



BINGHAMTON  
UNIVERSITY

SCHOOL OF PHARMACY AND  
PHARMACEUTICAL SCIENCES

# Preceptor Development: Practically Precepting the Pharmacists' Patient Care Process (PPCP)

Erin E Pauling, PharmD

Clinical Assistant Professor

Binghamton University School of Pharmacy and Pharmaceutical Sciences

February 12<sup>th</sup>, 2019

# Disclosures

Erin E Pauling, PharmD has no actual or potential conflicts of interest in relation to this program.

# Objectives

1. Explain the need for the Pharmacists' Patient Care Process (PPCP).
2. List the steps in the PPCP.
3. Apply the PPCP to experiential activities in a variety of practice settings.

# Self-Assessment Question #1

Why was the Pharmacists' Patient Care Process (PPCP) developed?

- A. To create a new way for pharmacists to practice
- B. To more precisely describe the role of pharmacists
- C. To move pharmacists into a primary dispensing role
- D. To limit time spent on pharmacist-patient interactions

# Self-Assessment Question #2

During which step of the Pharmacists' Patient Care Process (PPCP) would the pharmacist/student pharmacist obtain information from a patient/caregiver?

- A. Plan
- B. Implement
- C. Follow-up
- D. Collect

# Self-Assessment Question #3

Which activity is best associated with the implementation step of the Pharmacists' Patient Care Process (PPCP)?

- A. Developing a patient-specific medication action plan
- B. Interviewing a patient to obtain his/her allergies
- C. Providing antibiotic stewardship recommendations to the healthcare team
- D. Reviewing a patient's medication record for refill histories

# Self-Assessment Question #4

A student pharmacist is currently on your rotation in the community pharmacy. A patient inquires about an over-the-counter product that he can take to treat his back pain. Together, you and the student pharmacist determine the patient, based on his symptoms, must be referred to his primary care provider. What step of the PPCP was completed?

- A. Assess
- B. Collect
- C. Document
- D. Follow-up

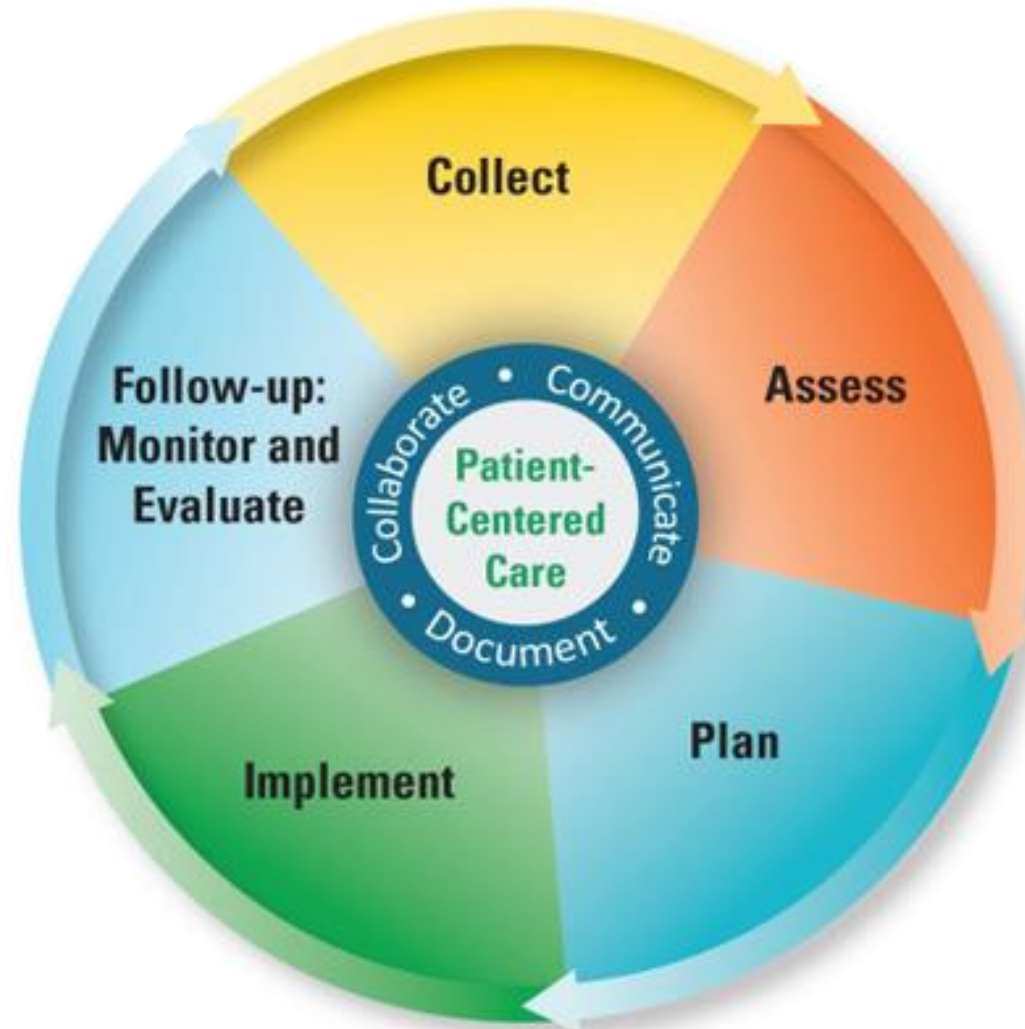
# The Pharmacists' Patient Care Process (PPCP)



