Establishing a Patient Care Ritual: Pharmacists' Patient Care Process

Elizabeth Zdyb, PharmD, MBA, BCPS Chicago College of Pharmacy, Midwestern University Northwestern Memorial Hospital

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Disclosures

I declare no conflicts of interest, real or apparent, and no financial interests in any company, product, or service mentioned in this program, including grants, employment, gifts, stock holdings, and honoraria.

Harle Council of Houlth System Discounsists 2045 Avenuel Monther

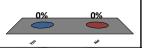
Acknowledgments

- Mary Ann Kliethermes, BSPharm, PharmD
- Marialice S. Bennett, BSPharm, FAPhA

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Audience Polling: Are you familiar with the new Pharmacists' Patient Care Process (PPCP)?

- 1. Yes
- 2. No



Audience Polling: Learning

Have you utilized or taught the pharmacists' patient care process in your practice?

- 1. Yes
- 2. No



llinois Council of Health-System Pharmacists 2015 Annual Meeting

Learning Objectives (Pharmacists and Technicians)

- Describe how a standardized patient care process has been defined by national pharmacy organizations
- pharmacy organizations.

 Explain the rationale for using a standardized patient care process.
- standardized patient care process.

 Devise a care plan using the standardized patient care process.
- patient care process.

 4. Apply factors to consider, including health information technology, when implementing a standardized patient care process in various practice settings.
- practice settings.

 Identify how to obtain resources and tools for implementing a standardized patient care process.

Self-Assessment Question #1

The pharmacists' patient care process was created to:

- 1. promote consistency across the profession.
- 2. document immunizations in the community.
- 3. make pharmacy practice more challenging.
- 4. serve only the didactic needs of Colleges of Pharmacy.

Illinois Conneil of Months System Discomments 2045 Amount Months

Self-Assessment Question #2

The pharmacists' patient care process is:

- 1. pharmacist centric.
- 2. meant to be implemented independently by the pharmacist.
- 3. a five-step process: collect, assess, plan, implement, follow-up: monitor and evaluate.
- 4. a totally new process.

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Self-Assessment Question #3

The pharmacists' patient care process identifies three key roles that transcends all steps. They are:

- 1. communicate, measure, and report.
- 2. interview, assess, and coordinate.
- 3. medication reconciliation, counseling, and document.
- 4. collaborate, communicate, and document.

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Self-Assessment Question #4

In order to implement the PPCP in your practice:

- 1. an action plan should be developed to evaluate existing services.
- 2. education of colleagues and other health care providers will be necessary.
- continuous quality improvement should be used.
- 4. All of the above.

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Self-Assessment Question #5

Key national organizations are developing strategies to implement the PPCP.

- 1. True
- 2. False

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Joint Commission of Pharmacy Practitioners (JCPP)

JCPP Vision:

 Patients achieve optimal health and medication outcomes with pharmacists as essential and accountable providers within patient-centered, team-based healthcare.



Pharmacists' Patient Care Process

JCPP Strategic Plan: **Consistent patient care process** identified as a key driver for achieving the JCPP vision

- Supports the profession's provider status activities
- Needed to meet demands of evolving health care system

• Movement towards outcomes-based payment Collaboration of national pharmacy

organizations working to develop a standardized pharmacist patient care process

- Purpose: to stimulate consistency, predictability, and measurability in pharmacists' service delivery

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Need for Consistency, Predictability, and Measurability

- Outcomes based payment
- Objective comparisons between individual and groups of pharmacists
- Consistent expectations for diverse stakeholders
 - Patients, other healthcare providers, payers, regulatory bodies, government
- Comparative effectiveness research

Illinois Council of Horith-System Pharmarists 2015 Annual Montine

JCPP Pharmacists' Patient Care Process Workgroup

Activities: January 2012-May 2014

- Workgroup meetings
- Environmental scan
- Testing among clinicians
- Organizational feedback



llinois Council of Health-System Pharmacists 2015 Annual Meeting

Pharmacists' Patient Care Process Development

Review of key resources

- Pharmaceutical care Strand & Cipolle
- Profession's MTM definition and MTM Core Elements
- PCPCC Medication Management Resource Guide
- ACA language
- Nurse Practitioner's Practice Standards

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Pharmacists' Patient Care Process Development

Should apply to the wide variety of patient care services provided by pharmacists AND the pharmacist's medication expertise

- ${}^{\bullet}$ Level of intensity varies depending on the service
- One pharmacist (or technician) might be responsible for all the steps in some settings where in others more than one pharmacist may be involved at different stages of the process.

