

Faculty: Allington, Douglas; Hemmer, Staci

**Site:**

Community Medical Center

**Status:** Active

Required

**General Description:**

**Description:** The Internal Medicine (IMed) II rotation is a required 4-6 week learning experience. Training will occur in the all units of the hospital but will primarily include activity in the Intensive Care Unit and the Rehabilitation Unit. This rotation serves to focus on and expand the resident's experience in the areas of neurology and nephrology but also builds on experience gained in other Internal Medicine areas previously addressed in the required Internal Medicine I rotation. As with the Internal Medicine I rotation, emphasis will be placed on designing, monitoring, evaluating, and recommending improvements in patient-specific pharmacotherapy.

The rotation will also focus on the development of precepting skills in the resident by having them be actively involved with the UM APPE in Hospital/Inpatient Care.

**Disease States Focused on in Rotation:**

*From IMed I rotation that may be covered in IMed II rotation:* 1. Diabetes 2. Cardiovascular diseases including hypertension, heart failure, and others 3. Thyroid disease 4. Gastrointestinal diseases including gastroesophageal reflux disease, peptic ulcer disease, Liver disease, and inflammatory bowel disease 5. Respiratory diseases including COPD and asthma 6. Infectious diseases including pneumonia, skin/soft tissue infections, bone & joint infections, sepsis, and others. 7. general surgeries involving the GI and GU systems. Other diseases that the resident may get exposure to: 1. Hematological disorders (coagulopathies, anemias) 2. Pancreatic disease 3. Eating disorders and 4. Others as applicable

*Focus for the IMed II rotation:* 1. Stroke 2. Rehabilitation from major medical event 3. Neurological diseases, various 4. Meningitis 5. Renal disease, both acute and chronic 6. Dialysis therapy, including CRRT

*More Specific to the IMed II rotation:* The clinical faculty member commonly interacts with the healthcare team in the Rehabilitation Unit. This includes participating in interdisciplinary team rounds on patients in the unit. Patients are comprehensively monitored and managed as described above in the other services. Documentation and teaching activities are also similar.

The clinical faculty members for this rotation have extensive experience in precepting IPPE/APPE students & residents. A focus of this required rotation will be the development of precepting skills in the residents by having them participate in the daily teaching and evaluation of student learners.

Revised: November 2019, reviewed/updated Sept 2020

Revised: May 2021

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

### **Clinical Pharmacist Specialist/Preceptor roles:**

*From the IMed I rotation:* The Med-Surg pharmacist performs concurrent pharmacy systems and clinical functions. They process and assure the accuracy of medication orders on the unit, working with the health care team to optimize safe and effective pharmacotherapy. Duties include medication reconciliation, drug formulary consultation & handling of non-formulary requests, management of therapeutic interchange, renal dosing, and drug therapy protocols including performing pharmacokinetic studies, anticoagulation dosing, and pain management when applicable. Drug therapy is monitored for the desired outcomes and the avoidance of adverse effects. The pharmacist commonly provides drug therapy recommendations not only to other members of the health care team, but also to patients & caregivers. Medication education is provided to patients and their caregivers, when applicable.

Achievement of many duties are enhanced by participation in the daily "huddle" with other health care practitioners that occurs in the late morning. Teaching of, and interaction with IPPE & APPE students occurs at almost all days during the year.

*From the Critical Care rotation:* The ICU pharmacist performs concurrent pharmacy systems and clinical functions. They process orders on the unit, working with the health care team to optimize safe and effective pharmacotherapy. The pharmacist meets daily with charge RNs for shift change report. Main duties include: order processing, medication reconciliation, handling of non-formulary requests, therapeutic interchanges, renal dosing, IV to PO conversions, high risk medication double checks and monitoring drip rates. Clinical pharmacist-managed protocols if ordered include: kinetics (vancomycin or aminoglycosides), warfarin dosing, heparin dosing, electrolyte replacement and pain management. All drug therapy in all patients is monitored for desired outcomes, adverse drug reactions and safety. The pharmacist performs chart review on all patients and attends & contributes to patient rounds every day. The pharmacist commonly makes drug therapy recommendations to other members of the health care team, either unsolicited or by request. The pharmacist provides patient medication education to the patient and/or their caregivers when applicable. When indicated, the activities discussed above are documented in the chart or Sentri7. Teaching of APPE/IPPE students also commonly occurs.

## **Expectations of Residents:**

### **Resident Involvement in Rotation:**

The resident will be oriented to the Rehabilitation Unit in the first week of rotation and will be introduced to the other Rehabilitation Team members. During the first week, the resident will read and review topics in the Appman folder for the rotation- the resident will be prepared to discuss these topics throughout the rotation. The Appman folder contains guidelines and/or important hallmark journal articles on stroke, traumatic brain injury, spinal cord injury and rehabilitation medicine as a subspecialty. Articles are also included that concern renal disease and dialysis.

The resident will follow between 5 to 7 patients at all times. Also, the resident will be expected to attend every rehabilitation patient's weekly patient care conference and actively participate in the conference by providing medication information, as it is pertinent to the collaborative working relationship of all of the rehabilitation team members.

**Work Experience- Staffing:** The CMC Pharmacy maintains an active patient education program in the Rehabilitation Nursing Unit (RNU) and a clinical pharmacist attends weekly team meetings on all patients in the unit. The resident will be instructed in the process related to the medication teaching program early in the residency by the RNU preceptor. The resident also may be instructed to attend team huddle meetings on other units, e.g. Med-surg or ICU to contribute to

the care of patients with renal disease and treatment. Expectations regarding patients with renal disease are the same as delineated for Rehabilitation patients.

