

Rosalind Franklin University of Medicine and Science College of Pharmacy

P2 IPPE HEALTH-SYSTEMS ACTIVITY WORKBOOK 2025 – 2026

Name:		
Practice Site:		
Preceptor Name:		



P2 IPPE HEALTH-SYSTEMS SCHEDULE



Rosalind Franklin University – College of Pharmacy 2025-2026 P2 Introductory Pharmacy Practice Experience IPPE Each student must complete 108 hours (thirteen visits) 9/13/24

						., .,				
MONTH	S	M	T	w	T	F	S	Notes	WEEK#	QUARTER
Jul-25	20	21	22	23	24	25	26		WEEK 9	SUMMER
501-25	27	28	29	30	31	1	2		WEEK 10	SOMMER
	3	4	5	6	7	8	9	S	ummer/Fall I	ntercession Break
Aug-25	10	11	12	13	14	15	16		WEEK1	
	17	18	19	20	21	22	23	Group 1 Visit 1	WEEK 2	
	24	25	26	27	28	29	30		WEEK 3	
	31	1	2	3	4	5	6	Group 2 Visit 1	WEEK 4	
	7	8	9	10	11	12	13	Group 1 Visit 2	WEEK 5	
Sep-25	14	15	16	17	18	19	20	Group 2 Visit 2	WEEK 6	3
	21	22	23	24	25	26	27	Group 1 Visit 3	WEEK 7	FALL
	28	29	30	1	2	3	4	Group 2 Visit 3	WEEK 8	
	5	6	7	8	9	10	11	Group 1 Visit 4	WEEK 9	
Oct-25	12	13	14	15	16	17	18	Group 2 Visit 4	WEEK 10	
Oct-25	19	20	21	22	23	24	25		WEEK 11	
	26	27	28	29	30	31	1	FINALS	WEEK 12	
	2	3	4	5	6	7	8	1	Fall/Winter In	tercession Break
	9	10	11	12	13	14	15	Group 1 Visit 5	WEEK 1	
Nov-25	16	17	18	19	20	21	22	Group 2 Visit 5	WEEK 2	
	23	24	25	26	27	28	29	Thanksgiving Break	WEEK 3	WINTER
	30	1	2	3	4	5	6	Group 1 Visit 6	WEEK 4	į į
	7	8	9	10	11	12	13	Group 2 Visit 6	WEEK 5	
Dec-25	14	15	16	17	18	19	20		WEEK 6	
	21	22	23	24	25	26	27		Winter Break	
	28	28	30	31	1	2	3		Win	ter Break
	4	5	6	7	8	9	10	Group 1 Visit 7	WEEK 7	
	11	12	13	14	15	16	17	Group 2 Visit 7	WEEK 8	
Jan-26	18	19	20	21	22	23	24	Group 1 Visit 8	WEEK 9	Ĕ
	25	26	27	28	29	30	31	Group 2 Visit 8	WEEK 10	MNTER
	1	2	3	4	5	6	7		WEEK 11	>
	8	9	10	11	12	13	14	FINALS	WEEK 12	
Feb-26	15	16	17	18	19	20	21	w	inter/Spring	Intercession Break
	22	23	24	25	26	27	28	Group 1 Visit 9	WEEK 1	
	1	2	3	4	5	6	7	Group 2 Visit 9	WEEK 2	
	8	9	10	11	12	13	14	Group 1 Visit 10	WEEK 3	
Mar-26	15	16	17	18	19	20	21	Group 2 Visit 10	WEEK 4	
	22	23	24	25	26	27	28	Group 1 Visit 11	WEEK 5	e e
	29	30	31	1	2	3	4	Group 2 Visit 11	WEEK 6	SPRING
	5	6	7	8	9	10	11	Group 1 Visit 12	WEEK 7	ds.
Apr-26	12	13	14	15	16	17	18	Group 2 Visit 12	WEEK 8	
Apr 20	19	20	21	22	23	24	25	Group 1 Visit 13	WEEK 9	
	26	27	28	29	30	1	2	Group 2 Visit 13	WEEK 10	
	3	4	5	6	7	8	9		WEEK 11	
	10	11	12	13	14	15	16	FINALS	WEEK 12	
May-26	17	18	19	20	21	22	23	IPPE MAKE-UP W	EEK (F NEEDED)	Spring/Summer Intercession Break
	24	25	26	27	28	29	30	Start new AY →	WEEK 1	
	31	1	2	3	4	5	6	1	WEEK 2	~
	7	8	9	10	11	12	13	1	WEEK 3	SUMMER
Jun-26	14	15	16	17	18	19	20		WEEK 4	N S
	21	22	23	24	25	26	27		WEEK 5	Š
	28	29	30					1	WEEK 6	
	20	20	90		l	L	L		WEEK 0	



TABLE OF CONTENTS

TABLE OF CONTENTS

WORKBOOK				
P2 IPPE Health-Systems Schedule	1			
Table of Contents				
Academic Integrity Acknowledgement				
Office of Clinical Education Contacts	7			
Activity Workbook Instructions	9			
INDIVIDUAL STUDENT ACTIVITY				
Daily Patient Care Log	11			
Visit #1 Preparation & Onsite Orientation	13			
Daily Drug Information Log				
TEAM STUDENT ACTIVITY				
Medication Use Systems Management	25			
Problem Solving- Compounding & Calculations				
Learner	41			
Educator	46			
Patient-Centered Care	47			
Problem Solving- Patient Intervention	57			
Health& Wellness /Patient Advocacy	58			
Professionalism	59			
Communication	60			
Interprofessional Collaboration	63			

References:

- Accreditation Council for Pharmacy Education, 2025 Standards & Guidelines
 Center for the Advancement of Pharmacy Education's Educational Outcomes 2013.
 Entry-level Competencies Needed for Pharmacy Practice in Hospitals and Health-Systems

Acknowledgements:

- The following manual was adapted with permissions from Beverly Talluto, Texas A&M Health Science Center Irma Lerma Rangel College of Pharmacy Community IPPE Activities Workbook. May she rest in peace. Also from Dawn Carlson from the University of Minnesota Health-System IPPE Workbook, and adapted from the Pharmacist's Letter.
- Rosalind Franklin University of Medicine & Sciences College of Pharmacy:
 - Ali Salem, P4 pharmacy student for his tireless work in mapping the CAPE outcomes and updating this document for compliance with 2016 ACPE Standards & Guidelines.
 - Dr. Lauren Angelo, Assistant Dean for Academic Affairs for her work in developing the IPPE P1 2014-2015 Workbook, on which this workbook was based.



ACADEMIC INTEGRITY ACKNOWLEDGEMENT

Professionalism

Academic Integrity Acknowledgement

The intent of the IPPE workbook is for each student to get the most out of his or her IPPE rotation by doing the activities assigned with their preceptors. Students will complete individual assignments independently with the help of his or her preceptor(s) whose names appear on this workbook. Students may complete team assignments with other students at the site. The completion of this workbook should accurately reflect the student's experiences at his or her IPPE site.

Students must document honestly and independently. Copying another student's workbook in any way or form or falsifying information within the workbook is a violation of the University's Standards of Student Conduct and is subject to disciplinary actions.

According to the Rosalind Franklin University of Medicine and Science Student Handbook Standards of Student Conduct, academic integrity forms the cornerstone for building a professional academic community, where individuals come to teach, learn and discover new knowledge. Academic integrity encompasses ethical standards, profession specific standards, and shared Rosalind Franklin University standards.

Academic dishonesty violates the University 's standards. As an academic community, we will not tolerate any form of academic dishonesty. It is incumbent upon every member of the community to uphold the highest levels of academic integrity.

Academic integrity violations include:

- 1. Cheating
- 2. Fabrication
- 3. Plagiarism
- 4. Redundant Submissions
- 5. Facilitating Violations of Academic Integrity
- 6. Unauthorized Possession or Disposition of Academic Materials
- 7. Unauthorized Examination Behavior
- 8. Any other behavior that is deemed to violate the Professionalism Policy in the Experiential Manual.

Use the following tips to avoid academic integrity violations:

- You must complete INDIVIDUAL assignments independently.
- If your preceptor does not work with you on assigned tasks or states that a task cannot be completed in the pharmacy, speak to the course director.
- Fill out each portion thoughtfully and completely and assure that every item that you complete is accurate.

By virtue of being enrolled in this course, you are acknowledging the terms above.



OFFICE OF CLINICAL EDUCATION CONTACTS

Office of Clinical Education Contacts

3333 Green Bay Road North Chicago, Il 60064-3095 847-578-8782 phone 847-775-6586 fax copexperientialed@rosalindfranklin.edu

Paul Fina, PharmD, BCACP, BCPS, CSSGB Assistant Dean of Clinical Education paul.fina@rosalindfranklin.edu 847-578-3433



Katie Cunningham, PharmD, BCPS Director of Clinical Education kathleen.cunningham@rosalindfranklin.edu 847-578-7682



Lisa Michener, PharmD, MS
Director of Clinical Development
lisa.michener@rosalindfranklin.edu

847-578-8762





ACTIVITY WORKBOOK INSTRUCTIONS

ACTIVITY WORKBOOK INSTRUCTIONS

Purpose:

The purpose of the Health System Introductory Pharmacy Practice Experience (IPPE) is to introduce students to the fundamentals of pharmacy practice in the Health-System Pharmacy setting. Students should become APPE—READY and TEAM—READY by the conclusion of this course.

