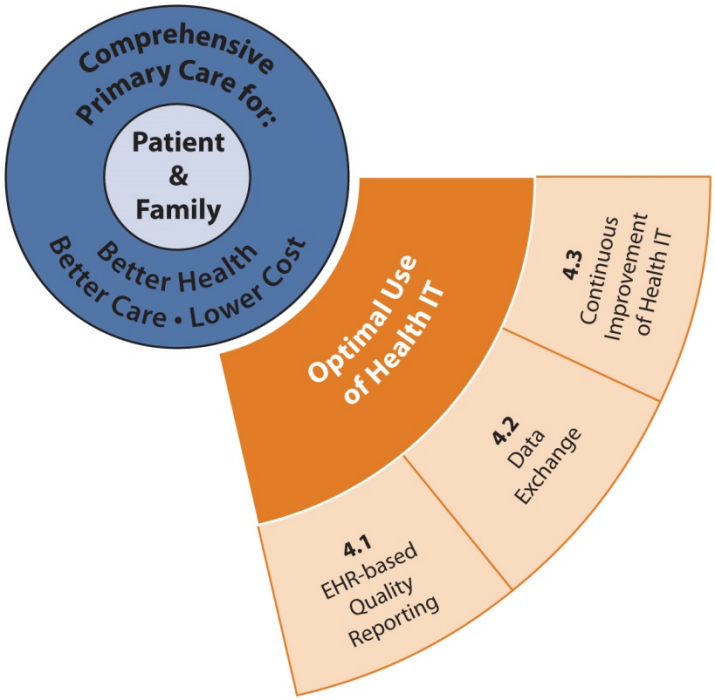
Driver 4:
Optimal Use of Health IT

CPC practices adapted workflows to fully use the capabilities of the electronic health record (EHR) to manage patients and populations. Through EHR-based quality reporting, quality measurement and improvement are linked to daily clinical care and documentation. Participation in regional health information exchanges (HIEs), when available, helped them more effectively bridge the seams of care in their medical neighborhood.



Driver 4: The Secondary Drivers

The secondary drivers that support the Optimal Use of Health IT are described as follows.

4.1 EHR-based Quality Reporting

Many initiatives and payers require reporting of electronic clinical quality measures (eCQM) to participate in value-based payment programs. This section describes the necessary steps required to produce accurate quality reports from your EHR.

4.2 Data Exchange

This section explores the various options that might be available to your practice to get a comprehensive picture of patient care provided in other settings through electronic connections within the medical neighborhood.

4.3 Continuous Improvement of Health IT

Leveraging the use of health information technology (health IT) will continue to enhance the workflow in the office. Investment in automation will move the practice toward achieving the aims of better care for individuals, better health outcomes for the population, and a reduction in the total cost of care through improvement in care.

Secondary Driver 4.1: EHR-based Quality Reporting

Before the advent of EHRs, quality reporting used two types of data: claims data or labor-intensive chart reviews. Once electronic health records became widely adopted, quality reporting using the EHR became a more efficient method to measure the quality of patient care. Many initiatives and payers require reporting of eCQMs to participate in value-based payment programs. This section describes the steps required to produce accurate quality reports from your EHR.

The phases of the work in CPC

- Practices implemented an Office of National Coordinator of Health Information Technology (ONC)-certified EHR and followed the guidelines to attest to Meaningful Use (MU) Stage 1. This may have included the Menu Measure of transmission of immunization data to registries or surveillance data to public health departments.
- Practices continued to improve the function and use of the EHR, and hired or trained personnel to develop, maintain and improve EHR functionality. All eligible professionals (EPs) attested to MU Stage 1 in the program year 2014.
- Practices worked with their EHR vendor to enable reporting at the practice level. Because reporting for MU is at the EP level, some modifications were necessary to report from the EHR.
- Shared savings payments looked at practice-level eCQM reporting among other data sources in ascertaining payments to practices.

Change Concepts for EHR-based quality reporting

- Develop the capacity for practice- and panel-level quality measurement and reporting from the EHR

Implementation tips for EHR-based quality reporting

- Identify the eCQM measures the practice is required to report for its various initiatives as well as for quality improvement activities.
- Evaluate the capability of the practice EHR to provide these measures and report them electronically.
- Work with health information technology (health IT) vendors to develop the capability to measure eCQMs and report them electronically.
- Validate all eCQM reports regularly (quarterly is suggested).

Change Concept: Develop the capacity for practice- and panel-level quality measurement and reporting from the EHR

The Physician Quality Reporting System (PQRS) is a Medicare quality-reporting program that encourages eligible professionals (EPs) and group practices to report information on the quality of care they deliver.[1] The Centers for Medicare & Medicaid Services (CMS) allowed providers to submit PQRS data through a variety of electronic methods: reporting from a qualified clinical data registry, direct submission from an EHR or other IT system and the Group Practice Reporting Option (GPRO) web interface. A CMS-certified vendor reporting mechanism began in 2014 for the GPRO option. This history helps us to understand the importance of developing the capacity to report CQMs from the EHR. Moving forward, the Merit-based Incentive Payment System (MIPS) will allow individual clinician reporting and group reporting.

PQRS is not the only program requiring the practice to report CQMs. Many initiatives require reporting of CQMs. Sometimes this data is requested at the provider level (such as MU Stage 2) and others at the practice level (such as the CPC and CPC+ initiatives). Many EHRs focused on meeting MU measures in their development and, therefore, reported a limited number of CQMs at the provider level only. This is changing over time.

Your practice will be instrumental in working with your vendor to report at the practice and the provider levels in the future. Measurement at both levels also helps the practice in its quality improvement efforts. Understanding the practice-level measures assists the practice teams see how they compare with like practices. Measurement at the panel (provider or care team) level often assists practice teams as they fine-tune their workflows.

Online (external) resources for quality measurement and reporting from the EHR

Physician Quality Reporting System (2016). This site provides an overview of the PQRS system. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html

The Merit-based Incentive Payment System: Quality Performance Category (2016). This site provides an overview of the Quality Payment Program (QPP), with a focus on the quality performance category that replaces PQRS. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/Quality-Performance-Category-training-slide-deck.pdf

Change tactics CPC practices used:

- Develop capacity for practice-level reporting of CQMs derived from EHR
- Develop capacity for panel-level reporting of CQMs derived from the EHR
- Develop capacity for electronic transmission of CQM reports

[1] Physician Quality Reporting System (2016). https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html

Change Tactic: Develop capacity for practice-level reporting of CQMs derived from EHR

Developing the capability to report CQMs from your EHR at the practice level can be a challenge, specifically if your EHR only reports CQMs by individual clinicians. A practice may be tempted to simply add each provider's CQMs together to get a practice-level value. However, this is not a mathematically valid technique. Keep in mind the detail that goes into calculating a CQM: the various components of a numerator as well as the components of a denominator. Simply adding together the final CQM value of each provider creates duplication in the numerators and denominators. Calculating an accurate value for a CQM at the practice level involves compiling each component of the numerator and denominator from each provider in the practice.

Being able to report at the practice level will involve working with your EHR vendor. As the developer of the software, your vendor understands how the EHR processes information to calculate CQMs. The vendor can work with the practice team to develop the capability for practice-level reporting.

Online (external) resources for quality measurement and reporting from the EHR

CPC+ Quality Reporting Overview for Performance Year (PY) 2017 (2016). This is an example of an initiative requiring reporting at the practice level. https://innovation.cms.gov/Files/x/cpcplus-qualrptpy2017.pdf

Quality Payment Program (2016). This site describes the QPP with the differences between MIPS and Alternative Payment Model (APM) reviewed. Allows the practice to use the embedded tools to understand how the QPP may affect its reporting and incentives. https://qpp.cms.gov/

Essential components

Investigate the capability of your EHR to report aggregated CQMs at the practice level. Include the following questions in your assessment:

- Can the EHR aggregate data for all providers and create CQM reports at the practice level?
- What methodology does the EHR use to aggregate the data? Is it calculating using total population elements for the numerator and denominator? Or, calculating at the provider level and providing a summation?
- How many CQMs can the EHR report? Are these the practice's choice of measures to focus on? Are they sufficient to meet the requirements of programs or initiatives in which the practice is enrolled and participating?
- Run reports regularly. Monthly reports help the practice understand how their work affects the CQMs.
- Validate the data using chart audits. Is the EHR capturing the correct information for the numerator and denominator?
- Share CQM practice-level reports with leaders and the practice team. These reports are also valuable to compare performance with other like practices. This may be practices in the same physician hospital organization, independent physician organization or medical group.

