



### **Getting from APPE to EPA**

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# Learning Objectives

After this presentation the participant will be able to:

- Define the terms competencies and Entrustable Professional Activities (EPAs)
- Discuss the limitations of standards in pre-APPE readiness, APPEs and EPAs
- Identify the gaps from the pharmacy curriculum to contemporary pharmacy practice

### Who is here today? I am a...

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# $\bigcirc$

### The one thing that I wish I learned in school or I wish that students knew before rotations is...

(i) Start presenting to display the poll results on this slide.



# Pre-APPE APPE EPA







# Entrustable Professional Activity (EPA)

"Units of professional practice defined as tasks or responsibilities that trainees are entrusted to perform unsupervised once they have attained sufficient specific competence"

Haines ST, Pittenger AL, Stolte SK et al. Core entrustable activities for new pharmacy graduates. Am J Pharm Educ. 2017;81(1):Article S2.





# EPAs for new pharmacy graduates

- Six Domains:
  - Patient Care Provider
  - Interprofessional Team Member
  - Population Health Promoter
  - Information Master
  - Practice Manager
  - Self-Developer
- Fifteen EPAs with examples of supporting tasks





# "Fulfill a medication order"

- Enter patient specific information into an electronic health record
- Sterile and non-sterile compounding
- Determine medication contraindications and drug interactions
- Determine a patient's copay
- Assist patients in acquiring medications
  - Prior authorization
  - Assistance programs



### APPE

# **Essential Elements for APPEs**

- 2014 study demonstrated variability in APPEs
  - Amount of time spent in distribution activities for community and health-systems rotations
- 2016 AACP Task Force to create Essential Elements for required APPEs
  - Community, ambulatory care, health-systems, and inpatient general medicine
- Agreement was NOT reached for health-systems APPE

Danielson J, Besinque KH, Clarke C, et al. Essential elements for core required advanced pharmacy practice experiences. Am J Pharm Educ. 2019;83(4):Article 6865.





# Essential Elements for Health-Systems APPEs

- Follow up survey:
  - Accurately verify new medication orders
  - Accurate preparation of medication orders
  - Sterile compounding simulation only
- Areas of controversy
  - Use of the word "verify"
  - Supervising technicians
  - Sterile compounding



APPE

# Essential Elements for Community Pharmacy APPEs

- Accurately apply the prescription verification process
- Utilize a computerized pharmacy management system for safe medication distribution to patients





# EPA Fulfill a Medication Order – UMB APPEs

### APPE 401: Health-System Pharmacy Practice Example Skills:

- Enter patient specific information into an electronic health record
- Sterile and non-sterile compounding
- Applies a systemic approach for prescription verification
- Compare costs of medications
- Assist patients in acquiring medications
  - Prior authorization
  - Assistance programs





# EPA Fulfill a Medication Order ACPE Pre-APPE Curriculum

- Patient Safety Domain
- Accurately dispense medications (order fulfillment)
- Example Skills:
  - Accurately prepare and dispense medications or supervise such preparation
  - Evaluate medication order appropriateness by correlating with patient specific data
  - Sterile and non-sterile compounding



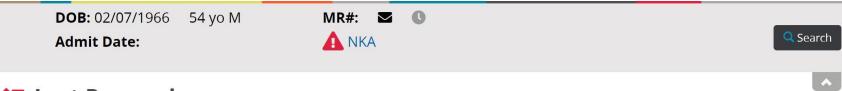
# EPA Fulfill a Medication Order ACPE Pre-APPE Curriculum UMB Curriculum

### Abilities Lab – 6 semester skills-based curriculum

- Sterile and non-sterile compounding
- Product verification (IV and community)
- EHR order verification (IV/PO)



# **EHR Order Verification Examples**



#### **℃** Inpt Processing

ORDER ITEM	ROUTE	FREQUENCY	STATUS ¥	WHEN 😽
24 HR metoprolol succinate 50 MG Extended Release Oral Tablet - Dose: 50 mg	By Mouth (PO)	BID	Non-Verified	06/25/2018 14:17
Rosuvastatin calcium 20 MG Oral Tablet - Dose: 20 mg	By Mouth (PO)	QHS	Non-Verified	06/25/2018 14:16
Amlodipine 10 MG Oral Tablet - Dose: 10 mg	By Mouth (PO)	DAILY (0800)	Non-Verified	06/25/2018 14:15
enoxaparin sodium 40 MG per 0.4 ML Prefilled Syringe - Dose: 40 mg	Subcutaneous (SQ)	DAILY (0800)	Non-Verified	06/25/2018 14:12
Acetaminophen 325 MG Oral Tablet - Dose: 325 mg	By Mouth (PO)	PRN Q4H	Non-Verified	06/25/2018 14:07



