

PGY1 – Internal Medicine – Focus on Pediatrics/Neonatology Learning Experience 1 & 2

Preceptors*

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Hours: 0700 to 1730

*Primary preceptors and preceptors will be assigned dependent on pharmacist schedule during rotation

General Description

This rotation is concentrated in four weeks of exposure to the pediatric and neonatal populations at Asante Rogue Regional Medical Center. The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the pediatric and neonatal intensive care unit. Routine responsibilities include: review and confirmation of appropriateness of medication for the patient population based upon age, weight, indication and pharmacokinetic considerations; completion of consults and medication therapy protocols in areas including dosing and monitoring of TPN, kinetics, evaluation of anti-infectives, addressing formal consults for non-formulary drug requests and providing patient and family education. The pharmacist also provides drug information and education to healthcare professionals as requested.

Expectations of the Resident

Residents will attend NICU and Pediatric rounds every day. During this rotation the resident will focus on caring for patients in the pediatric and neonatal intensive care units. Residents will actively seek to identify the potential for significant medication-related problems and offer suggestions to the appropriate member of the Multidisciplinary Team. Residents will use both verbal and written communication skills to discuss and collaborate with the pediatric and NICU medical teams to convey drug therapy recommendations that positively impact patient outcomes. Residents will learn about signs and symptoms, epidemiology, risk factors, pathogenesis, natural history of disease, pathophysiology, clinical course, etiology, and treatment of diseases commonly encountered in the pediatric and neonatal patient populations. Residents will be encouraged to critically evaluate patient specific data and scientific literature to formulate responses to specific drug information questions. Residents will become familiar medication safety and drug formulation issues/policies/procedures/protocols specific to this population.

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
- Attend daily NICU rounds
- Attend daily Pediatric rounds
- Attend monthly High Risk Obstetric rounds, Pediatric and NICU Safety Committee meetings

Disease States / Topics

Common disease states in which the resident will be expected to gain exposure to through direct patient care experience for common diseases may include, but not limited to:

- Neonatal early/late onset, rule out sepsis
- Sepsis/Septic shock
- Pneumonia (CAP/HAP/VAP)
- Bronchiolitis
- Acute Otitis Media
- Skin and Soft Tissue Infections
- Perioperative antibiotics
- Urinary Tract Infection/Pyelonephritis
- Meningitis
- Cardiac / Respiratory Arrest / RSI
- Asthma / Status Asthmaticus
- Seizure Disorders
- Apnea of Prematurity
- Patent Ductus Arteriosus
- Pain Management
- Fluids/electrolytes / nutrition
- Hematology / Oncology: Leukemias, Lymphomas
- Medication safety
- Drug formulation
- Neonatal Intraventricular Hemorrhage

Other Requirements of the Learning Experience

- Topic discussions and key articles/guidelines will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.
- Give a 30-minute presentation on a Pediatric or NICU topic applicable to inpatient pharmacy practice.
 - Resident will email topic choice to primary preceptor by the first Friday for approval.
 - Resident will research any associated guidelines and applicable primary/tertiary references and recommendations regarding therapy.
 - Presentation will be offered to the Pediatric/NICU Team (based on availability of staff) during the last week of the rotation. Primary preceptor must be present. This topic presentation may be expanded upon and/or presented as one of the required Continuing Education presentations required for the Residency.

The resident’s achievement of the goals of the residency is determined through assessment of the resident’s ability to perform the associated objectives. The table below demonstrates the relationship between the activities the resident will perform on the learning experience and the goals/objectives assigned to the learning experience.

Goals and Objectives

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	Associated Activities
1.1.1	(Applying) Interact effectively with health care teams to manage patients’ medication therapy.	<ul style="list-style-type: none"> • Interactions are cooperative, collaborative, communicative, and respectful. • Demonstrates skills in negotiation, conflict management, and consensus building. • Demonstrates advocacy for the patient and patient’s family • Identifies alternate methods of communicating with the families of patients to establish and relay goals of therapy. • Uses effective communication skills, utilizing different methods (phone, Doc Halo, Progress Notes).
1.1.2	(Applying) Interact effectively with patients, family members, and caregivers.	<ul style="list-style-type: none"> • Interactions are respectful and collaborative, and conducive to providing excellent patient/family centered care. • Shows empathy towards patient, patient/family. • Demonstrates cultural competence, awareness of cultural related issues and practices that may be applicable to patients and families
1.1.3	(Applying) Collect information on which to base safe and effective medication therapy.	<ul style="list-style-type: none"> • Collection/organization methods are efficient and effective. • Collects relevant information about medication therapy, including: <ul style="list-style-type: none"> ○ History of present illness. ○ Relevant health data that may include past medical history, health and wellness information, biometric test results, and physical assessment findings. ○ Social history of patient and family that may affect patient care ○ Medication history including prescription, non-prescription, illicit, recreational, and non-traditional therapies; other dietary supplements; immunizations; and allergies. ○ Laboratory values & adverse drug reactions ○ Medication adherence ○ Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that affect access to medications and other aspects of care. • Identifying sources of information that are the most reliable • Documentation is functional for subsequent problem solving and decision making. Clarifies information as needed.

