

# Infectious Disease/Specialty Pharmacy

## Preceptors

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## General Description

Infectious Disease/Specialty Pharmacy is a required 6-week rotation in a unique infectious disease/primary care and specialty pharmacy settings, taking care of patients in the community. Specialty medications are defined as high-cost medications that require clinical monitoring, administration, and/or unique storage parameters. There are 5 different clinical management teams managed by a Clinical Specialist Pharmacist and provide patient education and medication monitoring. Clinical Disease Specialist Pharmacists work in coordination and directly with physicians and other ancillary providers by assisting with acquiring and educating the patient on the specialty medication and/or disease state.

Under the direct supervision of a Clinical Disease Specialist Pharmacist, student responsibilities may include, but are not limited to: performing medication reconciliation, adherence assessment phone calls, medication counseling, managing medication therapy, screening drug-drug interactions, adjusting medication therapies based on organ functions, providing injection training to patients, developing and monitoring patient follow-up care plans, and communicating with providers for recommendations to optimize patient medication therapies.

Students will develop skills in the following areas while on rotation: time management skills, multi-tasking skills, communication skills, clinical knowledge in medications and disease states, and counseling skills in an Infectious Disease/Specialty Pharmacy care and specialty pharmacy setting.

Students will be required to lead topic discussions in various pre-set disease states. Required resources for topic discussions will be from guidelines and primary literature.

## Core Content

Common disease states will be covered via direct patient care experiences, discussions of reading materials, and/or case presentations. Students will be integrated among various disease specialties including, but not limited to:

- Infectious diseases
- Endocrine disorders
- Cardiology
- Pulmonary
- Anticoagulation
- Solid organ transplant
- Psychiatric disorders
- Oncological disorders

## Evaluation Strategy

Formal evaluation will be through school online evaluation program. The student will receive on-going, regular formative verbal feedback throughout the Infectious Disease/Specialty Pharmacy learning experience.

## Expected Progression of Students

Length of time preceptor spends in each of the phases will be customized based upon student's abilities and timing of the learning experience during the rotation

**Week 1-2 (direct instruction/modeling):** The student will be oriented to the Infectious Disease clinic and Specialty Pharmacy. Preceptor to review syllabus, learning activities and general expectations (see next section) with student. The student will shadow Clinical Specialist Pharmacist(s) on different disease states/specialty medications for reassessments (RAs). The student will be responsible for completing a minimum of 5 reassessments per week by the end of week 2.

**Week 3-4 (direct instruction/modeling/coaching):** The student will attend the Infectious Disease/Specialty Pharmacy/ID clinic 2-3 times per week and answer any drug information questions and/or provide direct-patient counseling for healthcare team with guidance from preceptor. The student will provide assistance with any medication therapy management (MTMs) reviews and medication appeals process that are required with the guidance of a Clinical Disease Specialist Pharmacist. The student will be responsible for completing a minimum of 5 reassessments by the end of week 2.

**Weeks 5-6 (coaching/facilitating):** By the end of week 5, the student should be working independently at the Infectious Disease/Specialty Pharmacy/ID clinic and answer any drug information questions and/or provide direct-patient counseling for healthcare team with minimal guidance from preceptor. The student will provide assistance with any medication therapy management (MTMs) reviews and medication appeals process that are required with the guidance of a Clinical Disease Specialist Pharmacist. The student will be responsible for completing a minimum of 10 reassessments by the end of week 5.

