PGY1 – Internal Medicine – Focus on General Medicine Learning Experience

Preceptors*

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

General Description

This rotation is a four-week learning experience that provides broad exposure to clinical pharmacy practice on the General Medicine unit at Asante Rogue Regional Medical Center. The general medicine clinical pharmacist is involved in monitoring drug therapy, including dosing, monitoring clinical response, evaluating for adverse drug effects and assessing for potential drug-drug, drug-food, drug-disease, and drug-laboratory effects. The pharmacist is also responsible for many clinical consults and protocol services such warfarin dosing, vancomycin dosing, aminoglycoside dosing, renal dosing, IV to PO conversion, antimicrobial stewardship, glycemic management, pneumonia education consults, TPN consults, and patient education. The clinical pharmacist also participates in codes.

Expectations of the Resident

The resident will gain exposure to a broad variety of pharmacotherapy issues. The resident will learn about common disease states like COPD, DVT/PE, pancreatitis, diabetes and glycemic control, and common infectious diseases such as community acquired pneumonia, urinary tract infections, cellulitis, and bone/joint infections. The rotation will provide the resident the opportunity to gain broad practical experience in the management of these common conditions.

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

Disease States

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience or topic discussion includes, but not limited to:

- Cardiovascular disorders
- ACS, cardiac arrhythmias, hypertension, heart failure, stroke, hyperlipidemia
- Renal disorders
- Anemia, acute kidney failure, chronic kidney disease/end stage renal disease
- Respiratory disorders
- Asthma, COPD (bronchitis, emphysema), cystic fibrosis
- Gastrointestinal disorders
- GERD, PUD, pancreatitis, hepatitis, IBD/IBS
- Metabolic/Endocrinological disorders
- Hypo and Hyperglycemia and insulin management
- Infectious diseases and antimicrobial stewardship: pneumonia, UTI, intra-abdominal infections, endocarditis, skin and soft tissue infections, bone and joint infections, spontaneous bacterial peritonitis, antibiotic spectrum of activity, C&S interpretations, pharmacokinetic dosing software)

The resident's achievement of the goals of the residency is determined through assessment of his/her 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.

Objectives to be FORMALLY EVALUATED and Activities to facilitate professional growth

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, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications 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	• Identify medication-related problems and make evidence-based recommendations for solutions to prescribers. • Work with physicians, PAs, and nurses to resolve issues found when reconciling patients' medications prescribed on admission with medications taken as outpatient. • Utilize the appropriate method of contact based on patients' clinical condition (Doc Halo, face-to-face, or telephone) • Work with nurses and other health care providers (pharmacy technicians, pharmacists, buyers) to resolve missing doses and other medication distribution issues brought to your attention while staffing. • Demonstrates skills in negotiation, conflict management, and consensus building

		• Interactions are cooperative, collaborative, communicative, and respectful.
1.1.2	(Applying) Interact effectively with patients, family members, and caregivers.	• Assess patients' and/or caregivers' understanding of medication therapy and address educational needs through counseling. • Provide medication education to patients, their families, and/or care-givers for all patients on assigned floor to be discharged on warfarin, heart failure medications, U500, or antibiotics. • During the course of daily face-to-face visits answer questions concerning medication therapy and effectively discuss plan of care with patients and/or family members • Empower patients to take responsibility for their health. • Facilitate patient understanding of the plan of care and provide updates throughout admission as necessary with repeated face-to-face visits • Introduce yourself appropriately to patients, tell them how long the interaction will take, explain to them your role in their care, and thank them for speaking with you.
1.1.3	(Analyzing) Collect information on which to base safe and effective medication therapy	• Collect pertinent information about each assigned patient from the medical record, patient's nurse, and patient. • Utilize most reliable sources of information including CareEverywhere, face-to-face interview, and others to clarify information as needed • Review antimicrobial therapy for indication, patient's clinical condition, duration, renal dosing, and IV to PO potential. • Review glycemic trends for hyper or hypoglycemia utilizing the MAR, and glycemic trend charts in the EMR • Review INR's, medical record, and interview patients before altering warfarin therapy • Conduct a medication profile review daily on assigned patients, including a review of medical record and patient interview as needed, gathering all pertinent patient-specific information in an organized manner and be prepared to discuss recommendations with preceptor and interdisciplinary team • When verifying orders, review patient's profile, medical record (as needed), and interview patient, if necessary, to help assess potentially problematic medication orders.

1.1.4	(Analyzing) Analyze and assess information on which to base safe and effective medication therapy	• Actively analyzes patient-specific profiles, medication administration records, pertinent clinical data, progress notes, laboratory values on a daily basis. • Draw conclusions that reflect consideration of any ineffectiveness in prescribed therapy, need for additional therapy, need for patient counseling, significant laboratory trends, clinical endpoints, and safety and effectiveness of current therapy • Evaluate each patient's regimen for appropriateness (dose, dosage form, schedule, duration, route of administration, method of administration) • Determine the likelihood that an adverse reaction is occurring because of a medication and assess the severity of a drug reaction • Evaluate patients' improvement through use of objective clinical information found in the medical record and subjective information gathered from patients and care providers • Determine if therapy adjustments are needed to renal-dosed medications using the correct calculations for the patient • Determine if medications can be switched from IV to PO based on clinical criteria and the patient's ability to take medications orally • Determine if insulin dose adjustments are needed based on assessment of blood glucose trends, dietary intake, and medication therapy • Make appropriate recommendations for antimicrobial therapy optimization based on cultures, sensitivities, renal and hepatic function, kinetic calculations, and patient clinical condition • Assesses INR trends, doses of warfarin, and patient specific factors when determining subsequent warfarin dosing and monitoring • Nothing is identified as a problem that is not a problem. • Make appropriate overall conclusions about reasons for patient's progress or lack of progress toward each stated therapeutic goal • Properly judge the reliability of data (e.g., timing or site of collection, differences in test sites)

