



**CE Pearls: ACPE Spring Education Conference  
May 14-15, 2019**

## Pharmacists' Patient Care Process in Continuing Education

Jill S. Borchert, PharmD, BCPS, BCACP, FCCP  
Kathy E. Komperda, PharmD, BCPS  
Midwestern University Chicago College of Pharmacy



### Disclosure

- ▶ Drs. Borchert and Komperda both are financially compensated for editing and/or writing in McGraw-Hill products.

## Learning Objectives

- ▶ Articulate the patient care process for pharmacists to use as a framework for delivering patient care in any practice setting
- ▶ Describe how the patient care process is incorporated into the Doctor of Pharmacy curriculum
- ▶ Discuss strategies to implement the patient care process in CE activities

## Who?

- A. Pharmacist
- B. Non-Pharmacist Healthcare Professional
- C. Non-Clinician Administrator/Educator/Other

## Familiarity with Pharmacists' Patient Care Process (PPCP)?

- A. Have incorporated PPCP into CE or teaching activities
- B. Working knowledge of PPCP and/or in planning stages for incorporation into activities
- C. Heard of PPCP before
- D. I am here to learn

What comes to mind when you think of PPCP?

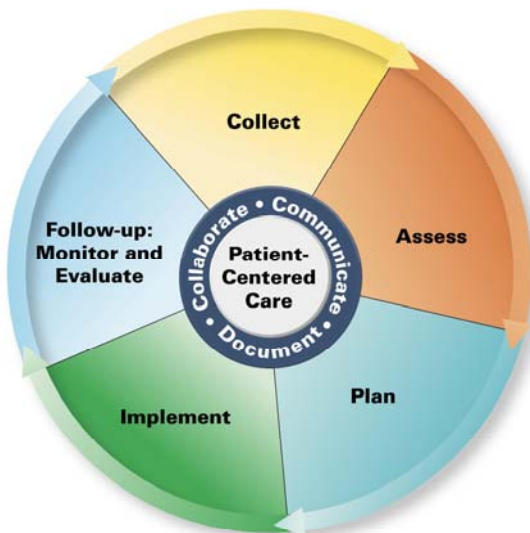
# Pharmacists' Patient Care Process

- ▶ Need for consistent approach
- ▶ Multiple organization development and support
  - ▶ Joint Commission of Pharmacy Practitioners
  - ▶ ACPE
  - ▶ May 2014
- ▶ Incorporation into ACPE Pharmacy Education Standards



<https://jcpp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf>

## Pharmacists' Patient Care Process



### Pharmacists' Patient Care Process

Pharmacists use a patient-centered approach in collaboration with other providers on the health care team to optimize patient health and medication outcomes.

Using principles of evidence-based practice, pharmacists:

#### Collect

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.

#### 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.

#### 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.

#### Implement

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

#### 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.

Source: [http://www.pharmacist.com/sites/default/files/JCPP\\_Pharmacists\\_Patient\\_Care\\_Process.pdf](http://www.pharmacist.com/sites/default/files/JCPP_Pharmacists_Patient_Care_Process.pdf)

## Medication Therapy Problems

### Indication

- Unnecessary medication therapy
- Needs additional medication therapy

### Effectiveness

- Ineffective medication
- Dosage too low
- Needs additional monitoring

### Safety

- Adverse medication event
- Dosage too high
- Needs additional monitoring

### Adherence

- Consider cost

<https://www.pqaalliance.org/assets/Measures/POA%20MTP%20Categories%20Framework.pdf>

