Infectious Diseases @ EUHM Learning Activities:

Preceptor: Steve Mok, PharmD, BCPS (AQ-ID)

Office: EUHM Clinical Pharmacy office, 2nd fl Peachtree Building

Hours: 8:00 – 17:00

Desk: 404-686-8904

Pager: 20806

General Description

Infectious Diseases (ID) is a four week learning experience at Emory University Hospital Midtown. This experience includes providing comprehensive pharmaceutical care to patients being seen by the Emory ID consultation service and performing antimicrobial stewardship activities at the Midtown campus. The resident works with the ID team to identify, prevent, and resolve drug-related problems for patients. The ID team consists of an attending physician, one fellow, one to two residents (PGY-2), one physician’s assistant, and the antimicrobial stewardship pharmacist. The resident also works with the antimicrobial stewardship pharmacist and hospital epidemiologist in conducting surveillance activities to promote the rational, safe, and cost-effective use of antimicrobials as part of the antimicrobial stewardship program at EUHM.

Specific activities on this rotation will include:

- Identify patients with medication therapy problems.
- Establish a patient-specific database through chart review and interviews with patients and other health care professionals.
- Prepare a medication-related problem list.
- Determine therapeutic goals for patients.
- Design and modify treatment regimens based on patient specific data.
- Formulate monitoring plans for drug therapies.
- Recommend or communicate therapeutic plans to health care providers and patients.
- Provide drug information to other health care professionals.
- Document pharmaceutical care activities in patients’ records.
- Reconcile the medication profiles of HIV-infected patients on antiretroviral therapies to ensure no treatment interruption across the continuum of care.
In the course of providing pharmaceutical care services during this learning experience, the resident will develop his or her skills in providing evidence-based, patient-centered medication therapy management with interdisciplinary teams (Outcome R2).

Good communication and interpersonal skills are vital to success in this experience. The resident must devise efficient strategies for accomplishing the required activities in a limited time frame. In addition to patient care, the resident must provide education to healthcare providers and patients as necessary.

**Infectious Diseases Topics**

Hospital related infections in which the resident will be expected to gain proficiency through literature review, topic discussion, and/or direct patient care experience include:

- Central nervous system infections
- Skin and soft tissue infections
- Osteomyelitis
- Infective endocarditis
- Pneumonia
- Urinary tract infection
- Surgical site infection and appropriate prophylaxis
- Intra-abdominal infections
- Fungal infections
- Viral infections
- HIV/AIDS
- Opportunities infections
- Catheter related infections
- Bloodstream infections
- Fever of unknown origin
- *Clostridium difficile* infection
- Antimicrobial stewardship
- Management of multidrug resistant organisms

**Goals Selected**

Goals selected to be taught and evaluated during this learning experience include:

- Goal R2.1: As appropriate, establish collaborative professional relationships with members of the health care team.
- Goal R2.2: Place practice priority on the delivery of patient-centered care to patients.
- Goal R2.4: Collect and analyze patient information.
Goal R2.5: When necessary, make and follow up on patient referrals
Goal R2.6: Design evidence-based therapeutic regimens.
Goal R2.7: Design evidence-based monitoring plans.
Goal R2.8: Recommend or communicate regimens and monitoring plans.
Goal R2.9: Implement regimens and monitoring plans.
Goal R2.10: Evaluate patients’ progress and redesign regimens and monitoring plans.
Goal R2.11: Communicate ongoing patient information.
Goal R2.12: Document direct patient care activities appropriately.
Goal R5.1: Provide effective medication and practice-related education, training, or counseling to patients, caregivers, and healthcare professionals.
Goal R6.1: Use information technology to make decisions and reduce error.

