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CPC Milestone 2: Integrating Medication Management Services

May 7, 2014

Moderator

Krystal Gomez, MS

TMF Health Quality Institute

Introductory Comments

Laura L. Sessums, JD, MD
Director, Division of Advanced Primary Care
CMMI/CMS

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CPC Milestone 2: Integrating Medication Management Services

Marie Smith, PharmD, FNAP

Palmer Professor and Assistant Dean, Practice and Policy Partnerships

UCONN School of Pharmacy

Milestone 2: Medication Management

CPC Medication Management Goals

- assure optimal patient outcomes
- prevent medication errors and adverse drug events
- avoid preventable medication-related hospitalizations, readmissions and emergency department visits
- achieve medication-related quality metrics

Systematic Approach to Providing Medication Management Services

1. Determining set of comprehensive medication management services within practice
2. Identifying high-risk patients to receive medication management services
3. Integrating a pharmacist into the clinical team
4. Establishing practice measures for key processes and outcomes to improve medication effectiveness and safety

Overview

- Milestone 2: Medication Management Services
- Medication Use and Safety Dilemmas
- Team-based Care Models
- Review Implementation Guide Key Questions for Integrating Medication Management Services

Angela Vinti, PharmD, BCPS

Clinical Pharmacist,
OHSU Internal Medicine & Geriatrics

Amy Stump, PharmD, BCPS

Clinical Pharmacist,
Associates in Family Medicine, PC

Today's Medication Use and Safety Dilemmas

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Primary Care

- ✓ Multiple chronic conditions: increased costs + risk for med-related misadventures[1]
- ✓ Use of 4+ medications increases risk for falls[2]
- ✓ **$3.5 billion/year is spent on extra medical costs of Adverse Drug Events (ADEs)[3]**
- ✓ **40% of costs of ambulatory ADEs are estimated to be *preventable*[3]**
- ✓ 24% Rx meds and 76% OTCs/herbals (reported as actual meds used at home) were not in EHRs; **~ 50% medication discrepancies due to discontinued meds[4]**

Care Transitions

- ✓ **up to 40% medication info is missing or incorrect on hospital discharge[5]**
- ✓ **700,000 ED visits and 120,000 hospitalizations are due to ADEs annually[3]**