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Goals

*Pharmacists' patient care process created to:

- promote consistency across the profession.
- provide a framework for delivering patient care in any practice setting.
- be a contemporary and comprehensive approach to patient-centered care delivered in collaboration with other members of the health care team.
- apply to a variety of patient care services delivered by pharmacists, including medication management.

Pharmacists' Patient Care Process

Foundational Components:

- Establishment of patient-pharmacist relationship
- Engagement and effective communication with patient, family, caregivers
- Continually collaborate, document, and communicate with physicians and other health care providers
- Process enhanced by interoperable information technology systems that facilitate effective and efficient communication

What found of Booth System Dhennesists 2045 Annual Months

Pharmacists' Patient Care Process

- Approved by JCPP organizations in May 2014
- Supported by 13 national pharmacy organizations



http://www.pharmacist.com/sites/default/files/PatientCareProcess.pdf

Illusia Council of Houlth System Discounsists 2045 Avenuel Months

Pharmacists' Patient Care Process



Illinois Council of Health-System Pharmacists 2015 Annual Meeting

COLLECT

Enlines

Necessary <u>subjective</u> and <u>objective</u> information about the patient in <u>order</u> to understand the relevant medical/medication history and clinical status of the patient.

Information may be gathered and verified from multiple sources

Collect:

- $\begin{array}{ll} 1. \ A \ current \ \underline{medication \ list \ and \ \underline{medication \ use \ history} \ for \\ prescription \ \underline{and \ nonprescription \ medications, \ herbal} \\ products, \ \underline{and \ other \ dietary \ supplements} \end{array}$
- 2. Relevant <u>health data</u> that may include medical history, health and <u>wellness</u> information, biometric test results, and physical assessment findings
- 3. Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that impact access to medications and other aspects of care

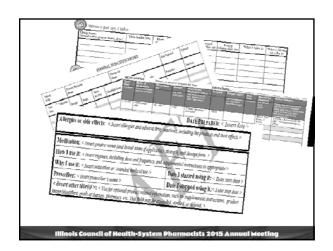
Illinois Council of Health-System Pharmacists 2015 Annual Meeting

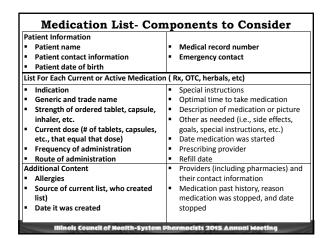
Collect: 1. Medication List

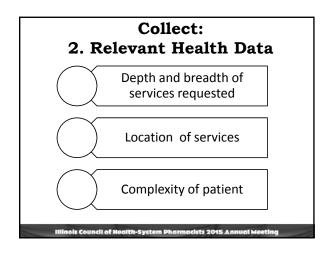
Fundamental role

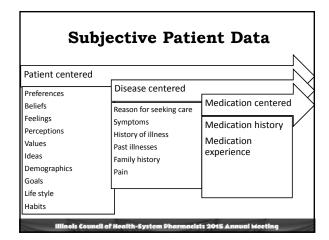
"current" "complete" "active"

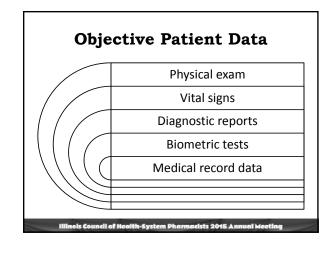
Medication reconciliation











Challenges Pharmacist factors • Knowledge • Communication skills Patient factors • Accuracy as a historian • Cognitive abilities • Communication skills System factors • Efficiency • Access • Time 29 Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Patient Case: Mr. W.A.