### Activities

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<thead>
<tr>
<th>Activity</th>
<th>Goal</th>
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<tbody>
<tr>
<td>Accurately gather, organize, and analyze patient specific information on team’s patients</td>
<td>R2.2, R2.4, R2.6, R2.7, R2.10</td>
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<tr>
<td>Actively participate in ID team rounds</td>
<td>R2.1, R2.2, R2.4, R2.6, R2.7, R2.8, R2.9, R2.10, R2.11, R2.12</td>
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<tr>
<td>Compose accurate, concise progress notes documenting direct patient care activities (ADR, drug-drug interaction, kinetics, monitoring of therapy) within time frame to be useful</td>
<td>R2.6, R2.7, R2.8, R2.10</td>
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<tr>
<td>Task</td>
<td>Code(s)</td>
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<tr>
<td>Participate in the ID teaching service</td>
<td>R2.1,  R5.1</td>
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<tr>
<td>Design antimicrobial regimens, including drug selection, dosing, and monitoring plans, for patients requiring outpatient parenteral antimicrobial therapy (OPAT)</td>
<td>R2.2, R2.4, R2.5, R2.6, R2.7, R2.8, R2.9, R2.11</td>
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<tr>
<td>Perform antimicrobial surveillance activities using Theradoc</td>
<td>R2.4, R2.8, R2.11, R2.12</td>
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<tr>
<td>Reconcile medication histories and screen for drug-related problems in patients receiving antiretroviral therapies</td>
<td>R2.4, R2.5, R2.6, R2.7, R2.8, R2.9</td>
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<tr>
<td>Initiate monitoring plans or medication therapy changes as per protocol or verbal orders</td>
<td>R2.9</td>
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<tr>
<td>Weekend and day off sign-out for PK +/- team patients</td>
<td>R2.11</td>
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<tr>
<td>Document ADRs and interventions in Pharmacy One Source and Theradoc</td>
<td>R2.12</td>
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<td>Document medication variances in STARS Event Reporting System</td>
<td>R2.12</td>
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<tr>
<td>Serve as co-preceptor for pharmacy students when applicable</td>
<td>R5.1</td>
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Preceptor Interaction

- Meet with preceptor in morning to review patient assignment, HIV admissions, and stewardship goals
- ID team rounds begin at either 11 am or 1 pm, depending on attending physician; meet with preceptor 15 minutes before rounds to discuss interventions
- Topic discussion and patient follow-up in afternoon
- Hospital epidemiologist available to discuss antimicrobial stewardship issues daily
- ID Case of the Week at 4 pm at Grady
- Weekly learning reflection on Friday afternoon

Expected progression of resident responsibility on this learning experience:

Day 1 @ 0800: Preceptor to review ID learning activities and expectations with resident.
Week 1: Resident to work up ID team patients and present to preceptor prior to team rounds.
       Preceptor will attend rounds with resident during the first week. Resident will also identify intervention opportunities with preceptor while completing surveillance activities.
Week 2: Resident to work up ID team patients and present select patients to preceptor prior to team rounds. Preceptor may attend and participate in team rounds (coaching the resident to take on more responsibilities as the pharmacist on the health care team). Resident will complete antiretroviral regimen reviews independently. Preceptor will be available to discuss issues.
Week 3-4: Resident will attend round independently. Resident will work up team patients and present select patients to preceptor prior to team rounds. Preceptor may attend and observe the resident’s participation on, and/or may expect a summary report from the resident regarding rounding activities and use of recommendations made by the resident. Preceptor will always be available for questions and will follow patients independently to monitor resident skill development in all aspects of the learning experience (facilitating the resident as the pharmacist on the health care team).

Note: the length of time the preceptor spends in each of the phases of learning will depend BOTH on the resident’s progression in the current rotation and when the rotation occurs in the residency program

Evaluation Strategy

ResiTrak will be used for documentation of formal evaluations. For formative evaluations, residents will perform the activity appropriate to the snapshot with the preceptor. Resident and preceptor will then independently complete the snapshot. After both have signed the evaluation, the resident and preceptor will compare and discuss the evaluations. This discussion will provide feedback both on their performance of the activity and the accuracy of the self-assessment. Formative evaluation will also occur as verbal or written
feedback on a daily basis. Preceptor will also meet with resident every Friday to conduct a learning reflection session to review clinical pearls and knowledge/skills/abilities gained during the week.

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<tr>
<th>What</th>
<th>Snapshot</th>
<th>Who</th>
<th>When</th>
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<tbody>
<tr>
<td>Formative Self-Evaluation</td>
<td>As applicable</td>
<td>Resident</td>
<td>As learning opportunities arise</td>
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<tr>
<td>Formative</td>
<td>As applicable</td>
<td>Preceptor</td>
<td>As learning opportunities arise</td>
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<tr>
<td>Midpoint Summative Self-Evaluation</td>
<td></td>
<td>Resident</td>
<td>End of week 2</td>
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<td></td>
<td>Preceptor</td>
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<td>Summative Self-Evaluation</td>
<td></td>
<td>Resident</td>
<td>End of learning experience – deadline to be signed and submitted by 1300 the day following rotation completion.</td>
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<td>Summative Evaluation</td>
<td></td>
<td>Preceptor</td>
<td>End of learning experience – deadline 7 days post final day of rotation to meet with resident to discuss.</td>
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<td>Preceptor &amp; Learning Experience Evaluation</td>
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<td>Resident</td>
<td>End of learning experience – deadline 7 days post final day of rotation.</td>
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