Considerations for your practice

- Reporting population health data at the practice level may be assisted by add-on software, such as a registry or other reporting tool, if allowed by the program or initiative.

CPC resources related to working with EHR vendors

CPC On Demand Video: Improving the Accuracy of Information from your EHR (2017). How to gather data for eCQM reporting, validate its accuracy and educate your staff. https://www.youtube.com/watch?v=8PNHTDprYTM&index=30&list=PLaV7m2-zFKpgNDwSSnQ6QMys_LbIaZXjh

Change Tactic: Develop capacity for panel-level reporting of CQM derived from the EHR

In a value-based care environment, the capability to collect, analyze and report measures at the panel level becomes more important. In the introduction to this section, the ability to report at the EP level related to the PQRS and MU programs was reviewed. Evaluating CQM for a primary care team at the panel level is crucial to quality improvement activities.

More than one EP may care for a panel of patients in this new environment. The care team may include a combination of providers as determined by the practice. Examples of provider teams may include:

- one full-time and one part-time physician
- two part-time physicians
- a physician with advanced nurse practitioners or physician assistants

Support personnel round out the team. A designated panel of patients receives their care from this care team.

Electronic health records vary in their capability to report quality measures. Basic functionality may include the ability to report a limited number of CQMs by eligible provider. Yet in the ever-changing world of value-based care, the ability to report and evaluate quality data by panel becomes vital as the practice strives for continuous quality improvement.

Essential components

- Identify the current capability of the practice EHR to report clinical quality data at the panel level. This may involve the capability to aggregate data for measures from multiple EPs.
- Look at the number of measures the EHR is capable of reporting.
- Are they the measures the practice wishes to work on?
- Work with your EHR vendor to understand the capability of the EHR and to develop the capability to report at the panel (care team) level.
- Run the reports on a monthly basis. Share this quality data with the practice team. See **Driver 3: Continuous Improvement Driven by Data** for more information.
- Validate the data whenever there are software updates or other changes affecting the reports using chart audits.

Online (external) resources for developing reports from the EHR

CPC+ Quality Reporting Overview for Performance Year (PY) 2017 (2016). These requirements indicate the need to report from the EHR at the practice level. https://innovation.cms.gov/Files/x/cpcplus-qualrptpy2017.pdf

CPC resources related to developing reports from the EHR

CPC Practice Spotlight 44: Teamwork, Transparency and Rewards Drive Improvement in Quality Measures (2015). This group practice leveraged its effective teamwork and transparency to provide performance scorecards for each team to motivate friendly competition to drive its quality improvement efforts. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=9

CPC On Demand Video: Building a Culture for Practice Improvement (2017). How a Colorado medical center used data to improve its practice. Staff are encouraged to engage in improvement efforts through a variety of methods. https://www.youtube.com/watch?v=WEd4LhB-oe0&index=26&list=PLaV7m2-zFKpgNDwSSnQ6QMys_LbIaZXjh

Considerations for your practice

- Reporting by EP does not always equal reporting by panel. An example of this would be if two EPs share a panel. Keep this in mind as you work with your EHR vendor to develop the ability to report at the panel level.

Change Tactic: Develop capacity for electronic transmission of quality reports

Historically, quality reporting involved a manual process of attestation whereby someone in the practice logged into a secure website and recorded the numerator and denominator for each quality measure on a reporting form. This process is labor intensive and prone to errors.

More recently, federal quality programs allow CQM data submission directly from the EHR or qualified clinical data registry (QCDR) in discrete data format. This option automates the reporting process for the most part and eliminates human reporting errors. However, this option requires your health IT vendor(s) to support this reporting option.

Online (external) resources for developing the capacity for electronic transmission of quality reports

Physician Quality Reporting System Qualified Clinical Data Registries (2016). This site lists the 2016 QCDRs meet the CMS requirements outlined in the 2016 Medicare Physician Fee Schedule final rule. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/2016QCDRPosting.pdf

Essential components

- It is important to understand the reporting requirement for each of the practice programs or initiatives, especially whether reporting is at the practice, panel or provider level. Identify a member of your practice team to stay current on these requirements.
- Evaluate the capability of your current EHR to report CQMs electronically. Discuss whether an add-on registry with the capability to report is needed and/or an option.
- As a practice, map out the measures selected to report for the various initiatives you are involved in. This will vary by practice. Are they in alignment with the measures required by the program or initiative you are engaged in?
- Identify the reporting requirements of the programs or initiatives that your practice must submit electronically. Are you required to submit directly from the EHR? Is a registry report external to the EHR permissible?
- Initially work with your EHR vendor to discuss the potential for electronic reporting directly from the EHR.
- Engage other registry options, should that be the most accurate, cost-effective and allowable means of electronic reporting.

Work collaboratively with your EHR vendor and other potential heath IT solution vendors selected to assist with developing the capability to electronically transmit quality reports.

Measuring Success for Change Concept: Develop the capacity for practice- and panel-level quality measurement and reporting from the EHR

The practice will evaluate its capability to measure practice and panel performance and reporting in the following ways:

- Run CQM reports at the practice level. Include all measures the practice reports to outside programs and initiatives. Evaluate the month-to-month change in the measures for quality purposes.
- Run CQM reports at the panel or care-team level for all measures identified above. Compare measures for each team. Share with all team members and use this data for quality improvement activities.

Change Concept: Develop practice capacity for optimal use of EHR

Once the practice selects an ONC-certified EHR, align the practice workflow to make optimal use of this technology. The primary objective is to improve the quality of care and reduce the cost of the care. This requires a fundamental change in the culture of a practice toward continuous process improvement.

Change will happen in small increments. Once investing in an EHR, it takes time to leverage the investment in that EHR to optimize practice workflow in an effort to automate tasks.

Use automated alerts to notify team members when patients have preventive screenings due or when they are overdue for labs. For example, effective use of patient portal can reduce incoming phone calls by transferring patient communications to a more efficient communication channel.[2] Another example is replacing the paper or spreadsheet registry for patients with diabetes with an automated population health report from the EHR. The automated report reduces workload on the front end (gathering the data) and back end (identifying gaps of care).

Implementation tips for optimal use of EHR

- Designate the role of EHR manager to individual(s). Provide ongoing training and resources to support the role.
- Cross-train practice personnel in key EHR skills. Update training regularly.
- Engage the entire practice team in discussions and actions for EHR workflow improvement.
- Ensure training is ongoing, especially as improvements and updates are made to EHR workflows. Remember training for the new "people" workflows, too.
- Develop and maintain a strong working relationship with the EHR vendor.

Change tactics CPC practices used:

- Identify personnel with responsibility for management of EHR capability and function
- Cross-train team members in key skills in the use of health IT to improve care
- Convene regularly to discuss and improve workflows to optimize use of the EHR
- Engage regularly with EHR vendors about EHR requirements to deliver efficiently the five comprehensive primary care functions and for EHR-based quality reporting

[2] Measuring the Impact of Patient Portals (2011). http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20M/PDF%20MeasuringImpactPatientPortals.pdf

Change Tactic: Identify personnel with responsibility for management of EHR capability and function

When implementing the use of the EHR, the practice must identify who is responsible to manage the capacity of the technology and the function within the practice. In large practices or system-supported practices, this individual or group of individuals is often identified as IT support. These individuals have a firm understanding of the EHR's capabilities. They have often taken additional training to enhance their knowledge of the functionality. Smaller independent practices often must identify a single individual or team to accomplish the same functions.