The workbook intends to guide and augment this learning experience.

Workbook Activities Timeline Instructions:

• Students are required to adhere to complete activities throughout each quarter.

Student Individual Activity:

- Students are to work <u>INDIVIDUALLY</u> on the following three activities:
 - prescription medication tables
 - patient activities care log
 - Problem Solving Compounding & Calculations
- Unless otherwise noted above, students may collaborate on other workbook sections.
- Where possible, the activities are sequenced according to what the student is learning in the classroom and pharmacy practice skills course.

Student and Preceptor Responsibilities:

- Preceptors are asked to review exercises with students throughout as assigned and at least once per quarter.
- All workbook activities must be completed neatly with correct grammar for the preceptor to review.
- The workbook will be assessed at the end of the IPPE course by the course director.
- At the end of EACH site visit the student is expected to update the prescription medication tables, patient activity care log, review his/her timeline, ensure that activities are being completed, and log hours in CORE-ELMS.
- Students must not wait until the last site visit to complete activities. This is disruptive to the preceptor's workflow and is unprofessional.
- The entire IPPE P2 Health-System Activities Workbook is required to be completed by the last site visit (Site Visit #13)

All students must attend the required number of site visits (<u>13</u>) even if the workbook is completed before this date.



INDIVIDUAL STUDENT ACTIVITY:

DAILY PATIENT CARE LOG

Patient-Centered Care

DAILY PATIENT ACTIVITY CARE LOG

Use the following form to record the patient care encounters and activities that took place during each site visit using the table below.

Visit	Date	#Patients Counseled	#Medication Histories	#Medication Reconciliations	# Patients Presented	#Drug Info ?s	#IV Compounded	# Calculations Performed
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								



VISIT #1 PREPARATION AND ONSITE ORIENTATION

ACTIVITY: Visit #1 Preparation

All students must contact their preceptors, by email or phone, **at least 2 weeks BEFORE** their first IPPE start date.

Please note this contact is your **first chance to make a good impression on your preceptor.** Follow the following instructions in order to start your experience off in a professional manner:

1. CHECK CORE-ELMS SITE/PRECEPTOR PROFILE

a. Student should refer to the CORE-ELMS Site Profile to read the site description and write **down** and print all required documents to bring to the first site visit.

2. **CONTACT SITE**

rotation logistics using the checklist below:	

a. At least 2 weeks before to going to your site, email your preceptor to clarify the

	Determine the first date of the rotation (including group number) and whether your preceptor is scheduled to work
	7 7 7 7
	and technicians)
	Determine the time you are expected to arrive
	Confirm the location where you should arrive (e.g., address, office / department)
	Clarify any traffic concerns (confirm directions to location, any constriction, tolls, or detours)
	Ask if parking is available and, if so, where you should attempt to park
	Ask if there are special dress requirements and if lab coat and nametag are appropriate
	Determine any information that should be read or reviewed prior to beginning the experience
	Request any requirements including documents that must to be completed prior to starting the
	experience
	Verify any documents that need to be provided to the site on the first day
	Communicate that you will provide an ORIGINAL HARDCOPY of your IL Pharmacy Student
	Technician License.
	Exchange contact information. Provide your contact information (e.g., cell phone and email) and
	identify the best way to contact the preceptor (e.g., phone number, cell phone number, and
	email).
b.	If you do not receive a response within 48 hours, call the site, verify the day and time of

c. If you cannot reach the preceptor upon contacting the site after a second attempt or if it is determined that the preceptor no longer works at site, is on vacation, or is on leave, promptly notify the Experiential Office via email.

the preceptor's next scheduled shift and call during that time.

d. The Experiential Office must be notified no later than 10 days BEFORE the rotation start date if the student is unable to reach the preceptor so that additional communication from OEE can be initiated.

ACTIVITY: Visit #1 Orientation

ACTIVITY 1: Site Orientation Checklist

Review the following topics (as applicable) with your preceptor. Check each item once complete.

	Introductions	Preceptor					
Ш	Introductions	Other pharmacy staff					
		Syllabus review					
		Pharmacy Manual review					
		Workbook Activity review					
		Pharmacy Skills course activities and schedu	le				
	Goals and objectives	Assessment form review Deadlines (record dates in the lines that follow):					
		Preceptor Assessment of Student	Midpoint	FINAL			
		Student Self-Assessment	Midpoint	FINAL			
		Student Assessment of Preceptor	End of IPPE				
		Student Assessment of Site	End of IPPE				
	Recurring visit	Workbook activity review					
	requirements	Use of forms for recurring activities					
		Special activities/projects					
		Hours/schedule, including breaks					
		Calendar with deadlines					
	Scheduling	Absence policy					
П	(Confirm ALL of the	College holidays					
ш	following):	Logistics Parking					
	ioliowing).	Personal item storage					
		Restroom/break area location					
		Dress code					
		Review of pharmacy layout and workflow					
	Introduction to work	Computer system(s) and expectations					
	area	Phone system(s) and expectations for answering phone (i.e., phone etiquette)					
	uicu	Paper documentation system, if applicable					
		Storage of medications					
		Copy of student intern license provided					
_	Legal and regulatory	Patient confidentiality and HIPAA (Health Ins					
Ш	issues	Requirements mandated by OSHA (Occupati	onal Safety and F	lealth Administration)			
		Antidiscrimination policy					
		Patient counseling expectations					

ACTIVITY: Visit #1 Orientation

Activity 2: Icebreaker

	Ask your preceptor to discuss his or her career path (e.g., pharmacy school, residency considerations, opportunities, organization involvement) and why pharmacy was the chosen field.
	Tell your preceptor why you chose pharmacy and what you hope to do when you graduate.
	Review with your preceptor your experience so far in pharmacy.
	dentify specific strengths and areas you would like to improve upon over the year. te these in the space below.
TI	rree goals you hope to accomplish in the P2 Health System IPPE
	1.
	2.
	3.
_	ofessional Opportunities in Pharmacy at Site
	Does the site offer summer pharmacy internships for pharmacy students? What is the process for applying?
	Ask your preceptor what qualities they look for when choosing to hire a student.
	How do pharmacists typically get hired and promoted at the pharmacy (from within, from outside, is residency required and do most staff have residencies)?
	Is the site is currently hiring? Describe any pharmacy positions that are currently available.

ACTIVITY: Visit #1 Orientation

Activity 3: Roles and responsibilities

Familiarize yourself with roles and responsibilities.

- □ Request to review job descriptions for the following roles at your site.
- □ Describe at least three roles and responsibilities of each individual and how they differ?

Individual	Responsibilities
Pharmacist-in-Charge	
Staff Pharmacist	
Technician	
Hospital Manager	
Corporate Pharmacy Director(s)	
Other:	Fill in any role that is important at your site
Individual	Responsibilities (What does your site expect of P2 students)
IPPE Student	



INDIVIDUAL STUDENT ACTIVITY:

DAILY DRUG INFORMATION LOG

ACTIVITY: Drug Information DAILY STUDENT INDIVIDUAL LOG

Complete prescription medication table for two drug classes at each site visit.

Physically locate product, review a package insert, site-specific guideline and appropriate tertiary reference to complete other information

Class	Formulary Agent & Nonformulary Brand/Generic Name	Usual Dosage Range & Dosage Forms from Hospital Guidelines	One Indication and Two Monitoring Parameters	Mechanism of Action	List 2 important adverse effects, precautions, drug interaction or pertinent counseling points
Antineoplastic agents					
Anticonvulsants					
Antivirals					
Gastrointestinal agents (monoclonal antibodies)					
Biologicals (e.g. immunoglobulin, monoclonal antibodies)					

ACTIVITY: Drug Information DAILY STUDENT INDIVIDUAL LOG

Complete prescription medication table for two drug classes at each site visit.

Physically locate product, review a package insert, site-specific guideline and appropriate tertiary reference to complete other information

Class	Formulary Agent & Nonformulary Brand/Generic Name	Usual Dosage Range & Dosage Forms from Hospital Guidelines	Therapeutic Use Common Indication(s) and Monitoring Use Site Guideline	Mechanism of Action	List 2 important adverse effects, precautions, drug interaction or pertinent counseling points
Hospital Intravenous Fluids					
Respiratory Therapy Agents					
Direct Oral Anticoagulants					
Antiplatelet Agents					
Anticoagulants Injectable					
Thrombolytic agents					

ACTIVITY: Drug Information DAILY STUDENT INDIVIDUAL LOG

Complete prescription medication table for two drug classes at each site visit.