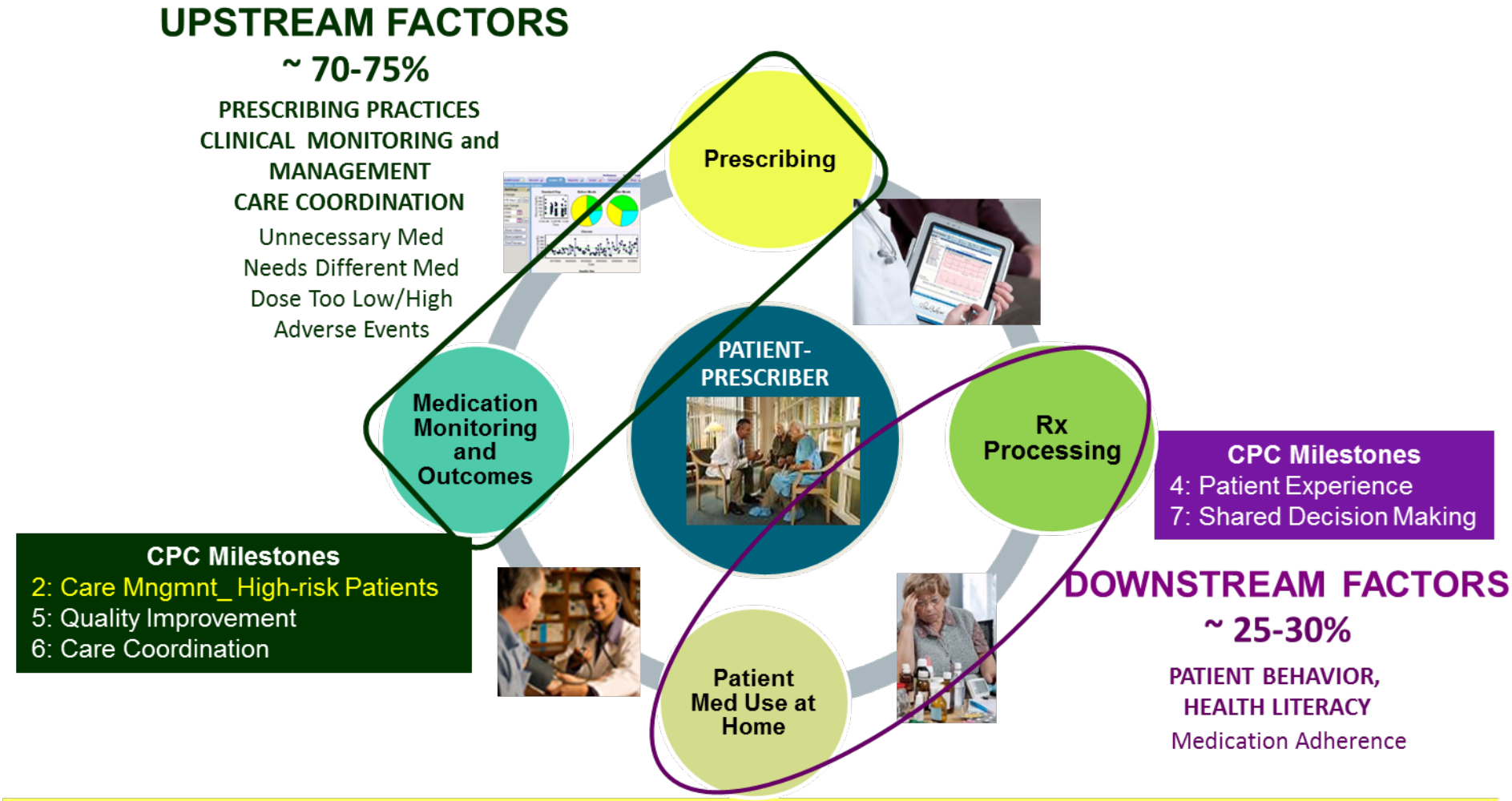
Readmissions

- ✓ 34% of Medicare patients rehospitalized within 90 days[5]
- ✓ **About 20% discharged patients have adverse event; 66% due to ADEs[6]**
- ✓ 9% adverse events leading to hospital admission attributed to medications[7]

1. U.S. Department of Health and Human Services. Multiple Chronic Conditions—A Strategic Framework: Optimum Health and Quality of Life for Individuals with Multiple Chronic Conditions. Washington, DC. December 2010.
2. WHO Global Report on Falls Prevention in Older Age. World Health Organization. 2007
3. Mediation Safety Basics. CDC. 2012 http://www.cdc.gov/medicationsafety/basics.html
4. Smith et al, *Health Affairs 2011;30:*646-654.
5. Kripalani et al. *JAMA. 2007;297:831-841.*

- 5. Jencks et al, *N Engl J Med* 2009;360:1418-28.
- 6. Forster et al. *Annals of Internal Medicine, 2003; 138:161-7*
- 7. Budnitz et al. *JAMA.* 2006;296(15):1858-1866.

Mapping Primary Care Medication-related Problems



"Gaps" in safe and effective medication use are due to both clinician-influenced factors and patient influenced factors. Although med management touches multiple CPC Milestones, today's focus is on Milestone 2

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Primary Care – Dynamic Clinical Teams

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Annals of Internal Medicine | Position Paper

Principles Supporting Dynamic Clinical Care Teams: An American College of Physicians Position Paper

Robert B. Doherty, and Ryan A. Crowley, for the Health and Public Policy Committee of the American College of Physicians*

The U.S. health care system is undergoing a shift from individual clinical practice toward team-based care. This move toward team-based care requires fresh thinking about clinical leadership and responsibilities to ensure that the unique skills of each clinician are used to provide the best care for the patient as the patient's needs dictate, while the team as a whole must work together to ensure that all aspects of a patient's care are coordinated for the benefit of the patient. In this position paper, the American College of Physicians offers principles, definitions, and examples to dissolve barriers that prevent movement toward dynamic clinical care teams. These principles offer a framework for an evolving, updated approach to health care delivery, providing policy guidance that can be useful to clinical teams in organizing the care processes and clinician responsibilities consistent with professionalism.

Ann Intern Med. 2013;159:
www.annals.org
For author affiliations, see end of text.
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The U.S. health care system is shifting from the prevailing care delivery model in which clinicians operate independently toward team-based care. In this new model, groups of physicians, nurses, physician assistants, clinical pharmacists, social workers, and other health professionals establish new lines of collaboration, communication, and cooperation to better serve patient needs. The team-based model requires a new way of thinking about clinical responsibilities and leadership, one that recognizes that different clinicians will assume principal responsibility for specific elements of a patient's care as the patient's needs dictate, while the team as a whole must ensure that all elements of care are coordinated for the patient's benefit.