Essential components

- Identify the individual(s) or departments that will manage the EHR from a functionality perspective. Those responsible should have a back-up person, if at all possible, to avoid creating a critical void should an individual be unavailable.
- Provide training for the identified personnel. This training should include EHR-specific training from the vendor as well as other health IT training from other sources, if required. The ONC Regional Extension Centers (RECs) assist providers with health IT needs and education. Covering the entire U.S. with regional representation, the RECs are responsible for advising on all phases of EHR implementation.[3] The financial investment requirements changes for these organizations and varies by region.
- Identify resources and information for the designated team members. This may include the vendor and the REC. These other resources could also be beneficial: a practice transformation coach or facilitator, EHR-specific user groups, peers who share the same EHR and online resources.
- Ensure these individuals remain current on their knowledge and skills over time, particularly with software updates and changing regulations and incentive programs.
- Identify these individuals as the primary resource for information and assistance with EHR-related concerns. In many practices, these well-trained personnel have the authority to contact the vendor. Additionally, these individuals are responsible for educating and communicating with other practice team members. This may be in the form of training, email, newsletter or other mechanisms.

Considerations for your practice

- Personnel responsible for managing the EHR need not be IT specialists by trade, but have a high aptitude for learning this task. In the office-based setting, this responsibility may fall to a clinically trained individual with a strong knowledgebase, skillset and interest in health IT.

Online (external) resources for EHR management/ training

Regional Extension Centers: Advising Providers in All Phases of Electronic Health Record Implementation (2015). https://www.healthit.gov/providers-professionals/regional-extension-centers-recs

Practice Facilitation Handbook: Module 17. Electronic Health Records and Meaningful Use (2013). This AHRQ resource provides useful information for the practice facilitator and practice personnel. https://www.ahrq.gov/professionals/prevention-chronic-care/improve/system/pfhandbook/mod17.html

Health IT Implementation Toolbox: 9 Steps to Implement EHRs (2016).This review of nine important topics is helpful for working on practice workflows, building personnel, evaluating and optimizing your health IT. https://www.hrsa.gov/healthit/toolbox/healthitimplementation/index.html

CPC resources related to EHR management

CPC Practice Spotlight 52: A Small Practice and Shared Decision Making: Start Simple to Scale Up (2015). This practice used its EHR to track the use of shared decision making tools by using codes developed by the IT department. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=16

[3] Regional Extension Centers (RECs): Advising Providers in All Phases of Electronic Health Record Implementation (2015). https://www.healthit.gov/providers-professionals/regional-extension-centers-recs

Change Tactic: Cross-train team members in key skills in the use of health IT to improve care

Every member of the practice team will interface with the EHR at some point in the workday. These technologies may include the EHR, registry, care management software, patient portal, patient outreach software and others. The primary focus is the EHR, with all others generally dependent on the EHR as the main source of data.

Demographics in the system are necessary to complete administrative or reporting tasks. Cross-training team members in key skills spreads the workload and responsibility for supporting your health IT infrastructure. It also ensures that progress never comes to a halt when team members are unavailable.

Essential components

- Map all practice workflows involving EHR touchpoints. Review these with all personnel and providers.
- Develop workflow diagrams that define the process for data entry or extraction. These worksheets are then used to guide new employees as well as personnel identified to work in an unfamiliar role. Diagrams should be updated anytime the workflow changes.
- Provide cross-training for the purposes of data entry and review of record.
  - Include hands-on activities with the EHR during training.
  - Increase the skill set of cross-trained employees to add to the efficiency of the practice and limit the total number of team members required to function.
- Provide cross-training to enhance teamwork.[4]
- Provide cross-training to increase team satisfaction and provide insight into the teammates' roles.
- Develop discrete data fields, which are crucial to effectively use the EHR for patient care, reporting and evaluation. Train all providers and team members in the use of structured fields and audit the records regularly for accuracy in record keeping. Refresh training as needed to improve accuracy.
- Update training at least annually and any time the health IT software changes. Give personnel the opportunity to hone their skills using fictitious patients.

Online (external) resources for cross-training

Importance of Cross Training in the Workplace (2015). This blog identifies the many benefits of cross-training in any workplace. http://www.directrecruiters.com/uncategorized/blog/importance-of-cross-training-in-the-workplace/

CPC resources related to cross-training

CPC Spotlight 12: DTC Family Health and Walk-in (2014). This Colorado practice shares how it registered 90 percent of its patients for portal use, with 72 percent as active users. The team used iPads connected to the EHR to enter registration data, saving time for front-desk personnel. https://innovation.cms.gov/Files/x/cpcipsl1.pdf#page=30

CPC Practice Spotlight 85: **Expanding Access to Care through E-visit Technology** (2016). This system found e-visits effective for increasing access to care without compromising quality. The system was on track to complete 4,800 e-visits in 2016. https://innovation.cms.gov/Files/x/cpcipsl2014-2016.pdf#page=43

[4] Importance of Cross Training in the Workplace (2015). http://www.directrecruiters.com/uncategorized/blog/importance-of-cross-training-in-the-workplace/

Change Tactic: Convene regularly to discuss and improve workflows to optimize use of the EHR

Often practice teams include outdated manual work processes in their initial workflows that incorporate the use of EHR. To capture the most recent workflows and allow room for improvement, the entire practice team should be involved in ongoing conversations about the work. This fosters continuous improvement as well as an effective route to fully optimizing the EHR.

Essential components

- Train all team members in continuous process improvement tools and techniques.
- Form a quality improvement team comprising a cross-section of personnel to initially address workflow improvement. The outcome of these meetings is then communicated to all team members.
- Identify measures for evaluating process improvement efforts. This may include response time to patient portal communications as well as improvement in data entry into appropriate fields. Your measures evaluate the effect of the process or the outcome of the action.
- Involve the entire practice team in developing new workflows to optimize the EHR. The individuals responsible for interfacing with the EHR are the most knowledgeable about how suggested changes will affect work.
- Document all change projects. This allows the practice to build on previous improvement efforts.

Online (external) resources for optimizing use of the EHR

Science of Improvement: How to Improve (2016). This IHI resource provides instruction in the Model for Improvement used in many health care settings.
http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx

Going Lean in Health Care (2005). This IHI white paper describes how the use of Lean in health care improves processes with elimination of waste, less rework and better quality.
http://www.ihi.org/resources/pages/ihiwhitepapers/goingleaninhealthcare.aspx

Change Tactic: Engage regularly with EHR vendors about EHR requirements to deliver efficiently the five comprehensive primary care functions and for EHR-based quality reporting

EHR optimization is a collaboration of the organization and the EHR vendor, requiring mutual understanding and appreciation, with an open line of communication. This is accomplished with regular contact, effective communication and the willingness of both partners to work together to solve their mutual concerns.

The practice must communicate the EHR needs related to the five comprehensive primary care functions and the related EHR-based quality reporting to the EHR vendor. Those functions are as follows:

1. Access and continuity
2. Planned care for chronic conditions and population health
3. Risk-stratified care management
4. Patient and caregiver engagement
5. Coordination of care across the medical neighborhood

Essential components

- Establish a relationship with the EHR vendor that includes identifying key practice personnel and vendor representatives who will work together on health IT optimization.
  - Select designated individuals to reach out to the vendor. A designated point person should be familiar with preparing for a conversation with the vendor, is well-versed in the needs of the practice and is empowered to work with the vendor to improve the EHR functionality.
- Decide jointly the process of communication between the practice and the vendor. Engagement with the vendor may be initiated with submitting a request. This request may define a specific question, request or concern and be supported by data. This request will form the foundation for ongoing discussions related to this matter.
- When contacting the vendor, prepare for the discussion with screenshots, data reports and other supporting documentation that clearly identifies the concern or topic of conversation. Have all evidence needed to completely and accurately describe your request or your concern.
- Document contacts with the EHR vendor as a means of record keeping and of monitoring progress as you improve the EHR functionality in the practice. Include dates of activities, actions taken, outcomes of the actions and plans for additional work.