68 year old Caucasian male referred to pharmacy services because of three hospital admissions for exacerbation of heart failure in the past year.

What information do you want to collect?

Patient Case: Mr. W.A. **EMR** data

CC: 68 yo presented with increasing shortness of breath and bilateral leg swelling

 $\mbox{\bf HPI:}\,$ On vacation in Key West and noticed in airport on his way home he had to stop to catch his breath.

Legs have been swelling so took some extra furosemide and swelling improved but persistent SOB. Unable to put shoes on today. States he was very active in Florida.

Since home has had low energy and stamina

No palpitations, fever, chills, cough More lightheaded and dizzy than usual

ROS: 15 lb weight gain on trip with 7 lb weight loss since furosemide Dyspnea on exertion

PMH: HTN, atrial fib with failed cardioversion x2, CAD, S/P CABG single vessel RCA; hyperlipidemia, GERD osteoarthritis, BPH, stage 3 CKD

Patient Case: Mr. W.A. **EMR** data

FH: both parents with HTN SH: non-smoker occ alcohol Allergies: Zolpidem

Medications:

- · Warfarin 3mg daily
- Pravastatin 40mg daily
- Metoprolol XL 25mg daily
- Amlodipine 5mg daily
- Lisinopril 10mg daily Furosemide 40mg daily
- KCl 20mEq daily
- Omeprazole 20mg daily (OTC)

Patient Case: Mr. W.A. **EMR** data

PE/Vitals

HR 67, BP 119/70 RR 20 Ht 74 inches, 129.5 kg (285 lbs) BMI- 36.5 Cardio: Mild JVD ireg ireg rhythm

Lungs bilateral rales

Extremities: visit 2-3+ bilateral edema

Labs

H/H 14.8/44.8, WBC 6.2

Na 138, K 4.0 BUN/Cr 23/1.88

Troponin 0.02 CK 80 CK-MB 1.1 INR 2.5 Lipids: TC 240 LDL 115 HDL 35

Other tests

O2 sat 97% EFR 40%

EKG - atrial fib

You are ready to visit the patient. What additional information do you want to collect?

- 1. A current and complete medication list and medication use history
- 2. Relevant health data
 - · medical history
 - · health and wellness information
 - biometric test results
 - physical assessment findings
- 3. Lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that impact access to medications and other aspects of care

Patient Case: Mr. W.A. interview

S: Since retired travels for pleasure 4-5 times a year with friends Diet: Goes out to eat frequently, especially when on vacation, likes McDonalds hamburgers, does not add salt, cannot eat greens so pretty much meat and potatoes

Exercise: Plays golf at least 2-3 times per week with cart Occasionally weighs himself. Does not understand why he is supposed to weigh himself daily. Tough to do when traveling

Medications: rarely misses medications, easy for him to take except furosemide which he there is something he is doing in the morning he does not take

zolpidem allergy - felt fuzzy in the head

Other: has had insomnia for years for which he takes diazepam SH: Retired VP of a high tech firm

Patient Case: Mr. W.A. interview

Additional Medications

- Diazepam 5 mg prn sleep uses regularly
- · Vitamin D 2000 units daily
- Vitamin C 500 units daily
- · Centrum silver daily
- Celebrex 200 mg as needed for aches and pain especially after golfing
- Tadalafil 2.5 mg when needed
- Acetaminophen 325 mg as needed

ASSESS



The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.

Assess:

- Each medication for appropriateness, effectiveness, safety, and patient adherence
- Health and functional status, risk factors, health data, cultural factors, health literacy, and access to medications or other aspects of care
- Immunization status and the need for preventive care and other health care services, where appropriate

'Assess' Components

- Medication assessment
 - Appropriateness
 - Effectiveness
 - Safety
 - Adherence
- Patient history and risk assessment
- Preventive care assessment

Knowledge and Problem Solving Skills



Patients medical and medication history

Clinical practice guidelines

Evidence based medicine

Disease state risk factors

Medication Assessment

Medication Appropriateness





- Are there any disease states or indications for which the patient does not currently have a medication but a medication may be beneficial?
- Is the patient taking a medication for no medically valid indication?
- Does each prescribed medication have a current and valid indication? Do some medications have duplicate indications pertaining to the patient?

