

Faculty: Hyduk-Cardillo, Amy E.

**Site:**

ABC Medical Center

**Status:** Active

Required

**General Description:**

Adult Medicine I is a required four-week learning experience at ABC Medical Center. There are 200 adult medical/surgical beds across four different patient care units in the medical center. There are two internal medicine teaching teams each comprised of an attending physician, a PGY2 or PGY3 medical resident, a primary care nurse, and a clinical pharmacist. Pharmacists are decentralized from 0700-1800 daily on all four medical/surgical patient care units on weekdays and 0700-1500 on weekends. Pharmacy residents and other health professionals in training also participate when assigned to IM teaching teams.

Common disease states encountered in the adult medical/surgical units in which the resident will be expected to gain proficiency through direct patient care experience include, but are not limited to:

- \* Cardiovascular disorders--hypertension, heart failure, dyslipidemia, stroke
- \* Renal disorders--acute renal failure, end-stage renal disease, glomerulonephrosis
- \* Respiratory disorders--asthma, COPD
- \* Gastrointestinal disorders--GERD, PUD, hepatitis, pancreatitis, Crohn's disease, IBD
- \* Endocrine disorders--diabetes mellitus, thyroid disorders, osteoporosis
- \* Infectious diseases--pneumonia, UTI, sepsis, skin and soft tissue infections, bone and joint infections, endocarditis

**Role(s) of Pharmacist(s):**

The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include reconciling medications for all patients admitted to the team based off of the admission medication history, addressing formal consults for non-formulary medication requests, pharmacy clinical consults for therapeutic drug monitoring (e.g., pharmacokinetics, anticoagulation, parenteral nutrition, etc.), code response participation, and participating in multidisciplinary rounds. The pharmacist will also provide drug information and education to healthcare professionals as well as patients and caregivers.

**Expectations of Residents:**

The resident is expected to be on-site at minimum between 0700 and 1600 for the entire Adult Medicine I learning

experience. The resident may need to begin preparing earlier in the morning for patient care rounds based on resident efficiency and complexity of patients on the service. Multidisciplinary rounds begin ~8:30/9am daily Monday through Friday and last approximately 3-4 hours. The preceptor will round with the resident on the team for at least the first two weeks. The preceptor and resident will review patient care items, discussing patient issues

over lunch following rounds daily. The resident will spend the remainder of the afternoon following up on patient care issues, completing clinical pharmacy consults, and finishing patient care documentation. The resident and preceptor will complete topic discussions at least twice weekly in the afternoons also.

Topic discussions and primary literature will be used to help develop the resident's patient care skills for common disease states and also acquiring knowledge about diseases encountered less frequently on the service. The resident will be expected to review primary literature and evidence-based guidelines applicable for the disease states encountered during the learning experience, referencing them when making therapeutic recommendations.

The resident is expected to be on time for patient care rounds, meetings, and other learning activities.

The resident is expected to maintain an open line of communication with the preceptor regarding issues and concerns during the learning experience.

The resident is expected to carry their hospital-issued HIPAA-compliant voice and text-messaging smart badge while in the hospital at all times during the learning experience. This is the communication device that is to be used for all patient care discussions with providers, nurses, preceptors, and ancillary staff unless in-person communication is deemed more appropriate. The preceptor will provide guidance to the resident at the beginning of the learning experience the most appropriate communication methods based on various scenarios.

During the learning experience, the resident will focus on the objectives outlined below, performing the activities associated with each of the learning objectives. Achievement of the goals of the residency program is based on an assessment of the resident's performance in completing the activities associated with each learning objective.

The resident will gradually assume responsibility for all of the patients within the assigned unit. The resident must devise efficient strategies for completing the required activities within a limited timeframe.

### **Progression of Residents:**

Expected progression of resident responsibilities on this learning experience is outlined below. The length of time the preceptor spends in each of these phases is dependent on the resident abilities and timing of the learning experience during the residency year.

Day 1: Preceptor will review learning activities and expectations with the resident using this learning experience description and the calendar for the month.

Week 1: Resident to work-up and assume pharmaceutical care for approximately 1/3 of the assigned teaching team's patients and present to preceptor daily. Preceptor to attend and participate in team rounds daily with resident, modeling the role of pharmacist on the healthcare team. Preceptor to provide direct instruction and model the role of the pharmacist in the completion of pharmacy clinical consults (including a more in-depth review of the clinical pharmacy protocols), the provision of patient education, and patient care documentation. The resident is expected to complete all clinical pharmacy orientation checklist items and earn a passing score on all clinical competencies by the end of the week.

Week 2: Resident to work-up and assume pharmaceutical care for approximately 1/2 of the assigned teaching team's patients and present to preceptor daily. Preceptor to attend rounds daily with resident, coaching the resident to take on the role of the pharmacist on the team in the provision of recommendations for each patient's therapeutic care plan to the team. The preceptor will also coach the resident in the completion of clinical pharmacy consults and the provision of patient education. The resident is expected to be able to appropriately optimize or adjust medication dosing based on renal and hepatic function per protocol as well as complete appropriate IV to PO therapeutic interchanges per protocol.

Week 3: Resident to work-up and assume pharmaceutical care for approximately 3/4 of the assigned teaching team's patients and transition to the role of the team's primary pharmacist. The preceptor will be in the patient care area to observe the resident but will not be an active participant in daily rounds. The resident should develop pharmaceutical treatment recommendations and the preceptor will provide support and guidance as

necessary as well as review all patient care documentation completed by the resident. The resident will still review patients with the preceptor post-rounds and should be able to demonstrate appropriate application of clinical guidelines and reference primary literature for all recommendations made.

