All clinics set appointments accordingly, resulting in group transport discounts.

Affordable In-home Attendant Care



Attendant care rates drop from \$54.00/day (4 hour minimum fee) to \$13.50/day for 8 hours of "intermittent monitoring." One attendant visits 6-8 individuals in rotation every 2 hours. Visits last a minimum of 10 minutes.

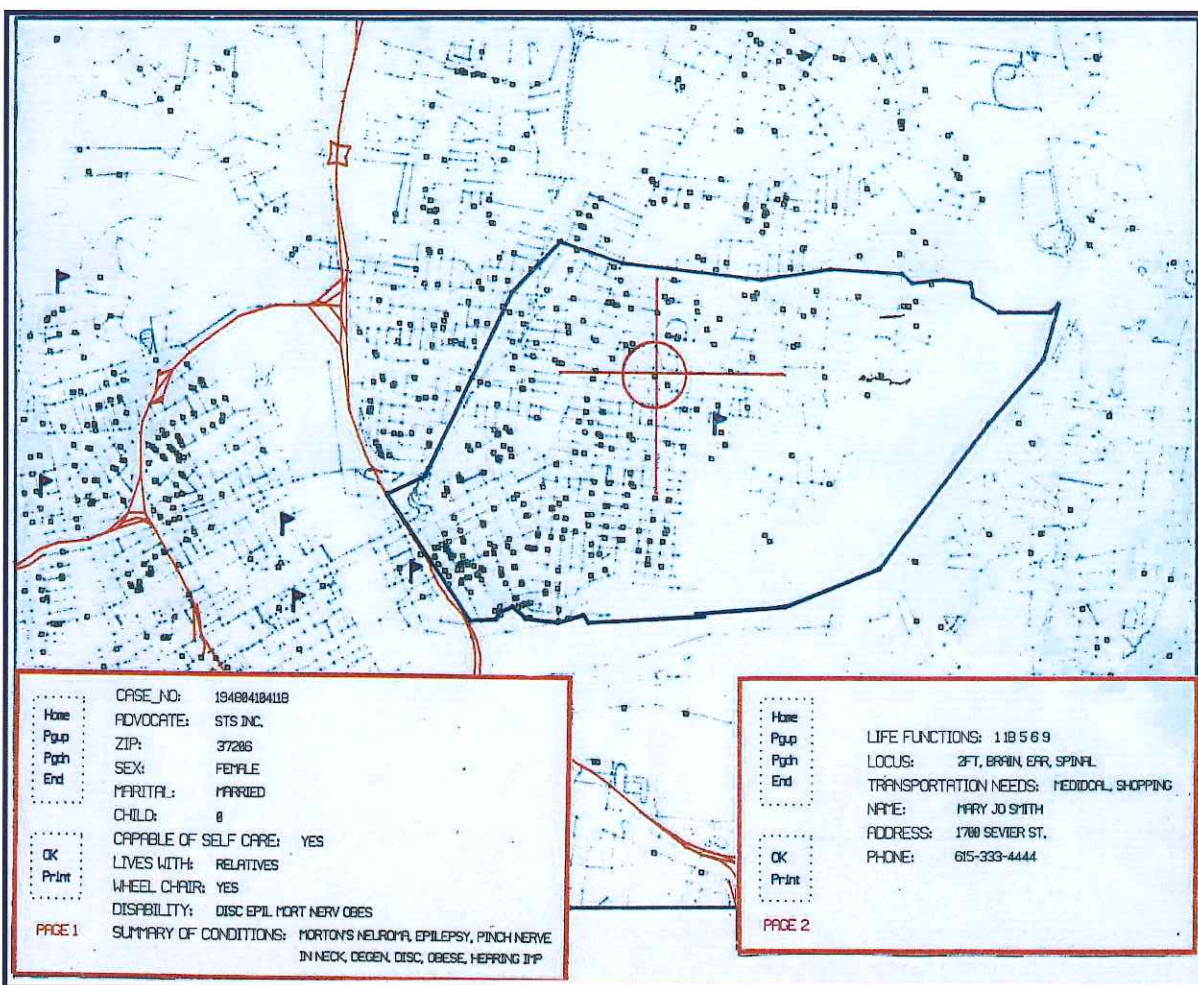
OTHER SERVICES:

- Home delivered groceries (refrigerated van) \$3.00
- Wheel chair ramps/home modifications (free or sliding fee scale)
- In-home assistance with applications for Tenn-Care, food stamps, other entitlements, insurance appeals, legal matters. (Free services)

High Risk Patients (Zip Code 37206)

Referred by Social Services Agencies

(Does not yet include referrals from payers & providers of healthcare)



CASE MANAGERS SUBMIT A NEEDS PROFILE FOR EACH CLIENT

HOUSING NEED = 1D

(All cases coded for confidentiality)
(Contact made through caseworker)



CMSC Needs Profile Example & Instructions

Write your CMS
Caseworker ID# -
If you don't have
one, call the CMS
Center 880-2470

Enter client's 12-digit ID number as follows:

- 4 digit year of birth (example 1949)
 - 2 digit month of birth (example 02 for February)
 - 2 digit day of birth (example 28 for 28th day of month)
 - last 4 digits of patient's Social Security number (example 4038)
- The above example number would be 194902284038

Client's 5-digit
home zip code

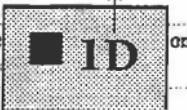
Caseworker ID#	Client ID#	Client Zip Code	Life Functions			
			<input type="checkbox"/> 01	<input type="checkbox"/> 02	<input type="checkbox"/> 03	<input type="checkbox"/> 04
			<input type="checkbox"/> 05	<input type="checkbox"/> 06	<input type="checkbox"/> 07	<input type="checkbox"/> 08
			<input type="checkbox"/> 09	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 12
Client Conditions or Disabilities <input type="checkbox"/> ambulatory <input type="checkbox"/> walker - quad cane - crutches <input type="checkbox"/> partial <input type="checkbox"/> complete <input type="checkbox"/> wheel chair transferable <input type="checkbox"/> wheel chair non transferable			<input type="checkbox"/> 01	<input type="checkbox"/> 02	<input type="checkbox"/> 03	<input type="checkbox"/> 04

Notes:

Indicate level of mobility
support needed

Client's disabilities, diagnoses or
need conditions

Is Life
compl



Blacken the boxes for areas of client needs, if a ny part applies to the client:

1. **Cas/Case Management:** assessment & referral, help locating services, social worker support, professional counseling, assistance with decisions
- 1A **Financial Needs:** needs payee, help applying for benefits/budgeting/automatic deposits/making payments, cash/vouchers for utilities, medicine, gas, etc.
- 1B **Health & Medical:** medical resources and services, affordable medication, treatments, therapies, equipment
- 1C **Legal Assistance:** legal counseling/help, e.g. estate planning, lawsuits, landlord disputes, divorce, abuse, custody, bills, loan companies, conservatorship

1D Housing : affordable/appropriate housing, specialized living arrangements (e.g. supported living, group home), residential treatment, transitional housing.

- 3 **Basic Self-Care:** self-care training, respite in home or elsewhere, attendant care, caregiver support, safety (taking medications, wandering, etc.)
- 4 **Socialization:** opportunities to socialize & make friends, support groups, associations & peer networking
- 5 **Home Accessibility/Mobility Devices:** wheelchair, braces, seeing eye dog, wheelchair ramps, home modifications (e.g. wider doors, rails, lower cabinets)
- 6 **Transportation:** out-of-home mobility, specialized transportation, home delivered services, street scooters, vehicle modifications, driver retraining
- 7 **Home Management:** home maintenance, help with chores (e.g. cleaning, laundry), home management skills (e.g. how to shop & prepare meals)
- 8 **Education/Training/Day Svc (children or adults):** classroom/home instruction, special. ed., voc. training, sheltered workshop, meaningful day activities
- 9 **Vocational Placement:** finding employment, training at job site, supported employment, enclave
- 10 **Leisure Time Activities:** locating and/or learning leisure time activities, group or individual recreation activities, hobbies, other pastimes
- 11 **Parental Guidance:** nurturing children, children need parent supervision, parent skills training, abuse counseling, need foster care/adoption
- 12 **Adult Role Models/Mentoring:** role models or mentors for children and adolescents

(Sub-Data Base)