## General Student Expectations/Responsibilities

### General Assignments:

*Assignments may be repeated if the quality of the presentation is below expectations required achieve goals to pass the IM rotation*

- Weekly topic discussions
- Proactive Risk Assessment Review (one)
- Medication/patient case/disease state presentation (one)

### Drug Information/Follow-Up Questions:

- All drug information questions and/or questions from topic discussions and/or presentations must be addressed **within 48 hours via email**

### Deadlines:

- The student will be expected to complete at least one disease state/specialty medication presentation. This formal presentation will have **two (2) established draft deadlines**, both within 1.5 – 2 weeks prior to the presentation date to allow adequate time for preceptor feedback and corrections.
- If you have not been given a soft deadline for a project or have a concern about the deadline date, reach out to the preceptor to discuss.
- The student must have a **completed or nearly completed draft** of the presentation emailed to the preceptor by 8am on the established deadline date.
- Preceptor **feedback will be given in-person within 48 hours** of each deadline or following business day that the preceptor is available if the deadline falls on a Thursday or Friday. If feedback is not received within this timeframe, contact the preceptor to discuss.

Independent Patient Assessments and Educations:

- Students will review patient assessments/educations with their primary preceptor prior to providing education for that disease state/specialty medication
- Students are encouraged to review interventions with their assigned preceptor prior to education or contacting physician/healthcare provider

Documentation and Follow-Up:

- The student will document on all assessments, educations, and clinical interventions through Caretend and EPIC prior to the end of their day
- The Student will communicate any pending time-sensitive issues with their precepting pharmacist and place a “To-Do” for any follow-ups that cannot be addressed that day

Education and Counseling:

- The student will be responsible for following-up and completing any pending education/counseling for patients on their assigned clinical care team.
- During the **second week of rotation**, each student will perform a simulated patient education for the following specialty disease state/format listed below. The assigned Clinical Disease Specialist for each medication will observe and sign-off on Student’s ability to perform each consult and review appropriate documentation.
  - HIV/HepC Reassessment      Date completed/Clinical Specialist initials: \_\_\_\_\_
  - MTM      Date completed/Clinical Specialist initials: \_\_\_\_\_

Topic Discussions:

- The APPE pharmacy student(s) will be provided with a preliminary schedule at the beginning of the rotation. This schedule will include planned topic discussions.
- Each topic discussion will be led by the student unless otherwise noted.
- Any pending questions generated from the discussion must be answered in a timely manner as detailed in the ‘Clarifications and Questions’ section above.
- Topic discussions should include review of primary literature, guidelines, and clinical trials. Review format with the assigned preceptor for that topic (e.g. patient-case, jeopardy, powerpoint, handout)

Objectives and Activities

		Activities
Goal R1.1	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple comorbidities, 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	<ul style="list-style-type: none"> <li>• Attend daily rounds and collaborate with varying members of the health care team to assist in managing patients (e.g provider, nursing, social worker, care coordinators, etc)</li> <li>• Contact providers to resolve issues with medication verification.</li> <li>• Work with nurses to resolve medication distribution issues and ensure correct medication gets to patient in a timely manner.</li> </ul>
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	<ul style="list-style-type: none"> <li>• Assess patient and/or caregiver understanding of medication therapy by return demonstration or teach back method.</li> <li>• Provide patient and/or caregiver education, counseling; assist with answering any drug/disease related patient questions; provide drug information as needed</li> </ul>
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	<ul style="list-style-type: none"> <li>• Review patient history and collect pertinent information to assess appropriateness of a patient’s pharmacotherapy (drug, dosing, dosage forms, routes of administration, delivery systems).</li> <li>• Review pending consults, open interventions, new lab/imaging results, changes to medication profile, and physician notes prior to preceptor discussion and team rounding.</li> </ul>

OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	<ul style="list-style-type: none"> <li>Effectively review medication profile and analyze/assess appropriateness of regimen in accordance with age, gender, renal/hepatic function, route, indication and potential drug-interactions.</li> <li>Discuss issues identified with preceptor prior to rounding with team.</li> <li>For medication reconciliation, assess and analyze appropriateness of medications ensuring that all patient disease states are addressed. Discuss issues identified with preceptor and resolve with healthcare team.</li> </ul>
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	<ul style="list-style-type: none"> <li>Assess and design medication regimens for assigned patients on consultant services (ex. Anticoagulation, Pharmacokinetics consults). Order necessary labs and modify dose/frequency based on drug levels, indications or required renal/hepatic adjustments.</li> <li>Contact providers to initiate required changes and communicate plan with healthcare team by completing progress notes and/or documenting interventions in electronic system.</li> <li>Evaluate antimicrobials regimens for appropriateness when prescribed empirically and modify as cultures are resulted. Assess patient response to therapy and initiate modifications required to maximize therapy and minimize adverse effects.</li> </ul>
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	<ul style="list-style-type: none"> <li>Follow-up on recommended changes and or established interventions and monitoring plan for patient; ensure patient is progressing towards desired outcomes.</li> </ul>
<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	<ul style="list-style-type: none"> <li>Communicate pending issues and any follow-up effectively with floor pharmacists, nurses and other healthcare team members when patients are being transferred.</li> <li>Provide patient discharge counseling as needed to ensure the patient establishes an understanding of medication changes and highlight therapy changes.</li> <li>Patients are to be assessed daily for discharge preparedness and an education plan established for any important changes in medication therapy. Address other educational needs and resolve any issues identified with providers prior to discharge.</li> <li>Review and assess medications when receiving admitted patients from the ER or from other levels of care. Perform admission medication reconciliation and ensure profile reflects continuity of care. Ensure medications can be given on specific floors and according to policy if transferred from higher acuity floors.</li> </ul>
<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	<ul style="list-style-type: none"> <li>Complete a self-assessment at the beginning of the rotation to assess specific disease state knowledge level and identify strengths and areas of focus.</li> <li>Continue ongoing self-evaluation at midpoint and reevaluate at end of rotation.</li> </ul>
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>	
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	<ul style="list-style-type: none"> <li>Complete final disease state presentation meeting all deadlines for rough draft and final presentation.</li> <li>Progressively manage greater portion of assigned patients and by final week be able to manage all patients on assigned provider service. Includes gathering and updating patient information, managing patients of consult services, performing necessary IV to PO and dose adjustments, and addressing appropriateness of antimicrobial regimens based on empiric versus targeted therapy. Demonstrate ability to prioritize patients based on acuity and opportunities for clinical intervention.</li> <li>Provide timely and accurate drug information responses to preceptor and team.</li> </ul>
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>	
OBJ R4.1.1	(Cognitive - Applying) Design effective educational activities	<ul style="list-style-type: none"> <li>Prepare disease state presentation for pharmacy staff and pharmacy students.</li> </ul>
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	<ul style="list-style-type: none"> <li>Lead weekly topic discussions for APPE Infectious Disease/Specialty Pharmacy students and deliver final disease state presentation to pharmacy staff and students.</li> <li>Perform medication and/or disease state education for assigned patients, their family and/or caregivers.</li> </ul>

		<ul style="list-style-type: none"> <li>• Education may include CHF, COPD/asthma, anticoagulant, diabetes, hypertension management, stroke or generalized medication counseling for administration or adherence.</li> </ul>
OBJ R4.1.3	(Cognitive - Applying) Use effective written communication to disseminate knowledge	<ul style="list-style-type: none"> <li>• Prepare clear, concise presentation summarizing disease state management in accordance with current guidelines.</li> <li>• Write well-referenced and accurate drug information responses using approved format.</li> </ul>
OBJ R4.1.4	(Cognitive - Applying) Appropriately assess effectiveness of education	<ul style="list-style-type: none"> <li>• Follow-up on any gaps in education provided to pharmacy staff and ancillary services</li> <li>• Use evaluation form to gather feedback on Student led topic discussions and final disease state presentation. Review feedback and self-reflect on performance for areas of improvement.</li> </ul>

## Evaluations

	<b>Evaluator</b>	<b>Evaluated</b>	<b>Timing</b>
Summative Midterm Evaluation	Primary Preceptor	Each Student taking this rotation	Week 3
Summative Final Evaluation	Primary Preceptor	Each Student taking this rotation	Week 6