٦.	Physically locate product	review a nackage insert	site-specific guideline and	l annronriate tertiary referer	ice to complete other information
_	PHYSICALLY TOCALE DI OUUCL	. Teview a Dackage iliseri	. Site-Specific guidellie aliu	i abbi obijate tertiary referei	ice to complete other imormation

Rx Drug by Class	Formulary Agent & Nonformulary Brand/Generic Name	Usual Dosage Range & Dosage Forms from Hospital Guidelines	Therapeutic Use Common Indication(s) and Monitoring Use Site Guideline	Mechanism of Action	List 2 important adverse effects, precautions, drug interaction or <i>pertinent</i> counseling points
Beta-Blockers					
Calcium Channel Blockers					
Diuretics					
Antibiotics (Gram Negative)					
Antibiotic (Gram Positive)					
Antibiotic (Anaerobic)					
NSAIDs					

ACTIVITY: Drug Information DAILY STUDENT INDIVIDUAL LOG
Complete prescription medication table for two drug classes at each site visit.

_	Dbysically lacata product	raviant a paglage incort	sita spacific quidalina and appropriate	tartian, rafaranca ta camplata athar informatian
_	Privsically locate product.	. review a backage insert.	. Site-specific guideline and appropriate	tertiary reference to complete other information

Rx Drug by Class	Formulary Agent Brand/Generic Name	Usual Dosage Range & Dosage Forms according to Site Guideline	Therapeutic Use Common Indication(s) and Monitoring Use Site Guideline	Mechanism of Action	List 2 important adverse effects, precautions, drug interaction or pertinent counseling points
Opioids (Agonist)					
Opioids (Agonist/Antagonist)					
Selective Serotonin Reuptake Inhibitors					
Sedative/Hypnotics					
Thyroid Hormones					
Insulin					
Antidiabetic: Dipeptidyl Peptidase IV (DPP-IV) Inhibitor					

ACTIVITY: Drug Information DAILY STUDENT INDIVIDUAL LOG

Complete prescription medication table for two drug classes at each site visit.

Physically locate product, review a package insert, site-specific guideline and appropriate tertiary reference to complete other information

Rx Drug by Class	Formulary & Nonformulary Agent Brand/Generic Name	Usual Dosage Range & Dosage Forms	Therapeutic Use Common Indication(s) and Monitoring Use Site Guideline	Mechanism of Action	List 2 important adverse effects, precautions, drug interaction or <i>pertinent</i> counseling points
Skeletal Muscle Relaxants					
Sedative/Hypnotics					
Antiarrhythmic Class III					
Alpha 1 Blockers					
Sulfonylureas					
H2 Antagonists					

Learner **ACTIVITY: Drug Information DAILY STUDENT INDIVIDUAL LOG** Complete prescription medication table for two drug classes at each site visit. □ Physically locate product, review a package insert, site-specific guideline and appropriate tertiary reference to complete other information Formulary & **Therapeutic Use Common** List 2 important adverse effects, precautions, Usual Dosage Range & Mechanism of **Nonformulary Agent** Indication(s) and Monitoring drug interaction **Rx Drug by Class Dosage Forms** Action Brand/Generic Name or pertinent counseling points **Use Site Guideline Antimigraine (Triptans)** Antispasmodic **Gastrointestinal Agents Amphetamines**

Antispasmodic Urinary

Antigout

Oral Contraceptives

Updated 7.3 ²	1 25	Page	24	of 65



TEAM STUDENT ACTIVITY

ACTIVITY: Review Order Processing and Roles

1.	Desc	cribe the process pharmacist order verification at the site.
2.	Is th	ere a pharmacist reviewing medication orders remotely? If so, describe the process.
2.	. Wha	t patient information can the pharmacist see when they are reviewing medication orders?
3.	. Desc	ribe how these drugs are dispensed from the pharmacy and what is on the label that prints: Unit Dose (packaged individually for one-time use)
		Multi Dose (packaged in multiple dose form e.g. inhaler, topical products)
		Intravenous (IV) syringe
		IV Bag
4.	How	does your site define a STAT order and how quickly does the drug need to reach the patient?

ACTIVITY: Review Order Processing and Roles

stora	ige, pres	cribing, transcription, dispensing, administration, and monitoring steps.
S t o r a g e		How does the pharmacy impact safety of storage of medications?
Press cribing		What does pharmacist do to impact prescribing of medications?
Transcribing		Under what circumstances are orders transcribed by the pharmacist (orders entered by pharmacists from paper via telephone, fax, delivery, or pneumatic tube)
V e r i f i c a t i o n		What elements of a medication order do the pharmacist review when verifying and checking medication orders?
D i s p e n s i n g		How do the pharmacist and technician influence the safety of order during dispensing?
Adm in is tr ati on		How does the pharmacist and technician staff influence safety of administration (e.g. medication administration record, or barcoded medications)?
M o n i t o r i n g		Describe the role of the pharmacist at your site related to monitoring (ability to review, and order patient labs)

Describe the medication use process in health-systems, including how pharmacy impacts the safety of

ACTIVITY: Accurate Dispensing of Medications-Workflow

Review Roles and Schedules Describe scheduling of pharmacists and technicians in terms of the roles and areas covered.

1. Who is responsible for s	. Who is responsible for scheduling the pharmacist and technician shifts?							
2. What happens if a pharmacist who is scheduled to work is unexpectedly unavailable?								
3. Who is responsible for scheduling the technicians, student pharmacists, and other personnel?								
4. What happens if a techr	nician who is scheduled to v	work is unexpectedly unav	ailable?					
•	y has a limit on the numbe e law influence this? □ Yes	•	ns, or students that can					
6. If so, explain these limit	s and how they are determ	ined?						
7. Discuss the schedule for	pharmacists and technicia	ns with your preceptor						
 # of pharmacist and 	technicians per shift, hours o	f the shift, roles the different	shifts cover					
Pharmacists	Day Shift	Evening Shift	Night Shift					
Technicians	Day Shift	Evening Shift	Night Shift					

ACTIVITY: Accurate Dispensing of Medications-Workflow

Describe the overall layout in the pharmacy and any suggestions for improvement.

Discuss the following with a <u>pharmacy technician or pharmacist manager</u> at your site for drug distribution.

- ☐ Layout and overall workflow safety and efficiency of the pharmacy
 - Medication storage/technology: unit dose, multi-dose liquids, solutions, suspensions, sterile products, non-formulary, patient's own, otic / ophthalmic, topical, controlled, and expired medications, automated dispensing devices, pneumatic tube etc.
 - Workflow areas: Non-sterile preparation, sterile preparation, purchasing, computers staff: pharmacist, technicians, buyer, administration etc.
 - o Administrative: fire extinguishers, alarms, entrances and exits. Etc.

ACTIVITY: Accurate Dispensing of Medications-Workflow

Review the contents of a crash cart.
Identify three commonly used medications the crash cart and identify the indications below.
1.
2.
3.
Did you observe a rapid response or code at your site?
What medications were administered?
Describe role of the pharmacist in a code situation at your site.

ACTIVITY: Review Practice Manager Oversight

Discuss the following supporting tasks with a pharmacy technician and or pharmacist manager. Ask them specifically to describe their role in and to share any examples of how they oversee or are involved in each of following supporting tasks.

		Example Supporting Task	Discussed with preceptor
	DOMAIN		
		Implement pharmacy policies and procedures.	
P R		Supervise and coordinate the activities of pharmacy technicians and other support staff.	
A C T	Oversee the	Assist in training pharmacy technicians and other support staff.	
C E M A	pharmacy operations for	Assist in the evaluation of pharmacy technicians and other support staff.	
N A G E R	an assigned	Identify pharmacy service problems and/or medication safety issues.	
D O M	work shift.	Maintain the pharmacy inventory.	
A I N		Assist in the management of a pharmacy budget.	
		•Interpret pharmacy quality and productivity indicators using continuous improvement quality techniques.	

[•]Adapted from: Pharmacists/ Patient Care Process. May 29, 2014 Joint Commission of Pharmacy Practitioners https://icpp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf Accessed July 2024.

[•]Adapted from: Core Entrustable Professional Activities for New Pharmacy Graduates https://www.aacp.org/sites/default/files/2017-11/coreEntrustableProfessionalActivitiesforNewPharmacyGraduates.pdf Accessed July 2024.

Medication Use Systems Management ACTIVITY: Review Purchasing, Inventory and Product Acquisition (NON-controlled medications).

Discuss the following with your preceptor or designee and ask that your preceptor initial each item once complete. You do not need to record the answers or responses.

	Discussed with Preceptor
How many wholesalers does your pharmacy use?	
How are orders communicated to the wholesaler(s)?	
When do shipments arrive?	
Who is responsible for managing the shipment and adding products to the current inventory?	
How is the quantity of medication needing to be ordered determined?	
Describe the means by which controlled substances and legend drugs are shipped.	
How are temperature-sensitive medications managed?	
What documents arrive with the shipment and what is done with these?	
How is the computer updated when a new product arrives?	
How does the pharmacy keep track of expiration dates of medications?	
Who monitors the drug budget and expenses?	
What happens if there is not enough medication in stock to fill an order?	
What is the pharmacy's process for returning a medication to stock?	
If a medication is made by multiple manufacturers, how does your pharmacy decide which one to use?	
Are medications ever dispensed to patients in their original containers? ☐ Yes ☐ No If so, what criteria must be met on the labels of the products?	
Does your pharmacy ever lend or borrow medications from other sites? ☐ Yes ☐ No If so, what is the process for doing so?	
What is the procedure for returning medications to the manufacturer?	
What is the procedure for dispensing, and storing patient's own medications	

ACTIVITY: Review Purchasing, Inventory and Product Acquisition (CONTROLLED substances)

Discuss the following with the pharmacy buyer and or preceptor and ask that your preceptor initial each item once complete. You do not need to record the answers or responses.

