

PGY1 – Infectious Disease Learning Experience

Preceptor

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Hours: 0700 to 1730 M-F

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General Description

The infectious disease (ID), four-week rotation aims to build the resident's knowledge and leadership skills in Asante antimicrobial stewardship, which include direct patient care and outpatient parenteral antimicrobial therapy (OPAT) at infusion services across the organization. The rotation is highly customized to fit individual resident's unique learning approach and short-term and long-term career objectives in the context of antimicrobial stewardship services across the organization. The ID pharmacist coordinates the antimicrobial stewardship program (ASP) in collaboration with Asante's ID physicians and health professionals within multi-hospital Asante Health System. S/He develops, implements and updates institutional policies, protocols, and procedures to promote judicious antimicrobial therapy and minimize unintended consequences associated with extraneous antimicrobial prescribing. The effectiveness of ASP initiatives is evaluated, and ASP policies, protocols, and procedures are adjusted as needed. The ID pharmacist serves as a preceptor and/or mentor and provides antimicrobial stewardship education for pharmacists, residents, interns, physicians, and other health professionals and offers prospective feedback with audit for prescribers. In addition to ASP services, s/he manages inter-departmental pharmacy initiatives to support delivery of healthcare services to patients and performs clinical activities and monitoring, including patient and medication assessment and clinical recommendations. S/He partners with doctors and nurses to understand and meet their pharmacy needs, improve responsiveness, and improve patient safety.

Expectations of the Resident

While the core focus of learning is antimicrobial management therapy, the resident is expected to assess all medications and perform clinical interventions as needed to optimize integrated patient care and safety. The resident will provide patient care and pharmacy services at Asante Rogue Regional Medical Center, Asante Infusion Services, and other Asante campuses, including Asante Ashland Community Center (AACH) and Asante Three Rivers Medical Center (ATRMC), to understand campus-specific clinical needs to optimize communication with frontline colleagues and providers about patient care and safety.

To promote collaborative efforts across departments and campuses, the resident will work closely with Infectious Disease physician(s) and Antimicrobial Stewardship Committee core team members in the development or implementation of initiatives, formal reporting and education across in line with Asante Pharmacy Balance Scorecards. The resident will be expected to provide best-practice recommendations in response to therapeutic, pharmacokinetic and pharmacodynamic inquiries from physicians and contribute proactively to the objectives of the Asante Antimicrobial Stewardship, Infection Prevention & Control and Asante Pharmacy & Therapeutic Committees.

To ensure core competency, the resident will complete case-based assessments based on national guidelines and best practice throughout the rotation. The resident is expected to score at minimum 70% on case-based assessments to demonstrate competency. If the resident does not meet this requirement for ID competency assessment, the resident will be expected to repeat the 4-week rotation with discussion with the preceptor. Due to time-sensitive clinical demands and patient care expectations during rotation hours, the resident will be required to commit additional personal time beyond the required rotation hours to learn and apply guidelines to customize care. Case-based topical discussions will be integrated to reinforce critical concepts of antimicrobial stewardship with focus on patient-centered care and safety.

Staffing/Meeting Attendance

Rotation Attendance: Required five days per week.

Staffing: Residents are required to notify the primary preceptor/preceptor of any scheduled staffing or requested project days. The primary preceptor reserves the right to shift these days to optimize days working together.

Case Conference or Journal Clubs: The resident may attend any case conference or journal clubs for students.

Pharmacy & Therapeutics Committee: Residents are required to notify the primary preceptor/preceptor in advanced when they are attending a P&T committee meeting. This meeting usually occurs on the last Tuesday once a month.

Absences: Scheduled time off is not allowed when resident is scheduled with the primary preceptor.

Others: As deemed necessary by the Residency Director, residency program, and/or preceptor

Educational Objectives

The resident will be assessed based on the ability to perform these objectives. Table 1 below demonstrates the relationship between the learning objectives and specific activities pertinent to the objectives.

TABLE 1: LEARNING OBJECTIVES FOR FORMAL EVALUATION

Competency Area R1: Patient Care		
GOAL R1.1 In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients...following a consistent patient care process.		
Objective Number	Objective	Specific Activities
1.1.1	(Applying) Interact effectively with health care teams to manage patients' medication therapy.	<ul style="list-style-type: none"> Communicate best-practice, therapeutic plans effectively with medical teams, including physicians, nurses and other health professionals, to optimize patient-centered antimicrobial therapy. Prior to patient's hospital discharge, offer providers timely and appropriate antimicrobial options to assist in inpatient-to-outpatient transition of antimicrobial care. Provide patient education prior to discharge when appropriate to encourage compliance with antimicrobial therapy in outpatient setting. Respond to providers' antimicrobial-related or pharmacokinetic (PK)/pharmacodynamic (PD) inquiries in a timely manner at the point of care to assist in therapeutic decisions customized to patient's specific clinical scenarios.