## Universal Application

### Settings

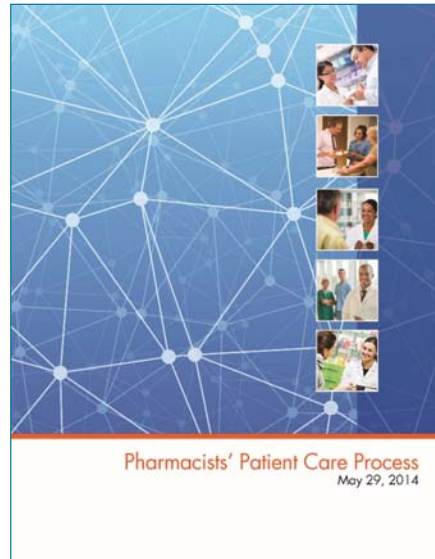
- Inpatient
- Outpatient

### Scope

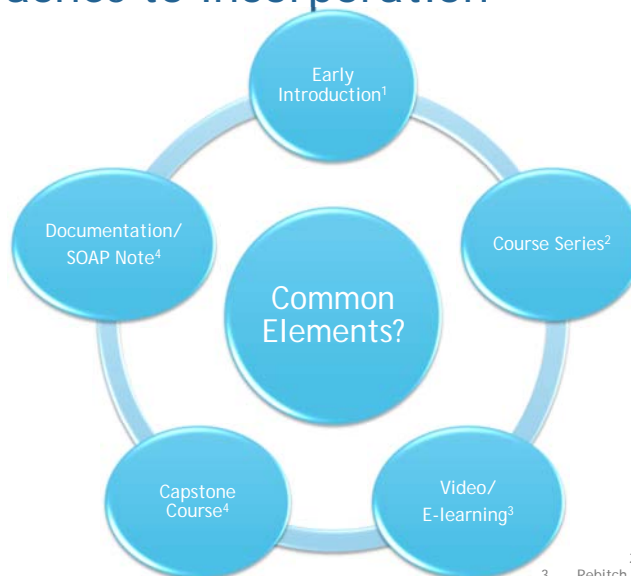
- Comprehensive
- Focused

## Incorporation into Doctor of Pharmacy Curriculum

- ▶ Standards 2016
- ▶ Posters
- ▶ Publications

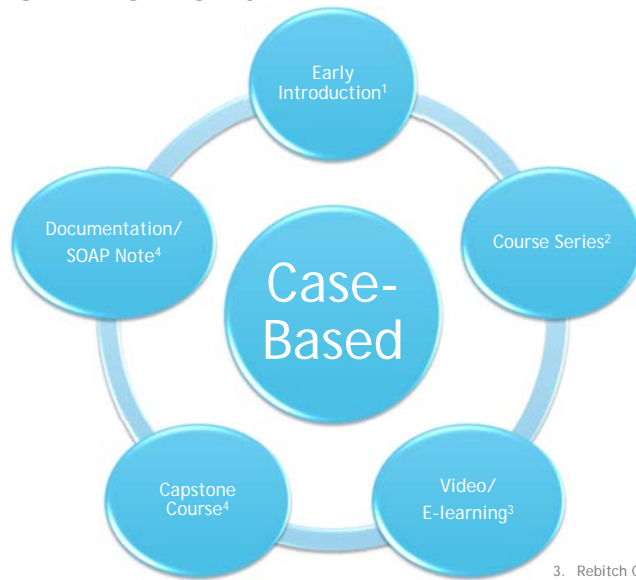


## Approaches to Incorporation



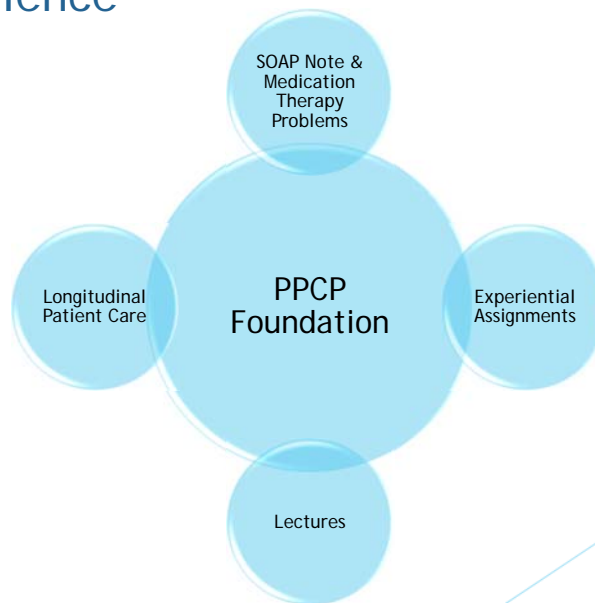
1. Rivkin A. Am J Pharm Educ 2016; 80(10) Article 114
2. Gonyeau MJ et al. Am J Pharm Educ 2018; 82(4) Article 5317
3. Rebitch CB et al. Am J Pharm Educ 2017 <https://doi.org/10.5688/ajpe8207>
4. Cooley J et al. Am J Pharm Educ 2018; 82(2) Article 3207
5. Phillips B, et al. Am J Pharm Educ 2019 <https://www.ajpe.org/doi/abs/10.5688/ajpe7307>

## Common Element



1. Rivkin A. Am J Pharm Educ 2016; 80 (10) Article 114
2. Gonyeau MJ et al. Am J Pharm Educ 2018; 82 (4) Article 427
3. Rebitch CB et al. Am J Pharm Educ 2017 <https://doi.org/10.5688/ajpe827>
4. Cooley J et al. Am J Pharm Educ 2018; 82 (2) Article 920
5. Phillips B, et al. Am J Pharm Educ 2019 <https://www.ajpe.org/doi/abs/10.5688/ajpe7307>

## Our Experience



## Our Experience: Lectures

- ▶ Case-based lectures
  - ▶ Incorporate elements
- ▶ Guided questions during active learning

### Case 1: HR

HR is a 68 year old man with h/o CAD, PUD. Several days ago he developed a swollen L calf, with unilateral warmth/tenderness that progressed to affect entire leg to groin. Today, patient presents to the ER with recent onset of R-sided pleuritic chest pain and SOB. He has no history of VTE.