Mr. W.A.

HTN, atrial fib, HF, CAD, S/P CABG single vessel RCA

Warfarin 3mg daily Metoprolol XL 25mg daily Amlodipine 5mg daily Lisinopril 10mg daily Furosemide 40mg daily KCl 20 mEq daily

Hyperlipidemia

Pravastatin 40mg daily

Omeprazole 20mg daily (OTC) needed

Osteoarthritis

Celebrex 200 mg as needed **Insomnia**

Diazepam 5 mg prn sleep – uses regularly

Tadalafil 2.5 mg when needed

<u>BPH</u>

Stage 3 CKD

<u>Other</u>

Vitamin D 2000 units daily Vitamin C 500 units daily Centrum silver daily Acetaminophen 325 mg as

Medication Assessment

Medication Effectiveness

- Is the medication working? Achieving desired therapeutic goals?
- Is the medication the optimal choice for the indication being treated?
- Is the patient on the correct (adequate) dose of medication?
- Are monitoring parameters in place to evaluate medication effectiveness and safety?
- Do results of medication monitoring indicate continued use of this medication?

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

HTN, atrial fib, HF, CAD single vessel RCA Warfarin 3mg dail		HR 65 irreg-irreg, RF	
Metoprolol XL 25r	HF target doses	108)	
Amlodipine 5mg d Lisinopril 10mg dang	Spironolactone?	ilaterally dema bilat	
Furosemide 40mg daily KCl 20mEq daily	Est CrCl – 53 ml/min ASCVD – 21.5%		
	NSAIDs contraindicated		
<u>Hyperlipidemia</u> Pravastatin 40mg daily	INR 2.5	.0 BUN/Cr 23/1.88	
GERD	Diazepam high risk in	0 LDL 115 HDL 35	
Omeprazole 20mg daily (the elderly		
Osteoarthritis Celebrex 200 mg as need	led		
Insomnia			

Medication Assessment

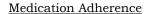
Medication Safety



- Is the dose of medication higher than the usual recommended dose for its indication?
- Is the patient experiencing signs or symptoms of adverse medication effects?
- Is the patient experiencing a side effect or issue that decreases patient safety that may be a result of a drug-drug, drug-food, or drug-laboratory test interaction?
- Do results of medication monitoring indicate a need for intervention?

Illinois Council of Monith System Dharmasists 2045 Annual Montine

Medication Assessment





- Is the patient taking the medication too frequently or too much at one time?
- Is the patient not meeting clinical goals or measures based on not receiving or taking the medication as prescribed?
- Can the patient afford the medications? Is cost affecting medication adherence?
- Are there alternative therapies that could be used for an indication that would decrease patient cost burden?
- Are there therapies that may be unnecessary and would decrease cost if discontinued?
- Does the patient have a medical problem that is the result of not receiving a medication because of economic, psychological, sociological, or pharmaceutical reasons?

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Mr. W.A.

Safety

- Diazepam
- NSAID

Adherence

Furosemide

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Patient History and Risk AssessmentThought Process Can they get their medications? Are they taking them? Are they causing problems? Are there better medications? What do I need to do??

Preventative Care Assessment

- Immunizations
- Self-examinations
- Screenings
- Based on <u>collected</u> data- medical history, family history, lab values, current disease states, environmental factors

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Mr. W.A.