The American College of Physicians (ACP) believes that the nation's health care system must encourage and enable clinicians to work together in dynamic clinical care teams. The movement to team-based health care delivery has generated confusion among the public, policymakers, physicians, and other health disciplines on how to organize teams to achieve the best possible outcomes for patients. To address this confusion, ACP offers the following principles related to the professionalism, regulation, reimbursement, and research of clinical care teams to attempt to dissolve the barriers that hinder the evolution toward dynamic clinical care teams and nimble, adaptable partnerships that encourage teamwork, collaboration, and smooth

Professionalism and Clinical Care Teams

Professionalism requires that all clinicians—physicians, advanced practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals—consistently act in the best interests of patients, whether providing care directly or as part of a multidisciplinary team (1, 2). Therefore, multidisciplinary clinical care teams must organize the respective responsibilities of the team members guided by what is in the best interests of the patients while considering each team member's training and competencies.

The following framework applies principles of professionalism to the organization, functions, and responsibilities of clinical care teams and applies to teams that are part of a single practice or institution as well as to virtual teams comprising members from more than 1 practice or institution that organize around shared patients to deliver care.

Definition of Clinical Care Team

A clinical care team for a given patient consists of the health professionals—physicians, advanced practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals—with the training and skills needed to provide high-quality, coordinated care specific to the patient's clinical needs and circumstances.

Clinical care teams typically include, and are supported by, personnel who have a wide range of clinical,

Dynamic Teams

"A clinical care team for a given patient consists of the health professionals – physicians, advance practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals – with the **training and skills needed to provide high-quality, coordinated care services specific to the patient's clinical needs and circumstances."**

(American College of Physicians, October 2013)

Ann Intern Med. 2013;159(9):620-626

Complementary Skills

Primary care teams should include health care practitioners who have **complementary skills to those of the physician to achieve quality improvement initiatives and improve physician productivity**

(K Grumbach, T Bodenheimer *JAMA* 2004;291:1246-1251)

Pharmacist Training and Expertise

Education and Training

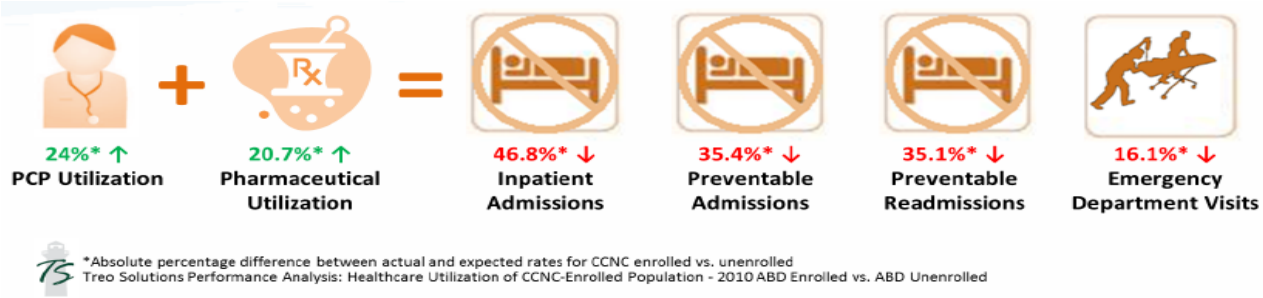
- **Entry-level 6- or 7-yr degree (PharmD)**
  - ✓ 2 yrs Pharmacotherapeutics
  - ✓ 1.5 yr Drug Info/Lit Eval'n
  - ✓ 3 yrs Pharmacy problem-solving
  - ✓ 4 yrs Patient-care exp + clinical rotations
- **Postgraduate Residencies and Fellowships**
- **Board-certified Pharmacy Specialties (7)**
  - ✓ Ambulatory Care, Geriatrics, Nuclear,
  - ✓ Nutrition Support, Oncology,
  - ✓ Pharmacotherapy, Psychiatric
  - ✓ Proposed: Pediatrics, Critical Care,
  - – Pain and Palliative Care
- **Medication Management Certificates**
- **Advanced Pharmacy Practitioner Credentials**