		Discussed with		
Controlled Substances				
	Review with your preceptor the purpose and components of the DEA 222 form.			
	Who is permitted to complete this form?			
	How is this form completed and what if a mistake is made?			
	What is the procedure when a CII medication is borrowed?			
	Who receives and puts controlled substances away when delivered			
	What is the procedure followed if a CII medication is not received in the order?			
	How does the pharmacy dispose of expired CII products?			
	How does your pharmacy take an inventory of CII products?			
	How is this inventory documented?			
	What steps are taken if the count is not what was expected?			
	How often does your pharmacy take an inventory of CIII-V products?			
	How is this inventory documented for controlled substances?			

ACTIVITY: Define Purchasing, Inventory and Product Acquisition (Drug Shortages)-

Give examples of three medication shortages at your site and identify what alternative medications should be supplied. Provide <u>references</u> for your recommendations.

- Discuss any clinical decision-making that must be made for a particular shortage.
- Discuss how the shortage is communicated to staff outside the pharmacy.

Describe Drug Shortage Define drug brand and manufacturer on shortage and define why it is on shortage	Define Appropriate Formulary Alternatives Indication What is the drug used for? Define what the appropriate clinical alternatives on the formulary?	Define Appropriate Drug Information Resources: Appropriate Drug Reference Guide 1. ALWAYS check for hospital guideline first 2. Next, tertiary reference (e.g. Micromedex, Clinical Pharmacology, if not found #1) 3. Then check national expert guidelines (e.g. Infectious Diseases Society of America, if not found #2) 4. Lastly check Up-to-date, Pub Med or Ovid for a reference (if not found #1-3)
Drug Shortage 1 Drug Brand/Generic		10unu #1-3)
Manufacturer		
Reason		
Drug Shortage 2: Drug Brand/Generic		
Manufacturer		
Reason		

ACTIVITY: Identify Information Technology (Informatics)

1. Discuss with the preceptor the technology available at the site and basic functionality.

√ all that apply	Technology	Product Name and Basic Functionality
•	Automated Dispensing Machines	
•	Automated Intravenous Admixture Device (Compounders)	
•	Automated Medication Dispensing Cabinets	
•	Bedside-Barcoding	
•	Medication Storage Carousel	
•	Clinical Decision Support	
•	Computer Generated Medication Administration Record	
•	Computerized Prescriber Order Entry Systems	
•	Critical Pathways/ Order sets/ Protocols	
•	Inventory Control Applications	
•	Medication Administration Devices	
•	Unit Dose Packaging Machines	
•	Pharmacy Information Systems	
•	Pharmacy Intranet	
•	Point of Care Bar-Code Medication Administration	
•	Report Writing	
•	Smart Pumps with Drug Libraries	
•	Unit Dose Robotics Systems	
•	Integrated surveillance applications for the reporting of medication incidents / adverse events	

3. Describe opportunities for informatics management that exist for pharmacists or technicians within the pharmacy?

Medication Use Systems Management

ACTIVITY: Identify Medication Safety Measures.

1. Discuss the following with your preceptor and describe the site's use of the following best practices.

Best Practice	Describe Pharmacy's Process
□Tall Man Lettering	How does pharmacy make use of this in the system? If so, how?
☐ High-Alert Medications	Name 4 high-alert medications at your site?
□Concentrated electrolytes	What is "concentrated potassium chloride" and how does pharmacy prevent dispensing of concentrated electrolytes on the decentral areas?
□ Dangerous abbreviations	Name two dangerous abbreviations defined by your site
	How does pharmacy educate and prevent the use of dangerous abbreviations?
□Leading decimals/trailing	How does the system prevent the use of leading decimals/trailing zeroes?
☐Leading decimals/trailing zeroes	How does the system prevent the use of leading decimals/trailing zeroes?

~	- 1	10ccrino V	ทกา	n tna	nnarmacu	COULCTE SHO	managac	madication	arrar and	241/21	ם סי	iriio r	CARCTIANC	,
J	. ь	JESCHIDE V	VI IU I	II LIIC	viiaiiiiacv	collects and	ı ıııaııaecs	IIICUICALIOII	citoi and	auvei	ac u	II UE I	Cachons:	
_														

4. If a medication error or adverse drug reaction occurs,	, what steps are taken to document the error or
reaction internally?	

5. How do pharmacists and technicians receive information about medication errors and adverse
reactions occurring within the hospital, error-prone situations, errors occurring in other pharmacies, and
strategies to prevent such errors?

6. Under what circumstance would the pharmacist report an error or adverse reaction to FD	λ
MedWatch or ISMP? Has anyone reported one?	
□ Yes □ No	

- 7. If so, describe the error and what was reported:
- 8. Report an adverse drug event and medication error using the site's reporting system and describe the underlying system-associated causes here.

For additional information, tools, and resources pertaining to medication safety in pharmacies, refer to the Institute for Safe Medicine Practices (ISMP) at: https://home.ecri.org/pages/ismp Accessed July 2024.

INDIVIDUAL ACTIVITY: Complete the following calculations.

- 1. How many grams <u>each</u> of dextrose and sodium chloride are used to prepare a 500ml bag of D5½NS for intravenous infusion?
- 2. Calculate the milliequivalents of sodium and millimoles of dextrose in the above solution.
- 3. A pharmacist prepared a liter of a 5% dextrose solution in sterile water for injection using a dextrose injection, 500mg/ml. How many milliliters of the injection were required?
- 4. Calculate the daily infusion volume of D5W to be administered to a neonate weighing 4 lb., on the basis of 50 mL/kg/day. The final answer should be expressed in mL/day.
- 5. Gentamicin sulfate, 5mg/kg, is prescribed for a 2kg neonate.
 - a. Calculate the dose of the drug.
 - b. When the drug is placed in a 50ml IV bag, what is the flow rate, in mL/min, if the infusion is to run for 30 minutes.
- 6. A medication order for a patient weighing 180 lb calls for 5mg of Amphotericin B lipid complex (ABLC) per kilogram of body weight to be added to 250ml of 5% dextrose injection. If the ABLC is to be obtained from a vial that contains 100mg/20ml, how many milliliters should be added to the dextrose injection?
- 7. An emergency syringe contains lidocaine, 100mg/5ml. How many milliliters should be used in preparing 500mL of an infusion to contain 4 mg/mL of lidocaine in D5W?
- 8. If 250mg of dopamine in 250 mL D5W is administered to a 190 lb patient at a rate of 10mL/hr, how many mcg/kg/min is the patient receiving?
- 9. A prescriber orders a 2-gram vial of ceftriaxone to be added to 500ml of D5W. If the administration rate is 100 mL/hr, how many milligrams of ceftriaxone will the patient receive per minute?
- 10. A patient weighing 160lb requires amikacin, and the prescription calls for 7.5mg of amikacin sulfate per kilogram of body weight to be added to 500ml of D5W. How many milliliters of an amikacin sulfate injection containing 500mg/ml should be used in preparing the infusion?

Problem Solving

ACTIVITY: Provide an example of a time calculations were needed to be performed.
--

ACTIVITY: Participate in / observe sterile Intravenous (IV) compounding

The following questions should be answered by students AFTER they receive aseptic technique training at the College.

- 1. What training does the site provide to prepare staff for sterile compounding?
- 2. What type of laminar flow hood(s) does the site have for preparing sterile products (# and type horizontal/vertical)?
- 3. List five of the most commonly intravenous medications compounded by your site?
- 4. What is an IV piggy back medication?

Problem Solving

5. To what extent has the pharmacy been able to implement the recommendations in USP 797 the standards? (Are they fully compliant- ask the manager or pharmacist?)
6. How are sterile medications prepared in batches at your site (syringes versus large volumes)?
7. Describe the return policy/ expiration dating and handling of IV syringes, and solutions?
8. How are latex free orders identified and handled?
9. What special precautions are taken for preparing chemotherapy?

Problem Solving

ACTIVITY: Participate in/ observe sterile intravenous (IV) compounding.

1. Observe one medication order for an IV medication prepared aseptically in pharmacy from order review, labeling, dispensing, delivery and administration.