		<ul style="list-style-type: none"> • Apply national guidelines and relevant, available literature to support therapeutic plans when communicating with providers and share key references with providers when appropriate.
1.1.4	(Analyzing) Analyze and assess information on which to base safe and effective medication therapy.	<ul style="list-style-type: none"> • Evaluate antimicrobials for appropriate indication, dosage, frequency, duration, route of administration and potential adverse events and drug-drug interactions based on relevant medical history, comorbidities available laboratory, microbiological reports and other clinical parameters critical to optimizing patient-centered antimicrobial therapy. • Analyze options to streamline or adjust antimicrobial regimen based on microbiological data, including rapid diagnostic MRSA test results and local antibiograms to help guide therapy. • Assess and interpret culture data to determine best-practice antibiotic options based on type, severity and site of infection, MIC and PK/PD of the antibiotic. • Evaluate benefits vs. risks of antimicrobials in context of drug-drug interactions, potential/suspected adverse effects and allergy/intolerance
1.1.5	(Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans).	<ul style="list-style-type: none"> • Assess patients receiving broad-spectrum antibiotics and recommend opportunities to narrow therapy as indicated. • Evaluate antimicrobials for appropriate indication, selection, dosage, frequency, duration and/or route of administration based on clinical status and available laboratory, diagnostic and microbiological reports. • Recommend an alternative agent if the patient has developed drug-drug interactions, adverse effects or allergy or intolerance to prescribed antimicrobials. • Formulate and implement a regimen and monitoring plan in response to consults based on Asante policies and protocols. • Present recommendations in a timely manner to accommodate patient needs and pharmacy workflow within a clinical shift.
1.1.6	(Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	<ul style="list-style-type: none"> • Effectively recommends or communicates patients’ regimens and associated monitoring plans to relevant members of the healthcare team. • Recommendation is persuasive. • Presentation of recommendation accords patient’s right to refuse treatment. • If patient refuses treatment, pharmacist exhibits responsible professional behavior. • Creates an atmosphere of collaboration. Communication conveys expertise.

		<ul style="list-style-type: none"> • Communication is assertive not aggressive. • Ensures recommended plan is implemented effectively for the patient. • Responds appropriately to notifications and alerts in electronic medical records and other information systems which support medication ordering processes (based on patient weight, age, gender, co-morbid conditions, drug interactions, renal function, hepatic function, etc.). • Provides thorough and accurate pneumonia education to patients, and caregivers, when appropriate, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration. • Addresses medication- and health-related problems and engages in preventive care strategies, including vaccine administration.
1.1.7	(Applying) Document direct patient care activities appropriately in the medical record or where appropriate	<ul style="list-style-type: none"> • Selects appropriate direct patient-care activities for documentation. • Documentation is clear. • Written in time to be useful. • Follows the health system’s policies and procedures, including that entries are signed, dated, timed, legible, and concise.
1.1.8	(Applying) Demonstrate responsibility to patients	<ul style="list-style-type: none"> • Gives priority to patient care activities. Plans prospectively. Routinely completes all steps of the medication management process. Assumes responsibility for medication therapy outcomes. Actively works to identify the potential for significant medication-related problems. Actively pursues all significant existing and potential medication-related problems until satisfactory resolution is obtained, including antimicrobial and all other clinically relevant medication issues.

Competency Area R2: Advancing Practice and Improving Patient Care

Goal R2.1: Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization.

Objective Number	Objective	Associated Activities
2.1.1	(Creating) Prepare a drug class review, monograph, treatment guideline, or protocol	<ul style="list-style-type: none"> • Displays objectivity. • Effectively synthesize information from the available literature and antimicrobial guidelines. • Applies evidenced-based principles including use of primary antimicrobial literature. • Uses the appropriate format.

		<ul style="list-style-type: none"> Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties. Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders.
2.1.2	(Applying) Participate in a medication-use evaluation.	<ul style="list-style-type: none"> Apply evidence-based medicine to develop criteria for use. Demonstrate a systematic approach to gathering data. Accurately analyze data gathered. Demonstrate appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders. Implement approved changes, as applicable.
GOAL R2.2 Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system.		
Objective Number	Objective	Associated Activities
2.2.1	(Analyzing) Identify changes needed to improve patient care and/or the medication-use systems	<ul style="list-style-type: none"> Appropriately identifies antimicrobial problems and opportunities for improvement and analyzes relevant background data. Determine an appropriate antimicrobial topic for a practice-related project of significance to patient care. Uses best practices or evidence-based principles to identify opportunities for antimicrobial improvement projects.
Competency Area R3: Leadership and Management		
Goal R3.1: Demonstrate leadership skills		
Objective Number	Objective	Associated Activities
3.1.1	(Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership.	<ul style="list-style-type: none"> Demonstrate effective time management. Manage conflict effectively. Use effective communication skills and styles. Demonstrate understanding of diverse perspectives of among health care professionals. Advocate care and safety above personal interest to elevate pharmacy standards of service excellence
GOAL R4. Demonstrate management skills		
Objective Number	Objective	Associated Activities
3.2.4	(Applying) Manages one's own practice effectively	<ul style="list-style-type: none"> Accurately assesses successes and areas for improvement (e.g., staffing projects, teaching) in managing one's own practice.