		• Where monitoring data are incomplete, makes sound judgments in determining if there are sufficient data upon which to base a conclusion • Accurately assess patients': health and functional status, risk factors, health data, cultural factors, health literacy, access to medications, immunization status, need for preventive care and other services when appropriate, other aspects of care as applicable.
1.1.5	(Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans).	• 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. • Present recommendation to preceptor if necessary and contact prescribing/primary physician with recommended changes to medications or monitoring plans.
1.1.6	(Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	• Actively intervene if patient therapy is not optimal (e.g., indication, dose, route, frequency, interactions, compliance, cost, therapeutic duplications, etc.). • Activity complies with the health system's policies and procedures (All formal consults and "Per Pharmacy Protocols") • Addresses each medication - and health-related problem and engage in preventive care strategies, including recommendation for vaccination, when needed • Respond 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.). • Assure daily completion of all consults and acuity flags • Effectively design, implement, recommend and communicates patients' regimens and associated monitoring plans to relevant members of the healthcare team. • Ensures recommended plan is implemented effectively for the patient, including ensuring that the: 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, and tests are ordered and performed at the appropriate time. • Implement pharmacokinetic drug monitoring and regimen adjustments based on evidence for disease states being treated and patient clinical condition • Initiate parenteral nutrition regimens and monitoring plans for patients upon consult • Provides thorough and accurate education to patients, and caregivers, when appropriate, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration. Ensure education is more fully understood by patients by utilizing the teach-back method. • Provide patients appropriate written materials to support verbal education (warfarin therapy booklet, pneumonia education flyer, and U500 insulin dose clarification sheet). • Ensure patients that need a different level of care receive it by contacting the appropriate provider/department for referrals (i.e. ID physician, social worker, dietician, discharge planner) • Utilizes the EPIC i-vents to transition necessary patient information shift-to-shift
1.1.7	(Applying) Document direct patient care activities appropriately in the medical record or where appropriate	• For pharmacy consults, write an initial consult note and then a follow-up note whenever drug level results are reported by the lab or the regimen is changed. • Document in the medical record, at minimum, every 3 days thereafter. • Assure that the relevant patient information is transcribed into the progress notes for the consultant to refer to in their assessment of the patient • Utilize iVents and Shift hand-offs appropriately • Chart documentation exhibits the following characteristics: (1) Written in time to be useful (2) Follows the health system's policies and procedures (3) concise (4) plans are clearly presented
1.1.8	(Applying) Demonstrate responsibility to patients.	• Daily activities consistently show a priority placed on the delivery of patient centered care (i.e., arranges work activities so that priority needs of patients are met first and subsequently all other pharmacotherapy acuity issues

		are addressed, or communicated appropriately to the next shift prior to leaving for the day). • Ensure that accurate and timely medication specific information regarding a specific patient reaches those who need it at the appropriate time (i.e., patient education is completed and timely; provides timely drug-information responses to other healthcare professionals) • Reports medication-related problems (e.g., ADRs, medication errors, drug interactions)
Goal R1.2: Ensure continuity of care during patient transitions between care settings.		
Objective Number	**Objective**	**Associated Activities**
1.2.1	(Applying) Manage transitions of care effectively	• Participates effectively in medication education (ie warfarin, heart failure medications, sotalol, dofetilide, U500, etc). • Completes medication history and reconciliations for directly admitted patients • Assures patients that need additional care receive the care they need (i.e., bedside medication delivery, discharge planner assistance with home medications, dietary consult, PT consult, ID consult, OPAT)

Communication

- Daily as necessary with preceptor
- 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.
- Halo: Appropriate for urgent questions pertaining to patient care
- Personal phone number: Provided to resident at time of learning experience for emergency issues

Expected Progression of resident responsibility on this learning experience

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Preceptor to teach and model for the resident patient care and documentation activities. Resident will work up several patients daily that the preceptor also works up and compare and contrast care decisions with preceptor daily.

Weeks 2: Resident to answer questions posed by other healthcare professionals. Residents will work to improve knowledge on areas of determined weakness. Resident will be accountable for clinical work and discuss care decisions and problems with preceptor daily. Preceptor will coach resident on their performance.

Week 3: Resident to work up approximately 1/3+ of the patients and discuss with preceptor daily. Preceptor will facilitate resident's growth towards independent practice, and provide additional teaching, modeling, and coaching as needed.

Week 4: Each week the resident is expected to take over the responsibility of working up more of the patients and continuing to discuss identified problems with preceptor daily. Evaluation Strategy
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.

PharmAcademic will be used for documentation of scheduled evaluations (both formative and summative per the chart below). The resident and preceptor meet face-to-face to discuss the summative evaluation to provide feedback on performance of the activities. Following discussion, the preceptor will submit evaluation in PharmAcademic. Preceptor and Learning Experience evaluations must be completed by the last day of the learning experience.

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

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

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 be expected to 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.”