2. Copy information from order below and review for appropriateness.

Information on the Order		What references do you check?			
Drug		Appropriate Drug Reference Guide			
		1. ALWAYS check for hospital guideline first			
		2. Trissels is a standard IV drug reference			
Dose Fred	Juency Due	3. Next, tertiary reference (e.g. Micromedex,			
		Clinical Pharmacology, if not found #1)			
Concentration	Volume	 Then check national expert guidelines (e.g. Infectious Diseases Society of America, if not found #2) 			
Expiration	Special Instructions	5. Lastly check Up-to-date, Pub Med or Ovid for a reference (if not found #1-3)			
Consider: □ indication□drug-drug interactions □incompatibilities		drug interactions □incompatibilities			

Concentration	Volume	Clinical Pharmacology, if not found #1) 4. Then check national expert guidelines (e.g. Infectious Diseases Society of America, if not
Expiration	Special Instructions	found #2) 5. Lastly check Up-to-date, Pub Med or Ovid for a reference (if not found #1-3)
Consider: □ indication	ondrug-dru	ug interactions □incompatibilities
3. Based on the re	view, is the order appropriate fo	or the patient?
□ Yes	1	No
4. If changes were n	ecessary, describe them here:	
5. What calculations	were needed to compound the	e medication?
C. Dagawiha tha mua	adura far accutically accused	line the care dust.
6. Describe the proc	edure for aseptically compound	ling the product:
7 How did this proc	edure differ from instruction re	caived in Skills Lah?
7. How did tills proc	edure differ from mistraction re-	ceived in Skiils Lab:
8. Are there any con	cerns about shaking the produc	t (can this product be tubed safely)?
9. Observe a nurse a procedure.	administering the IV medication.	. Describe the patient identifiers the RN checks and

Learner

ACTIVITY: Search for appropriate drug information resources.

- □ Pharmacists must know the proper resources to use when locating appropriate drug information.
- □ Discuss the following with your preceptor and WRITE the NUMBER of the Drug Reference Description matching the Appropriate Drug Reference Choice.

#	Drug Reference Description	#	Appropriate Drug Reference Choice
1	ALWAYS check this reference first in a hospital to ensure the answer is site-specific.		National expert guidelines (e.g. Infectious Diseases Society of America)
2	Next, check this drug reference which has answers in a database look-up.		Preceptor
3	Then check this reference for the most appropriate recommendation from a nationally recognized organization.		Rosalind Franklin University Boxer Librarian
4	Finally if you <i>still</i> cannot find the answer, you may look here for a specific study.		Primary drug reference (Pub Med, Ovid)
5	Only after checking all of the above, you may consult this resource.		Hospital-specific guideline
6	And if <u>all</u> of the above do not give you the answer, you may always call this reference for assistance.		e.g. Micromedex®, Clinical Pharmacology, Lexicomp ^{Inc} , Facts & Comparisons, etc.

Learner

□ ACTIVITY: Review Site-specific drug use guidelines, protocols important drug-use policies are at the site. If permitted, print a copy of the list for your reference to use on the rotation.

Reference	Drug Reference Used at Hospital
What is the most common tertiary database used at the site?	
What reference does a pharmacist use to look up when they have a tablet and need to identify?	
What reference does the pharmacist use as the 'gold standard' identify incompatibilities or published concentration IV information?	
What reference does the pharmacist use to renally dose the patient?	
What reference(s) allow you to pull up disease and drug information in English and in Spanish	
What reference(s) does the pharmacist use during a code?	
What reference does a pharmacist use when identifying latex allergies?	
What reference(s) allows you to pull up a full drug class review with comparison tables reviewing the drug class?	
What reference does a pharmacist use if the patient has a gluten allergy?	
What reference is the 'gold standard' for looking up teratogenicity and lactation?	
What reference(s) has quick calculators to for creatinine clearance,	
What reference(s) allows a pharmacist to easily identify the manufacturer of the medication?	
What reference(s) allow a pharmacist to find the average wholesale price of a medication?	
What reference(s) allow you to pull up side-by-side drug monograph section comparisons?	
What reference do many poison centers use for toxicology information?	
What reference(s) does the pharmacist use for recipes for <u>non-sterile</u> compounding?	
What hospital-specific reference does the pharmacist use to identify whether something is a standard concentration in the hospital for a particular medication (e.g. epinephrine drip is 1mg/ml).	

	IPPE Health-System Pharmacy Workbook	
		Learner
What hospital-specific reference will show you the site-specific sensitivities to bacteria?		

Learner Information Master

ACTIVITY: Retrieve and analyze scientific literature to answer a drug information question. **Drug Information Request Form** Type text here Requester Information Email: Type text here Type text here AM/PM Date Received: Time Received: How Received: MD/DO MD/DO Phone Urgent DDS DDS Voice Mail High priority RN RN Email Routine Pharmacist Pharmacist Low priority In person PA/NP PA/NP Referred by: Other: Other: General public: Original Question/Request Type text here Classification of Request Drug standards/legal/ Administration (route/methods) Pharmacokinetics regulatory Adverse effects/intolerances Physiochemical properties Drug use in special Allergy/cross reactivity Poisoning/toxicology populations Alternative medicine Pregnancy/lactation/ Biotechnology/genetherapy Pharmacokin etics teratogenicity/fertility Pharmacology Product availability/status Clinical nutrition/ metabolic support Pharmacodynamics Product identification Compatibility/storage/ stability Excipients/compounding/ Contraindications/precautions Product information formulations Cost/ pharmacoeconomics Study design/protocol Investigational products Dosing development Drug delivery/devices Lab test interferences Other: Monitoring parameters Drug interactions Lab test interferences Drug of choice/therapeutic alternatives/therapeuticuse Monitoring parameters Nonprescription products Patient education Response (referenced) Type text here References (numbered) Type text here Tracking/Follow-Up Type text here Type text here Type text here ☐ Literature Provided ☐ Verbal Response □ Written Response Outcome/Follow Up Type text here

Learner

Drug Information Request Form							
Preceptor Assessment of Drug Inform	nation Re	equest:					
Student Name			Evaluator Name				
Requestor	Yes	No	Comments				
Did the student obtain complete demographic information for the person asking the question?	1	0	Type text here				
Background information:							
Thorough	1	0	Type text here				
Appropriate to the request	1	0	Type text here				
Search Strategy References							
Appropriate references used	1	0	Type text here				
Search was sufficiently comprehensive	1	0	Type text here				
Is search strategy clearly documented	1	0	Type text here				
Response was							
Appropriate for situation	1	0	Type text here				
Sufficient to answer the question	1	0	Type text here				
Provided in a timely manner	1	0	Type text here				
Integrated with available patient data	1	0	Type text here				
Supported by appropriate materials	1	0	Type text here				
If complete response could not be provided within timeframe requested, was the requestor advised as to the status of the rel uest and the anticipated delivery of the final response?	1	0	Type text here				
Final GRADE	#/12		L Comments pe text here				

Educator

ACTIVITY: Counsel patient(s) on a medication. (Document ONE encounter below) Patient Counseling Assessment Form

Patient Counseling Assessment Form
Student Name: Type text here Date:
Evaluator Name:
Evaluator Role: Role Preceptor Faculty Student Resident
Medication dispensed:
CONSULTATION:
Which of the following did the student pharmacist discuss with the patient? Check all that apply. Product/ingredient name and intended use Directions for use Adverse effects Drug interactions Duration of use Special precautions Proper storage Self-monitoring of effectiveness Expectations of treatment/When to contact health care provider Nonpharmacologic treatment options
Consultation Assessment (check one): How well was the medication information communicated to the patient? Inadequate Needs Improvement Satisfactory Excellent
ASSESSMENT OF INTERACTION AND COMMUNICATION SKILLS: Check all that apply.
Introduces self
Verifies patient and correct prescription
Maintained eye contact with the patient
Asked open-ended questions when appropriate Clearly communicated information to patient
Used terminology appropriate to the patient's level of understanding
All important counseling points and key messages were covered
Seemed friendly and empathetic Demonstrated an organized approach
Gave patient an opportunity to ask questions
Adequately assessed patient understanding
Communication Skills (check one): Not acceptable Acceptable (Less than 5 checked items) (5-10 checked items) (All 11 items checked)
Feedback for the Student Pharmacist:

Patient-Centered Care
ACTIVITY: Discuss / present a patient with a pharmacist.
Patient Case Presentation Guideline Type text here
Student Name: Date:
Evaluator Name: Type text here
Evaluates Name.
Evaluator Role: Role Preceptor Faculty Student Resident
Use the following form to provide structure to the student in obtaining necessary information from the patient's medical chart. Student may practice discussing a patient with a resident, pharmacist, and/or health care provider and give feedback to student. Note- A formal presentation not required, e.g. no Power Point or formal write-up): Recommended components for student to gather and write: 1 Patient Discussion Chief complaint (why patient came to the hospital) History of present illness Past medical history Medications on admission Drug allergies Family/social history (if relevant) Physical exam and review of systems Problem list (assessment and plan) Hospital Course Baseline labs and pertinent labs throughout hospital course (labs which should be monitored based on patient's disease state(s) and medications) Review hospital course (summarize days on which important therapeutic interventions were made, changes in patient status occurred) Include patient's drug therapy throughout their course and be able to discuss side Effects, drug interactions, and pertinent labs associated with this therapy.
2. Review and discuss disease state related to patient Epidemiology of the disease Etiology of the disease Pathophysiology of the disease Clinical presentation Diagnosis Treatment guidelines and alternatives Discussion of treatment options, including drugs of choice, alternatives, monitoring, and side effects. 3. Review and discuss patient's therapy and monitoring Comparison with "classic patient" Critique of drug therapy Discussion of efficacy parameters Monitoring of adverse effects

Monitoring of adverse effects
All references should follow the Uniform Requirements as described in New England Journal of Medicine (N Engl J Med 1997;336:309-315).