CASE	WORKER #	DISABILITY/CONDITION	CLIENT ID#	ZIPCODE	LIFE FUNCTION(S)
M.T.A.	0237	Degenerative Disc	19431101088	37076	1 1A 1D 1F
Nashville General Hospital	0014	Quadriplegia	196301031703	37217	10 9
Metro Action	0302	Splua Bifida	196410263418	37064	10 4 5 9
Martha O'Bryan Center	0152	Brain Tumor, Heart, Pancreas	191111100154	37027	1 10 1A 3 4 6
Metro Housing	0308	C5, C6 Spinal Cord-Quadriplegic	196506083524	37208	1 10 1A 1B 1D 1E 6
Columbia Home Health	0168	MR	190606062222	37076	1E 6
Medshares Home Care	0093	Deaf	198806144383	37209	1 1A 1B 2 4
Nutrition Program	0147	Deaf, Dementia	191605211196	37209	1 1D 3
M.T.A.	0237	Alzheimers, Frail	190005307874	37205	1 10 1A 1D 3 4 6
N.E.S.	0089	Alzheimers	191603034832	N/A	1 10 1A 1D 3 4
Metro Health Dept.-Lentz	0248	Alzheimers	101801175844	37215	1 10 1A 1D 3 4
Martha O'Bryan C.M.O.	0153	Alz	172586	37215	1 10 1A 1D 2 4
Melarry-Hubbard Hospital	0289	Alz	17631	37215	1 10 3 4 7
J.B. Knowles Center	0009	Deaf	16202	37221	1 10 1D 3 4 5
Metro Social Services	0309	Stroke	14035	37210	10 4 6
N.E.S.	0028	Paraplegia, insomnia	194903041592	37203	1 4 8 9
Metro Social Services	0176	Quadriplegia	196803010938	37130	10 1E 4 5 9
M.T.A.	0063	Paraplegia	197808048926	37917	1 10 4 8
Donelson Home Health.	0295	M.S., Deteriorating Vision	195004174674	37209	1 10 1E 2 4 8
Metro Housing	0017	Paraplegia	197101182205	N/A	1 10 1A 1E 2 4 8
M.T.A.	0086	Quadriplegia	195307172017	37101	1 10 1E 4 8
Metro I&R	0174	Duchenne Muscular Distrophy	198302255287	37209	1 10 3 4 5 6
Metro Social Services	0042	Respiratory	190709122944	37216	10 3 4 5 6 7
J.B. Knowles Center	0179	Brain Tumor	197702281402	37055	3
Friendship Home Health	0249	MR	196809262102	37013	1 10 1A 1B 1C 1D
M.T.A.	0072	Diabetic, Amputee, High BP, Weak	193001096513	37027	1 1A 1B 3 6
Lentz Metro Health	0142	Panic Disorder	196504113847	37080	1 10 1A 1B 4 8

CLIENT HOUSING NEEDS PROFILE

(L.E. 1-D)

SECOND LEVEL QUESTIONS

Client Case # _____

Sex: ☐ Male ☐ Female

Case Worker/Advocate _____

I. CLIENT DESCRIPTION (as relates to housing need):

Check all that apply

- ☐ Elderly
- ☐ Alcohol or Drug Dependent
- ☐ Homeless (indigent)
- ☐ Homeless due to disaster (fire, flood, etc.)
- ☐ Veteran
- ☐ Refugee
- ☐ Crime/Delinquency
- ☐ Pregnancy
- ☐ Abuse/Neglect
- ☐ Indigent living in unsatisfactory housing (needs relocation)
- ☐ Developmentally disabled/Mental retardation
 - ☐ Mild ☐ Moderate ☐ Severe
- ☐ Physically Disabled
 - ☐ Ambulatory ☒ Non-Ambulatory - wheelchair transferable
 - ☐ Non-Ambulatory - Non-wheelchair transferable
- ☐ Other (specify) _____

312 case workers provide additional information for all clients with data strips marked 1D (Housing).

II. TYPE HOUSING REQUESTED:

- ☐ Emergency (short notice) housing
- ☐ Transitional housing (less than two years) without rehab
- ☐ Transitional housing with treatment, rehabilitation or training.
- ☐ Supported living center/sheltered apartment
- ☐ Congregate care home/boarding home
- ☐ Nursing home or long-term care facility
- ☐ Permanent housing (traditional apartment or house)
- ☐ Other (explain) _____

\$ 3.5 million dollar HUD grant for an Assisted Living Center was secured as the result of 31 specific individuals in wheelchairs checking this profile item. HUD approved a unique architectural design, surprising local housing officials. HUD's reason was Nashville's ability to identify a sizable waiting list (real count) and has a plausible follow-up contact method, assuring immediate occupancy after construction.

III. SUPPORT SERVICES NEEDED

Check all that apply

- ☐ Housing related financial counseling and training (general)
- ☐ Budget counseling, debt management (detailed/one on one)
- ☐ Eligibility screening for public housing (e.g. Section 8, etc.)
- ☐ Savings assistance with matching funds (Individual Development Accounts.)
- ☐ Direct financial assistance for start-up or to get established (first month rent, deposit, utilities, etc.)
- ☐ Counseling in landlord expectations, resolving conflicts, respect for neighbors, care and maintenance of property, etc.
- ☐ Training in independent living skills (safe cooking, food storage, security, trash removal, etc.)
- ☐ Social Services e.g. assistance with entitlements, (Social Security, SSI, Food Stamps, etc.) seeking legal assistance or other advocacy (e.g. Appeals, Child Support).
- ☐ Food/Commodities
- ☐ Free or discounted transportation
- ☐ Job counseling
- ☐ Furnishings, utensils; donated or discounted.
- ☐ Home-finding and application process assistance.

HOUSING PLACEMENT AGENCIES

(Supply Data Base)

* Partial Data

	American Red Cross	Base Camp, The Veterans Center, Inc.	Belmont United Methodist Church	Campus for Human Development	Catholic Charities*	CCS Housing Systems*	Center for Independent Living	Church of Salvation New Canaan Ranch	Community Care Fellowship	Cumberland Heights Alcohol & Drug Tx.*	Dede Wallace Center	Dismas House*	Drug Free Recovery Facility	Elderly Care Referral Agency	Foundations*	Hillcrest 7th Day Adventist Church*	Home Mission Haven
Case Finding/Outreach Waiting List, Housing Census		x		x		x	x										x
Financial Entitlements Counseling/Soc..Sec., Food Stamps, Legal Advocacy, Child Support		x		x		x	x								x		
Budget Counseling, Debt Management		x		x		x	x										
Personal Savings Incentives (Match Funds) Escrow																	
Start-up Financial. (1st months rent, Deposit, Utilities)	x			x	x												
Food/Commodities	x	x		x	x				x					x			
Furnishings, Utensils, Donated or Discounted	x			x		x											
Emergency (short notice) Housing				x			x		x					x			
Transitional Housing (pre-placement) no Rehab or Specialized Treatment							x										
Transitional Housing with Rehab or Treatment		x		x			x	x		x			x				
Independent Living Skills Counseling (Food Storage, Trash Removal, Conflict Resolution w/neighbors, etc.)		x		x			x	x									
Home Finding and Application Assistance				x			x	x									
Job Counseling		x				x		x							x		
Provide Placement Services and offers direct placement				x		x		x									x
Above Services provided: After (A) Before (B) placement	A B	A B		A B		A B	A B	A B									
Gender Restriction: M=Male Only F=Female Only																	
Age Range:	ALL	18+		18+		18+	18+										65+
CLIENTS SERVED																	
Elderly				x		x		x									x
Alcohol/Drug Dependent		x		x		x		x									
Homeless (indigent)		x		x		x		x									
Homeless due to disaster (fire, flood, etc.)	x					x		x									
Veterans		x		x		x		x									
Refugees				x				x									
Pregnancy				x				x									
Abuse/Neglect																	
Indigent living in unsatisfactory housing (relocation)						x		x									
Developmentally Disabled				x				x									
Physically Disabled				x		x	x										
Crime/Delinquency						x		x									

SUPPLY

TRANSPORTATION

A Referral / Eligibility Specialist at the Lead Agency, in this case M.T.A., contacts the case worker for additional information. (see bold outlined boxes) This information along with the basic information from the data strip is used to conduct an extensive computer search for appropriate transportation and mobility assistance resources.

Agency (Case manager I.D.#)	Disability / Condition	Client ID #	Zip Code	Life Functions Needs						
Baptist Hospital (002)	Cerebral Palsey / Legally Blind	1949 01038872	37209	1	2	4	5	6	8	10
<input type="checkbox"/> Ambulatory <input type="checkbox"/> Wheel Chair (transferrable)		<input checked="" type="checkbox"/> Walker / Quad Cane / Crutches <input type="checkbox"/> Wheelchair (Non Transferrable)								
Mobility <input type="checkbox"/> Ambulatory <input checked="" type="checkbox"/> Quad cane / crutches / Walker <input type="checkbox"/> WC transferrable <input type="checkbox"/> WC non-transferrable		Area <input type="checkbox"/> 37206 <input checked="" type="checkbox"/> Davidson Co. <input checked="" type="checkbox"/> * 3/4 miles MTA (Davidson Co.) <input type="checkbox"/> North Nash. Zip Codes		Tran. Support Level <input type="checkbox"/> Drive with training <input type="checkbox"/> Ride bus with train. <input type="checkbox"/> Curb to Curb <input type="checkbox"/> Door to Door <input checked="" type="checkbox"/> Escorted entry <input type="checkbox"/> Continuous Attendant Support <input type="checkbox"/> Must travel by ambulance						
Disability/Condition <input checked="" type="checkbox"/> Blind <input type="checkbox"/> Kidney <input type="checkbox"/> Dev. Disab. <input type="checkbox"/> Cancer <input type="checkbox"/> Para. <input checked="" type="checkbox"/> Other Disabilities <input type="checkbox"/> Quad. <input type="checkbox"/> Economically Disadvantaged		Age <input type="checkbox"/> 0-11 <input checked="" type="checkbox"/> 12+ <input checked="" type="checkbox"/> 16+ <input checked="" type="checkbox"/> 18+ <input type="checkbox"/> 55+ <input type="checkbox"/> 60+ <input type="checkbox"/> 65+		Frequency of trips <input checked="" type="checkbox"/> Routine <input checked="" type="checkbox"/> Demand		Trip Types <input checked="" type="checkbox"/> Medical <input checked="" type="checkbox"/> Work/Day Activities <input type="checkbox"/> Gov. Benefits <input checked="" type="checkbox"/> Rec./Social <input checked="" type="checkbox"/> Nutrition/consumable (shopping)				

* additional question

Resource Communiqué

Case Management Support Center

Wednesday, December 10, 1997

To Case Manager: DAVID LAMPLEY CMID 0013
METRO BORDEAUX HOSPITAL Fax: 615-862-6825

New Resource: Program Middle TN Discount Ambulance Transportation
Agency: Angels of Mercy

Contact: Bobby Sensing

Short Description: ANGELS OF MERCY provides transportation service by ambulance to persons with disabilities who cannot be transported by standard lift-equipped vehicles.