Week 4: Resident to work-up and assume pharmaceutical care for all assigned teaching team's patients assuming full responsibility as the team's primary pharmacist. The preceptor will not attend rounds but will be readily available to the resident to facilitate the resident as the primary pharmacist on the teaching team. The resident will review patients with the preceptor post-rounds, focusing primarily on disease states and situations that have not yet routinely been encountered during the month, and should be able to demonstrate application of clinical guidelines and reference primary literature for all recommendations made.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>Provide safe and effective patient care services following JCPP (Pharmacists' Patient Care Process)</b>		
OBJ R1.1.1	(Cognitive - Analyzing) Collect relevant subjective and objective information about the patient.	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record, patient's nurse, and patient (as applicable) every morning for assigned patients and record pertinent data on patient monitoring forms Identify patients started on any oral anticoagulant, enoxaparin, fondaparinux, argatroban or heparin infusions within the last 24 hours. Perform a medication history, review medical record, and contact patient's pharmacy or prescriber as necessary when performing medication reconciliation to ensure a complete and appropriate active medication history and therapeutic plan. When reviewing medication orders, review patient's profile, medical record (as needed), and interview patient/caregiver if necessary to assess potentially problematic medication orders.
OBJ R1.1.2	(Cognitive - Evaluating) Assess clinical information collected and analyze its impact on the patient's overall health goals.	Taught and Evaluated	Actively question orders in real time to determine the appropriateness of medication orders (e.g., indication, dose, route, frequency, rate of administration, drug interactions, compliance, cost, etc.). Analyze assigned patient-specific medication profiles, medication administration records, and pertinent clinical data/documentation records on a daily basis to identify any necessary changes to the patient care plan or educational needs of healthcare providers or the patient/caregivers. Review medication-related problems identified with the preceptor prior to multidisciplinary rounds. Verify orders for assigned patients until 2nd shift pharmacists begin order verification duties.
OBJ R1.1.3	(Cognitive - Creating) Develop evidence-based, cost effective, and comprehensive patient-centered care plans.	Taught and Evaluated	Begin patient on a dosing regimen designed to achieve target levels and determine when levels or other appropriate labs need to be ordered, appropriately entering and timing all such orders in the CPOE system. For all patients with pharmacy consults for dosing and monitoring, assess whether changes are needed in the medication dosing regimen or if levels need to be ordered.

OBJ R1.1.4	(Cognitive - Applying) Implement care plans.	Taught and Evaluated	After rounds, ensure agreed-upon medication changes have been ordered and verified. Discuss recommendations for addressing medication therapy issues with multidisciplinary team on patient care rounds.
OBJ R1.1.5	(Cognitive - Creating) Follow-up: Monitor therapy, evaluate progress toward or achievement of patient outcomes, and modify care plans.	Taught and Evaluated	Complete daily follow-up review of patient clinical status, pertinent labs and vitals, and medication changes that may impact the current medication therapy regimen. Revise therapeutic regimen as necessary based on assessment of patient's response to therapy and reviewing for any adverse reactions. Follow-up after multidisciplinary rounds to ensure any agreed-upon changes have been implemented, communicating and/or providing education to nurses any pertinent medication administration or lab-draw information as deemed necessary, especially for unusual scenarios or medications not routinely administered on the patient care unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If issues cannot be resolved, ensure that such outstanding issues are communication to the appropriate 2nd shift pharmacist prior to leaving for the day.
OBJ R1.1.6	(Cognitive - Analyzing) Identify and address medication-related needs of individual patients experiencing care transitions regarding physical location, level of care, providers, or access to medications.	Taught and Evaluated	For patients on direct oral anticoagulants, ensure the patient's insurance will cover the selected agent prior to the patient's discharge. If not, discuss financial impact with patient, providing recommendations for appropriate alternatives to the patient and provider based on patient needs.
<b>Goal R1.2</b>	<b>Provide patient-centered care through interacting and facilitating effective communication with patients, caregivers, and stakeholders.</b>		
OBJ R1.2.1	(Cognitive - Applying) Collaborate and communicate with healthcare team members.	Taught and Evaluated	Actively contribute to interdisciplinary care rounds for assigned internal medicine team. Maintain an active presence on assigned internal medicine unit throughout the workday to ensure availability to all members of the multidisciplinary team. Respond to all drug information questions from interdisciplinary team members appropriately and in a timely manner, researching primary literature and tertiary drug information references as needed.
OBJ R1.2.2	(Cognitive - Applying) Communicate effectively with patients and caregivers.	Taught and Evaluated	Conduct an organized, focused patient interview incorporating active listening and open-ended questions. Demonstrate empathy, respect, and collaboration in interactions with patients and caregivers. Provide education to patients and/or caregivers at an appropriate literacy level on medications including potential adverse reactions and drug-drug, drug-food interactions. Teach patients how to properly administer insulin or use self-monitoring devices. Use motivational interviewing techniques when appropriate to promote lifestyle changes.
OBJ R1.2.3	(Cognitive - Applying) Document patient care activities in the medical record or where appropriate.	Taught and Evaluated	Complete progress notes in the electronic medical record for all initial pharmacy consults and anytime a medication dose is changed or a therapeutic level is drawn and analyzed.

**Assessments:**

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed

ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
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