Student Name: Type	e text here	ent Case Pre	senta Date:	Type text here	Form			
Evaluator: Type text i	here			Record Time Press	entation	Begins:	Type text here	
Ratings descriptors for patient care plans and follow-up questions: 5 = Student demonstrated excellent skills in this area; treatment decisions were clinically sound and supported by literature. 4 = Student demonstrated good skills in this area, with only minor changes needed to be considered excellent. 3 = Student demonstrated average skills in this area, with at least one critical aspect inaccurate or omitted. 2 = Student demonstrated below average skills in this area, with several critical elements inaccurate or omitted. 1 = Student needs significant improvement in this area, as several critical elements were inaccurate or omitted; important and clear evidence of potential patient harm exists if the plan was adopted in an actual patient Patient Presentation History of present illness (HPI)/problem presented in a clear and concise manner. Relevant patient data								
were provided. 0 = HPIno Relevant patient history (i 0 = omitted, 1 = incomplet	.e., medical, family,			z = compiete HFT			0 1 2	
Current medications (pres patterns. 0 = omitted, 1 = c	incomplete, 2 = com	plete				اِ	0 1 2	
Current physical and labor omitted, 1 = incomplete 2		pplicable because	e of lack	of case lab data, give			0 1 2	
			State D	iscussion				
Disease state discussion re 0 = disease state discussion complete disease state dis	n n ot present, 1 = in		ion of di	isease state discussion), 2 =		0 1 2	
Disease state discussion le 0 = disease state discussion long or abbreviated, 2 = di	n dominates presen	tation or is exclud	ded, 1 =		on is ove	erly	0 1 2	
				Patient Care Plan	1			
Student appropriately ider	ntified and <u>prioritize</u>	d medication-rel	ated iss	ues (e.g., drug-related	l proble	ms).	1 2 3 4 5	
affect patient compliance Student recommendations	Student discussed options for altering patient care plan, including risk-benefit analysis, factors that may affect patient compliance factors, patient preference, and social history. Student recommendations for alterations in drug therapy were appropriate.					may	1 2 3 4 5	
Student recommendation: Student recommendation:		ed and supported	d with a	ppropriate primary lit	erature		1 2 3 4 5	
		-	onsand.	Answers				
Student provided clear an							1 2 3 4 5	
Student appeared to be <u>c</u>	<u>completely</u> familiar v	vith primary litera	ature re	garding patient proble	ems.		1 2 3 4 5	
		Pr	esentat	ion Style				
Recommendations were p 0 = below average 1 = ave	rage, 2 = good						0 1 2	
Student displayed good ey			ıded sta	ring at the computer	screen o	or	0 1 2	
slides. 0 = b elow average Student avoided distractin			= ачеға	ge 2 = good			0 1 2	
Student displayed the app below average, 1 = averag		ormality, was poi	is e d, and	d gave a polished pres	entatio		0 1 2	
Record Time Presentation	Type text here						Type text here Above Boxes:	
otal Presentation Time:						Cirde	the one correct value below:	
14-16 minutes	Type text here Type text here						Zero points deducted	
<14 or >16 minutes	- The text here						One point deducted	
Facilitator comments (suggi done well). Please be specif Type text here	•	ment along with	aspects	of the case that were	e	Above t 50-55 g 44-49 g 39-43 p 33-38 p <33 p	cation Total: cotal minus time deduction coints: A coints: B coints: C coints: D coints: F	

Pharmacists' Patient Care Process (PCPP) and Core Entrustable Professional Activities (EPA) Exercise

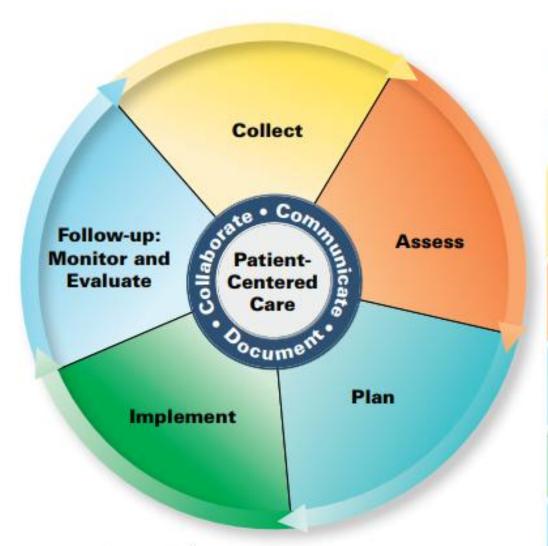


Figure 1: Pharmacists' patient care process

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.

Visit 10 Patient-Centered Care

ACTIVITY: For each of the following domains, student and preceptor will assess the trust level for each task.

	DOMAIN	Example Supporting Task	Performed	Observed
		Collect a medical history from a patient or		
COLLECT		caregiver. *Collect a medication history from a patient or caregiver.		
	Collect information to identify a patient's medication-related	•Discuss a patient's experience with medication.		
	problems and health-related needs.	Determine a patient's medication adherence.		
		•Use health records to determine a patient's health- related needs relevant to setting of care and the purpose of the encounter.		
		Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral.		
ASSESS	Assess/analyze information to determine the effects of medication therapy, identify medication-related problems, and prioritize health-related needs.	Measure an adult patient's vital signs and interpret the results (e.g., body temperature, pulse rate, respiration rate, and blood pressure). Interpret laboratory test results.		
		•Identify drug interactions.		
		•Perform a comprehensive medication review for a patient.		
		•Assess a patient's health literacy using a validated screening tool.		
		Compile a prioritized health-related problem list for a patient.		
		•Evaluate an existing drug therapy regimen.		
		•Follow an evidence-based disease management protocol.		
		Develop a treatment plan with a patient.		
	Establish patient-centered goals and create a care plan for a	Manage drug interactions.		
PLAN	patient in collaboration with the patient, caregiver(s), and other health professionals that is evidence-based and cost-effective.	•Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.		
		•Determine the appropriate time interval(s) to collect monitoring data.		
		Create a patient-specific education plan.		
		Write a note that documents the findings, recommendations, and plan from a patient encounter. Educate a patient regarding the appropriate use of		
IMPLEME NT	Implement a care plan in collaboration with the patient, caregivers, and other health professionals.	a new medication, device to administer a medication, or self-monitoring test.		
		•Educate a patient on the use of medication adherence aids.		
		•Assist a patient with a behavior change (e.g., use shared decision making and motivational strategies).		

	IPPE Health-System Pharmacy Workbook						
		*Collect monitoring data at the appropriate time interval(s).					
FOLLOW- UP MONITOR		Evaluate the selected monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.					
& EVALUAT	Follow-up and monitor a care plan	Recommend modifications or adjustments to an existing medication therapy regimen based on a patient's response.					
		Present a patient case to a colleague during a handoff or transition of care.					
INTERPR OFESSIO NAL TEAM	Collaborate as a member of an interprofessional team	Explain to a patient, caregiver, or professional colleague each team member's role and responsibilities. Communicate a patient's medication-related problem(s) to another health professional. Use setting appropriate communication skills when interacting with others Use consensus building strategies to develop a shared plan of action.					
	Identify patients at risk for prevalent diseases in a population	Perform a screening assessment to identify patients at risk for prevalent diseases in a population (e.g., hypertension, diabetes, depression).					
	Minimize adverse drug events and medication errors.	Assist in the identification of underlying system- associated causes of errors. Report adverse drug events and medication errors to stakeholders.					
POPULA	Maximize the appropriate use of medications in a population.	Perform a medication use evaluation. Apply cost-benefit, formulary, and/or epidemiology principles to medication related decisions.					
TION HEALTH	Analyze the protective and detrimental determinants of health to promote social justice.	Identify systemically at risk populations and provide patient- and population-centered care that is equitable Perform an educational outreach intervention focused on disease prevention and health promotion.					
	Ensure that patients have been immunized against vaccine preventable diseases.	Determine whether a patient is eligible for and has received CDC-recommended immunizations. Administer and document CDC-recommended immunizations to an adult patient. Perform basic life support.					
INFORMA TION MASTER	Educate patients and professional colleagues regarding the appropriate use of medications.	Lead a discussion regarding a recently published research manuscript and its application to patient care. Develop and deliver a brief (less than 1 hour) educational program regarding medication therapy to health professional(s) or lay audience.					
	Use evidence-based information to advance patient care.	Retrieve and analyze scientific literature to make a patient-specific recommendation. Retrieve and analyze scientific literature to answer a drug information question.					
PRACTIC E MANGER	Oversee the pharmacy operations for an assigned work shift.	Implement pharmacy policies and procedures. Supervise and coordinate the activities of pharmacy technicians and other support staff. Assist in training pharmacy technicians and other support staff. Assist in the evaluation of pharmacy technicians and other support staff. Identify pharmacy service problems and/or medication safety issues. Maintain the pharmacy inventory. Assist in the management of a pharmacy budget.					