## **EHR Order Verification Examples**

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#### └❑ Inpt Processing Details

Provider:	Rachel Blumenthal, MD
Medication:	24 HR metoprolol succinate 50 MG Extended Release Oral Tablet
Include DEA/NPI Number:	No
Alternate name:	
Barcode ID:	866436SCD1
Dose:	50 mg
Route:	By Mouth (PO)
Order Details:	for HTN
Frequency:	BID
Status:	Non-Verified
Starts on:	06/25/2018 14:17
Ends on:	06/25/2018 14:17
	ACCEPT EDIT CLOSE NEXT



# Would you approve this order?

Solution:	SOL00127 KCL 10 mEq/100 mls sterile H2O
Solution Volume:	100 mls
Solution Rate:	400 mls/hr
# of Bags:	1
Include DEA/NPI Number:	No
Alternate name:	
Barcode ID:	SOL00127
Route:	IV Piggyback (IVPB)
Order Details:	for K+ 3.3
Due:	No
Frequency:	ONCE
Status:	Non-Verified

### Would you approve this order?

(i) Start presenting to display the poll results on this slide.



# **EHR Essential Skills**

- Appropriate timing
  - Antibiotics
  - Daily medications (new admission)
- Clinical decision support
- Drug-drug interaction alerts
- Pre-built IV orders



## EPA – Fulfill a Medication Order Summary

Element	Pre-APPE	APPE – UMB	EPA
Enter patient information into the EHR		$\checkmark$	$\checkmark$
Prepare, label, dispense, distribute medications			
Sterile and non- sterile compounding		$\checkmark$	$\checkmark$
Order verification			



### Competency

 Competency is "an observable ability of a health professional, integrating multiple components such as knowledge, skills, values, and attitudes"

Frank JR, Snell LS, ten Cate O, et al. Competency-based medical education: theory to practice. Med Teach. 2010;32(8):638-645.



### Communication

### Maybe you can relate to Emily Blunt?

https://youtu.be/3-DdP3DGV88

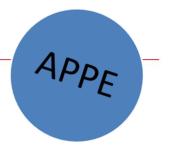




### **Competency - Communication**

Competency	EPA #4	EPA #5	EPA #6	EPA #11
Communication	Implement a care plan in collaboration with the patient, caregivers and other health professionals	Follow-up and monitor a care plan	Collaborate as a member of an interprofessional team	Educate patients and professional colleagues about the appropriate use of medications
Activity				
	Educate a patient regarding a new medication or device	Present a patient to a colleague during a handoff	Communicate a patient's DRP to another health professional	Lead a discussion on a recently published article and its application to patient care
			Use appropriate communication skills when interacting with others	





### Competency – Communication in APPE

	EPA #4	EPA #5	EPA #6	EPA #11
Activity	Educate a patient regarding a new medication or device	Present a patient to a colleague during a handoff	Communicate a patient's DRP to another health professional Use appropriate communication skills when interacting with others	Lead a discussion on a recently published article and its application to patient care
APPE Essential Elements	Ambulatory Patient Care		Inpatient General Medicine Patient care	





### Competency – Communication in UMB APPE

	EPA #4	EPA #5	EPA #6	EPA #11
Activity	Educate a patient regarding a new medication or device	Present a patient to a colleague during a handoff	Communicate a patient's DRP to another health professional Use appropriate communication skills when interacting with others	Lead a discussion on a recently published article and its application to patient care
UMB APPE – Communication and IPE Domain			$\checkmark$	





### Communication in pre-APPE Curriculum

	EPA #4	EPA #5	EPA #6	EPA #11
Activity	Educate a patient regarding a new medication or device	Present a patient to a colleague during a handoff	Communicate a patient's DRP to another health professional Use appropriate communication skills when interacting with others	Lead a discussion on a recently published article and its application to patient care
ACPE pre-APPE Standards	Patient Education		Patient Education General Communication Abilities	





### Communication in UMB pre-APPE Curriculum

	EPA #4	EPA #5	EPA #6	EPA #11
Activity	Educate a patient regarding a new medication or device	Present a patient to a colleague during a handoff	Communicate a patient's DRP to another health professional Use appropriate communication skills when interacting with others	Lead a discussion on a recently published article and its application to patient care
UMB pre-APPE Curriculum	ABL 1,2,4			Journal Club elective





### Changes in the pre-APPE curriculum

ABL 6 is now an APPE readiness skills-based course with a focus on written and verbal communication and integrated with knowledge

New activities:

- Journal club
- Patient presentation to preceptor
- Telehealth encounters
- Patient education
- SOAP notes (multi problem and longitudinal)



### Conclusions

- There are gaps between curricular standards and contemporary pharmacy practice.
- Change is needed in the curriculum, APPEs and standards to close these gaps.