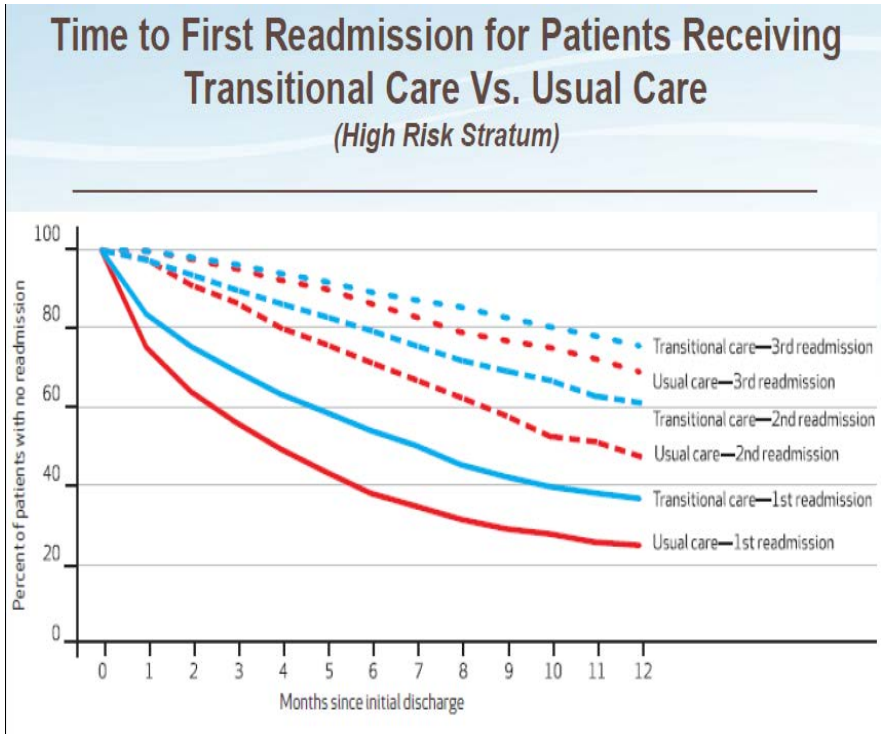
Pharmacist's Expertise

- Pharmacology
- Pharmacotherapeutics
- Pharmacokinetics and Pharmacodynamics
- Drug Toxicities – Adverse Drug Events, Interactions
- Drug Information and Evaluation
- Patient Medication Safety
- Medication Therapy Management (MTM)
  - Identify, Resolve, and Prevent Med Problems
- Medication Adherence Assessment
  - Compliance and Persistence
- Pharmacoeconomics
- Outcomes Research
- Patient Communications/Health Literacy
- Pharmacy Practice Systems

Pharmacists' competencies are SYNERGISTIC (not duplicative) with those of other health professionals

Value of Medication Management Services





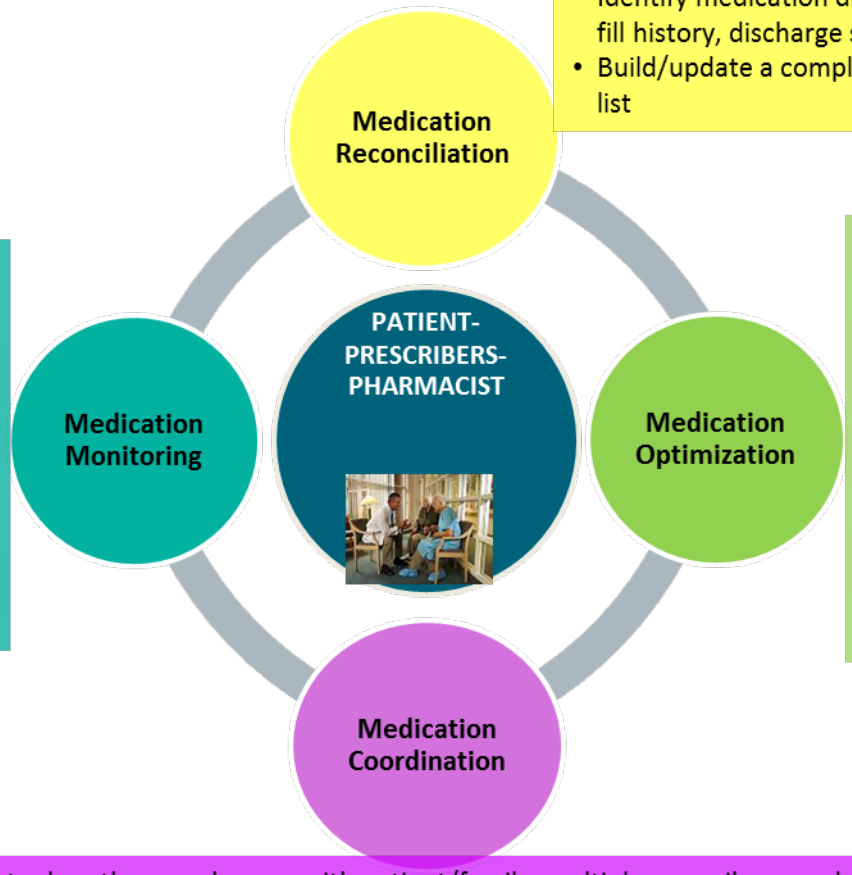
Jackson CT et al. Transitional care cut hospital readmissions for NC Medicaid patients with complex chronic conditions. *Health Affairs Aug 2013: 1407-15.*