		<ul style="list-style-type: none"> • Regularly integrates new learning into subsequent performances of a task until expectations are met. • Routinely seeks applicable new learning opportunities when performance does not meet expectations. • Demonstrates effective workload management and time management skills. Assumes responsibility for personal work quality and improvement. • Is well prepared to fulfill responsibilities (e.g., patient care, project, management, meetings). • Sets and meets realistic goals and timelines. • Demonstrates enthusiasm, self-motivation, and “can-do” approach. • Works collaboratively within the organization's political and decision-making structure.
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Communication

Daily as necessary with preceptor

Doc Halo: Residents should be prepared to respond to time-sensitive or urgent/emergency situations pertaining to patient care

E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

Office extension: Appropriate for urgent questions pertaining to patient care.

Personal phone number: Provided to resident at time of learning experience for emergency issues

Expected Weekly Progression of Resident Learning

Week 1:

- Preceptor will seek to understand the resident’s unique learning approach and short-term and long-term career goals and aspirations, customizing the rotation to complement optimal learning experiences.
- Preceptor will provide overview of learning objectives, activities and expectations with resident.
- Preceptor will introduce current and upcoming key projects and initiatives central to antimicrobial stewardship and identify resident’s specific areas of interest in ID.
- Evaluate cases to demonstrate key antimicrobial stewardship principles and application of Asante policies and protocols.
- Apply national guidelines and tailor these principles to optimize patient-specific therapeutic recommendations with a clear understanding of pharmacist’s roles and responsibilities.
- Create a work-in-progress timeline of project management and objective learning.

Weeks 2 and 3:

- Demonstrate progressive application of best-practice recommendations in direct patient care and topical case discussions in a timely manner.
- Continue assessing progress on achieving learning objectives in Table 1 and identify areas of strength and opportunities for improvement.
- Provide on-site clinical services at Asante Infusion Services, AACH and/or ATRMC.

- Conduct projects in a team-oriented setting to align with Asante Pharmacy Service Line BSCs.
- Week 4:
- Complete end-of-rotation core competency assessment
 - Assess whether learning objectives & expectations have been fulfilled
 - Recommend opportunities for improvement in future ID rotations

Evaluation Strategy

- The resident is required to score at minimum 70% on case-based assessments to demonstrate core competency on antimicrobial stewardship and application of best practice guidelines.
- The preceptor will provide both written and verbal formative feedback during the course of the rotation. Additional customized assessments and/or snapshots may be conducted at the discretion of the preceptor or directive of the RPD to assess the resident’s skill in a particular area.
- Pharm Academic will be used for documentation of scheduled evaluations (both formative and summative per the chart below). The resident and preceptor will independently complete the evaluations. The resident and preceptor will then compare and discuss the evaluations. This discussion will provide feedback both on performance of the activities and resident self-assessment skills. Following discussion, preceptor will provide documentation of the discussion and correlation of resident self-assessment on the preceptor evaluation prior to submitting evaluation in Pharm Academic. Evaluations will be completed no later than due date specified below.

What	Who	When
Summative	Preceptor	End of rotation
Summative Self-evaluation	Resident	End of rotation
Preceptor/Learning Experience Evaluation	Resident	End of rotation

Content of the evaluation

- The preceptor is expected to grade the resident on the following scale: NI (Needs Improvement), SP (Satisfactory Progress) and Ach (Achieved) depending on the performance of the resident.
- A grade of “NI” means that the resident needs a more exposure and additional formal evaluation on the topic, likely in two separate rotations. Any grade of NI **must** be accompanied by actionable feedback (what must the resident to do improve) for every objective graded NI. Example: *The resident’s therapeutic plans are not appropriately evidence based; more guideline or primary literature consultation is recommended to improve the recommendations for patients with MRSA pneumonia*
- A grade of “SP” means that the resident is doing what they need to be doing, considering the place they are in the program, but the preceptor does not yet feel that they have achieved the goal. Any goal graded with an “SP” should have actionable feedback (what must the resident to do improve) provided to the resident about what they must do to “achieve” that particular goal.

This may also be provided at the objective level if the preceptor wishes to. An objective graded “SP” should receive additional formal evaluation, possibly for as little as a single rotation. *The resident’s analysis of the patient problem list is insufficient; the resident does not actively question the presence of each order to determine its appropriateness.*

- A grade of “Ach” means that the resident is doing what would be expected of a resident at or near the end of his or her program or comparable to a pharmacist with a year of time spent working. “Achieved” does not mean that the resident *cannot* improve, but it means that the resident would not likely benefit much from further additional formal evaluation. Examples of why the resident deserves the “Ach” are necessary for every goal marked “Ach.” *The resident counseled 4 patients on warfarin and 3 on enoxaparin during the last week; the resident explained the medication well and assured the patient’s understanding of the new medication.*

Timing of the Evaluation

Within 7 days the end of the learning experience (preferably on the final day, if able) a member of the preceptor team will be expected to discuss the evaluation in person– with a copy of the evaluation in hand – of the learning experience with the resident to help clarify any potential misunderstandings and to ensure that residents get the most out of the feedback provided.