Online (external) resources for engaging with EHR vendors

What Is EHR Optimization, How Does It Start? (2017). EHR optimization begins soon after implementation. The EHR vendor is a crucial partner in this journey. https://ehrintelligence.com/features/what-is-ehr-optimization-how-does-it-start

CPC resources related to working with EHR vendors

CPC On Demand Video: Improving the Accuracy of Information from your EHR (2017). How to gather data for eCQM reporting, validate its accuracy and educate your staff. https://www.youtube.com/watch?v=8PNHTDprYTM&index=30&list=PLaV7m2-zFKpgNDwSSnQ6QMys_LbIaZXjh

Measuring Success for Change Concept: Develop practice capacity for optimal use of EHR

Consider the following when evaluating the effectiveness of improving practice capacity for optimal use of the EHR:

- Amount of time spent by practice personnel on direct patient care during EHR optimization. Measuring the time of each step of the workflow during the patient visit will provide this information as the practice makes changes.
- Accuracy of coding. In particular, evaluate the use of current procedural terminology (CPT) codes and ICD-10.
- Patient use of secure messaging via the patient portal. Increasing use of the patient portal may decrease phone traffic for various reasons (e.g., appointments, information, questions for provider, medication refills) as well as the need to provide patient records for personal use.
- The number of alerts from the EHR that resulted in a desired action by the team. Evaluating this will help the practice fine-tune the alert system to meet the needs of the team members and the patients.
- Team member satisfaction surveys.

Online (external) resources for EHR measures affecting practice capacity

Health IT Evaluation Toolkit and Evaluation Measures Quick Reference Guides (2009). This site provides a guide to measures for evaluation. https://healthit.ahrq.gov/health-it-tools-and-resources/health-it-evaluation-toolkit-and-evaluation-measures-quick-reference

Measuring the Impact of Patient Portals: What the Literature Tells Us (2011). This report examines the impact of patient portals and provides information to health care workers looking to implement and measure their own portals. http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20M/PDF%20MeasuringImpactPatientPortals.pdf

Secondary Driver 4.2: Data Exchange

Health care for your patient population occurs in many settings, but your HER may only capture care provided in your practice. To get a comprehensive picture of patient care provided in other settings, seek to implement electronic connections within the medical neighborhood. This data exchange takes various forms depending on the options available in your community or region. This section explores the various options that might be available to your practice.

The phases of the work in CPC:

- Early in the initiative, most practices worked out agreements with hospitals, emergency departments (EDs) and specialists to obtain data on patient visits. Most arrived via fax. Few were a result of an HIE or direct EHR access.
- Practices increased their use of health IT over time. HIE access began to increase, as was shared access to EHRs.
- The practices began using more referral and care transition templates to increase sharing information among providers. As paper and fax information exchange remained, practices began entering that data into the EHR in the designated discrete field within the patient record.
- As data exchange improved, an increased use of local and state HIEs developed. Sharing data increased between providers using structured notes, secure messaging and access to the EHR for providers outside the primary care office.

Change Concepts for data exchange

- Enable the exchange of patient information to support care

Implementation tips for data exchange

- Identify a project lead.
- Identify all outside sources of patient data.
- Prioritize the sources based on volume and value.
- Contact the high volume/value sources first.
- Contact your health IT vendor for interface support.
- Explore HIE options available in your region.

Change Concept: Enable the exchange of patient information to support care

The American Recovery and Reinvestment Act of 2009 provided funding to establish HIEs with the intent of securely sharing patient information across the care continuum. Although not universally used, this technology has made great strides in the sharing of patient information.

The ultimate goal of data exchange is to transfer information securely in a format that automatically uploads into the EHR. A common example is the transfer of patient lab results into the EHR through a lab interface. The interface imports the discrete values of each lab result into the patient's chart in a format the software understands. This data may then trigger an alert to the provider that action is needed, such as an alarmingly high potassium or glucose level that needs immediate medical care. This section explores options for exchanging patient data.

There are three forms of HIE:

- Directed exchanges (also known as "push" exchanges) enable providers to send and receive secure information electronically to support care coordination.
- Query-based exchanges (also known as "pull" exchanges) enable providers to find and request patient information from other providers. Delivery of unplanned care, such as ED visits, uses this form of exchange.
- Consumer-mediated exchanges allow patients to collect and control the use of their health information and share with providers.[5]

Online (external) resources for HIE

What is HIE? (2014). Overview of HIE and the different types. Includes a video depicting consumer-mediated exchange. https://www.healthit.gov/providers-professionals/health-information-exchange/what-hie#consumer-mediated_exchange

Health Information Exchange Case Studies (2013). Contains a description of the three forms of HIE with case studies. https://www.healthit.gov/providers-professionals/health-information-exchange-case-studies

Change tactics CPC practices used:

- Connect to local HIEs, if available
- Develop information exchange processes and care compacts with other service providers with which the practice shares patients
- Use standard documents created by EHR to routinely share information (e.g., medications, problem list, allergies, goals of care, etc.) at time of referral and transition between settings of care
- Use non-clinical workflows to systemically enter structured clinical data from external (e.g., paper and e-fax) sources into their EHR

[5] Health Information Exchange Case Studies (2013). Contains a description of the three forms of HIE with case studies. https://www.healthit.gov/providers-professionals/health-information-exchange-case-studies

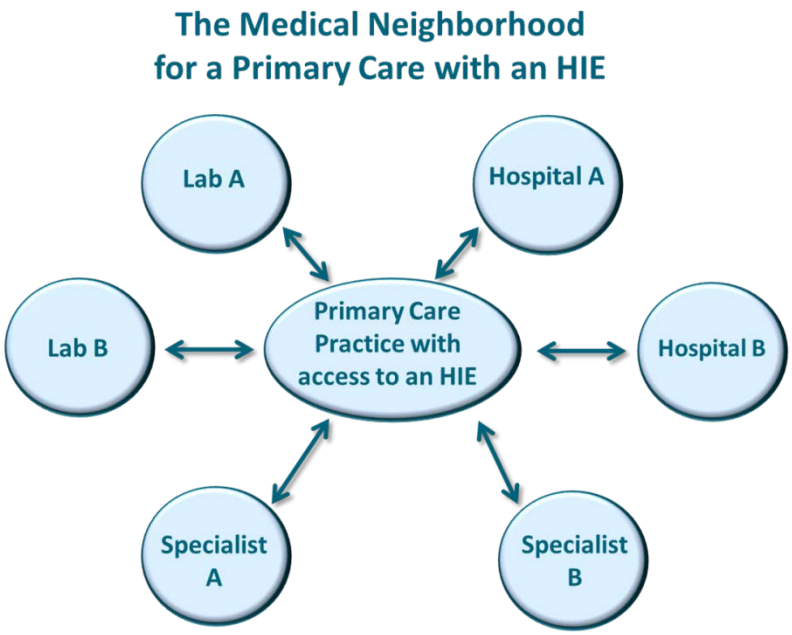
Change Tactic: Connect to local HIEs, if available

An HIE is similar to a modern cellular telephone system where individuals purchase a cell phone and connect to a network to call or text. Similar to the cell phone network, the HIE enables the provider to connect to a secure data exchange to obtain patient data necessary for care. It is more efficient to make a single connection to an HIE to obtain data than it is to make point-to-point connections to all the health care organizations providing care to the patient population of the practice.

An HIE may be located within a health system, a community, a region or state. However, we are still in the pioneer days of HIE implementations. Some states or regions have effective HIEs, whereas other areas are still in the early stages of adoption.