Two examples where pharamcists were involved in clinical care teams and provided medication management services for high-risk, complex patient populations

- Overall directional trend to decrease inpatient admissions, preventable admissions, ED visits

- Transitional care group of patients were 20% less likely to experience a readmission during the subsequent year

Primary Care Medication Management Cycle



- Identify medication discrepancies (EMR, patient report, pharmacy fill history, discharge summaries)
- Build/update a complete, accurate, and active patient medication list

- Set desired patient medication outcomes
- Determine best timing and frequency of routine lab tests for medications
- Monitor patient for therapeutic effects and potential toxicities in-between office visits/adjust medications as needed

- Assess each medication for pharmacotherapy appropriateness, efficacy, safety, and adherence
- Prevent or detect/resolve drug-therapy problems
- Develop patient medication action plan – ongoing, new, changed, or discontinued medications
- Disseminate medication management report with actionable recommendations to PCP/other HCPs

- Coordinate drug therapy changes with patient/family, multiple prescribers, and community care providers (e.g., home health, dialysis, hospice)
- Verify drug therapy changes made across multiple pharmacies (e.g., community retail, outpatient clinics, specialty care, online, mail-order, infusion centers, oncology centers)

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KEY QUESTION 1

What comprehensive medication management services does your practice provide beyond routine medication reconciliation?

Examples include:

- Medication reconciliation and resolving discrepancies
- Medication review and assessment aimed at providing the safest and most cost-effective medication regimen possible to meet the patient's health goals
- Development of a medication action plan or contribution to a global care plan
- Coordination of medications across transitions of care settings and providers
- Support for medication adherence and self-management
- Medication monitoring – especially between PCP visits

CPC Pharmacist Survey (19 Practices – Fall 2013)

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Pharmacist Services	Pharmacist Value Ranking	
Managing chronic medications	1	HIGHEST
Educating patients on med use and safety	2	
Resolving drug therapy problems	3	
Improving care quality/QI programs	4	
Improving medication safety	5	
Achieving CPC Milestones	6	
Educating clinician and staff	7	
Preventing drug therapy problems	8	
Reconciling med discrepancies	9	
Managing meds at care transitions	10	
Controlling costs	11	
Care coordination	12	LOWEST

KEY QUESTION 2

How does your practice engage pharmacist(s) as part of the care team? Do you engage pharmacist(s) as employees, through contract, through some other agreement, or are the pharmacist(s) provided to you as a system resource (for those practices in systems)? How much of pharmacists' time do you have per week?

- Direct Hire
- System resource
- Contract
- Other agreement (specify)
- _____ hours per week

CPC Pharmacist Survey (19 Practices – Fall 2013) 1

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Training and Practice Experience

- 86% pharmacists had a PharmD degree with a pharmacy residency or pharmacy specialty board certification or advanced certifications
- 85% pharmacists provided direct patient care in ambulatory settings for 4+ years

Primary Employer

- 36% were employed by a school/college of pharmacy
- 36% employed by a combination of the CPC practice, pharmacy school, or hospital
- 21% employed by CPC practice
- 65% pharmacists work 0.25 – 0.50 FTE/practice
  - some work at multiple CPC practices
  - shared resource model rotating across practices in geographic region
  - important to maintain continuity of same pharmacist at the CPC practice

Pharmacist Engagement Considerations

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- **Qualifications**
  - state pharmacist license, clinical background, training, certifications
  - direct patient care role
  - interdisciplinary, team-based experience
- **Recruitment sources**
  - ambulatory care pharmacy residency programs
  - college of pharmacy
  - local health system or hospital
  - QIOs
- **Business Arrangements**
  - employed, contracted, consultant, or shared resource across multiple practices
  - pharmacy students not a solution…not licensed/require supervision, not sustainable
- **Fees**
  - Average salary: 0.25FTE is approximately $25K + fringes
  - Consider regional market variations

KEY QUESTION 3

How does the pharmacist(s) on your team engage in patient care?

Some examples include:

- Pre-appointment review and planning without patient present
- Pre-appointment consultation and planning with patient
- Coincident referral ("warm hand-off") for consultation
- Follow-up referral or appointment request from the provider
- Medication review and recommendations in the EHR (asynchronous with visit)
- Specified medication management appointment/clinic (e.g., warfarin clinic, HTN management)
- E-consultations with patients through patient portal or other asynchronous communication
- Home visit
- As part of a group visit

CPC Pharmacist Survey (19 Practices – Fall 2013) 2

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- 93% pharmacists receive patient referrals from CPC team members
- 86% have collaborative drug therapy agreements with CPC physicians
- 86% involved in e-consults (patient not present, referred by CPC clinician)
- 64% CPC clinicians bring pharmacist into patient visits
- 64% CPC clinicians handoff patients to pharmacist after clinician visit is complete

REQUIREMENTS

Pharmacist has "read and write" use of EHR/HIE

- reviews and assesses patient medical history, medication list, lab values, notes, etc.
- documents and shares actionable recommendations with other clinical team members

Workflow Analysis

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Pharmacists bring unique skill set – therapeutics, economics, pharmacy/PBM systems – to save clinician time and improve patient medication outcomes.

Practice Processes

- Accuracy and completeness of medication histories
- Time spent with refill processes, prior authorization, pharmacy communications
- Annual wellness visits – time to get accurate patient med history
- Lack of time to work with patients on complex regimens
- Not maximizing quality or performance incentives – esp related to med use/safety

Clinician Roles

- Care transitions – accurate and complete med list
  - new meds, changed doses, stopped meds, disposal of old meds
  - care coordination planning sessions
- Medication monitoring and follow-up between visits

Panelist Question 1

- Are medication reviews retrospective or concurrent?

KEY QUESTION 4

How are patients selected for medication management services beyond routine medication reconciliation?

Some examples include:

- Patients in high-risk cohorts
- Patients who have not achieved a therapeutic goal for a chronic condition
- Patients with care transitions
- Patients with multiple ED visits or hospitalizations
- High-risk medications
- Complex medication regimens

CPC Pharmacist Survey (19 Practices – Fall 2013)

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Patient Targets and Triggers

- Complex med regimens (86%)
- Medication adherence challenges (79%)
- High-risk meds (71%)
- Presence of adverse drug event/side effect (57%)
- Can't afford medications (57%)
- Multiple meds from multiple prescribers (50%)
- Care transitions (43%)
- Meds require pharmacokinetic dosing or monitoring (43%)
- High ED utilization or hospitalizations (36%)

Panelist Question 2

- What is the process for referring patients to the pharmacist in your practice?

High-risk Patient Targets and Triggers

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- **Patients who have not achieved a therapeutic goal for a chronic condition** (e.g., hypertension, diabetes, asthma/COPD, chronic pain)
- **Patients taking high-risk medications for adverse events**
  - Beer's list medications to avoid in the elderly
  - insulin and oral hypoglycemic
  - psychotropics, anti-anxiety, antidepressants
  - anticoagulants, anti-hypertensives, beta-blockers, digoxin
  - HIV meds
  - chronic pain meds
- **Patients with multiple care transitions in a 6- or 12-month period**
  - Setting change: ED, Urgent Care/Retail Clinics, Hospital, Post-acute care, Long term care, Home Care
  - Provider change: gaps in PCP visits, provider leaves/joins practice, patient changes practices
- **Complex medication regimens**
  - multiple medications or multiple prescribers
  - multiple dosing frequencies per day
  - split dosing or tapered dosing

DO use these factors in your risk stratification approaches
DO NOT use sole criteria of # meds or cost of meds – can miss high risk patients using generic medications

KEY QUESTION 5

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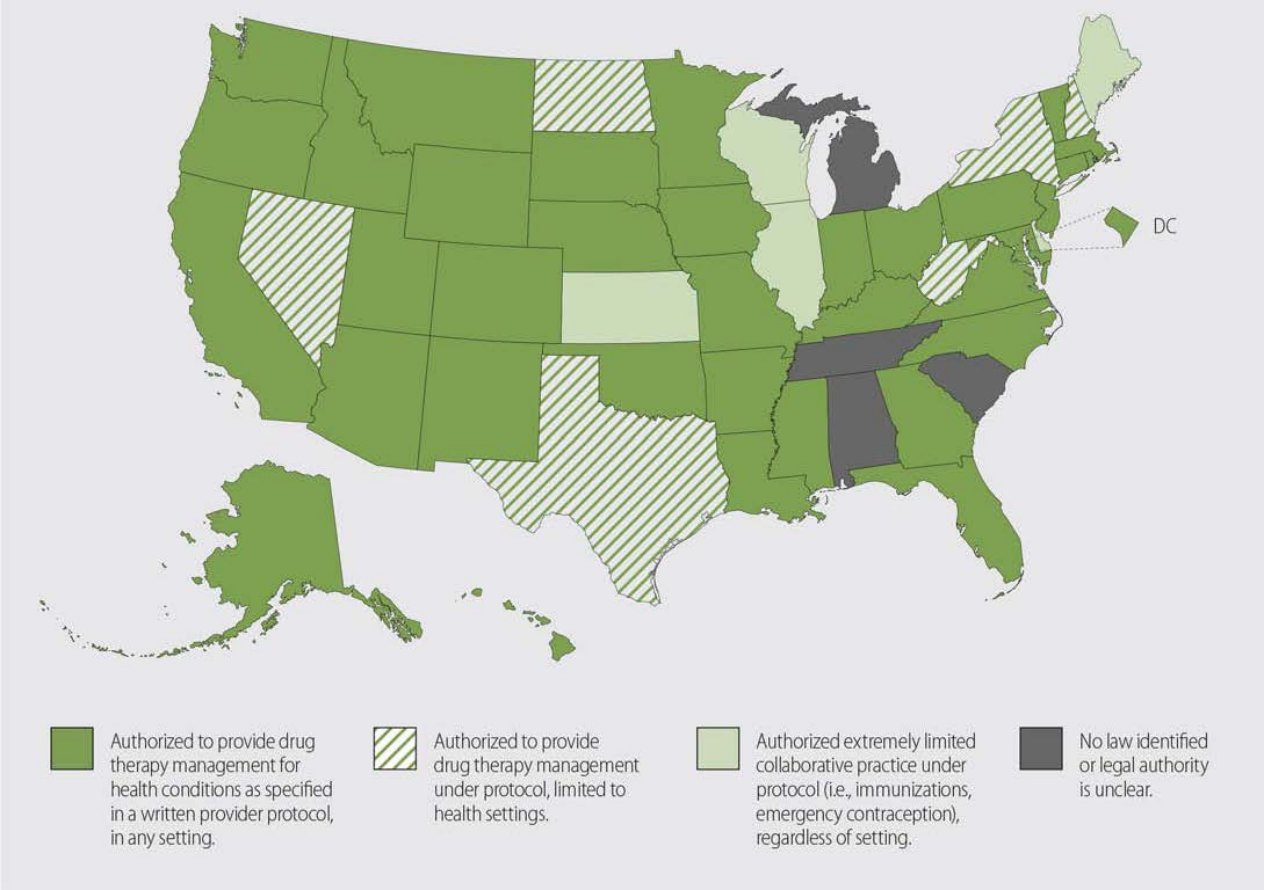
Does your practice provide Collaborative Drug Therapy Management, and if so, for what conditions?



Collaborative Drug Therapy Agreements

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86% CPC pharmacists have collaborative drug therapy agreements with physicians

- disease state: HTN, CHF, diabetes, lipidemias, asthma, COPD, depression, smoking cessation
- referral to pharmacist for high-risk patients; authorizing refills until next visit

- Agreement between pharmacist and physician; state-level practice acts allow CDTM in 47 states
- Physician delegates authority to the pharmacist under designated circumstances and delineates the functions, procedures, and decision-making criteria for managing medications
- Include pharmacist responsibilities for patient assessments related to disease state and drug therapy, ordering drug therapy-related lab tests, and administering medications

Centers for Disease Control and Prevention. *A Program Guide for Public Health: Partnering with Pharmacists in the Prevention and Control of Chronic Diseases.* Atlanta, GA: US Dept. of Health and Human Services; 2012. Available at: www.cdc.gov/dhdsp/programs/nhdsp_program/resources.htm.

Panelist Question 3

- Are you currently billing for pharmacist medication management services? If so, how? If not, are there any plans for billing in the future?

KEY QUESTION 6

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Does your practice target care transitions for comprehensive medication management services? If so, what triggers these services?

Some examples include:

What triggers these services?

- ED visit
- Hospital admission/ Hospital discharge
- NF or SNF admission / discharge
- Clinician Referral

- *Who receives these services?*
  - All patients
  - Patients with specific risk factors

Care Transition Targets and Triggers

Patients with multiple care transitions in a 6-month or 12-month period

Medication "gaps" with Care Setting change

- Emergency Department
- Urgent Care/Retail Clinics
- Hospital, Post-acute care
- Long term care
- Home Care

Medication "gaps" with a Provider change

- Patient sees different provider in practice
- Patient changes practices
- Provider "on call" (not as relevant for CPC practices)
- Provider leaves or joins practice

KEY QUESTION 7

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What process measures will you use in your practice to improve medication effectiveness and safety?

Patient clinical outcomes

- % patients on chronic medications who reach therapeutic goal

Improved practice efficiencies

- maximizing annual wellness visits
- ability for PCPs to see additional patients
- pre-visit comprehensive medication review for new Medicare patients

Quality metrics

- improved CPC, HEDIS, MU, ACO or other quality measures; decreased ED visits and hospital readmissions

Financial impact

- total cost of care = costs of drugs, medical, hospital, ED, labs, tests
- optimizing performance incentives related to medication use and safety

Medication management processes

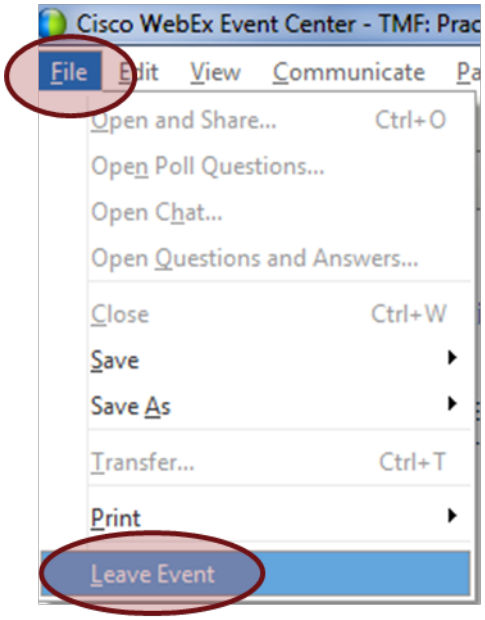
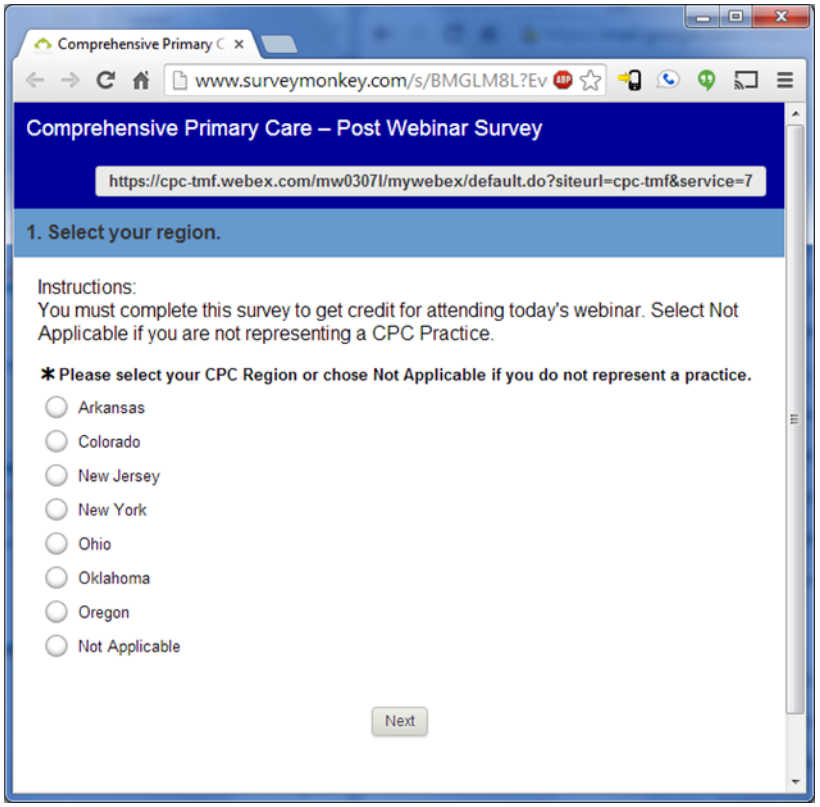
- Med-related problems identified and resolved
- Medication management recommendations to care team
- # Medication Action Plans developed
- # active Collaborative Drug Therapy Management agreements

Panelist Question

- How do you see the medication management role in the practice growing in the future?

Questions and Answers

What's Next

Event Date and Time	Title
Tues., May 13, 2 p.m. ET	Behavioral Health Integration with Virtual Site Visits
Thurs., May 15, Noon to 12:30 p.m. ET	National Open Mic
Tues., May 27, Noon ET	MS 6: Compact/Collaborative Agreements
Tues., June 10, Noon ET	Self-Management Support with Virtual Site Visits

Post Event Attendance & Feedback