# Pharmacists' Patient Care Process (PPCP)

Joint Commission of Pharmacy Practitioners, 2017.

“Consistent process of care in the delivery of patient care services”



# Haven't we always done this?

Harris, et al., 2012.

- YES...but...
  - Fractionation of profession and emergence of different care models
    - Medication Therapy Management (MTM) Model
    - Patient-Centered Primary Care Collaborative (PCPCC Model)
    - Pharmaceutical Care Model

# MTM Model

Harris, et al., 2012.

Medication  
Therapy  
Review (MTR)

Personal  
Medication  
Record (PMR)

Medication-  
Related Action  
Plan (MAP)

Intervention  
and/or Referral

Documentation  
and Follow-Up



1. Assessment of medication-related needs

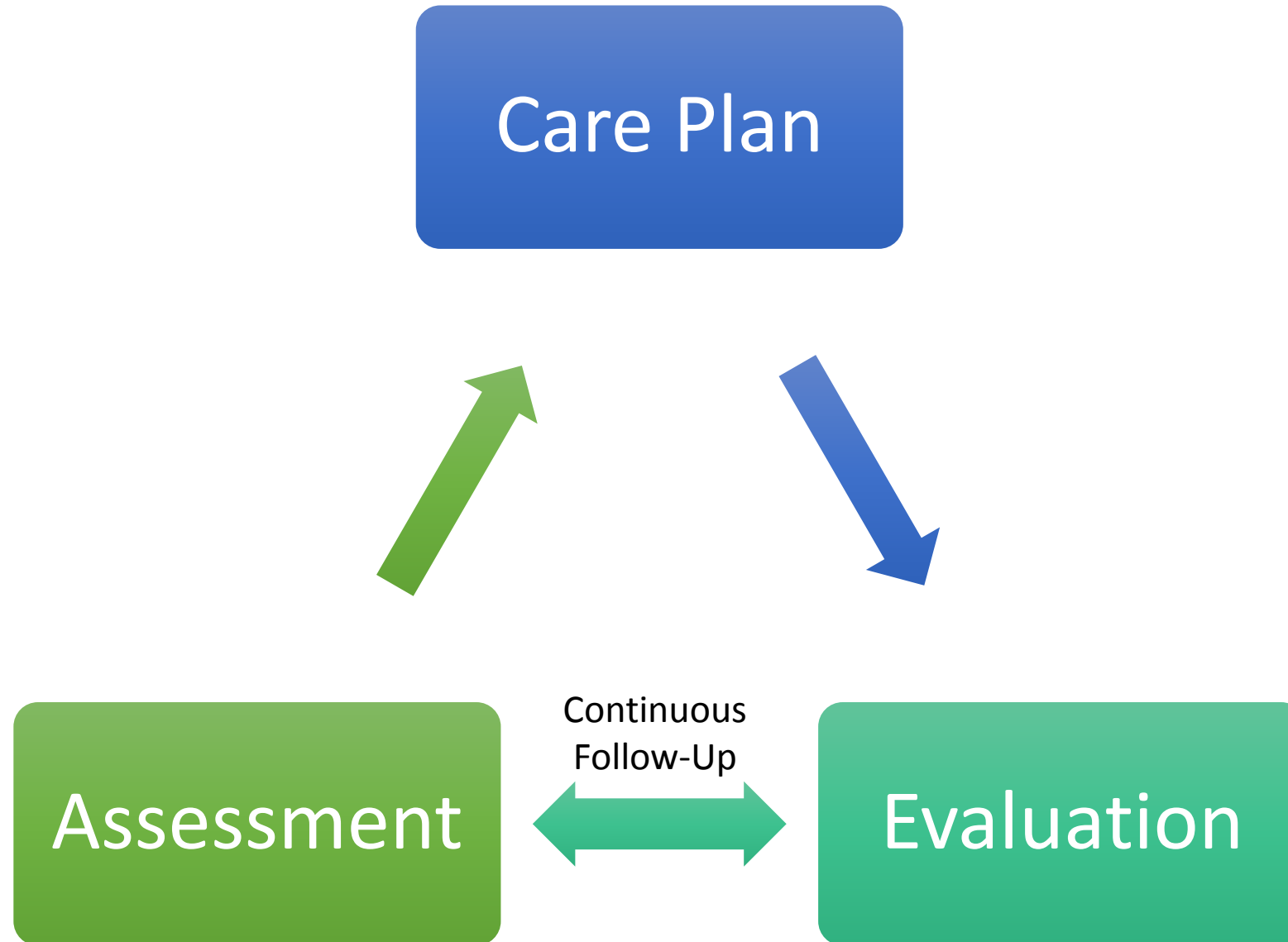
2. Identification and categorization of medication-related problems

3. Development of care plan

4. Follow-up evaluation

# Pharmaceutical Care Model

Harris, et al., 2012.  
*Pharmaceutical Care Practice*, 2012.



- “We need to determine *more precisely* what we do and demonstrate it *consistently* to those outside the pharmacy profession.”
- “Clinical pharmacy practice needs to be defined in a manner that can be applied across all patients, patient care settings, and types of practices. “

# Why now?

*How to Implement the Pharmacists' Patient Care Process, 2015.*

- Evolution from medication distribution
- Expanded pharmacist patient care services
- Movement toward *outcomes-based payment*

- Accreditation standard for colleges and schools of pharmacy
  - Accreditation Council for Pharmacy Education (ACPE)
    - Standard 10: Curriculum Design, Delivery, and Oversight
      - Key Element 10.8: “Pharmacists’ Patient Care Process – The curriculum prepares students to provide patient-centered collaborative care as described in the *Pharmacists’ Patient Care Process* model endorsed by the Joint Commission of Pharmacy Practitioners.”

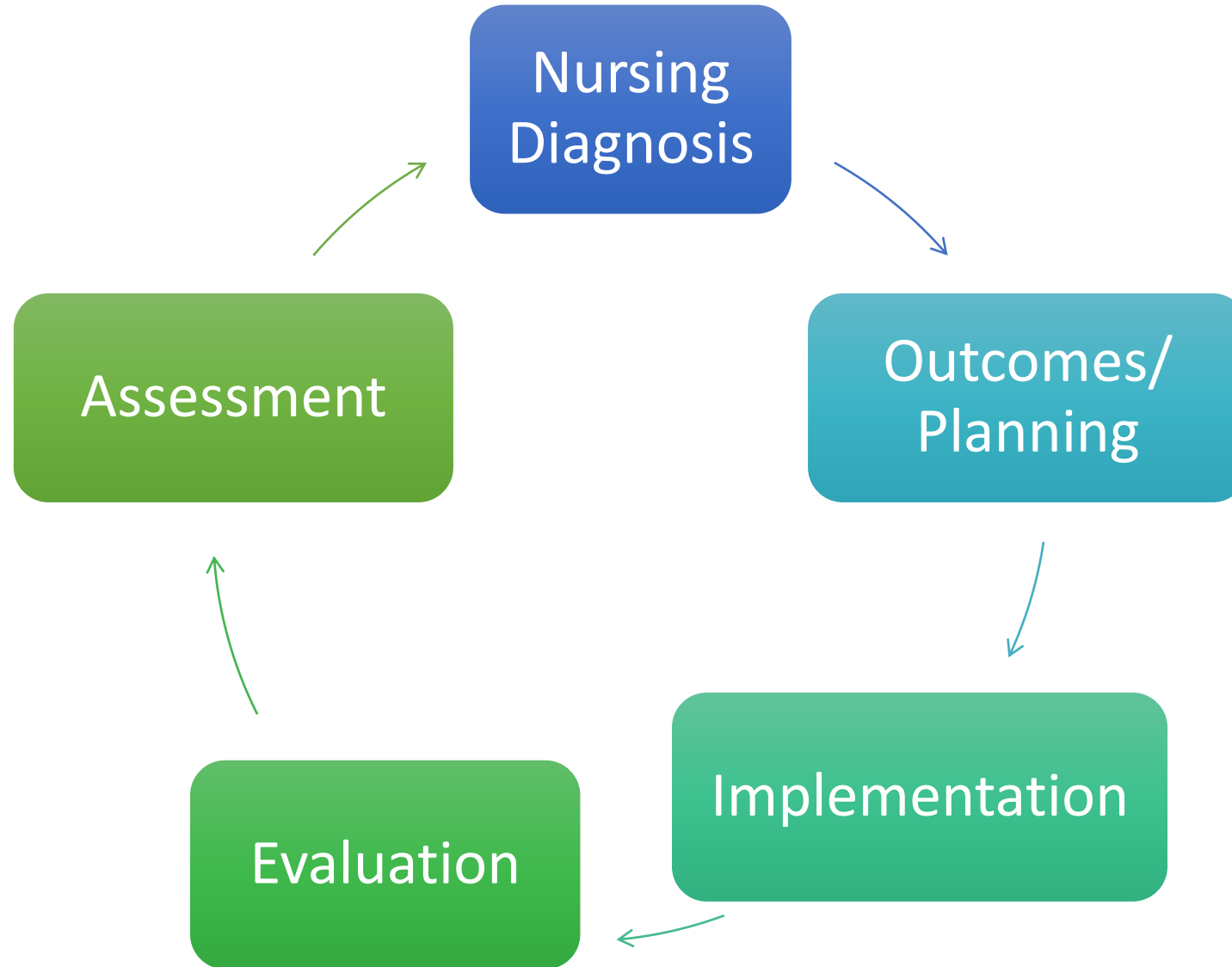


- Required Competency Areas, Goals, and objectives for Postgraduate Year One (PGY1) Community-Based and Managed Care Pharmacy Residencies
  - Competency Area R1: Patient Care
    - Goal R1.1: “Provide safe and effective patient care services including medication management, health and wellness, [immunization], and disease state management [including medication management] following the JCPP Pharmacists’ Patient Care Process. Services are provided to a diverse range of patients in collaboration with the health care team.”

# Other disciplines lead the way

American Nurses Association, 2017.  
Harris, et al., 2012.

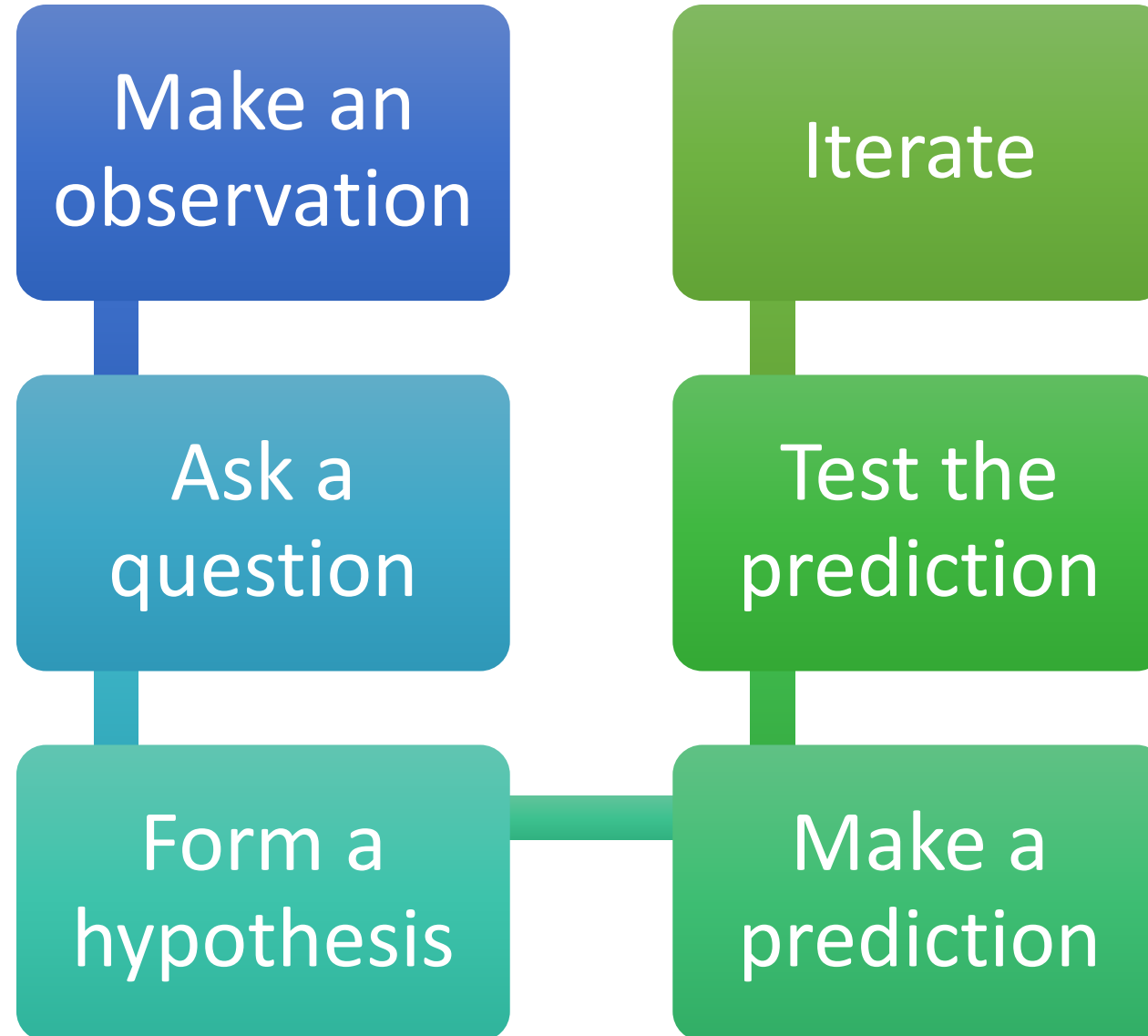
## American Nurses Association: “The Nursing Process”



# Other disciplines lead the way

Khan Academy, 2017.

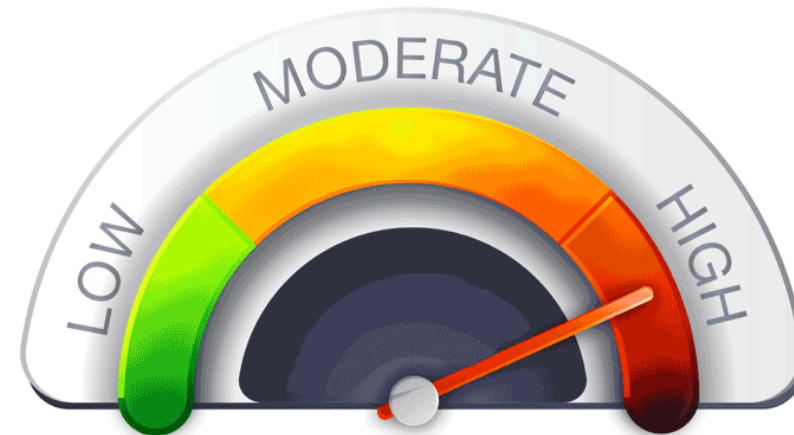
## "The Scientific Method"





# PPCP: Foundational Principles

*How to Implement the Pharmacists' Patient Care Process, 2015.*



# Patient-Centered Care

*How to Implement the Pharmacists' Patient Care Process, 2015.*

“Care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.”

- Continuous healing relationships
- Customized
- Patient in control
- Knowledge freely shared
- Evidence-based decisions
- Safety
- Transparency
- Needs anticipated
- Decreased waste
- Cooperation





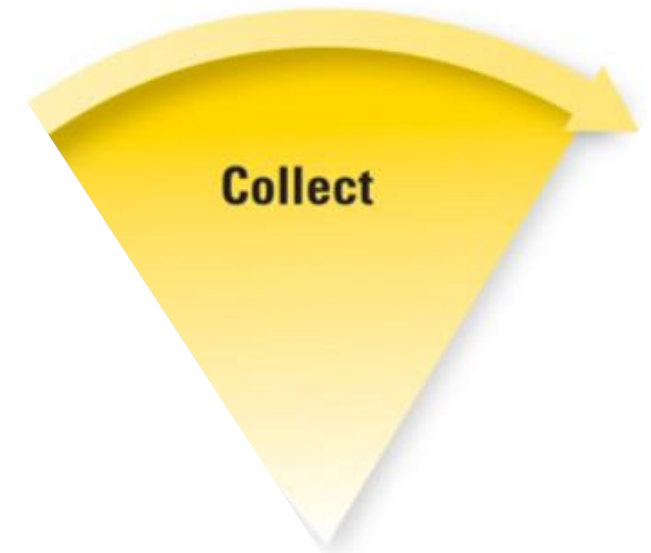
- Collaboration
  - Assists pharmacist with making meaningful recommendations
- Communication
  - Improves relationships
  - Improves understanding
  - May improve outcomes
- Documentation
  - Shows what happened
  - Supports pharmacist accountability



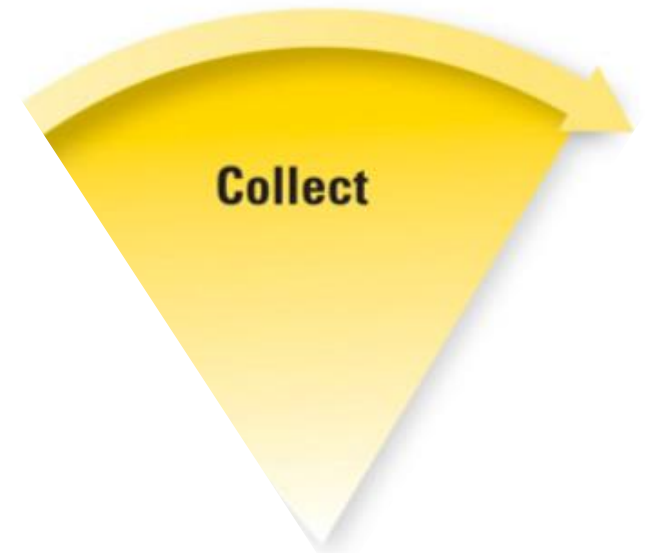




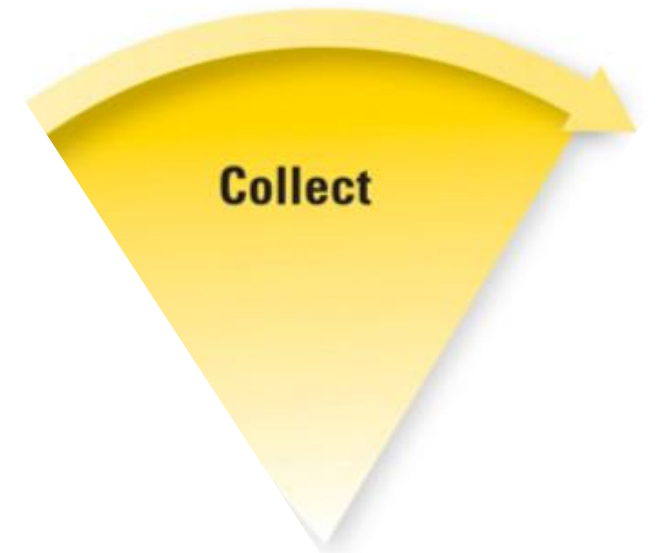
“The pharmacist assures the collection of the necessary subjective and objective information about the patient in order to understand the relevant medical/medication history and clinical status of the patient.”



- **Subjective Information**
  - Collected from or communicated by the patient
    - Beliefs, feelings, goals, ideas, perceptions, preferences, values
    - Demographics
    - Histories
      - Family, medical, medication, social, surgical
    - Medication use and experience
    - Reason for seeking care
    - Symptoms



- **Objective Information**
  - Observed or tested by a health care provider
  - Data can be seen, heard, or measured
  - Information is fact-based, quantifiable, and repeatable
    - Diagnostic reports
    - Laboratory results
    - Medication lists
      - Provided by institution or pharmacy
    - Physical examination
      - Auscultation, observation, palpation, percussion





“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.”



- Health Status
  - Lab results
  - Medical/medication history
  - Physical exam findings
  - Risk factors
  - Signs/symptoms
- Preventative Care Needs
  - Access to care
  - Immunization history



- **\*\*Drug-Related Problems\*\***
  - Medication adherence
  - Medication appropriateness
  - Medication effectiveness
  - Medication safety







“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.”



## Determine the optimal solution to the patient's problem

### **Patient-Specific Variables**

- Age
- Allergies
- Economic Status
- Family/home dynamics
- Gender
- Medical conditions
- Medication history
- Preferences
- Social habits

### **Therapy-Specific Variables**

- Dosage forms
- Flavor
- Ingredients
- Potential interactions
- Price
- Relative effectiveness
- Side effects



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



- Address all medication- and health-related problems
  - Adjust, administer, discontinue, initiate medications (as authorized)
- Educate
- Facilitate transitions of care
- Order labs/tests (as authorized)
- Recommend
- Refer



- Usually involves documentation
  - Clinical intervention tracking
  - Medication action plan
  - Order/Rx changes
  - Recommendations to healthcare team
  - SOAP notes





# Follow-Up: Monitor and Evaluate

*How to Implement the Pharmacists' Patient Care Process, 2015.*

“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 caregivers as needed.”

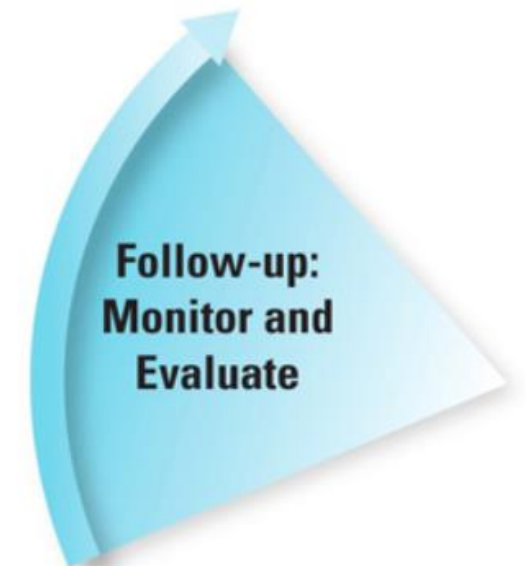




# Follow-Up: Monitor and Evaluate

*How to Implement the Pharmacists' Patient Care Process, 2015.*

- Follow-Up & Monitoring
  - Medication adherence
  - Medication appropriateness
  - Medication effectiveness
  - Medication safety
  - Outcomes of care
  - Progress toward or achievement of goals





# Practically Precepting the PPCP

# Applying the PPCP...

- Case #1: Anticoagulation Clinic
  - DJ is a 72yo male presenting to the pharmacist-run anticoagulation clinic for routine follow-up of his international normalized ratio (INR).
    - PMH:
      - Atrial fibrillation
      - Hyperlipidemia
      - Hypertension
      - Type 2 diabetes mellitus
    - Medications:
      - Atorvastatin 40mg by mouth daily
      - Lisinopril 20mg by mouth daily
      - Metformin 1000mg by mouth twice daily
      - Warfarin 5mg by mouth daily

# Applying the PPCP...Case #1

<b>PPCP</b>	
<b>Collect</b>	
<b>Assess</b>	
<b>Plan</b>	
<b>Implement</b>	
<b>Follow-up</b>	

- Case #2: Long-Term Care Facility
  - AC is a 80yo female patient who has resided in a nursing home for the last three years. Over the past three weeks she has experienced three falls. She had not experienced any falls previously.

# Applying the PPCP...Case #2

*How to Implement the Pharmacists' Patient Care Process, 2015.  
Adapted from case 3.*

## ■ PMH

- Cerebrovascular accident (CVA)
- Dementia
- Depression
- Gastroesophageal reflux disease (GERD)
- Hypertension
- Myocardial infarction (MI)

## ■ Medications

- Aspirin 81mg by mouth daily
- Benztropine 1mg by mouth three times daily
- Donepezil 10mg by mouth at bedtime
- Escitalopram 20mg by mouth daily
- Furosemide 10mg by mouth daily
- Lisinopril 5mg by mouth daily
- Lorazepam 0.5mg by mouth twice daily
- Megestrol acetate 400 mg by mouth daily
- Omeprazole 20mg by mouth daily
- Risperidone 0.5mg by mouth at bedtime

# Applying the PPCP...Case #2

*How to Implement the Pharmacists' Patient Care Process, 2015.  
Adapted from case 3.*

## ■ Vitals

- Baseline Mini Mental Status Exam (MMSE) score upon admission: 24
- No pain scale documentation noted
- Blood pressure (BP): 130/86mmHg
- Height: 5'5"
- Weight: 147lb

## ■ Pertinent Labs

- K: 4.1mEq/L
- SCr: 0.9mg/dL



# Applying the PPCP...Case #2

*How to Implement the Pharmacists' Patient Care Process, 2015.  
Adapted from case 3.*

<b>PPCP</b>	
<b>Collect</b>	
<b>Assess</b>	
<b>Plan</b>	
<b>Implement</b>	
<b>Follow-up</b>	

# Applying the PPCP...Case #3

<b>PPCP</b>	<b>Drug Information Question</b>
<b>Collect</b>	
<b>Assess</b>	
<b>Plan</b>	
<b>Implement</b>	
<b>Follow-up</b>	

# Applying the PPCP...

- What patient care activities do you complete in your practice setting that could be described as:
  - Collect
  - Assess
  - Plan
  - Implement
  - Follow-up: Monitor and Evaluate
  - Collaborate
  - Communicate
  - Document

# Applying the PPCP...

- How would you apply the PPCP in the following settings/situations?
  - Anticoagulation clinic
  - Community pharmacy over-the-counter product question
  - Drug information question
  - Journal club
  - Long term care monthly chart review
  - Vancomycin consult

# Self-Assessment Question #1

Why was the Pharmacists' Patient Care Process (PPCP) developed?

- A. To create a new way for pharmacists to practice
- B. To more precisely describe the role of pharmacists
- C. To move pharmacists into a primary dispensing role
- D. To limit time spent on pharmacist-patient interactions

# Self-Assessment Question #2

During which step of the Pharmacists' Patient Care Process (PPCP) would the pharmacist/student pharmacist obtain information from a patient/caregiver?

- A. Plan
- B. Implement
- C. Follow-up
- D. Collect

# Self-Assessment Question #3

Which activity is best associated with the implementation step of the Pharmacists' Patient Care Process (PPCP)?

- A. Developing a patient-specific medication action plan
- B. Interviewing a patient to obtain his/her allergies
- C. Providing antibiotic stewardship recommendations to the healthcare team
- D. Reviewing a patient's medication record for refill histories

# Self-Assessment Question #4

A student pharmacist is currently on your rotation in the community pharmacy. A patient inquires about an over-the-counter product that he can take to treat his back pain. Together, you and the student pharmacist determine the patient, based on his symptoms, must be referred to his primary care provider. What step of the PPCP was completed?

- A. Assess
- B. Collect
- C. Document
- D. Follow-up



# References

- Accreditation Council for Pharmacy Education (ACPE). Accreditation Standards and Key Elements for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree ("Standards 2016"). Published February 2015. Available at: <https://www.acpe-accredit.org/pdf/Standards2016FINAL.pdf>. Accessed 8 May 2018.
- Accreditation standard for postgraduate year one (PGY1) community-based pharmacy residency programs. Approved by the ASHP Commission on Credentialing January 15, 2016. Approved by the ASHP Board of Directors January 22, 2016. Approved by the APhA Board of Trustees January 22, 2016. Available at: <https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy1-community-based-pharmacy-2017.ashx?la=en&hash=C128D3594496763CCB5DDF26E95912AAF0F41AE8>. Accessed November 11, 2018.
- American Society of Health-System Pharmacists (ASHP), American Pharmacists Association (APhA). Required Competency Areas, Goals, and Objectives for Postgraduate Year One (PGY1) Community-Based Pharmacy Residencies. Published 2016. Available at: <https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy1-ashp-apha-newly-approved-community-based-pharmacy-residencies-2016>. Accessed 3 November 2018.
- American Nurses Association. The Nursing Process. Updated 2018. Available at: <https://www.nursingworld.org/practice-policy/workforce/what-is-nursing/the-nursing-process/>. Accessed 8 May 2018.
- Bennett MS, Kliethermes MA. How to implement the pharmacists' patient care process. Washington, DC; American Pharmacists Association:2015.

# References

- Harris I, Phillips B, Boyce E, et al. American College of Clinical Pharmacy report May 2012: Should organized clinical pharmacy promote a consistent process of patient care provided by clinical pharmacists that can apply to any clinical practice setting?: part I: why seek a consistent clinical pharmacy practice? Written May 2012. Available at: <https://www.accp.com/report/index.aspx?iss=0512&art=1>. Accessed 8 May 2018.
- Harris I, Phillips B, Boyce E, et al. American College of Clinical Pharmacy report June 2012: Should organized clinical pharmacy promote a consistent process of patient care provided by clinical pharmacists that can apply to any clinical practice setting?: part II: current models of clinical pharmacy practice. Written June 2012. Available at: <https://www.accp.com/report/index.aspx?iss=0612&art=1>. Accessed 8 May 2018.
- Joint Commission of Pharmacy Practitioners (JCPP). Pharmacists' patient care process. Written 29 May 2014. Available at: <https://www.pharmacist.com/sites/default/files/files/PatientCareProcess.pdf>. Accessed 8 May 2018.
- Khan Academy. The scientific method: how the scientific method is used to test a hypothesis. Updated 2018. Available at: <https://www.khanacademy.org/science/biology/intro-to-biology/science-of-biology/a/the-science-of-biology>. Accessed 8 May 2018.

# Questions



BINGHAMTON  
UNIVERSITY

SCHOOL OF PHARMACY AND  
PHARMACEUTICAL SCIENCES

# Preceptor Development: Practically Precepting the Pharmacists' Patient Care Process (PPCP)

Erin E Pauling, PharmD

Clinical Assistant Professor

Binghamton University School of Pharmacy and Pharmaceutical Sciences

February 12<sup>th</sup>, 2019