		<ul style="list-style-type: none"> • Displays understanding of limitations of information in health records. • With newborns, take into consideration health history of newborns mother.
R1.1.4	(Analyzing) Analyze and assess information on which to base safe and effective medication therapy.	<ul style="list-style-type: none"> • Includes accurate assessment of patient’s: <ul style="list-style-type: none"> ○ health and functional status, ○ risk factors ○ health data ○ cultural factors ○ health literacy of family ○ access to medications ○ immunization status ○ need for preventive care and other services when appropriate • Identifies medication therapy problems, including: <ul style="list-style-type: none"> ○ Lack of indication for medication. ○ Medical conditions for which there is no medication prescribed. ○ Medication prescribed or continued inappropriately for a particular medical condition. ○ Suboptimal medication regimen (e.g., dose, dosage form, duration, schedule, route of administration, method of administration). ○ Adverse drug or device-related events or potential for such events. ○ Clinically significant drug-drug, drug-disease, drug-nutrient, drug-DNA test interaction, drug-laboratory test interaction, or potential for such interactions. ○ Use of harmful social, recreational, nonprescription, nontraditional, or other medication therapies. ○ Patient not receiving full benefit of prescribed medication therapy. ○ Problems arising from the financial impact of medication therapy on the patient. ○ Patient lacks understanding of medication therapy. ○ Patient not adhering to medication regimen and root cause (e.g., knowledge, recall, motivation, financial, system). ○ Laboratory monitoring needed. ○ Discrepancy between prescribed medications & established care plan for the patient.
1.1.5	(Creating) Design or redesign safe and effective patient-centered therapeutic regimens and	<ul style="list-style-type: none"> • Initiate, monitor, and adjust dosing regimen to achieve and maintain target levels for vancomycin, aminoglycosides, phenytoin, and other medications per physician or automatic consults. • Determine when levels or other appropriate labs need to be obtained to assess therapeutic efficacy and prevent toxicity.

	<p>monitoring plans (care plans).</p>	<ul style="list-style-type: none"> ● Present recommendation to preceptor if necessary and contact prescribing/primary physician with recommended changes to medications or monitoring plans.
<p>1.1.6</p>	<p>(Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions.</p>	<ul style="list-style-type: none"> ● Effectively recommends or communicates patients’ regimens and associated monitoring plans to relevant members of the healthcare team. <ul style="list-style-type: none"> ○ Recommendation is persuasive, conducive to patient health ○ Presentation of recommendation accords patient’s right to refuse treatment. ○ If patient refuses treatment, pharmacist exhibits responsible professional behavior. ○ Creates an atmosphere of collaboration, fostering quality patient care ○ Communication conveys expertise, & assertiveness (not aggression) ○ Where the patient has been directly involved in the design of the plans, communication reflects previous collaboration appropriately. ● Ensures recommended plan is implemented effectively for the patient, including ensuring that the: <ul style="list-style-type: none"> ○ Therapy corresponds with the recommended regimen. ○ Regimen is initiated at the appropriate time. ○ Medication orders are clear and concise. ○ Activity complies with the health system's policies and procedures. ○ Tests correspond with the recommended monitoring plan. ○ Tests are ordered and performed at the appropriate time. ● Takes appropriate action based on analysis of monitoring results (redesign regimen and/or monitoring plan if needed). ● Appropriately initiates, modifies, discontinues, or administers medication therapy as authorized. ● 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 education to patient’s family, 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. • 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. • 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. • Helps patient’s families learn to navigate the health care system, as appropriate. • Informs patients’ families how to obtain their medications in a safe, efficient, and most cost-effective manner, with special emphasis on maintaining health of newborn and pediatric patients • Determines barriers to patient compliance and makes appropriate adjustments. (I.E switching forms of medications from tablets → solutions, flavoring medications, etc)

Competency Area R3: Leadership and Management

GOAL R3.2 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. • Makes accurate, criteria-based assessments of one’s own ability to perform practice tasks. • 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., Pt. care, project, management, meetings). • Sets and meets realistic goals and timelines. • Demonstrates awareness of own values, motivations, and emotions.

		<ul style="list-style-type: none"> • Demonstrates enthusiasm, self-motivation, and “can-do” approach. • Strives to maintain a healthy work-life balance. • Works collaboratively within the organization's political and decision-making structure. • Demonstrates pride in, and commitment to, the profession through appearance, personal conduct, planning to pursue board certification, and pharmacy association membership activities. • Demonstrates personal commitment to and adheres to organizational and departmental policies and procedures.
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Competency Area R4: Teaching, Education, Dissemination of Knowledge

GOAL R4.1 Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public.