Vitals: BP 150/86; HR 102; RR 28 Ht: 5'6" Wt: 91 kg

D-dimer: Positive

Spiral CT → intraluminal filling defect that occludes the anterior basal segmental artery of the right lower lobe, suggestive of PE

Doppler: iliofemoral DVT

What subjective and objective evidence of DVT/ PE are present in this patient?



### Case 1: HR

The team decides to start HR on **heparin** for treatment of DVT/PT.

What baseline labs do you want to obtain? [Collect]

What initial dose of heparin do you recommend? [Plan]

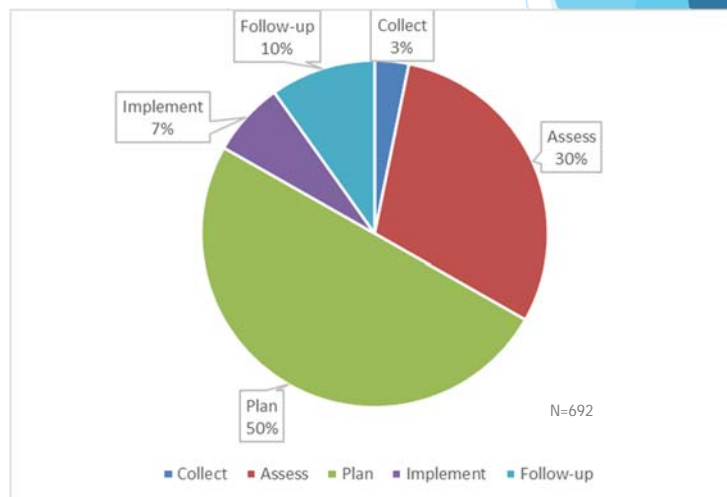
What lab do you recommend for monitoring? [Monitor]

When should it be obtained? [Monitor]



## Our Experience: Within Course Assessment

- ▶ Map exam questions to steps of PPCP
- ▶ Representative distribution?
- ▶ Implications: Mapping CE assessment questions





## PPCP and CE

- ▶ Standard 6: Communicate and collaborate with CPE activity faculty
- ▶ Guidance: Faculty should be instructed to prepare pharmacists to provide patient-centered collaborative care as described in the Pharmacists' Patient Care Process model endorsed by the Joint Commission of Pharmacy Practitioners.

## Workshop - Next Steps

- ▶ Brainstorming
- ▶ Discuss Strategies
- ▶ Implementation Ideas
- ▶ Overcoming Barriers to Implementation
- ▶ Resources
- ▶ Q & A

## Brainstorming

- ▶ Consider a recent or currently planned CE activity.
- ▶ How can PPCP be incorporated into this CE Activity?
  - ▶ Learning objectives
  - ▶ Teaching and learning methods
  - ▶ Educational materials
  - ▶ Assessment of learning
- ▶ Parking Lot: Hurdles

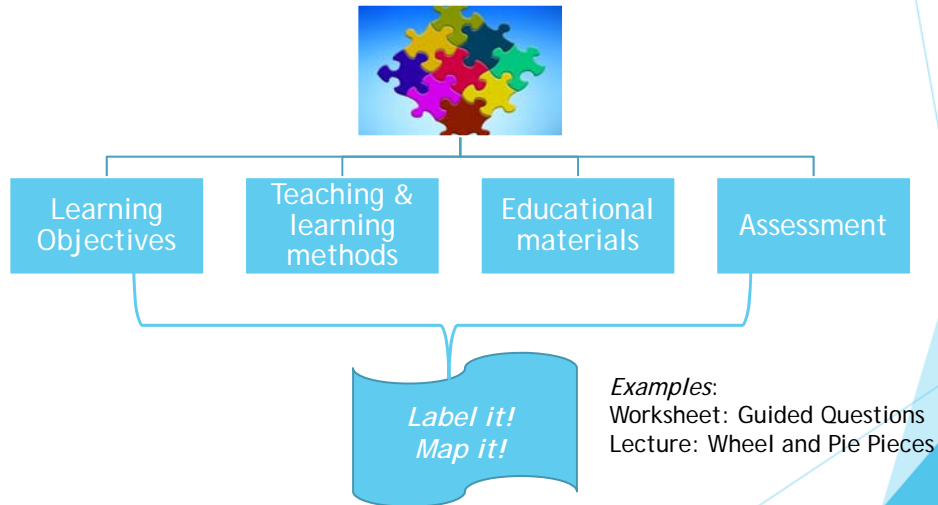
## Discuss Strategies

- ▶ CE format
- ▶ Audience



Free image available at: <https://pixabay.com/photos/mindmap-brainstorm-idea-illustration-2122757/>