Note Pad: Week-end Trips: First-call first-serve ambulance transportation to week-end recreational outings, family reunions, etc. Rates are \$50.00 per roundtrip within Davidson County, and \$50.00 per roundtrip plus \$1.25 per mile for trips within the five counties surrounding Davidson.

Life Function(s): 4, 6 Transportation

Clients most likely to benefit:



192808130

194803014

195001248

195308049

195404131

195501305

CASE MANAGEMENT SUPPORT CENTER

JACQUELYN PAGE
PRESIDENT

JACK JAKOBK
EXECUTIVE DIRECTOR

A Message to Case Workers:

The Case Management Support Center is now available to assist you in locating community resources for your clients who are frail elderly or have severe disabilities.

Referral Specialists, each with expertise in specific service categories, use innovative search techniques to supply you with the latest and best community resource information.

Resource lists are "packaged" for each particular client based on his or her Needs Profile which you fax or E-mail to the Center. No client names or addresses are used to protect confidentiality. Profiles are assigned Client ID numbers which are listed with your name for contact purposes.

Updates of new resources are periodically forwarded to you referencing specific clients in your caseload who are likely to benefit. As always, you decide whether or not to contact the new resource and/or forward the information to your client(s).

A client Needs Profile Form and instruction sheet are attached.

Case Tracking and Referral Directory

The Case Tracking and Referral Directory is a multi-dimensional resource database that lists over 2,500 community services, programs, and benefits that are available to people who are either frail elderly, disabled or otherwise disadvantaged. This electronic directory is designed primarily for use by case managers, agency administrators, and advocacy organizations.

UNIQUE FEATURES:

- Greater program detail: All listings are by individual program as opposed to the more general agency listings usually found in other directories. Each program is categorized by the life function need it addresses. See the 18 life function categories (attached).
- Automated search capabilities: The CTR Directory uses a completed client questionnaire called a "Needs Profile" to identify the most appropriate resources for each particular client. Twenty-two (22) client characteristics are simultaneously matched against each resource in the database.
- Follow-along/updates: When a new resource is identified and is added to the directory, faxes or E-mails are sent to case workers representing previously submitted client profiles which now match the new resource.
- In-depth eligibility screening: Specialists representing 18 service categories, e.g. housing, transportation, financial resources, etc. are linked to the CTR Directory through the Internet. They review client profiles with needs identified in their area of expertise and then refine the computer-generated list of resources before it is sent to the caseworker.
- Confidentiality: Client ID numbers are used to identify each client Needs Profile submitted for a Directory search and eligibility screening. Only the representative case manager's identity is divulged for contact purposes.
- Community needs assessment: The CTR Directory stores each inquiry, i.e. client Needs Profile, in memory. The resulting real count of people with specific needs is of value to community planners and interagency cooperative efforts.

Virginia Commonwealth University Health System

See attachment.



Virginia
Commonwealth Uni

March 28, 2017

Alexander Billioux, Director, Preventive and Population Health Group
Centers for Medicare & Medicaid Services
Department of Health and Human Services

Re: Request for Information on Pediatric Alternative Payment Model Concepts

Dear Dr. Billioux:

The Children's Hospital of Richmond at Virginia Commonwealth University (CHoR) appreciates the opportunity to comment on the recently released Request for Information on Pediatric Alternative Payment Models. We share CMS's commitment to expanding children's access to comprehensive, integrated care through innovative payment models, particularly with respect to children with complex medical conditions.

In addition to the potential to improve children's health outcomes, pediatric alternative payment models offer providers an opportunity to expand data capture and clinical data access capabilities, prioritize care coordination through patient medical homes, and reduce redundant health care services.

Pediatric alternative payment models could also help eliminate barriers to care. One persistent challenge is maintaining a sufficient supply of available pediatric primary care physicians. Reimbursement rates for pediatric providers remain suboptimal despite a two-year rate increase from 2013 to 2015. This challenge is particularly acute at CHoR, as roughly 57 percent of our patient population is covered through Medicaid or CHIP, while 42 percent of children nationally are covered through those programs.

Finally, while the Commonwealth of Virginia has transitioned nearly all of the state's Medicaid-enrolled children to managed care, pay-for-performance models and augmented medical-home payments are not yet widespread. We believe that an integrated care model for pediatrics, with appropriate payment for meeting quality metrics and outcomes, could encourage additional providers in the Commonwealth to participate in such models.

Our comment identifies three principles we believe are critical to a successful and sustainable pediatric alternative care model. We also ask that CMS clarify the flexibilities that would be offered to states under a pediatric care model. Specifically, we ask that CMS clarify: What services will be covered under pediatric alternative care models? Additionally, how will these models impact future provider payments?

Three Principles for Success

We believe the following three principles are critical to a successful pediatric alternative payment model:

Commitment to Holistic Care

Any pediatric alternative payment model must fully embed mental health and social services into the pediatric patient's primary care medical home so all providers are encouraged to prioritize holistic care. For example, children battling obesity should have access not just to primary care but also to nutrition therapy, exercise training, and other physical and social supports.

Focus on Health Care Infrastructure

Any pediatric alternative payment model must allow and encourage participants to improve care coordination through improvements to health care infrastructure. Participants should be incentivized to make it easier for patients' families to access electronic medical records or to improve information sharing among health care providers and state social service agencies.

Targeted Reimbursement Rate Modifications

Any pediatric alternative model must modify provider reimbursement rates to encourage innovation and ensure provider network adequacy. For instance, a model could reimburse triage phone call services to a patient's medical home or primary telehealth visits. Social workers and mental health providers must also be sufficiently reimbursed to encourage adequate care coordination.

CHoR Potential Pediatric Alternative Payment Models

The Children's Hospital of Richmond at Virginia Commonwealth University has adhered to the aforementioned principles in testing prior demonstration projects. These demonstrations, described below, could potentially be responsive to a future CMS Request for Proposals for a pediatric alternative payment model:

A partnership between CHoR and the VCU Department of Psychology to integrate pre-doctoral psychology student interns in the CHoR primary care clinic one day each week for consultations, brief assessments, and short-term therapies for children with behavioral and mental health concerns;

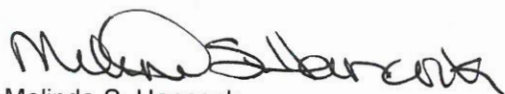
A partnership with an evidence-based Maternal, Infant, and Early Childhood Home Visiting program to link families with young children (under age five) to home visiting by co-locating a home visitor in the clinic with warm hand-offs between programs; and

A faculty member's partnership with University of California, Los Angeles (UCLA) and 2-1-1 of Los Angeles County to test the effectiveness of telephone-based early childhood developmental screening and primary care coordination for children between ages one and four in a federally qualified health center serving a predominantly Latino patient population. A soon-to-be published study will show that this demonstration has increased preventive screening rates, service utilization, and referrals for developmental evaluations social service programs including Head Start after six months.

These programs illustrate how collaborative partners can develop innovative health interventions that improve children's health care outcomes. We stress that CMS should consider the diversity of innovative models as demonstrated by these different programs when developing pediatric care model delivery and reimbursement policies.

Thank you for taking time to read our comments. We look forward to working with you to make the needed public policy changes to improve health care access, delivery, and outcomes for all children.

Sincerely,



Melinda S. Hancock
Chief Financial Officer
Virginia Commonwealth University Health System

Virginia Mason University Village Medical Center

Thank you for the opportunity to comment on this important initiative. Here is the feedback from the Health Care Transformation Committee of the Washington Chapter of the AAP.

This includes comments from today's phone call with CMS/CMMI.

Sincerely,



Virginia Mason
University Village M

WCAAP Health Care Transformation Committee's Response to the CMMI Pediatric Care Model RFI

Thank you for the opportunity to give input on a new pediatric health care payment and service delivery model. The Health Care Transformation Committee of the Washington Chapter of the American Academy of Pediatrics was formed in 2015 to ensure that the voices of children and the health care providers who care for them was not lost in the state health care transformation efforts of Washington State. During the past 2 years, we have had the opportunity to partner on a CMS TCPI Practice Transformation Network (Peds-TCPI) focused on the physical and behavioral health needs of Washington's pediatric Medicaid population, collaborate with organizations focused on serving children with special health care needs, and help shape the implementation of Washington's Health Care Innovation Plan to address the needs of children. The combined learnings of our work on the Practice Transformation Network developed through Peds-TCPI, the Medical Home Partnership Program, and collaboration with the Accountable Communities of Health offer a unique perspective and real world experience to inform a Pediatric Care Model. They also provide the foundation for a potential framework for a pediatric service delivery part of that model.