Risk assessment

- ASCVD
 - 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults. Available at http://circ.ahajournals.org
- Aspiri
- 2013 ACC/AHA Guideline on the assessment of Cardiovascular Risk. JACC 2014;63:2935-59
- AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease: 2011 Update. Available at http://circ.hajpournals.org

Preventative Care

Immunizations- CDC

Harle Council of Houlth System Discounsists 2045 Avenuel Monther

PLAN



The pharmacist develops an individualized patient-centered care plan, in collaboration with other health care professionals and the patient or caregiver that is evidence-based and cost-effective. The plan:

- $\underline{\underline{Addresses}}$ medication-related $\underline{\underline{problems}}$ and $\underline{\underline{optimizes}}$ medication $\underline{\underline{therapy}}$
- Sets goals of therapy for achieving clinical outcomes in the context of the patient's overall health care goals and access to care
- Engages the patient through education, empowerment, and selfmanagement
- Supports care continuity, including follow-up and transitions of care as appropriate

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

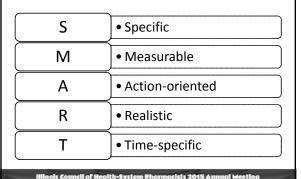
Medication Related Problems and Optimizing Therapy

Rules to abide by

- Evidence Based
- Cost Effective
- Best achieve desired outcomes
- In collaboration with the patient
- In collaboration with the team
- Coordination of care

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Setting Goals of Therapy



Setting Goals of Therapy

- Based on evidenced-based guidelines
- ie. Laboratory values (A1C, blood pressure), safety parameters (side effects, drug interactions), adherence (refills)

What would you like to do for Mr. W.A.?

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Plan: Mr. W.A.

Heart failure: Goals decrease hospitalization, relieve symptoms, no side effects to medications

Medications:

- · Increase Lisinopril to 20 mg daily (potentially 40 mg)
 - monitor BP, K+, Cr
- · Consider adding spironolactone 12.5 mg daily
 - monitor K+, Cr
- Stop amlodipine if needed to maintain BP Education:
- · Heart failure medications and how they work
- · Diet restricted sodium intake and fluid management
- · Daily weights
- · Optimal use of furosemide
- · Exercise and weight loss

lineis Council of Horith-System Pharmacists 2015 Annual Mostina

Plan: Mr. W.A.

Atrial fibrillation: Goal INR at goal range, no side effects or stroke

- · Continue Warfarin 3 mg daily
 - Monitor INR monthly, consider self management
 - Educate as needed

Hyperlipidemia: Goal current recommendations, no side effects

- Switch to atorvastatin 80 mg daily
- Monitor if tolerated in 7-14 days

GERD: Goal control of symptoms

Continue present management

Osteoarthritis: adequate pain control, stable renal function

- Evaluate use and need for NSAID
- Educate on reasons NSAID not recommended

Insomnia: adequate sleep, appropriate therapy

- Recommend and refer sleep study and OSA evaluation
- Educate on diazepam concerns

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

IMPLEMENT

The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver.

The pharmacist:

- Addresses medication- and health-related problems, and engages in preventive care strategies, including vaccine administration
- Initiates, modifies, discontinues, or administers medication therapy as authorized
- Provides education and self-management training to the patient or caregiver
- Contributes to coordination of care, including the referral or transition of the patient to another health care professional
- Schedules follow-up care as needed to achieve goals of therapy

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Tips for implementing the plan

Prioritize medication related problems

Consider number and order of therapy changes

Personalize education to patient needs and abilities

Coordinate care with health team members

Determining reasonable follow up

Document

lline's Council of Health-System Dharmarists 2015 Annual Meeting

Communication Tips

S • Situation

S • Subjective

Background

O • Objective

• Assessment

A • Assessment

Recommendation

P • Plan

Implementation with Mr. W.A. Educate Educate how Educate medications how to self Educate work monitor how to manage importance of medications diet and exercise

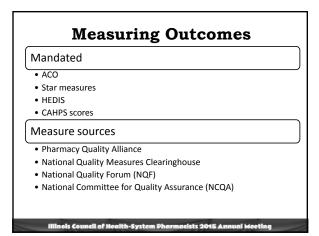
FOLLOW-UP: MONITOR AND EVALUATE

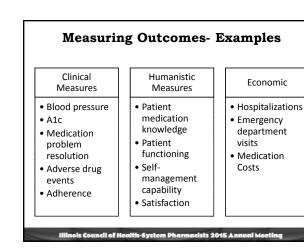
The pharmacist monitors and evaluates the effectiveness of the care plan and modifies the plan in collaboration with other health care professionals and the patient or caregiver as needed.