Objective Number	Objective	Activities
4.1.1 For Peds/NICU Learning Experience 1	(Applying) Design effective educational activities.	<ul style="list-style-type: none"> • Accurately defines learning needs (e.g., level, such as healthcare professional vs patient, and their learning gaps) of audience (individuals or groups). • Defines educational objectives that are specific, measurable, at a relevant learning level (e.g., applying, creating, evaluating), and that address the audiences’ defined learning needs. • Plans use of teaching strategies that match learner needs, including active learning (e.g., patient cases, polling). • Selects content that is relevant, thorough, evidence-based (using primary literature where appropriate), and timely, and reflects best practices. • Includes accurate citations, relevant references, and adheres to applicable copyright laws.
4.1.2 For Peds/NICU Learning Experience 1	(Applying) Use effective presentation and teaching skills to deliver education. Criteria:	<ul style="list-style-type: none"> • Present a 30-minute Peds/NICU topic (preferably with CE credit). • Demonstrates rapport with learners. • Captures and maintains learner/audience interest throughout the presentation. • Implements planned teaching strategies effectively. • Effectively facilitates audience participation, active learning, and engagement in various settings (e.g., small or large group, distance learning). • Presents at appropriate rate and volume and without distracting speaker habits (e.g., excessive “ah’s” and “um’s”). • Body language, movement, and expressions enhance presentations. • Summarizes important points at appropriate times throughout presentations.

		<ul style="list-style-type: none">• Transitions smoothly between concepts. Effectively uses audio-visuals and handouts to support learning activities.
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Communication

Daily as necessary with preceptor

E-mail: Residents are expected to read emails 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.

Doc Halo: Residents to page daily preceptor for urgent/emergency situations pertaining to patient care

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

Expected Progression of resident responsibility on Peds/NICU 1

Day 1: Preceptor to review learning activities and expectations with resident. Resident will bring Disease State/Topic list daily to keep track of progress. Resident will log into Doc Halo UBP team daily and take primary responsibility for responding to pages.

Week 1: Resident to work up at least ¼ of the team's patients. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the healthcare team. Choose and email presentation topic to preceptor for approval.

Week 2: Resident to work up at least ½ of the team's patients and discuss problems with preceptor daily. Preceptor to attend team rounds with resident, coaching the resident to take on more responsibilities as the pharmacist on the team. Resident will schedule presentation date and time.

Week 3: Resident to work up all or most of the team's patients and discuss problems with preceptor daily. The resident will take the lead in rounds. The preceptor will attend rounds but allow resident to lead pharmacy services. Preceptor will facilitate the resident as the pharmacist on the team. Resident will assist with precepting interns on rotation with the team.

Week 4: Resident will work up all of the team's patients and discuss problems with preceptor daily. The resident will take the lead in rounds. The preceptor will attend rounds but allow resident to lead pharmacy services. Preceptor will facilitate the resident as the pharmacist on the team. Resident will precept any intern that is on rotation with the team. Resident will present chosen topic to Primary Preceptor and pharmacy staff.

Expected Progression of resident responsibility on Peds/NICU 2

Day 1: Preceptor to review learning activities and expectations with resident. Resident will bring Disease State/Topic list daily to keep track of progress. Resident will log into Doc Halo UBP team daily and take primary responsibility for responding to pages.

Week 1-2: Resident to work up at least ½ of the team's patients and discuss problems with preceptor daily. Preceptor to attend team rounds with resident, coaching the resident to take on more responsibilities as the pharmacist on the team if needed. The resident will answer most questions from the treatment team, patients, and caregivers prior to discussion with the preceptor.

Week 3-4: Resident to work up all or most of the team’s patients and discuss problems with preceptor daily. The resident will take the lead in rounds. The preceptor will attend rounds but allow resident to lead pharmacy services. Preceptor will facilitate the resident as the pharmacist on the team. Resident will assist with precepting interns on rotation with the team. The resident will answer all questions from the treatment team, patients, and caregivers prior to discussion with the preceptor.

Evaluation Strategy

The preceptor will provide both written and verbal formative feedback during 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.

On the last day of the learning experience, and no later than 7 days after the end of the rotation, a member of the preceptor team will discuss the evaluation – 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. Preceptor and/or resident are to document in the comment box at the end of evaluation, a statement that indicates a discussion has been taken place. For example: “discussed with preceptor in person.”

PharmAcademic 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 PharmAcademic. Evaluations will be completed no later than 7 days past due date specified below.

What	Who	When
Summative	Preceptor	End of week 4
Preceptor/Learning Experience Evaluation	Resident	End of week 4