Essential components

- Identify any HIEs that may be available to your practice. Keep in mind that these may be within your local health system or community, or may be part of a larger regional or state initiative. The Office of National Coordinator of Health Information Technology (ONC) provided financial resources for the State HIE Cooperative Agreement Program. Searching for the capability to connect to the HIE for your state may be an option.
- Meet with the HIE service providers. Key elements to investigate about the HIE include the sustainability and economics, the technology supported, investment required and risk involved.[6]



CPC resources related to HIE

CPC Practice Spotlight 30: Full HIE Access Facilitates Real-Time Care Management (2014). This practice benefited from its access to a HIE by gaining insights into the practice's ongoing patient treatment status in the hospital. This information improved transitions of care for patients. https://innovation.cms.gov/Files/x/cpcipsl1.pdf#page=53

Online (external) resources for HIE

Health Information Exchange (HIE) (2014). This site contains an overview of HIE, as well as interoperability courses that may benefit the practice. https://www.healthit.gov/HIE

State Health Information Exchange Cooperative Agreement Program Key Contacts (2014). Program ended in 2014, and not all states have a health IT Coordinator position. https://www.healthit.gov/policy-researchers-implementers/state-health-information-exchange-cooperative-agreement-program-key

Getting Started with HIE (2016). This site provides contacts for each state to help providers locate an HIE in their region. https://www.healthit.gov/providers-professionals/health-information-exchange/getting-started-hie

[6] Health Information Exchange: Getting Started with HIE (2016). https://www.healthit.gov/providers-professionals/health-information-exchange/getting-started-hie

- Work with your EHR vendor regarding the capability of your EHR to connect to an HIE and upload data to a discrete field, as well as send data securely to the HIE. Discuss the cost of this exchange and the timeframe to connecting to the exchange, if available.
- Many EHRs will connect with the state public health immunization registry, cancer registry or communicable disease registry. Verify the types of registries available to your practice using an HIE and whether your EHR can send and/or receive data. Some practices complete manual entry into registries such as these. Any registry where your practice team is currently performing manual entry is a suggested target for HIE ability.

Considerations for your practice

- One of the most commonly used HIEs is the EHR-based data exchanges that exist within health systems. Verify whether your practice is taking full advantage of this capability as you make referrals, obtain information from hospital or ED visits and the like.

Change Tactic: Develop electronic information exchange processes and care compacts with other service providers with which the practice shares patients

Sharing patient records reduces duplication of tests as well as enhances the quality of care delivered by providers outside of the primary care office. Sharing a referral document via fax or letter is one way to accomplish this task. Health IT provides a more effective tool for this purpose.

Direct secure messaging is a result of the Direct Project, a national encryption standard for securely exchanging clinical health care data through the internet. Using secure messaging, a provider can send continuity of care documents (CCD) to a specialist to enhance the referral experience. These CCDs provide the details needed to provide informed care for the patient.[7] The best part is that the CCD is in a human-readable format as well as a format a computer can understand.

Developing care compacts with select specialist providers and facilities assists with defining the relationship and expectations of both parties. (See a discussion of care compacts [care coordination agreements] on page 7 in **Driver 1.5: Coordination of Care Across the Medical Neighborhood**.) Adding secure messaging as the suggested communication method to these agreements will benefit the primary care practice, other providers and the patient.

Essential components

- Reach out to the providers used most often and to discuss the opportunity to communicate via secure messaging when sharing information related to primary care practice patients. Many providers have the capability to use this service, but they have not yet tapped into the resource within their EHR or network.
- Establish a care coordination agreement (care compact, formal or informal) with each provider that is willing to work with your practice. Include secure messaging as the tool used to communicate between providers.
- Regularly evaluate the effectiveness. The data obtained in your evaluation may be used as a positive talking point to other providers.

Considerations for your practice

- Establishing secure messaging will require engaging the practice EHR vendor and/or network sponsor. Include these resources as you begin discussing this option with your team to gain a full understanding of the timeframe and what will be required to establish this tool.

Online (external) resources for developing information exchange processes

Implementing Direct Secure Messaging (2015). HealthIT.gov provides an overview of this valuable tool. https://www.healthit.gov/policy-researchers-implementers/implementing-direct-secure-messaging

Direct Basics: Q&A for Providers (2014). This National Learning Consortium resource provides an understanding of what Direct is and how to use it. https://www.healthit.gov/sites/default/files/directbasicsforprovidersqa_05092014.pdf

How to Get Started with Direct Messaging (2016). This article provides insight into this secure tool for providers. http://medicaleconomics.modernmedicine.com/medical-economics/news/how-get-started-direct-messaging?page=full

5 Things to Know about CCD (2012). Healthcare IT News provides a description of CCDs and their use. http://www.healthcareitnews.com/news/5-things-know-about-ccd

CPC resources related to information exchange

CPC Practice Spotlight 46: Innovative Care Compacts Result in Timely Care, Continuity and Efficiency (2015). This practice increased the effectiveness of its referrals of patients to specialists by establishing Coordination of Care agreements with those specialists and using its EHR to track and follow-up on patient referrals. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=11

[7] 5 Things to Know about CCD (2012). Healthcare IT News. http://www.healthcareitnews.com/news/5-things-know-about-ccd

Change Tactic: Use standard documents created by EHR to routinely share information at time of referral and transition between settings of care

Sharing documents electronically is not always possible. For example, providers do not have access to Direct Secure Messaging or facilities have not developed the technology to share electronically. However, a practice will still be able to use the EHR to communicate effectively.

Creating documents directly from the EHR and sharing them with another provider is the most accurate method of depicting a patient's current medical picture. This does not suggest manually writing the information from the electronic health record and sending a paper document to the referral provider. Instead, it is the abstraction of data from the EHR to a standardized document and providing it to the referral provider.

Online (external) resources for standard documents for referrals and transitions

High Value Care Coordination Toolkit (2016). This online toolkit from the American College of Physicians provides resources to facilitate more effective and patient-centered communication between primary care and subspecialist doctors. Scroll through the page to find standard documents for communication among providers. https://www.acponline.org/clinical-information/high-value-care/resources-for-clinicians/high-value-care-coordination-hvcc-toolkit

Essential components

- Develop a template note for the information that providers wish to share with a specialist or facility. "One size fits all" may not work in this case. Templates specific to the type of consult or referral may be needed.
- Create standard documents for referrals to specialist providers and for facilities, such as long-term care, skilled care and rehab.
- Include only the information pertinent to the referral on the standardized document. The High Value Care Coordination Toolkit has examples of documents that may be used (see green inset box for link and more information).
- Using the template(s), engage the appropriate personnel and other resources to develop an abstract from the EHR that provides the pertinent information outlined in the template. It is likely the abstract for specialist referrals will differ from the abstract for facilities.
- Use the documents derived from your EHR to share information.
- Evaluate the use with those receiving the documents. Did the information meet their needs? How would they improve the document? Did it result in improved delivery of care?
- Evaluate the use of standardized documents with your practice team. Does this save time in the workflow? Is the consultant response more targeted to the reason for referral with this information presented?
- Work with referral sources to develop a standardized response document derived from their EHR. (Please see the High Value Care Coordination Toolkit in the resource box for a link to a sample document.) Share an example or template of what your practice would like in the response with the referral providers. Once established, provide feedback to the referral providers on the form's effectiveness.

Considerations for your practice

- Creating an abstracted document from the EHR will require someone with the skillset to build this type of report. Consider what resources your practice has or seek help from your EHR vendor.
- Some EHRs have templates as a part of the software or available as modules. Contact your EHR vendor to understand what is available to your practice. Discuss how to modify the standardized documents to fit your needs or build them into your system.

Change Tactic: Use non-clinical workflows to systemically enter structured clinical data from external sources (e.g., paper and e-fax) into their EHR

Although the electronic receipt of structured clinical data, such as test results or consultant reports, directly into the EHR is preferred, this is not always possible. When the practice receives clinical data via fax, mail or other sources, it must develop workflows to ensure entry of the information into their EHR in a usable, structured format.

Although scanning or inserting faxed documents into the EHR makes the document available within the EHR, the information does not appear in a structured field. Practices need discrete data elements to trigger alerts, track referrals and accurately report data via eCQMs and create data reports for monitoring and continuous improvement. Practice workflows not only must upload the document into the EHR, but they also should ensure all data is entered into a structured field within the EHR.