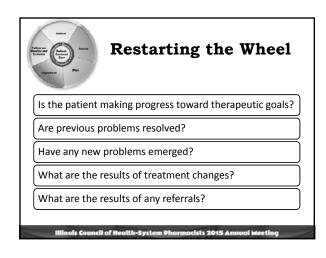
Monitor and evaluate:

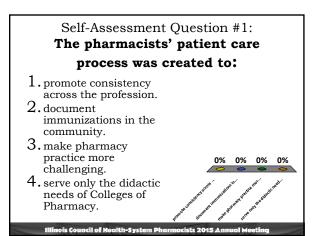
- · Medication appropriateness, effectiveness, and safety and patient adherence through available health data, biometric test results and patient feedback
- Clinical endpoints that contribute to the patient's overall health
- Outcomes of care, including progress toward or the achievement of goals of therapy

Economic

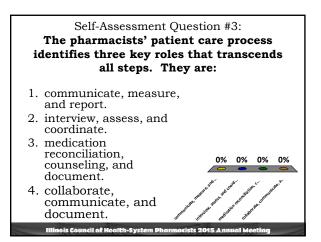




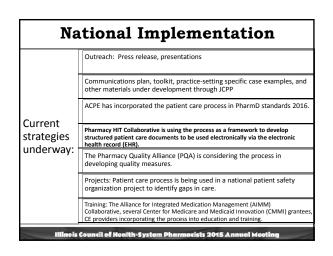


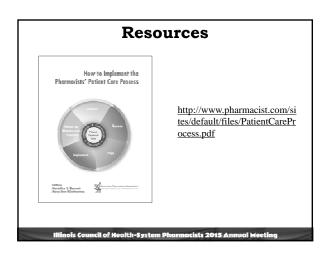


Self-Assessment Question #2: The pharmacists' patient care process is: 1. pharmacist centric. 2. meant to be implemented independently by the pharmacist. 3. a five-step process: collect, assess, plan, implement, follow-up: monitor and evaluate. 4. a totally new process.



Applying and Implementing the PPCP





Collect	List the necessary subjective and objective information you need to collect.
Assess	Analyze the information in the context of the patient's overall goals, and identify and prioritize the problems.
Plan	Develop an individualized patient-centered care that is both evidence based and cost effective.
Implement	Execute the care plan in collaboration with other health care professionals and the patient or caregiver.
Follow-up: Monitor and Evaluate	List monitoring and evaluation parameters.

Application Examples: Service/Setting

- Comprehensive medication review and follow-up
- Pharmacist consult in hospital
- IV to oral anticoagulant dosing
- Medication reconciliation during a care transition
- Diabetes management
- Immunization



Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Step 2: Evaluate existing services, develop strategies, and implement the process

Create Action Plan

- What patient care service?
- How to apply the process?
- Staff development?
- Anticipated impact?

llinois Council of Health-System Pharmacists 2015 Annual Meeting

Evaluate Existing Services

Patient Care Service	Collect	Assess	Plan	Implement	Follow up: Monitor & Evaluate
Comprehensive Medication Reviews	2	3	1	2	1

Rate the <u>current</u> delivery of each service-line for alignment with each step in the PPCP:

Alignment: Low = 1, Medium = 2, High = 3

illinois Council of Health-System Pharmacists 2015 Annual Meeting

Evaluating Existing Services

Patient Care Process Step	Quality Improvement Strategy	Implementation Timeline	
Collect	Develop a protocol to standardize collection process Design and implement standard patient intake form in EHR	One month Three months	
Assess			
Plan			
Implement			
Follow-up: Monitor and Evaluate			