The preceptor will meet at least three times weekly with the resident during the first two weeks and then at least weekly to discuss patients, evaluate residents ability to effectively monitor patients, find pertinent drug & disease state specific information and problem solve drug therapy related problems; these meetings may include APPE students. After working with the preceptor on several patients, the resident will independently assume responsibility for the patient education activity in the unit; this responsibility will continue throughout the rotation. In addition, the resident will gain the experience to independently practice in the settings of the weekly team meetings and day-to-day clinical service. After attending meetings with the preceptor, the resident will, when ready, independently practice/staff in the role of clinical pharmacist on the unit. This activity will primarily be limited to the time in rotation, although the resident may be following RNU patients with physicians during other rotations throughout the residency year.

The resident will attend, when possible, the regular meetings with IPPE & APPE students, and will assume an active role in the teaching and assessment of the students. It is expected that the resident will consult regularly with the clinical faculty precepting the rotation concerning issues around student teaching and the development of precepting skills.

**Progression of Residents:**

1st week: Resident will complete background readings and start attending patient rounds in the RNU and UM preceptor/student meetings with the APPE program. Resident will work up all patients in the RNU and will meet with preceptor(s) to discuss the patients; instruction & modeling by preceptor(s) will occur for patient types unfamiliar to the resident, and topic discussions may occur.

2nd week: The resident will assume a more active role in the RNU patient rounds and provide recommendations for optimization of drug therapy. They will also assume a preceptor role for the APPE students for given patients/tasks. They will meet with the preceptor(s) and continue patient and topic discussion.

3rd week: The resident will assume more independence in all of the activities- the preceptor(s) will move into a coaching/facilitating role. Meetings with the preceptor(s) to discuss patients/topics will continue. A more active preceptor role will be taken by the resident in working with the APPE students.

4th week: The resident will independently function in all patient care and precepting activities. They will lead to daily APPE meetings when possible.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Communicate to prescribers and health care providers relevant drug therapy inadequacies detected, and support feasible alternative regimens that are consistent with goals of pharmaceutical care. Participate in hospital rounds with the Rehab, Med-Surg, or ICU medical teams and be prepared to discuss/provide drug therapy recommendations for those patients, which are at greatest risk for medication therapy problems.

OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Conduct medication reconciliation when needed, both on admission and discharge from the Med-Surg unit Interact directly with patients and their families to communicate pharmacotherapeutic plans & recommendations either on an "as-needed" basis or as part of discharge counseling
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect & organize drug therapy data on all patients on the Med-Surg unit and work with other health care workers to resolve any discovered issues/irregularities Follow, monitor, and interpret laboratory and patient chart data related to medication issues in any given patient Use effective patient/caregiver interviewing techniques to complete medication reconciliation or collect background information for pharmacy-managed clinical protocols, e.g. pain management
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Provide drug information as requested, utilizing current medical literature and various drug information resources Utilizing a systematic approach to monitoring drug therapy, critique patient therapy to detect any problems that may be contributing to the patient's current illness, identifying deficiencies in therapy, that if changed, could improve the patient's care.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Actively participate in the patient care huddle, providing evidence-based recommendations for initiation, monitoring, and adjustment of a given patient's pharmacotherapy Design multimodal drug therapy regimens to effectively manage all aspects involved in pain management Initiate & adjust antimicrobial, anticoagulant, renally dosed, and other protocol-based medications based on patient demographics or the monitoring of outcomes
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Provide patient follow-up for dosing changes per your recommendations to ascertain the success of the action & adjust the action if the desired outcome has not been achieved, by interacting effectively with the patient care team
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	For each patient assigned, follow the hospital course and patient's progress in an organized fashion and document in the EMR or Senti-7 interventions made in regards to efficacy or safety, e.g. a pharmacokinetics analysis
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Assure that the dosage of all medications are appropriately adjusted in assigned patients with acute or chronic renal failure Prioritize patient problems effectively, and assure continuity/follow-up on unresolved problems before leaving for the day
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Communicate drug therapy recommendations and current status to the responsible pharmacist if a patient is transferred to a different unit (e.g. ICU) or to the CPG Ambulatory Care clinics (e.g. Anticoagulation Clinic) Perform admission and discharge medication reconciliation when indicated
<b>Goal R2.1</b>	<b>Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization</b>		
OBJ R2.1.4	(Cognitive - Applying) Participate in medication event reporting and monitoring	Taught and Evaluated	Learn the systems for reporting a patient adverse event or medication error & discuss when to use a given approach

<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Complete end-of-rotation evaluations in a timely manner, including a self-evaluation and meet with the primacy preceptor to discuss those evaluations
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	Taught and Evaluated	Effectively prioritize and complete varied demands of the Med-Surg service during the day Independently staff the decentralized clinical staff pharmacist position on the Med-Surg unit
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Ascertain an APPE student's level of knowledge and provide instruction/preceptorship based on the level of learning
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Provide effective management of APPE or other student learners based on their level of knowledge and learning needs
<b>Goal E6.2</b>	<b>Develops and practices a philosophy of teaching</b>		
OBJ E6.2.2	(Cognitive - Creating) Prepare a practice-based teaching activity	Taught and Evaluated	Organize & develop case patient reports with discussion of major medical issue for the Weds/Thurs noontime preceptor/resident/student education sessions
OBJ E6.2.3	(Cognitive - Applying) Deliver a practice-based educational activity, including didactic or experiential teaching, or facilitation	Taught and Evaluated	Present case patients to Weds noontime preceptor/resident/student education sessions or a FYDI CE presentation

**Evaluations:**

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