## Implementation Ideas



## Overcoming Barriers



Free image available at: <https://pixabay.com/photos/japan-journey-park-161-999691/>

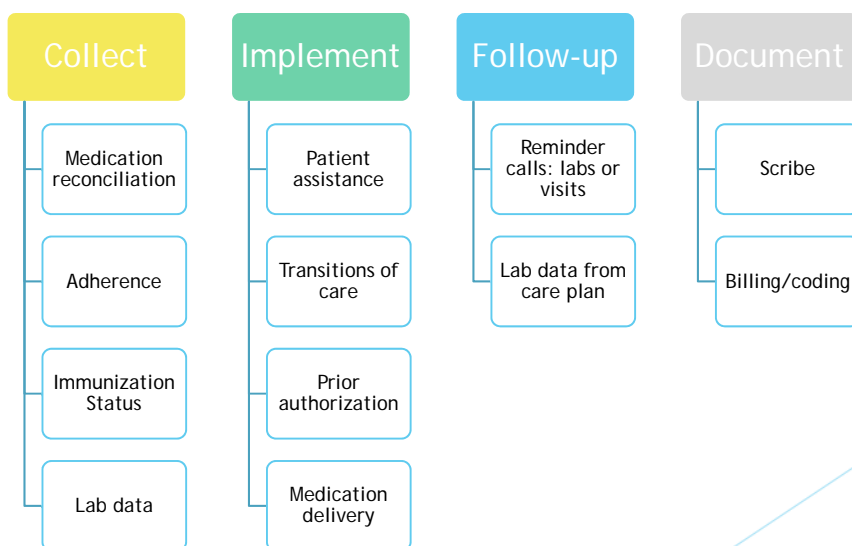
## Incorporation of other healthcare professionals

- ▶ Unique elements to pharmacy
- ▶ Similar and parallel processes
- ▶ 'Patient Care Process'



Free image available at: <https://pixabay.com/photos/abstract-boardwalk-architecture-wood-123811/>

## Pharmacy Technicians & PPCP



J Am Coll Clin Pharm. 2019;2:74-81.

## Resources: Tools for CE Faculty

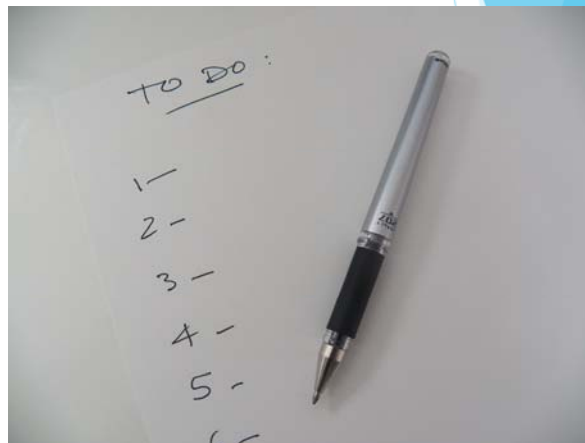
- ▶ JCPP: [PPCP](#)
  - ▶ Images available for download
- ▶ CDC: [Using the Pharmacists' Patient Care Process to Manage High Blood Pressure](#)
- ▶ CMM in Primary Care: [The Patient Care Process for Delivering Comprehensive Medication Management \(CMM\)](#)
- ▶ APhA: [Applying the Pharmacists' Patient Care Process to Immunization Services](#)
- ▶ Textbook resources

**Using the Pharmacists' Patient Care Process to Manage High Blood Pressure:**  
A Resource Guide for Pharmacists



## *Time to write down your take home ideas...*

- ▶ One strategy to incorporate PPCP into:
  1. Faculty Guide
  2. Teaching & Learning Methods
  3. Educational Materials
  4. Learning Assessment
- ✓ Accountability



Free image available at: <https://pixabay.com/photos/list-to-do-list-reminder-3646-122764/>

## Take home points

- ▶ PPCP is a universal approach to care
  - ▶ Approach not new ~ standard terminology
- ▶ Variability in audience familiarity with PPCP
- ▶ Incorporation of PPCP into CE programming
  - ▶ Strategies
  - ▶ Tweak, not paradigm shift



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