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Step 3: Advocate, Educate, and Promote

- Identify those associated with your practice
 - Colleagues
 - Other healthcare providers
 - Payers
 - Residents/Students
- · Create a plan
 - Action item
 - Desired Outcome
 - Timeline

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Step 4: Use Continuous Quality Improvement

- Reassess services on a periodic basis for alignment with the PPCP.
- Develop strategies and implementation plans for areas with low alignment.
- (see Step 2)

Key Points

- · Consistency, predictability, and measurability
- · Across all practice sites and disease states
- Patient-centered
- · Team based care
- Patient Care Process
 - Collect
 - Assess
 - Plan
 - Implement
 - Follow up: Monitor and Evaluate

llinois Council of Health-System Pharmacists 2015 Annual Meeting



Self-Assessment Question #4: order to implement the PPCF

In order to implement the PPCP in your practice:

- 1. an action plan should be developed to evaluate existing services.
- 2. education of colleagues and other health care providers will be necessary.
- 3. continuous quality improvement should be used.
- 4. All of the above.

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Self-Assessment Question #5: Key national organizations are developing strategies to implement the PPCP. 1. True 2. False

Self-Assessment Question #6:

ACPE has incorporated the pharmacists' patient care process into PharmD Standards for 2016.

- 1. True
- 2. False



0% 0% 0% 0%

Illinois Council of Health-System Pharmacists 2015 Annual Meeting

Self-Assessment Question #7: Which of the following are considered during the 'Plan' step of the PPCP? 1. Goals of therapy for achieving clinical outcomes. 2. Immunization status and the need for preventative care. 3. Medication reconciliation.

Self-Assessment Question #8:

The 'Implementation' step of the PPCP should include:

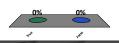
- 1. Prioritization of medication related problems.
- 2. Personalized education.
- 3. Coordination of care with other healthcare providers.
- 4. All of the above.

0% 0% 0% 0%

0% 0% Self-Assessment Question #9:

The need for consistency, predictability, and measurability in pharmacy practice is driven in part by the movement towards outcomes based payment.

- 1. True
- 2. False



Self-Assessment Question #10:

Choose the most correct answer related to the pharmacists' patient care process:

- Determining the outcomes and value of pharmacists' services requires a consistent process of care.
- 2. The pharmacists' patient care process is only applicable to the ambulatory/community pharmacy setting.
- The pharmacists' patient care process requires the use of collaborative practice

agreements.

References

- Cipolle RJ, Strand LM, Morley PC. Pharmaceutical Care Practice: The Patient Centered Approach to Medication Management, 3rd ed. New York: McGraw-Hill; 2012.
- McInnis T, Webb CE, and Strand L M. The Patient-Centered Medical Home: Integrating Comprehensive Medication Management to Optimize Patient Outcomes, Patient-Centered Primary Care Collaborative, June 2012. Available at:

http://www.pcpcc.org/sites/default/files/media/medman agent.pdf. Accessed January 6, 2014.

References

- American Pharmacists Association; National Association of Chain Drug Stores Foundation. Medication Therapy Management in Pharmacy Practice: Core Elements of an MTM Service Model. Version 2.0. March 2008. Available
 - http://www.pharmacist.com/sites/default/files/files/cor elements_of_an_mtm_practice.pdf. Accessed January 6
- Bluml BM. Definition of medication therapy management: development of profession wide consensus. J Am Pharm Assoc (2003). 2005;45(5):566-72.

References

- Patient Protection and Affordable Care Act, Pub. L. No. 111-148, §2702, 124 Stat. 119, 318-319 (2010). http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/html/PLAW-111publ148.htm Accessed January 9, 2014.
- Scope of Contemporary Pharmacy Practice: Roles, Responsibilities, and Functions of Pharmacists and Pharmacy Technicians, February 2009.
- Council on Credentialing in Pharmacy, Washington, DC. $\underline{http://www.pharmacycredentialing.org/ccp/Contemporary}$ _Pharmacy_Practice.pdf Accessed January 9, 2014.