A common example of this workflow involves receipt of mammography results from a radiologist or colonoscopy results from the gastroenterologist. Both of these services are typically performed outside the primary care practice. In many cases, the result comes into the primary care practice via fax or e-fax. The typical workflow is to file the result into the patient's medical record via scanning or into a paper file. This workflow may be missing the key step of informing the EHR as to the completion date and result. Entering this information into a designated structured field makes it visible and reportable for the primary care team. If these records are scanned into the patient's EHR, they are often scanned into the wrong place in the record and cannot be found. The key is that the results are scanned into the open "order" or "result" template (depending on the EHR). If they are just scanned into a generic place in the patient's record, they are not retrievable.

Essential components

- Determine your goals for this data entry. Reporting-related eCQMs is a vital goal for value-based payment. Your practice may also want to use this input for process improvement, patient education, and tracking referrals.
  - Once goals are established, identify the source and type of clinical documents typically received by your practice.
  - Identify the fields in your EHR to receive the information.
- Match the result to an order. This closes the loop in the order tracking system. If no orders are pending, then many EHRs allow you to create an order and attach the result. Both options require data entry to inform the EHR of the date and result.
- Manually enter lab orders received by e-fax or paper. Individual values are typically entered into discrete fields. This allows the EHR to send alerts for abnormal values and create run charts and other reports on the data. Simply entering the date completed and a brief "normal" or "abnormal" is not sufficient.
  - If necessary, create fields in your EHR to receive this discrete information, allowing you to create the reports or serve the purpose you have identified.
- Create the workflows to accomplish data entry. Scanning a document into the EHR and attaching it to a patient's record may be done by a non-clinical individual. Yet entering data into designated fields requires the individual to understand the content of the document, including where the data must be entered. This could be a medical-clerical individual.
- Meet regularly with the team to review the workflows and improve the process as identified by the individuals tasked with the role and the end user (provider, clinical personnel or analytics).

Considerations for your practice

- Working with your EHR vendor or IT specialist may enhance your planning as you develop these workflows. The goal is to create a workflow using the most appropriate team member, with the outcome of discrete data available in the EHR to meet the needs of the primary care practice.

Measuring Success for Change Concept: Enable the exchange of patient information to support care

The following may help you evaluate your practice's ability to exchange patient information to support care.

- Use of these evaluative measures may be beneficial when connected to a health information exchange:
  - Is your HIE connection manual or automated? What data is received and sent?
  - Evaluate the CQMs associated with the data transmitted. Has the HIE connection demonstrated improvement in the CQM measures?
    - Immunizations and screening tests are common measures to evaluate.
  - Has the connection to an HIE reduced the time it takes practice personnel to collect the data?
- Use of Direct Secure Messaging may be evaluated using these measures:
  - The time invested by providers and team members to provide this data to a referral provider
  - Accuracy of data presented to referral providers
  - Cost savings with the use of secure messaging implementation over copying and sending records
- Use of structure documents derived from the EHR may be accomplished as follows:
  - Amount of time to prepare documents for the referral provider (is it reduced from the use of paper forms?)
  - Accuracy of the data provided to the specialist or facility (audit of documents)
  - Referral results demonstrate provider had a firm understanding of the reason for the referral and provided feedback in line with the plan of care set by the patient and primary care provider (audit of records).
- Input of data from paper or faxed documents can be measured via an audit of CQM reports:
  - Do the measures demonstrate a different level of performance due to increased data availability?
  - Validate the accuracy of the CQM data and investigate the root cause of errors.
    - Errors in EHR mapping
    - Errors in data input

Secondary Driver 4.3: Continuous Improvement of Health IT

Installing health IT is just a beginning. Just as the practice team works toward improving the provision of comprehensive primary care, the health IT must undergo continual development to meet the needs of the primary care team and its patient population. Leveraging the use of health IT will continue to enhance the workflow in the office. Investment in automation will move the practice toward achieving the aims of better care for individuals, better health outcomes for the population, and a reduction in the total cost of care through improvement in care.

Change Concepts for continuous improvement of health IT

- Align with the MU program to improve EHR function and capability
- Develop practice capacity for optimal use of EHR

The phases of the work in CPC:

- The MU program was used as the foundation for optimal use of the electronic health record by CPC practice.
- Practices invested in workflow changes to use EHRs effectively.
- Practices moved to meeting MU Stage 2 criteria, including electronic reporting of CQMs.
- Employment of increased interconnectivity (when it was available) with the use of an HIE and electronic transmission of data between providers further enhanced health IT optimization.

This section discusses continuous improvement of health IT with MU as a foundation and provides guidelines to build on that foundation with practice team development to most effectively use health IT to deliver comprehensive primary care.

Further optimization of health IT will be discussed with the ability to exchange data with HIEs and other providers. Practice workflows to include input of external data from fax and other non-electronic sources will be described. EHR-based reporting will be dependent on accurate data reception and input, with EHR-based quality reporting as the outcome of this work.

Online (external) resources related to health IT

Health IT Dashboard: Quick Stats (2016). This site provides stats on the use of health IT in office-based settings and hospitals. https://dashboard.healthit.gov/quickstats/quickstats.php

Change Concept: Align EHR with the MU program to improve function and capability

Participation in the MU initiative provided the practice with the guidelines to develop their EHR in a way that best optimized its use for provision of comprehensive primary care.

The Centers for Medicare & Medicaid Services (CMS) MU incentive program began with data capture and sharing (Stage 1) in 2011, moving on to advance clinical processes (Stage 2) in 2014 and improved outcomes (Stage 3) in 2016.[8]

Each successive stage built upon the first. The practice aligned their workflows and reporting requirement with those of the MU initiative as it optimized their health IT.

The Medicare Access and CHIP Reauthorization Act (MACRA) of 2015 established the Quality Payment Program (QPP). This program has two tracks: Merit-based Incentive Payment System (MIPS) and Alternative Payment Model (APM) Incentive. The MIPS performance category of Advancing Care Information replaces the Medicare Meaningful Use program.[9]

Change tactics CPC practices used:

- Use an Office of National Coordinator of Health Information Technology (ONC)-certified EHR
- Align practice improvement efforts with MU requirements

Implementation tips for alignment of EHR with MU

- Select a leader and team to align EHR with MU.
- Choose an ONC-certified EHR.
- Involve the team in brainstorming needed EHR tasks.
- Determine capacity to produce needed reports.
- Select CQMs to report that align with MU and other programs or initiatives.
- Identify the correct EHR fields that will produce the numerator and denominator of each eCQM.
- Align “people workflows” with the newly identified EHR workflows to ensure data input is valid. Train employees on new workflows (people and EHR).
- Train staff on workflows and data entry.

[8] EHR Incentives and Certification: Meaningful Use Definition & Objectives (2015). https://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives

Change Tactic: Use an ONC-certified EHR

The ONC established standards for health IT and an independent testing program to certify that health IT products deliver ONC-required functionality. This certification process ensures that certified products will deliver standard results.

ONC certification is required to participate in the Medicare Quality Payment Program (QPP). Selecting the right vendor is still practice-specific. System-associated practices may not have the sole choice of selection, yet verification of the ability to meet the needs of the busy primary care office is crucial. Independent practitioners must evaluate the ability of an EHR to meet the goals of the practice with minimal costly customization.

Essential components

- Matches the needs of the clinic personnel and patient reporting needs.
- Meets your practice's high-priority goals.
- Are the capabilities present to address the practice's population health needs, such as care management and care coordination?
- Consider the entire cost of the EHR investment, which includes more components beyond the purchase or leasing of the system. These questions can help identify factors with potential to affect your practice's total investment:
  - Is customization needed? Is it an additional cost? Is the cost acceptable to the practice?
  - What is the cost for ongoing support?
  - What is the cost of time? Will the EHR reduce the cycle time in the practice workflow or require additional time to complete the work? Look at the workflow of front office personnel, back office clinical personnel and providers.
  - Are there costs for software updates?
  - Is there a charge for care management software?
  - Are there additional charges for registries?
- Reports the required eCQMs that are vital to value-based payment models.
- Provides future software updates that include desired capabilities.
- What is the estimated release date?
- Provides ongoing training for the practice team, as needed.

Considerations for your practice

- Be certain that the clinical data belongs to your practice. This enables you to transfer that data should you change EHRs. Seek information up front on the extent of data migration. Will any data be lost in the migration? Identify the cost for migrating data up front before selecting the EHR or transferring data.
- If you choose a replacement EHR, is there a cost to migrate your data into the new system?

Online (external) resources related to MACRA

Quality Payment Program (2016). This site describes the QPP with the differences between MIPS and Alternative Payment Model (APM) reviewed. Allows the practice to use the embedded tools to understand how the QPP may affect its reporting and incentives. https://qpp.cms.gov/

ONC Health IT Certification Program (2016). Describes the ONC structure, testing and certification process. https://www.healthit.gov/policy-researchers-implementers/about-onc-health-it-certification-program

Certified Health IT Product List (2016). The CHPL is a comprehensive and authoritative listing of all certified health IT, with search capability. https://chpl.healthit.gov/#/overview

Heath IT Dashboard: Health Care Professional EHR Vendors (2016). Overview of certified EHRs. https://dashboard.healthit.gov/quickstats/pages/FIG-Vendors-of-EHRs-to-Participating-Professionals.php

Change Tactic: Align practice improvement efforts with MU requirements

Developing the ability to report CQMs electronically for various incentive payment programs is sometimes challenging. Many things must be considered to obtain alignment in reporting for the various programs in which the primary care practice is engaged. As the country moves to QPP, the CQMs chosen by the practice for Advancing Care Information should align with any other initiative the practice is a participant.

Essential components

- Review each initiative or program the practice engages in for the CQMs available or mandated to report. Create a visual tool using a list of CQMs in the left-hand column, with each program or initiative in a row across the top. As the evaluation progresses, put a mark under the initiative if that CQM is reported.

Sample CQM Measures Across Initiatives

Measure	ID#	MU	QPP	Million Hearts	CPC	Medicare Advantage
Adult Weight Screening and Follow-up	NQF# 0421; CMS69v5	✓	✓			
Breast Cancer Screening	NQF# 2372; CMS125v5	✓	✓		✓	✓
Colorectal Cancer Screening	NQF# 0034; CMS130v5	✓	✓		✓	✓
Controlling High Blood Pressure	NQF# 0018; CMS165v5	✓	✓	✓	✓	✓
Diabetes: HbA1c Poor Control	NQF# 0059; CMS122v5	✓	✓		✓	✓
Low Back Pain: Use of Imaging Studies	NQF# 0052; CMS166v6	✓	✓			

* This chart is for demonstrative purposes only.

- Identify the measures where the practice wishes to focus its improvement efforts. Consider how many CQMs must be reported for each initiative. Select those that cross multiple initiatives as often as possible. This allows the practice team's investment of effort in improving the measure to be multiplied across the initiatives.
- As a team, develop the improvement strategy for the practice. In addition to the CQMs chosen for reporting, consider monitoring others to assist the practice with identification of areas that may need change. An example is reporting of NQF #0059 (CMS122v5), Diabetes: HbA1c Poor Control. This outcome is a measure of the percentage of patients ages 18 to 75 with diabetes who had hemoglobin A1c > 9.0 percent during the measurement period. Your practice may want to also monitor an associated process measure, such as NQF #0416, Diabetes Mellitus: Diabetic Foot and Ankle Care, Ulcer Prevention-Evaluation of Footwear. You can then correlate the actions taken for one measure with the effect on the other.

CPC resources related to use of eCQMs in improvement efforts

CPC Practice Spotlight 45: PDSA Cycles Focused on Reducing Falls Risk Help Reduce ED Use (2015). This Oregon practice focused on eCQM CMS139v5, Falls: Screening for Future Fall Risk, as a practice improvement initiative with positive results in positive results in reduction in ED visits, and identification of the root cause of the falls. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=10

CPC Practice Spotlight 56: Explore Potential Efficiencies Using Your Patient Portal as an Outreach Tool (2015). This system-affiliated site tested the patient portal as an outreach tool for certain targeted eCQMs. Process data assisted the change process. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=19

- Monitor the selected measures. CPC practices were given the option to select how often they reviewed these measures. However, a monthly review was recommended. Share results with the entire practice team and use them for continuous quality improvement efforts. (See **Driver3: Continuous Improvement Driven by Data** for additional discussion.)

Considerations for your practice

- As you select measures, closely evaluate the capability of your EHR to electronically capture and report the measure. Identify which discrete fields will hold the numerator and denominator, and develop training programs for all members of the practice team to ensure the data entry is in the correct field.
- Please note that MU has become one of four components of the Merit-Based Incentive Payment System (MIPS), which is part of the Medicare Access and CHIP Reauthorization Act or "MACRA."

Online (external) resources for quality measures

Quality Payment Program: Quality Measures (2016). This tool allows the practice to review and select the quality measures that best fit the needs of your practice. https://qpp.cms.gov/measures/quality

Case Study: Practice Transformation, Health Information Technology, Payment Reform: Is There Optimism for Primary Care? (2011). A Colorado physician describes implementing EHR and other health IT as part of his primary care improvement journey. https://www.healthit.gov/providers-professionals/primary-care/practice-transformation-health-information-technology-payment-r

Impact Insights: "MIPS, MACRA & MU – The Next Evolution of Healthcare Payment Reform" (2017). A discussion of the relationships among the merit-based payment programs and how they relate to meaningful use. http://www.impact-advisors.com/meaningful-use/mips-macra-mu-the-next-evolution-of-healthcare-payment-reform/#sthash.m2KdCyam.dpuf

Measuring Success for Change Concept: Align EHR with the MU program to improve function and capability

The following questions will help you evaluate your alignment with the MU program to improve EHR functionality and capability.

- To what stage of MU has your practice attested?
- How many measures can your EHR currently report electronically? Have you validated the accuracy of the data?

Resources for Driver 4

Case Study: Practice Transformation, Health Information Technology, Payment Reform: Is There Optimism for Primary Care? (2011). A Colorado physician describes implementing EHR and other health IT as part of his primary care improvement journey. https://www.healthit.gov/providers-professionals/primary-care/practice-transformation-health-information-technology-payment-r

Certified Health IT Product List (2016). The CHPL is a comprehensive and authoritative listing of all certified HIT, with search capability. https://chpl.healthit.gov/#/overview

CPC On Demand Video: Building a Culture for Practice Improvement (2017). How a Colorado medical center used data to improve their practice. They encourage staff in improvement efforts through a variety of methods. https://www.youtube.com/watch?v=WEd4LhB-oe0&index=26&list=PLaV7m2-zFKpgNDwSSnQ6QMys_LbIaZXjh

CPC On Demand Video: Improving the Accuracy of Information from your EHR (2017). How to gather data for eCQM reporting, validate its accuracy and educate your staff. https://www.youtube.com/watch?v=8PNHTDprYTM&index=30&list=PLaV7m2-zFKpgNDwSSnQ6QMys_LbIaZXjh

CPC Practice Spotlight 12: DTC Family Health and Walk-in (2014). This Colorado practice shares how it registered 90 percent of its patients for portal use, with 72 percent as active users. The team used iPads connected to the EHR to enter registration data, saving time for front-desk personnel. https://innovation.cms.gov/Files/x/cpcipsl1.pdf#page=30

CPC Practice Spotlight 30: Full HIE Access Facilitates Real-Time Care Management (2014). This practice benefited from their access to a HIE by gaining insights into their patients ongoing treatment status in the hospital. This information improved transitions of care for patients. https://innovation.cms.gov/Files/x/cpcipsl1.pdf#page=53

CPC Practice Spotlight 44: Teamwork, Transparency and Rewards Drive Improvement in Quality Measures (2015). This group practice leveraged its effective teamwork and transparency to provide performance scorecards for each team to motivate friendly competition to drive its quality improvement efforts. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=9

CPC Practice Spotlight 45: PDSA Cycles Focused on Reducing Falls Risk Help Reduce ED Use (2015). This Oregon practice focused on eCQM CMS139v5, Falls: Screening for Future Fall Risk as a practice improvement initiative with positive results in positive results both in reduction in ED visits, and identification of the root cause of the falls. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=10

CPC Practice Spotlight 46: Innovative Care Compacts Result in Timely Care, Continuity and Efficiency (2015). This practice increased the effectiveness of its referrals of patients to specialists by establishing Coordination of Care agreements with those specialists and using its EHR to track and follow-up on patient referrals. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=11

CPC Practice Spotlight 52: A Small Practice and Shared Decision Making: Start Simple to Scale Up (2015). This practice used its EHR to track the use of shared decision making tools by using codes developed by the IT department. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=16

CPC Practice Spotlight 56: Explore Potential Efficiencies Using Your Patient Portal as an Outreach Tool (2015). This system-affiliated site tested the patient portal as an outreach tool for certain targeted eCQMs. Process data assisted the change process. https://innovation.cms.gov/Files/x/cpcipsl-2015summary.pdf#page=19

CPC Practice Spotlight 85: Expanding Access to Care through E-visit Technology (2016). This system found e-visits effective for increasing access to care without compromising quality. The system was on track to complete 4,800 e-visits in 2016. https://innovation.cms.gov/Files/x/cpcipsl2014-2016.pdf#page=43

Resources

CPC+ Quality Reporting Overview for Performance Year (PY) 2017 (2016). This is an example of an initiative requiring reporting at the practice level. These requirements indicate the need to report from the EHR at the practice level. https://innovation.cms.gov/Files/x/cpcplus-qualrptpy2017.pdf

Direct Basics: Q&A for Providers (2014). This National Learning Consortium resources provides an understanding of what Direct is and how to use it. https://www.healthit.gov/sites/default/files/directbasicsforprovidersqa_05092014.pdf

EHR Incentives and Certification: Meaningful Use Definition & Objectives (2015). This site will help the reader understand the MU program. https://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives

Five Things to Know about CCD (2012). Healthcare IT News provides a description of CCDs and their use. http://www.healthcareitnews.com/news/5-things-know-about-ccd

Getting Started with HIE (2016). This site provides contacts for each state to help providers locate an HIE in their region. https://www.healthit.gov/providers-professionals/health-information-exchange/getting-started-hie

Going Lean in Health Care (2005). This IHI white paper describes how the use of Lean in healthcare improves processes with elimination of waste, less rework and better quality. http://www.ihi.org/resources/pages/ihiwhitepapers/goingleaninhealthcare.aspx

Health Information Exchange (HIE) (2014). This site contains an overview of HIE, as well as interoperability courses that may benefit the practice. https://www.healthit.gov/HIE

Health Information Exchange Case Studies (2013). Contains a description of the three forms of HIE with case studies. https://www.healthit.gov/providers-professionals/health-information-exchange-case-studies

Heath IT Dashboard: Health Care Professional EHR Vendors (2016). Overview of certified EHRs. https://dashboard.healthit.gov/quickstats/pages/FIG-Vendors-of-EHRs-to-Participating-Professionals.php

Health IT Dashboard: Quick Stats (2016). This site provides stats on the use of HIT in both office-based settings and hospitals. https://dashboard.healthit.gov/quickstats/quickstats.php

Health IT Evaluation Toolkit and Evaluation Measures Quick Reference Guides (2009). This site provides a guide to measures for evaluation. https://healthit.ahrq.gov/health-it-tools-and-resources/health-it-evaluation-toolkit-and-evaluation-measures-quick-reference

Health IT Implementation Toolbox: 9 Steps to Implement EHRs (2016). This site covers 9 topics of importance when implementing the EHR. The knowledge provided is helpful as you work on practice workflows, build staff, evaluate, and optimize your HIT. https://www.hrsa.gov/healthit/toolbox/healthitimplementation/index.html

High Value Care Coordination Toolkit (2016). This online toolkit from the American College of Physicians provides resources to facilitate more effective and patient-centered communication between primary care and subspecialist doctors. Scroll through the page to find standard documents for communication between providers. https://www.acponline.org/clinical-information/high-value-care/resources-for-clinicians/high-value-care-coordination-hvcc-toolkit

How to Get Started with Direct Messaging (2016). This article provides insight into this secure tool for providers. http://medicaleconomics.modernmedicine.com/medical-economics/news/how-get-started-direct-messaging?page=full

Impact Insights: "MIPS, MACRA & MU – The Next Evolution of Healthcare Payment Reform" (2017). A discussion of the relationships among the merit-based payment programs and how they relate to meaningful use. http://www.impact-advisors.com/meaningful-use/mips-macra-mu-the-next-evolution-of-healthcare-payment-reform/#sthash.m2KdCyam.dpuf

Implementing Direct Secure Messaging (2015). HealthIT.gov provides an overview of this valuable tool. https://www.healthit.gov/policy-researchers-implementers/implementing-direct-secure-messaging

Resources

Importance of Cross Training in the Workplace (2015). This blog identifies the many benefits of cross training in any workplace. http://www.directrecruiters.com/uncategorized/blog/importance-of-cross-training-in-the-workplace/

Measuring the Impact of Patient Portals: What the Literature Tells Us (2011). This report examines the impact of patient portals and provides information to health care workers looking to implement and measure their own portals. http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20M/PDF%20MeasuringImpactPatientPortals.pdf

The Merit-based Incentive Payment System: Quality Performance Category (2016). This site provides an overview of the Quality Payment Program (QPP), with a focus on the quality performance category that replaces PQRS. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/Quality-Performance-Category-training-slide-deck.pdf

ONC Health IT Certification Program (2016). Describes the ONC structure, testing and certification process. https://www.healthit.gov/policy-researchers-implementers/about-onc-health-it-certification-program

Physician Quality Reporting System (2016). This site provides an overview of the PQRS system. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html

Physician Quality Reporting System Qualified Clinical Data Registries (2016). This site lists the 2016 QCDRs meet the CMS requirements outlined in the 2016 Medicare Physician Fee Schedule final rule. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/2016QCDRPosting.pdf

Practice Facilitation Handbook: Module 17. **Electronic Health Records and Meaningful Use** (2013). This AHRQ resource provides useful information for both the practice facilitator and practice staff. https://www.ahrq.gov/professionals/prevention-chronic-care/improve/system/pfhandbook/mod17.html

Quality Payment Program (2016). This site describes the QPP with the differences between MIPS and Alternative Payment Model (APM) reviewed. Allows the practice to use the embedded tools to understand how the QPP may affect its reporting and incentives. https://qpp.cms.gov/

Quality Payment Program: Quality Measures (2016). This tool allows the practice to review and select the quality measures that best fit the needs of your practice. https://qpp.cms.gov/measures/quality

Regional Extension Centers (RECs): Advising Providers in All Phases of Electronic Health Record Implementation (2015). https://www.healthit.gov/providers-professionals/regional-extension-centers-recs

Science of Improvement: How to Improve (2016). This IHI resource provides instruction in the Model for Improvement used in many healthcare settings. http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx

State Health Information Exchange Cooperative Agreement Program Key Contacts (2014). Program ended in 2014, and not all states have an HIT Coordinator position. https://www.healthit.gov/policy-researchers-implementers/state-health-information-exchange-cooperative-agreement-program-key

What Is EHR Optimization, How Does It Start? (2017). EHR optimization begins soon after implementation. The EHR vendor is a crucial partner in this journey. https://ehrintelligence.com/features/what-is-ehr-optimization-how-does-it-start

What is HIE? (2014). Overview of HIE and the different types. Includes a video depicting consumer-mediated exchange. https://www.healthit.gov/providers-professionals/health-information-exchange/what-hie#consumer-mediated_exchange