		IPPE Health-System Pharmacy Workbook
		Interpret pharmacy quality and productivity indicators using continuous improvement quality techniques. Assist in the preparation for regulatory visits and inspections.
	Fulfill a medication order.	Enter patient-specific information into an electronic health or pharmacy record system. Prepare commonly prescribed medications that require basic sterile compounding or basic non-sterile compounding prior to patient use. Determine if a medication is contraindicated for a patient. Identify and manage drug interactions. Determine the patient co-pay or price for a prescription. Ensure that formulary preferred medications are used when clinically appropriate. Obtain authorization for a non-preferred medication when clinically appropriate. Assist a patient to acquire medication(s) through support programs.
SELF- DEVELO PER	Create a written plan for continuous professional development.	Create and update curriculum vitae, resume, and/or professional portfolio. Perform a self-evaluation to identify professional strengths and weaknesses.

•Adapted from: Pharmacists/ Patient Care Process. May 29, 2014 Joint Commission of Pharmacy Practitioners https://icpp.net/wp-content/uploads/2016/03/Patient/CareProcess-with-supporting-organizations.pdf Accessed July 2020 •Adapted from: Core Entrustable Professional Activities for New Pharmacy Graduates https://www.aacp.org/sites/default/files/2017-10/Appendix1CoreEntrustableProfessionalActivities Accessed July 2020.

ACTIVITY: Review a patient assessment.

SOAP Note Assessment Form							
Student Name	Evaluator Name		Date				
Overall Assessment:		Yes	No	N/A			
Note is dated. – 1 point		YES	NO	N/A			
Author of note identified. – 1 point		YES	NO	N/A			
Chief complaint or reason for encounter listed. — 1 po	YES	NO	N/A				
PMH, complete medication list, AND basic demographics included (ALL must be present). – 1 point				N/A			
Information in Subjective belongs in the subjective section 1 point				N/A			
Information in Objective belongs in the objective sec	YES	NO	N/A				
Information in Assessment belongs in the assessmen	YES	NO	N/A				
Information in Plan and Follow-Up belongs in the pla	YES	NO	N/A				
Information presented is restricted to what is relevan	YES	NO	N/A				
point							
	Total Points (1 point for each "Yes" or "N/A")	YES	NO	N/A			

Disease or Issue (Drug Therapy Problem) Addressed:	Yes	No	N/A
Subjective section presents all supportive information relevant to this disease or issue -1 point	YES	NO	N/A
Objective section presents all supportive information relevant to this disease or issue -1 point	YES	NO	N/A
Assessment is based on the subjective and objective information – 1 point	YES	NO	N/A
Assessment contains sufficient detail to support the hypothesis – 1 point	YES	NO	N/A
Assessment is therapeutically accurate – 3 points	YES	NO	N/A
Plan is therapeutically accurate – 3 points	YES	NO	N/A
Follow-up is therapeutically accurate – 3 points	YES	NO	N/A
Plan and follow-up completely address the issue or problem — 1 point	YES	NO	N/A
Total Points (full points earned for each "Yes" or "N/A")	YES	NO	N/A

Disease or Issue (Drug Therapy Problem) Addressed:	Yes	No	N/A
Subjective section presents all supportive information relevant to this disease or issue – 1 point	YES	NO	N/A
Objective section presents all supportive information relevant to this disease or issue -1 point	YES	NO	N/A
Assessment is based on the subjective and objective information – 1 point	YES	NO	N/A
Assessment contains sufficient detail to support the hypothesis – 1 point	YES	NO	N/A
Assessment is therapeutically accurate – 3 points	YES	NO	N/A
Plan is therapeutically accurate – 3 points	YES	NO	N/A
Follow-up is therapeutically accurate – 3 points	YES	NO	N/A
Plan and follow-up completely address the issue or problem − 1 point	YES	NO	N/A
Total Points (full points earned for each "Yes" or "N/A")	YES	NO	N/A

Disease or Issue (Drug Therapy Problem) Addressed:	Ves	No	N/A
Subjective section presents all supportive information relevant to this disease or issue -1 point	YES	NO	N/A
Objective section presents all supportive information relevant to this disease or issue – 1 point	YES	NO	N/A
Assessment is based on the subjective and objective information – 1 point	YES	NO	N/A
Assessment contains sufficient detail to support the hypothesis – 1 point	YES	NO	N/A
Assessment is therapeutically accurate – 3 points	YES	NO	N/A
Plan is the rapeutically accurate – 3 points	YES	NO	N/A
Follow-up is therapeutically accurate – 3 points	YES	NO	N/A
Plan and follow-up completely address the issue or problem – 1 point	YES	NO	N/A
Total Points (full points earned for each "Yes" or "N/A")	YES	NO	N/A

Comments:

Total Points Earned/Total Points Available: ________51___

Adapted from: Fauel MA, Starry MJ, Rekt.I.C. MHB-Foors SOAP Note Wirting: In dependent Video Actumy — Hyperthysiyce idem to an disort Actue Learning Exercises. In the American Pharmackt Association Pharmacy Library. The Uniterty of Words along or Pharmacy, Department of Pharmacy is a control of Pharmacy Library. The Uniterty of Wordship Uniterty Start Start

Medication History & Reconciliation

ACTIVITY: Categorize pharmacist perception of medication history, medication reconciliation and patient counseling

Discuss with multiple pharmacists the perceptions of who is primarily responsible in your site for conducting the following tasks.

Summarize the perception you gather from pharmacists below and share with pharmacy preceptor.

Patient Interaction	Simple Definition	Prescriber	Pharmacist	Student	Technician	Nurse	Note any exceptions /additions
Medication History	Obtaining past medications the patient takes prior to admission						
Rank at your site who performs the most to the least (1=most, through 5=least, or n/a=not applicable) 2							
Medication Reconciliation	Comparing the list of medications the patient came in on to what is ordered						
Rank at your site who performs the most to the least (1=most, through 5=least, or n/a=not applicable) 2							
Patient Counseling	Counseling patients about the medications they receive						
Rank at your site who performs the most to the least (1=most, through 5=least, or n/a=not applicable)?							

Medication History & Reconciliation

ACTIVITY: Perform and observe medication history and medication reconciliation (next page)

Work with your preceptor to identify a patient with 5 or fewer medications to obtain a medication history and medication reconciliation.

form on the next page. Use site-specific form if applicable. Take medication history while being

Before taking history from patient, review assessment points below and the medication reconciliation supervised by your preceptor. After the leaving the patient room, complete the following assessment with your preceptor. Medication: **CONSULTATION:** Which of the following did the student pharmacist discuss with the patient? Check all that apply. **Consultation Assessment (check one):** How well was the medication history communicated to the patient? □ Excellent □ Inadequate □ Needs Improvement □ Satisfactory **ASSESSMENT OF INTERACTION AND COMMUNICATION SKILLS:** Check all that apply. **History Components:** □ Introduces self as a student ☐ Reminds patients to ask questions if they do not understand ☐ Asks patient to state both name and date of birth (both pieces) □ Asks what pharmacy the patient normally fills prescriptions at □ Verifies whether the patient has any medication allergies and related reactions ☐ Asks patient about each prescription medications the patient is taking including: □Name of medication, dose, route, frequency □Why patient takes medication (if they know) □~Time of day (morning, lunch, evening) and last dose received (for timing next dose) ☐ Asks if patient takes any of the following types of medications: injections received ~ every few months, inhalers (puffers), nasal sprays, drops for eyes or ears, creams, patches or lotions for skin or any samples from MD they forgot to mention. ☐ Asks if takes any medications that are over the counter □Asks if patient is taking any pain medications like (Tylenol, ibuprofen or Aleve) □Asks if patient is taking any vitamins or herbal supplements ☐ Asks if doctor changed any medications recently and why □Asks if patient stopped taking any medications recently and why □Asks if patient has any questions before leaving room and thanks them for their time **General Communication** ☐ Maintained eye contact with the patient ☐ Asked open-ended questions when appropriate □ Clearly communicated information to patient □ Used terminology appropriate to the patient's level of understanding ☐ All important counseling points and key messages were covered ☐ Seemed friendly and empathetic □ Demonstrated an organized approach ☐ Gave patient an opportunity to ask questions ☐ Adequately assessed patient understanding Communication Skills (check one): □ Not acceptable □ Acceptable □ Outstanding (10-15 checked items) (All 16 items checked) (Less than 10 checked items)

Feedback for the Student Pharmacist:

Medication History & Reconciliation

ACTIVITY: Perform and observe medication history and medication reconciliation (next page)

On the same patient on the previous page, use the following form (or site-specific form) to reconcile what the patient was taking at home and what was ordered by the prescriber.

Basic Patient Assessment Medication Reconciliation Assessment Form

Use the following form (or site-specific form) to provide feedback to student on how the student pharmacist reconciles what the patient was taking at home and what was ordered by the prescriber.