A successful model for a pediatric care combining service delivery with alternative payment models must be designed around the clinical needs of each segment of the pediatric population and their health-related risks in order to optimize outcomes. These segments include healthy children, high risk newborns, medically chronic and complex, children with at-risk social environments, and behavioral health complexities. In addition, it must address the acute health needs children and adverse childhood experiences that children in any of these segments may encounter. Unlike adults, children who do have chronic and complex health conditions have an enormous heterogeneity of conditions requiring a broad range intensive acute services and subspecialty care. This is particularly true of children on Medicaid. Since no specific health conditions predominate in pediatric health care in any of these segments, the focus of a successful care delivery model must be through horizontal integration of pediatric care providers and community service providers rather than horizontal integration focused on specific conditions.

In the pediatric population, cost savings need to be measured over a lifetime, rather than over a few months or a few years. Children are usually born healthy. Our job in a Medical Home Pediatric Care model is to ensure they remain healthy for the first 20 years and are equipped to carry this health trajectory into adulthood. Our task on Day 1 of the newborn's life is to identify the high need, high risk baby and family to ascertain the newborn with or at risk for developmental, social, emotional, or behavioral health challenges, intellectual or physical developmental delays or disabilities, and those with complex and/or chronic health conditions. Within the Early Periodic Screening Diagnosis and Treatment model, we must provide early identification and early intervention throughout childhood, and use high quality, evidence based cost effective strategies. All children are particularly susceptible to the conditions of their environments, requiring an emphasis on the social determinants of health and adverse childhood experiences, which have a measurable impact on current and future health care needs. Since outcomes occur over a lifetime, we must view pediatric costs as the Lifetime Costs of Care rather than the limited Total Cost of Care perspective.

Based on these needs and our experiences, the critical components of a horizontally integrated pediatric delivery system are:

- Component 1: Transformed Pediatric Patient and Family-Centered Medical Homes
- Component 2: Regional Medical Home Support Systems
- Component 3: Accountable Communities of Health
- Component 4: Pediatric Tertiary care

Each of these components must aligned with the payer and funded through an Integrated Pediatric Service Model Payment and Incentive Arrangement described below.

Early experiences in Washington State through Peds-TCPI, the Medical Homes Partnership Project, Health Homes Program, and the initial work of Washington's Accountable Communities of Health are helping to create the learnings and infrastructure to support Washington's pediatric Medicaid population for the first three components of this integrated pediatric delivery system.

Component 1: Transformed Pediatric Patient and Family-Centered Medical Homes

Transformed Pediatric and Family-Centered Medical Homes are the central component for meeting the needs of the vast majority of the pediatric population. They are in the unique position to provide required wellness, preventive care, and acute care. They also allow for the early identification and intervention of more significant physical, behavioral, and health-related social needs of patients. They are in a unique position to develop longitudinal relationships with patients and as well as the rest of the medical home neighborhood that their patients may need to access. They can also provide care coordination services for the most costly 1% of children that consume 50% of the revenue.

We have learned that pediatric primary care practices need strong support such as that provided through Peds-TCPI. Due to the very low payments received by practices caring for Medicaid patients, it is cost prohibitive for most to expend any financial resources on the infrastructure needed to innovate and integrate new care delivery models. Adoption of new models though is critical to deliver better care and prosper with Alternative Payment Models (practice transformation). Many are financially challenged to even accept Medicaid patients. A Pediatric Care Model ACO that cares for the pediatric Medicaid population will need to address this issue of practice support and infrastructure development both inside and outside the walls of the clinic.

To address the hurdles of practice transformation, Peds-TCPI is creating a collaborative community of pediatric physical and behavioral health providers working toward shared goals of improving primary preventive physical and behavioral health care, reducing avoidable costs, and improving the experience of care. The education and interventions supporting transformation of clinicians practices are supported by leadership teams (Data Strategy, Primary Care, Behavioral Health, and Medical Home Neighborhood) and regional support teams (practice facilitators, physician champions, and behavioral health champions).

With the support of Peds-TCPI, practices are engaged in the work of transforming to Patient and Family-Centered Medical Homes, improving their quality and outcome measures, and improving their provision of pediatric primary behavioral health care. Key contributors to improvement centers on having actionable data on empanelment, quality/outcome scores, and care gaps. Understand this data has not only revealed practice improvement opportunities, but challenges including structural and payment components of the state's Medicaid delivery system that interfere with improvement. These include patients being enrolled in different Medicaid programs at different ages with silo'd data as well as lack of coverage for services that will identify problems early (screening services and certain well child visit important for identifying behavioral and development conditions as well as identifying adverse childhood experiences) or providing appropriate care in a more convenient and less acute setting such as telehealth.

Transformed Pediatric Patient and Family-Centered Medical Home provide better care at lower cost. After our first year of Peds-TCPI, the focus on building the a network practices, then helping those practices understand their patient panels and care gaps, we are beginning to see results correlated with this work:

- Reduction in Avoidable ED Visit Utilization per 1,000 patients (80.9 in 2015 to 57.6 in 2016) with actual cost savings of \$636,000.
- Reduction in Medical/Surgical In-Patient Utilization per 1,000 patients (15.8 in 2015 to 15.2 in 2016) with actual savings of \$1.743 million.
- Reduced Outpatient Advanced Imaging per 1,000 patients (4.66 in 2015 to 4.6 in 2016) with a cost increase of \$9,000.

This results in an overall cost savings from P-TCPI Enrolled Clinicians of \$2,370,000 with only a small amount of the practices engaged and only a few of the planned interventions rolled out. We look forward to seeing the impacts as we move through years 2 through 4 of this project.

Component 2: Regional Medical Home Support Systems

Because there are also going to be families who need more or broader help than a medical home can efficiently provide, it is necessary for a Pediatric Care Model to integrate Regional Medical Home “Neighborhood” Support Systems. In Washington State, through the Medical Home Partnerships Project, support is provided to coalitions and teams of pediatricians, community service providers and family organizations who are trying to make sure vulnerable children and their families get the health and health-related services they need by developing better local services. Critical areas of pediatric health these programs support include development needs, behavioral health needs, and care coordination for children with special needs. Adverse Childhood Experiences (ACEs) and other social determinants of health play a large role in the health of a developing child. Practice-based care coordination and community linkages supporting the PCP and family can help. Nurse care coordinators, parent navigators and community health workers are all promising sources of support for children and their families.

Integration between the Medical Home and the regional Medical Home “Neighborhood” serves three functions:

1. making it easy for the medical home to efficiently connect children and their families to needed community and specialty services,
2. ensuring a feedback communication loop between Neighborhood services and the medical home, and
3. identifying and addressing opportunities for improvement in local services.

Washington State has encouraging experiences with models of centralized information and referral and community care coordination for children. Help Me Grow (HMG) and the Pathways Hub are two examples of different approaches that provide medical homes and families efficient access to needed community services.

Help Me Grow is one of several support systems for the medical home that has strong traction in implementation and improved outcomes. It prioritizes tracking for connection to services and family support, often with warm handoffs, along with outreach/ provider education and data collection and monitoring. There are 25 affiliate states implementing the HMG model, including Washington State with Within Reach as the lead organization, but the work has been in coordination with the Developmental Screening Partnerships Group and the DOH CSHCN program. In Jan 2017 (<https://www2.ed.gov/about/inits/ed/earlylearning/files/ed-hhs-miechv-partc-guidance.pdf>) HMG was called out by the US Dept of Ed and US Dept of HHS as an example of an effective Centralized intake, screening and referral system for early childhood. Several communities across Washington are developing regional Help Me Grow hubs in collaboration with the main state hub.

The Pathways Hub model of care coordination provides a way to have measureable outcomes and payment points for different care coordination pathways such as connection to a medical home, developmental screening and more. Communities in Washington are beginning to use this approach as part of the state’s health transformation efforts. This evidence-based HUB model is an accountable community-wide approach that effectively addresses risk factors, improves health and reduces cost. A Certified HUB ensures that those at greatest risk within a community are identified and that an individual’s medical, behavioral health, educational and social risk factors are addressed. Risk factors are addressed through the use of “Pathways” – a standardized process that identifies, defines, and resolves an at-risk individual’s needs by connecting the individual to community-based, culturally proficient services that are coordinated. The HUB complements Patient-Centered Medical Homes, Accountable Care Organizations, Health Information Exchanges, and other reform initiatives. Currently, HUBs have been deployed in more than 20 regions in the United States and at least three of our Accountable Communities of Health regions are committed to implementing the model as part of their Medicaid Waiver project.

Since all children are susceptible to behavioral health problems, a model for Integrated Behavioral Health is essential. Larger practices and health systems are beginning to integrate behavioral health providers into the primary care team. This approach is ideal since an interprofessional team that implements behavioral health integration will develop trust and rapport with patients and families by providing an environment that focuses on physical and behavioral health. The warm hand-off between clinicians is a factor in the child’s success. When practice size and resources limit the ability to have on-site behavioral health service, it is critical to have regional or

state-wide behavioral health connections to the medical home. In Washington State the Partnership Access Line (PAL) provides psychiatric support services to primary care clinicians to help manage behavioral health conditions in the primary care setting and a pilot program called PAL Plus is assessing the model of providing regional access to brief, in-person counseling sessions to eligible patients. Telemedicine is another opportunity to extend the Medical Home, which if fully funded and implemented could expand services to improve the quality of care and decrease costs for physical and behavioral health needs.

The main challenges to fully implement these programs are the disparate and unstable mechanisms for funding them as well as the fact that they are managed and organized through different entities that are not integrated into the overall health state health system. To provide these services from within the Medical Home, Primary care providers need financial support and flexibility to support families inside the clinic and connect them with outside resources. To do this from outside the Medical Home, community-based organizations that can provide this regionally need to be integrated into both the care system and payment model.

Component 3: Accountable Communities of Health

Health system transformation depends upon coordination and integration at the delivery system at the local, regional and state level to combine care delivery with community services, social services and public health. Understanding and acting on social needs at the community level is essential since the type of need can vary widely by geography, local populations, local governance. It is crucial that the planning and execution happens at the community level since they are in the best position to understand their populations needs. Organization at the community level also helps facilitate statewide policy development and the dissemination of state-wide initiatives such as education and programming.

An essential component of Healthier Washington (SIM grant) has been the development of Accountable Communities of Health (ACH's) who are accountable for the understanding these health-related social needs within their communities and identifying projects and partnership for improving these. Peds-TCPI has organized our regional support teams to align with the states ACH's. Many of the ACH's have identified pediatric health care and health-related social needs important to their regions, including but not limited to:

- Behavioral Health Integration
- Improving access to pediatric preventive care and immunizations
- Oral health
- Adverse Childhood Experiences
- Opioid use
- Care Coordination

Under the Healthier Washington framework, ACH's are responsible for selecting projects which will be funded through Medicaid Waiver grants. They are also accountable for improving community-sensitive health measures.

Component 4: Pediatric Tertiary Care

Transformation of Tertiary Care systems has not been in the purview of Peds-TCPI, but access to Pediatric Tertiary Care is of critical importance to a comprehensive Pediatric Care Model. Feedback for this RFI is well addressed by comments from the Children's Hospital Association and the American Academy of Pediatrics.

Integrated Pediatric Service Model Payment and Incentive Arrangements

It is critical that the Advanced Payment Models of a Pediatric Care Payment Framework aligns payers and providers around shared goals to facilitate collaboration, integration, process improvement and accountability and,

- Focuses on pediatric health measures (preventive, acute, chronic; behavioral; developmental); and health-related social measures (food insecurity, homelessness, ACE's, poverty, toxic stress)
- Promotes access to the right care at the right time by the right provider
- Removes structural barriers and regulations that impact information sharing across entities for all aspects of physical, behavioral, developmental, and social services

- Provides temporary support for infrastructure and education for transitioning care providers to the new model of care
- Supports telehealth services between health care settings as well as between provider and a patient's home.
- Ensures Enhance payments for rural practices without community service infrastructure and economies of scale to help keep those children close to home.
- Provides Early childhood and parenting programs that foster resilience and promote school readiness (Promoting First Relationships, Reach Out and Read, and home visiting).
- Implements Regional supports for population health management such as outreach, engagement, and empanelment.
- Supports integrated information systems across care providers in all sectors and with payers.

For networks or organizations to eventually be accountable for the costs of care beyond quality measures and utilization measures, a proactive Pediatric Risk Adjustment Model that takes physical, behavioral, development, and social needs into account. The model would need to take into account not just prior utilization but potential utilization based on risks. For example, currently Medicaid clients can become eligible for Health Home care coordination if they are flagged with a PRISM score of 1.5 or more. However, clients often need to have had high costs for a certain time period which would not even be possible for an infant or young child who has recently been diagnosed. The Yakima Rural Health Network Development Grant identified current eligibility criteria for Health Home care coordination enrollment as a barrier to finding children who needed the help and for whom getting help early would save money for Medicaid in the future. In the absence of a Risk Adjustment Model, a payment mechanism for a centralized care functions with additional funding for emergency social services for high need populations will be necessary. This will serve to stabilize the revenue stream and provide readily available support more reliably for families.

Addition after phone call this a.m. with CMMI representatives:

- Our current VBP framework in Washington State for 2017 includes 3 pediatric quality measures for which there is an associated withhold and payment based on performance. These are all HEDIS measures and include:
 - a. Medication Management for people with Asthma
 - b. 2 year old Immunization – Combo 10
 - c. Well Child Care – ages 3-6
- Will forward additional pediatric measures developed in 2016 in subsequent communication per request.
- There was discussion about the revenue streams that fund current integration of wrap-around services and a point was made that is not covered above and was highlighted by the Odessa Brown Clinic in Seattle. It is a comprehensive pediatric Medical Home (non-FQHC) that provides integrated medical, dental, behavioral health, WIC services among others to the underserved community. To provide this care they operate deeply in the red with the deficit covered by the Children's Hospital and extensive fundraising activities. It underscores the point that much of the needed services aren't currently covered by existing revenue streams – even for well accepted basic needs of pediatric health care for underserved populations.
- There was a question about whether the state's MCO's had an appetite for working on a pediatric Risk Adjustment Model. They may and we will ask them. It sheds light on the fact that there needs to be resources to fund the convening, collaboration, and development of this type of work. We do our best to move what we can but the with our limited resources, it's a very small amount that we can do.

Thank you for giving us the opportunity to comment on this exciting innovation.

Michael S Dudas, MD FAAP
 Co-chair, WCAAP Health Care Transformation Committee
 President, Washington Chapter of the American Academy of Pediatrics
 On behalf of the WCAAP Health Care Transformation Committee

Wake Forest Baptist Health

Dear CMS,

As a pediatric nurse who has provided care to dying and seriously ill children since 1987, I observe daily the positive difference that pediatric palliative care can make for the child and their entire family.

Today, as I write this a 7 year old with Metachromic Leukodystrophy, a terminal condition, has required an unnecessary hospitalization because her county's hospice lacks the training and resources to provide support for this child's challenging symptom management. In addition, her father's job is in jeopardy due to missing so much work due to hospitalizations and medical appointments. We desperately need to fund palliative care so that it can be provided in the community and along with all the other services these families need.

Today, I am writing to add my support for the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28/17.

Sincerely,

Wake Forest Baptist Medical Center

Dear Sir or Madam:

I am writing to add my endorsement of the comments submitted by the Center to Advance Palliative Care in response to the Pediatric RFI on 3/28.

Respectfully submitted,

Wharton School of the University of Pennsylvania

To whom it may concern,

We are responding to the CMS request for information/suggestions on improving children's health care, and specifically children's oral health care, with a goal of higher quality/lower cost health care delivery. I have attached the main paper which discusses the proposed program in depth (Niederman et al. 2017. forthcoming in Am J Public Health) for your reference.

Best,

Problem. The GAO reports (2013), that the yearly Medicaid oral health expenditures total \$15 billion, and this provides care to less than 40% of U.S. children. Yet, in spite of this enormous investment, caries experience among Medicaid recipients continues to increase.

Solution. To address these cost, care, and health gaps, we recommend considering universal pre-K to grade 8 universal school-based caries prevention. We estimate that to provide this coverage twice yearly to all pre-K to grade 8 school children will cost \$5 billion, and reduce cavities by 50% (See: Niederman et al. 2017. Am J Public Health. In press). Once instituted, this program may be expanded to the WIC, Head Start, and Early Head Start programs.

In addition to the direct cost savings and clinical benefits from decreasing the prevalence of cavities among children, there are also indirect benefits in the form of medical savings. For example, Bruen et al. (2016) found that 98% of surgical care for Medicaid children under age 20 was due to treatment for dental caries. This represents an additional \$450 million in avoidable Medicaid expenditures if effective caries prevention programs were in place. Additional savings for Medicaid programs and for patients could come from decreased emergency department (ED) visits for dental problems, which average \$749 per visit (Meyer and Tolleson-Rinehart 2016) and represented \$1.6 billion in medical expenditures in 2012.

Rationale. There is a robust clinical literature establishing the effectiveness of sealants, silver diamine fluoride, and fluoride varnish in preventing cavities and tooth decay among children (Marinho et al., 2002; Liu et al., 2012; Rosenblatt et al., 2009; Zhi et al., 2012). Despite this,

1. Fewer than 40% of U.S. dentists provide sealants
2. Less than 16% of 6- to 9-year-olds received sealants, and
3. Less than 15% of children accessing dental care received topical fluoride or sealants.

Furthermore, increasing access to dental care does not translate to increased utilization of clinically effective preventive dental care over less effective types even if individuals have high levels of health literacy (Listl et al. 2014; Burgette et al. 2016). This is because current dental insurance over-incentivizes treatments with no established clinical efficacy over preventive dental treatments with proven clinical efficacy (Niederman et al.).

Solution Detail. We suggest that universal Pre-K to grade 8 universal prevention with a bundled

payment for cycle of prescribed care, with an established health improvement outcome, will meet health care's triple aim. In this program, a simple bundle of preventive services would include screening; silver diamine fluoride treatment for all caries, pits and fissures; fluoride varnish; oral hygiene instruction; and provision of a toothbrush and fluoride toothpaste. These services would be delivered within schools by dental hygienists or nurses. The individual estimated efficacy of each individual proposed treatment suggests that such a program could potentially eliminate all new caries in one year. Implementing a bundled payment per cycle of care, based on patient outcomes, would better align clinical incentives with outcomes.

If the proposed program were put into place, we conservatively estimate the annual national cost would be approximately \$5 billion, with a 50% reduction in untreated caries each year.

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ZERO TO THREE

See attachment.



ZERO TO THREE.pdf



ZERO TO THREE
Early connections last a lifetime

ZERO TO THREE and HealthySteps National Office Response to CMMI Request for Information on Pediatric Alternative Payment Model Concepts

March 28, 2017



HealthySteps
Supporting • Connecting • Pediatric Care

ZERO TO THREE appreciates the opportunity to provide information to the Center for Medicare and Medicaid Innovation on pediatric alternative model concepts, in response to the Request for Information on pediatric alternative payment model concepts. Founded in 1977 by leading researchers and clinicians focused on child development, ZERO TO THREE works to ensure that babies and toddlers benefit from the early connections that are critical to their well-being and development.

Children's health needs extend beyond preventive and therapeutic health care services. Children, even from birth, need access to social supports that ameliorate the negative impacts of social determinants of health that are directly linked to their short- and long-term health and development. HealthySteps, a program of ZERO TO THREE, is an evidenced-based intervention that is transforming the current practice of pediatric care by integrating behavioral health services into the primary care setting from the earliest years of life. While the model can benefit all children, over sixty percent of children receiving HealthySteps services are covered by Medicaid and/or CHIP. While the model was piloted by ZERO TO THREE in the late 1990's, in 2015 it assumed responsibility for its national office operations. ZERO TO THREE, along with the HealthySteps National Office, provides responses to specific questions in this Request for Information in alignment with our relevant expertise and experience.

SECTION I: INTEGRATED PEDIATRIC HEALTH CARE AND HEALTH-RELATED SOCIAL SERVICE DELIVERY MODEL

Where pediatric health care providers have partnered and aligned with health-related social service providers, what types of health care and health-related social services were included beyond the Medicaid mandatory benefits? (question 2)

HealthySteps, which is an evidence-based, interdisciplinary primary care program, provides a clear model for how pediatric health care providers can partner, align, and coordinate with health-related social services to maximize benefits and outcomes for children and families. The model, which is operational in 118 sites nationwide, embeds a developmental specialist known as a HealthySteps Specialist (HSS) within the pediatric care team.

The HSS connects with families during and between well-child visits, from birth to age three (or birth to five for some HealthySteps sites) as part of the primary care team. They offer screening and support for common and complex concerns that physicians often lack time to address, including feeding, behavior, sleep, attachment, depression, social determinants of health, and adapting to life with a baby or young child. HSS are trained to provide families with parenting guidance, support between visits—often including parenting groups and voluntary home visits—referrals, and care coordination, all specific to families' needs, which extends the reach of primary care beyond the clinic walls and into the community.

Through screening, referral and follow up, HealthySteps identifies resources to address social determinants of health for vulnerable Medicaid and CHIP beneficiaries, including housing, transportation, food, language and literacy programs, child care, vocational training and employment. Core responsibilities of the HSS include screening children and families for protective and risk factors as well as social service needs, referring families to services, and providing ongoing care coordination and

systems navigation to facilitate access and successful linkages within the community. The HSS also plays a critical role in identifying and building relationships with community social service providers to determine the most appropriate referral pathways for children and families and how to best provide warm hand offs to those social services.

While pediatric programs inherently serve children, research has shown that caregivers' health status directly impacts the health of children. The HealthySteps program is unique in that it not only addresses the health and well-being of children, but also the health and well-being of adults. HealthySteps extends the capacity of the pediatric care setting to adults and offers services beyond traditional medical care for parents such as maternal depression and substance abuse screenings. The pediatrician's office is a powerful access point for both children and families. By incorporating additional services including breastfeeding support, intimate partner violence screening and healthy birth spacing counseling, HealthySteps builds upon mandatory Medicaid coverage requirements for children within the traditional pediatric setting to help improve outcomes for the whole family. The Bright Future Guidelines, promulgated by the American Academy of Pediatrics, recommend that pediatricians assess parent and family factors, including the use of maternal depression screening. This is particularly important in low-income, vulnerable populations, where mothers may not have other regular sources of care and often have higher rates of health and mental health conditions that impact their young children in the short and long term. Maternal depression screening at regular intervals is an important component of the HealthySteps program.

HealthySteps addresses the increasing demand on physician time and pressure to constantly do more for patients. By adding a child development professional, HealthySteps delivers key service delivery tasks within an interdisciplinary team setting and ensures that pediatricians can practice the highest standard of care while maximizing top of license care, enhancing child development and improving family outcomes and well-being.

SECTION II: OPERATION OF INTEGRATED SERVICE MODEL

Where is there the most potential for improved outcomes and/or savings associated with future streamlining of eligibility and/or alignment of program requirements among Medicaid/CHIP and health-related social service programs? (question 5)

While there is no doubt that health-related social service programs fill a critical role for individuals eligible for Medicaid/CHIP as well as other low income beneficiaries, the current health care system is not structured to naturally link families with these types of resources. Payment methodologies need to incent providers to go outside of their traditional scope of work to screen and link families to critical social-supports within the community. This may include developing new payment models to reimburse providers, other than pediatricians, to provide these necessary services. There is also a lack of research that clearly links services that address social determinants of health to short and long term cost savings. This body of research needs to be further developed to educate payers on the importance of reimbursing for these types of services. In addition, quality measures and outcomes do not currently exist to capture the types of linkages made to community resources and the rich benefits created by

linking children and families to health-related social service programs. Current Medicaid quality measures for children and adults are more process oriented and not sufficiently outcomes focused.

HealthySteps' evidence-based outcomes correlate with National Committee for Quality Assurance (NCQA), Healthcare Effectiveness Data and Information Set (HEDIS), National Quality Forum (NQF), and Child Core Set metrics which are widely recognized across a variety of purchasers and payers of health care services. The outcomes are also critical for monitoring the level and quality of care provided to all populations including children and families. Over 20 peer-reviewed papers—including a randomized controlled trial with a number of successful studies tied to it—have shown significant impact on children and families as a result of the model. HealthySteps has proven positive impacts on the following:

- Greater adherence to well-child visits
- Increased vaccination rates
- Increased home safety
- Decreased injuries
- Less use of emergency department for non-urgent needs
- Increased age-appropriate nutrition
- Increased continuity of preventive care
- Increased exposure to early learning resources
- Improved literacy

As an innovative pediatric program with a two-generation approach, HealthySteps realizes cost savings from both the child-focused interventions and the parent-focused interventions. Increased and timely well-child visits and immunizations, better oral health and more appropriate use of care for ambulatory sensitive conditions all contribute to cost savings on the child side. Cost savings are realized on the adult side through greater duration in breastfeeding, increased rates of screening and referral for postpartum depression, maternal substance abuse, intimate partner violence, as well as counseling on healthy birth spacing. A recent single-state analysis conducted by the HealthySteps National Office demonstrated annualized savings to Medicaid of up to \$1,150 per family, for an annual return on investment of 83%. These savings are in large part driven by the risk and protective factor screens conducted by the HSS.

There are many longer-term cost savings associated with HealthySteps as well. These downstream savings accrue from early identification and treatment of physical and behavioral health issues. Parental support and education yield cost savings in additional areas, including child school readiness and educational attainment, juvenile justice involvement and state spending on social service programs.

What are some obstacles that health care and social services providers as well as payers face when integrating services? How might these obstacles be overcome? (question 6)

Providers working to integrate services face significant obstacles including: lack of provider time to address child and family social service needs; lack of provider skill and knowledge on screening for social service needs; lack of provider knowledge regarding how and where to refer patients to needed and available social services; and, critically important, providers' ability to fund and sustain enhanced social

service-related activities. These obstacles can make it challenging for busy pediatric practices to provide care that addresses the comprehensive needs of the child and his or her caregivers. Technical assistance is also critical for helping pediatric practices adjust office work flow, choose from a wide variety of screening tools with variably prohibitive permissions, conduct record keeping and data sharing, identify physical space for additional clinicians and for private family meetings, etc.

There are also challenges on the payer side that may hinder different types of payers from properly incentivizing and rewarding comprehensive pediatric primary care. One common challenge is that the payer or system making the initial investment may not be the one to recoup savings downstream. The “wrong pockets problem” will continue to deter upfront investments. It is critical to shift current thinking around cost savings to look across systems and beyond short term savings.

Payers are often myopically focused on annual cost savings, which ignores critical long term cost-savings and societal gains. It is essential to incent payers to shift their focus and consider long term cost-savings across systems that can be realized through powerful primary care interventions from the earliest years of life. Too often, cost-saving analyses focus solely on chronic conditions and ignore interventions that address the holistic needs of children and families, particularly in infants and toddlers. This is an area where CMMI and CMS can jointly test and study innovations that promote healthy development from the first one thousand days of life and onward, and drive not only short term savings, but longer term savings across multiple systems through adulthood. Only by going upstream and focusing investment in the formative early years can society truly bend the health services cost curve and drive long term well-being into adulthood.

Ongoing reimbursement challenges within Medicaid also disincentivize practices to enhance existing services through screening and referring patients to social services. Practices may even experience difficulties ensuring that qualified clinicians, who provide these services, can bill on their own for screenings and referrals to social services (e.g., a mental health clinician who may or may not be able to bill for dyadic family therapy delivered in a primary care setting).

Models such as HealthySteps offer an effective and efficient way to address many of these obstacles. The additional team member, a HSS, has the dedicated time, knowledge, and skills to screen children and families, refer them to appropriate services, and follow up to ensure receipt of services. Related to challenges around payment and sustainability for interdisciplinary practices, there are several concrete steps that CMS can encourage states and other payers to take that will facilitate the delivery of integrated social services to Medicaid and CHIP children, including:

- Allowing providers to bill for interventions that address social determinants of health (including referral, follow-up and case management time)
- Allowing pediatric providers to bill for services for parents (e.g., inter-birth spacing counseling) within the pediatric setting as well as dyadic and two-generation treatments
- Allowing pediatric providers to bill for a child’s service based on a related parental diagnosis (e.g., for a child’s therapeutic services to address issues related to maternal depression)
- Allowing providers to bill for prevention, with the goal of preventing future diagnoses (including behavioral health preventive services for infants and toddlers)

- Adopting the *Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0-5™)* as the standard for behavioral health diagnostic assessments for all children under 5 years of age
- Easing same day billing restrictions at Federally Qualified Health Centers to allow for flexibilities for linked parent/child encounters
- Sufficiently reimbursing appropriate validated screening tools, including the frequency with which they should be administered

Allow providers to bill for interventions that address social determinants of health:

HSS facilitate warm handoffs to many health-related social service providers, but the time spent providing these services and developing these relationships is rarely reimbursable, straining the ability of practices to determine how best to bill for services and receive reimbursement. These tasks include case management activities that provide referrals for families to community resources for housing and food insecurities; child care; employment assistance; preschool referrals; and nutritional referrals to Women, Infants, and Children (WIC). Because the role of the HSS often extends beyond the well-child visit and into care coordination and systems navigation activities, CMS can encourage these activities by ensuring Medicaid reimbursement for these critical services, particularly as social determinants of health affect both children and families in significant ways over the short and long term.

Allowing pediatric providers to bill based on parental diagnosis and for parental services:

An additional approach is to allow a child to receive services based on a parent's diagnosis in the primary care setting. For example, if a mother of a young child is diagnosed with a serious mental illness, the child can receive individual services or dyadic treatment based on the mother's diagnosis, as a medically necessary, or Medicaid reimbursable service. This approach is aligned with the knowledge, and increasing acceptance, that a child is only as healthy as his or her caretaker. In addition, social service needs are often shared across family members. By allowing pediatric providers to bill for services provided to parents, states would promote program sustainability while driving improved family outcomes.

Allowing pediatric providers to bill for more preventive services:

Especially for young children, it is imperative that states increase allowable reimbursement for preventative services – particularly preventive behavioral health services. While universally covered well-child visits are an important starting point, physicians and HSS often use those visits to identify children and families at-risk of future problems – but cannot be paid for services provided without a diagnosis in place. The reimbursement of infant and early childhood mental health services, as preventable services in the primary care setting, is a critical first step to improving access to care.

Eliminating and changing diagnosis code requirements:

In many states, children need a diagnosis code for a medical, mental health, or behavioral health condition for providers to receive reimbursement for related services. For example, in some states a child would need a diagnosis of seriously emotionally disturbed (SED) for a provider to receive reimbursement for delivering therapeutic services. This can present a serious challenge for young

children. There is both a lack of generally used diagnoses for children from birth through 3 years of age and a dearth of providers willing or qualified to diagnosis children that young. Although attempts to create appropriate diagnosis codes for children from birth to 5 years of age are increasing, Medicaid agencies as well as providers have been slow to adopt these codes. CMS can provide guidance urging states to eliminate or loosen diagnosis requirements, enabling providers to have more freedom to deliver, and refer to, necessary services and be reimbursed appropriately for doing so.

Supporting the uniform adoption of ZERO TO THREE's Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0–5™):

DC:0-5™ provides a mechanism for diagnosing young children with mental and behavioral health conditions, equivalent to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; DSM–IV). Some states have adopted the DC:0–5, but CMS can issue guidance encouraging all states to adopt the DC: 0-5. If state Medicaid agencies allow DC:0–5™ codes, this will enable providers to bill for supporting services that require diagnoses, including HealthySteps services.

Easing same day billing restrictions at Federally Qualified Health Centers to allow for flexibilities for parent/child encounters:

FQHCs provide critical care to many Medicaid and CHIP beneficiaries, particularly in underserved areas. They are well-positioned to house a program like HealthySteps because they traditionally have strong ties to community resources and they serve both children and their parents. However, FQHCs may struggle to provide enhanced primary care because of existing same day billing restrictions. Without adjusting the complicated payment mechanism for FQHCs at the federal level, CMS can approve an alternative payment structure and encourage state Medicaid agencies to pay a “bump” or enhanced fee for FQHCs that deliver integrated pediatric care, with a focus on connecting families to social services.

Sufficiently reimbursing the appropriate validated screening tools, including the frequency with which they should be administered:

Most states offer meager reimbursement for the use of validated screenings (usually less than \$10) which provide a wealth of information on issues that may impact the health and development of a child and the well-being of a caregiver. Low reimbursement can lead providers to not administer critical child and family screens given the other demands on their time. These screenings identify key issues for children and parents that can result in significant downstream cost savings (e.g., identification and treatment of substance abuse and maternal depression). CMS should emphasize the importance of screenings by encouraging states to offer a more generous screening reimbursement schedule for both children and caregivers. Many of these screenings should be provided multiple times (e.g., per the most recent Bright Futures Guidelines from the American Academy of Pediatrics, providers should conduct a maternal depression screen four times during the first year of a child's life). CMS should also encourage states to reimburse for multiple screens, for both the child and caregiver, so that providers can administer them appropriately and not be forced to ration the use of critical screening tools.

The steps outlined above will help evidence-based pediatric models with sustainability and growth efforts to improve outcomes, with the ultimate goal of ensuring access to a comprehensive range of

preventive physical and behavioral health services for every Medicaid and CHIP insured child and caregiver.

What lessons can a Medicaid managed care organization (MCO) or delivery system offer to inform this model concept? What challenges/barriers have managed care entities encountered? (question 7)

State Medicaid agencies could learn from MCO arrangements that grant enhanced payments via a per member per month (PMPM) mechanism for innovative and integrated care delivery models. A state, particularly a Medicaid fee for service state, with guidance from CMS, could offer enhanced payments to pediatric and family medicine practices that implement evidence-based models, such as HealthySteps. This would signal the value-add of these programs while decreasing the time consuming and bureaucratic processes of negotiating specific reimbursement rates for any given CPT or HCPCS code. This same type of CMS guidance approach could also be leveraged in Medicaid managed care and primary care case management states to encourage the adoption of innovative payment options for pediatric primary care evidence-based models to drive improved care outcomes and decreased costs.

Many Medicaid MCOs have case managers on staff whom work to facilitate continuity of care, provide referrals and track follow up. However, many case managers struggle to perform as effectively as possible because they are not onsite in a specific practice and cannot fully integrate with the clinical team. In addition, the majority of Medicaid beneficiaries do not receive a dedicated MCO case manager and once a mother has her baby, formal MCO case management services are typically discontinued after sixty days postpartum. This leaves most Medicaid pediatric infant and toddler patients and families without a dedicated case manager to advocate on their behalf and address social determinants of health and other health-related issues on a regular basis. Having an embedded individual to work closely with families, such as a HSS, can facilitate necessary referrals in a timely manner and allow for more successful follow ups because families develop a close relationship with the HSS. For practices to sustain dedicated child developmental specialists, such as the HSS, CMS should consider providing enhanced rates for practices that implement these additional professionals and activities (similar to increased payments for practices receiving patient-centered medical home designation).

SECTION III: INTEGRATED PEDIATRIC SERVICE MODEL PAYMENT AND INCENTIVE ARRANGEMENTS

What specific age ranges of CMS beneficiaries should be included in an integrated health care and health-related social service model to achieve the greatest impact on outcomes and cost savings for children and youth? (question 1b)

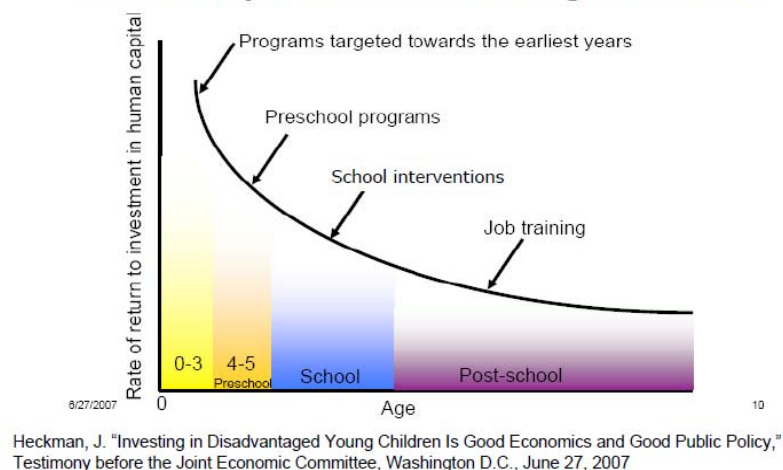
Focusing interventions on the birth to three age range offers the most promising opportunity to impact the trajectory of a child's life and bend the overall cost curve. The first one thousand days of a child's life are a period of incredible growth and laying down brain architecture, providing families and other caregivers with a critical opportunity to promote healthy long term development. Early investments during this time result in the most significant improved outcomes, cost avoidance, and societal gains (see Heckman's curve below). General interventions in the first three years of life can increase children's

cognitive and social-emotional development, educational achievement and graduation rates and parental involvement. These upstream investments can also mitigate both juvenile and adult crimes, cases of abuse and neglect, intimate partner violence, welfare dependency and the need for special education. As research continues to demonstrate the importance of preventing, and ameliorating the effects of, adverse childhood events (ACEs), it is essential to provide children and families comprehensive services from birth. To date, CMS has not taken full advantage of the incredible gains during the birth to three age range by allowing for targeted studies of integrated and innovative models and payments that support the transformation of pediatric primary care practice.

Pediatric and family medicine practices provide a powerful opportunity to support child development. In the first three years of life, the American Academy of Pediatrics recommends children attend fourteen well-baby and well-child visits. The volume of touchpoints in these settings offers an incredible opportunity to provide services beyond vaccinations and traditional medical services to not only children, but parents and families as well. This is particularly true as we understand more about how social determinants, in addition to biological determinants of health, affect child and family health and well-being. HealthySteps takes advantage of these touch points without increasing the time physicians spend on patient care, as the model is centered around the well-child visit and utilizes the lower-cost HSS when time permits.

Interventions at the beginning of life can drastically change the cost curve trajectory for children over time. In addition to improving overall health and outcomes, in two state-specific analyses, HealthySteps has achieved annualized cost savings to Medicaid—at the state and federal levels—for services provided to both children and mothers. Focusing on chronic conditions in adulthood to impact overall health and costs is too late. Innovative and impactful interventions must go further upstream to the earliest years of life and focus on the pediatric primary care setting.

Rates of Return to Additional Investments in Human Capital for Disadvantaged Children



Are there particular “bundles” of services appropriate for a pediatric population or subset of children and youth covered by Medicaid and CHIP that include health/clinical and health-related services?

(question 5c)

Bundled payments offer a promising approach to delivering clinical and health-related services through an integrated, primary-care based approach. For young children covered by Medicaid and CHIP, it will be important to incorporate both developmental and social services into the bundled payment model, as these domains are highly inter-related, as well as to consider the needs of both babies/toddlers and their families jointly. HealthySteps provides a clear and compelling model for how this could work: the bundle could include: joint well-child visits with the HSS and pediatrician; a schedule of screenings for children and parents (such as developmental, psychosocial and behavioral, maternal depression, intimate partner violence, and substance abuse screenings); a set number of home visits (if desired); referral and systems navigation; early literacy and learning services (such as Reach Out and Read); and care coordination support. CMS should encourage a robust bundled payment study on preventive behavioral health services within the pediatric setting for infants and toddlers to support broader adoption of this approach.

HealthFirst, an insurance carrier, is piloting a pediatric bundled payment in New York as part of its “Prevention as a Priority in Value-Based Healthcare” initiative.¹ HealthySteps is an integral part of this bundle. Healthfirst anticipates positively impacting the following select outcomes:

- Higher immunization rates
- Longer duration of breastfeeding
- Lower child obesity rates
- Reduced dental caries
- Increased number of books and reading aloud
- Improved parent-child interactions
- Improved identification of developmental delays
- Improved language development
- Improved social and emotional development
- Improved school readiness
- Increased family and provider satisfaction
- Increased access to social supports and services
- Decreased parenting stress

Healthfirst will be tracking these specific outcomes, in conjunction with the State’s Medicaid agency, to inform cost benefit and future reimbursement policies.

New York is engaged in a delivery system redesign, enabled by DSRIP funding of \$6.42 billion awarded in 2014. New York’s Office of Mental Health, Division of Integrated Community Services for Children and

¹ Healthfirst 2016 Fall Symposium Prevention as Priority in Value-Based Healthcare Part II presentation. George L. Askew, Deputy Commissioner of Health, NYC Department of Health and Mental Hygiene Division of Family and Child Health.

Family, received a portion of this award to implement HealthySteps at seventeen pediatric practices across the State. HealthySteps is the evidence-based program selected by the State to lead efforts and drive greater integration between physical and behavioral health services in the pediatric primary care setting from birth to age five.

What role do models of care such as ACOs play in the pediatric environment? (question 8)

ACOs will only be successful if they provide the appropriate services, including preventive and integrated services. A program such as HealthySteps can enable ACOs to enter into innovative payment arrangements related to certain outcome metrics that payers designate as important. These may include improving immunization rates, developmental screening rates, or screening rates for maternal depression. Other possibilities include increasing referral rates to specialty providers or community resources in situations where families require additional assistance to address non-medical needs. Regardless of legislative changes, including potential changes to the ACA, CMS should ensure that ACOs can receive incentive payments based on quality and cost containment as opposed to volume and intensity of services.

There are six pediatric ACOs across the country currently, although the number is expected to rise. The current ACOs offer a learning opportunity as the industry continues to transition to Value-Based Purchasing (VBP). Cincinnati Children's Hospital and pediatric ACO recently implemented HealthySteps to drive their population health efforts. For ACOs to fulfil their mission of high quality care at a lower cost, they must adopt innovative programs to drive this change. HealthySteps can play an important role in the move towards VBP, given that the previous HealthySteps randomized controlled trial illustrated that the program can impact several metrics that payers include in VBP arrangements: timely well-child visits and immunizations and frequency of reduced emergency room use for injury. These are metrics that VBP arrangements and payers may determine as valuable to their populations and encourage them to contract with HealthySteps sites and providers to link payment and improved care outcomes more appropriately.

CMS can also help to promote the greater use of ACOs within the overall Medicaid population by releasing additional guidance to states (as initially outlined in the Affordable Care Act) on Medicaid ACO development. Additional state guidance from the federal government can help to promote new innovative delivery and payment models, at the provider level, that can leverage existing systems of care including Medicaid managed care.

SECTION IV: PEDIATRIC MEASURES

What additional measures are appropriate for beneficiaries aged 0-18? Are they indicative of both near-term health and well-being as well as predictive of long-term outcomes?

Only 20 states have reported on the "Developmental Screening Measure in the First Three Years of Life" (in 2016), which is short of the minimum threshold of 25 states required for CMS to publish state-level data and rank state performance. This metric should continue to be included in the Child Core Set, and

CMS should consider requiring reporting on this and other Child Core Set metrics that are currently voluntary.

To promote a more holistic approach to pediatric care, metrics should consider the whole family. CMS should consider adopting metrics around maternal depression screening in the pediatric and family medicine setting, as well as screening and referral for social determinants of health. By promoting these metrics, CMS is highlighting that delivering these critical screenings is the new standard of care.

Most children, unlike chronically ill expensive adult populations, offer little savings in a single episode of care, however there are opportunities for immense savings over time. It is imperative to look at savings across systems, but there are significant savings to be gleaned from Medicaid alone, ensuring compliance with CMMI's mandate to invest in models that are at least cost-neutral. The metrics we choose to adopt can help shed light on these savings and enable state Medicaid agencies to better calculate savings.

One specific metric CMS could adopt is the percentage of children with qualifying developmental screenings referred to Early Intervention services. This could help minimize the duplication of screenings across systems and help to facilitate the connection of children with, or at risk of, a developmental delay to necessary Early Intervention services.

SECTION V: OTHER COMMENTS

The HSS, within the HealthySteps model, can act as the common link between many systems including Early Intervention, Title V programs, Foster Care, home visiting services and the Indian Health Service delivery system. Collaboration across these systems is typically fragmented due in part to varying eligibility criteria and data sharing challenges. Because over 90% of parents take their children to the pediatrician, the primary care team is uniquely positioned to provide referrals to services and follow up. HSS act as systems navigators to bridge the disparate early childhood systems, improving access to critical services and community linkages, and helping to improve overall child and parent well-being.

CMS should encourage states to think about what a pediatric or family medicine practice as a whole can achieve, and shift focus away from thinking of the physician as the only interventionist. Practices that implement HealthySteps could receive an enhanced per member per month (PMPM), which would not have to alter specific reimbursement rates, but would facilitate sites in providing more holistic care and encourage that care to diffuse outside of the clinic walls and within the community setting.

For more information on HealthySteps outcomes and cost savings analyses, please contact Johanna