MEDICATION RECONCILIATION ORDER FORM List all patient medications prior to assessment. Include OTCs & alternative meds (herbals). (Alternative meds will not be continued on admission). Before an outpatient receives any medication as part of their test or procedure, list all of their current home medications looking for allergies. interactions, duplications, or other concerns. A complete reconciliation is required only if the patient is to be admitted to the hospital. DO NOT USE ABBREVIATIONS: .#, #.0, IU, MS, MgSO4, MSO4, QD, QOD, U Family Primary Care Physician Information Source: Patient Patient's Pharmacy(s Type text here Type text here MAR from Other, specify Check here if patient is not currently on any medication. Last Dose Physician Decision: Continue? Circle one Medication Name Dose Route Frequency Time Date Type text here Type text here Type text here Type text here Type text Υ N Type text here Type text here Type text here Type text here 2 Υ Type text here Type text here Type text here Type text here Ν Type text here Υ Type text here Ν Type text here Type text here Type text here Υ N 5 Type text here Type text Υ Ν Type text here Type text here Type text here Type text here Υ Ν Type text here Υ N 8 Type text here Type text here Type text here Type text Type text here Υ Type text here Type text here Type text here Type text here Υ N 10 Type text here Υ Type text here Type text here Type text here Type text here Ν Type text here Type text here N Type text here Type text here Υ Type text here Type text here Type text here Type text here On the lines below, enter orders for new medications that the patient isn't currently taking or changes to their current regimen. Type text here Type text here

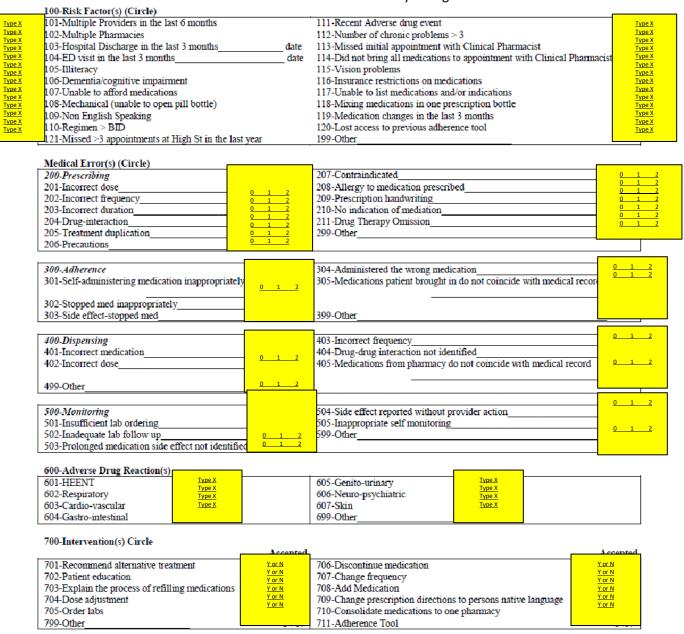
Adapted from the American Society of Health-System Pharmacists (ASHP) Medication Reconciliation Form Toolkit: https://www.ashp.org/Pharmacy-Technician-Roles-Toolkits/Medication-History-Technician-Toolkit/ Accessed August 2020

Communication Skills (check one):		
□ Not acceptable	□ Acceptable	☐ Outstanding
(Reconciled less than 60% of all meds) (R	econciled 60-90% of all meds)	(Reconciled 90-100 % of meds)
Feedback for the Student Pharmacist:		

Problem Solving - Patient Intervention

ACTIVITY: Document a patient intervention.

Ask your preceptor to help you identify one medication-related problem that requires a change to a medication order. Use the form below to describe the necessary change.



- 1. Mild (no potential for poor disease outcome)
- 2. Moderate (potential for poor disease outcome, but none observed)
- 3. Severe (poor disease outcome)

© 2005 Heelon/Meade All rights reserved.

Adapted from the American Society of Health-System Pharmacists (ASHP) Clinical Pharmacy Intervention Form: https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines/minimum-standard-ambulatory-care-pharmacy-practice.ashx

Health & Wellness / Patient Advocacy Population Health Promoter

ACTIVITY: Review and discuss health literacy.

- € Review the following website with your preceptor and discuss potential opportunities for increasing health literacy in hospitalized patients.
 http://www.ahrq.gov/professionals/quality-patient-safety/pharmhealthlit/tools.html#pillcard
 Accessed August 2021
- € Describe activities at the hospital that may involve the following health and wellness public health concerns. Discuss the possibility of pharmacy participation in those areas.
 - **€** DVT prophylaxis
 - € Diabetes management
 - € Heart Disease prevention
 - € Smoking cessation
 - **€** Immunizations
 - € Cancer prevention
 - € Medication adherence
 - € Suicide prevention

Professionalism

ACTIVITY: Describe legal and regulatory issues.

1	What annual	training is required	of pharmacist	s (e.g., HIPAA,	, OSHA Fire and	d Safety, pr	armacy-
S	pecific)?						

2.	How is	this	training	accomp	lished	and	document	ted?
----	--------	------	----------	--------	--------	-----	----------	------

Committees:

• Identify committees that pharmacists participate in at your site. List them here and indicate if they are internal to pharmacy, or interprofessional (include multiple professions)

ACTIVITY: Participate in/observe pharmacy Inspections.

- 1. Who is responsible to conduct unit inspections for medications?
- 2. Manager may assign student to assist staff in conducting the following audits as permitted:
 - € Decentralized pharmacy unit inspections
 - € Expiration date checking
 - € Refrigerator temperature log
 - € Hood cleaning inspection
- 3. Under what circumstances would one of the following organizations visit the hospital pharmacy?
 - a. State department of public health
 - b. Department of Financial and Professional Regulation
 - c. Drug Enforcement Agency

Communication

ACTIVITY: SOAP Note

In the Spring Quarter of your P1 year, you were asked to describe the sections of a SOAP note, and the key components of each section.

In the space provide below, describe each of the four components of a SOAP note, including the information you would expect to find in each section. Then, discuss the type of pharmacist documentation that is used at your site, and compare and contrast this with the format you were taught in class.

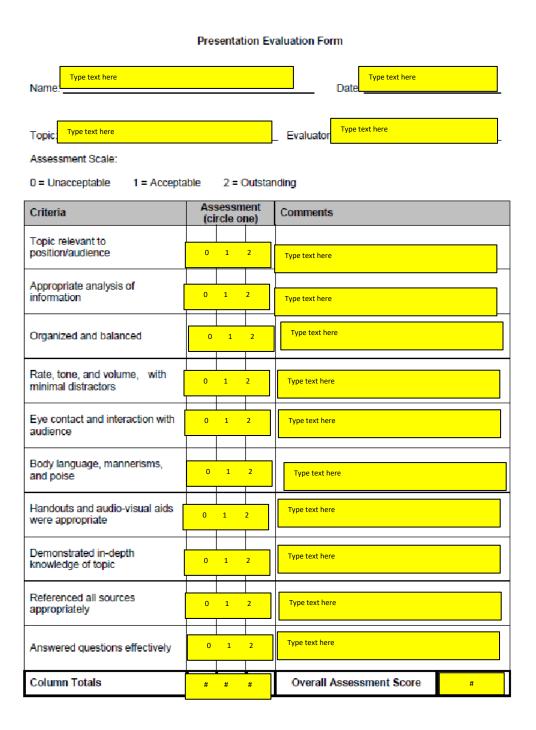
Category S	RFUMS perspective	Site perspective
S		
0		
U		
Α		
Р		

ACTIVITY: Discuss information at a level appropriate for the audience.

Communication

Presentation Evaluation Assessment Form

Use the following form to provide feedback to student on how the student pharmacist communicated information in a presentation (Optional)



Communication

ACTIVITY: For each of the following activities perform the supporting task and ask your preceptor to initial

		Example Supporting Task	Preceptor Initials
	DOMAIN		
I N F	Educate patients and professional	Lead a discussion regarding a recently published research article and its application to patient care.	-
O R M A T	colleagues regarding appropriate use of medications.	Develop and deliver a brief educational review regarding medication therapy to health professional(s) or lay audience.	□
I O N		Retrieve and analyze scientific literature to make a patient- specific recommendation.	
M A S T E R D O M A I N	Use evidence- based information to advance patient care.	Retrieve and analyze scientific literature to answer a drug information question (see Page 44)	

Interprofessional Collaboration

ACTIVITY:

- 1. For Interprofessional Team Member Domain below, discuss with your preceptor ways in which they participate in each supporting task.
- 2. Have PRECEPTOR sign if you performed or observed the related task during your rotation.

	DOMAIN	Example Supporting Task	Performed	Observed
ı		Contribute medication-related expertise to the team's work.		
N		Explain to a patient, caregiver, or professional colleague each team		
Т		member's role and responsibilities.		
E		Communicate a patient's medication-related problem(s) to another		
R		health professional.		
Р				
R		Use setting appropriate communication skills when interacting with		
0		others.		
F		Use consensus-building strategies to develop a shared plan of action.		
E				
S				
S				
0				
N				
A	Callabayata aa a			
L	Collaborate as a member of an			
т	interprofessional team.			
E	team.			
Α				
М				
М				
E				
М				
В				
E				
R				
D				
0				
М				
Α				
ı				
N				

Interprofessional Collaboration

3. Describe ONE example each in which you learned FROM, WITH, and ABOUT another health professional:
FROM another health care professional example:
WITH another health care professional example:
ABOUT another health care professional example: