

## Internal Medicine & Pulmonary Acute Care

### PGY1 Rotation – Acute Care I and II

#### Preceptors:

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#### Duration: 4 weeks

#### Site Description:

The pulmonary internal medicine service at the University of Utah Hospital currently consists of two teams. One team consists of an attending, resident, and a medical student. The other team is the cystic fibrosis team which is composed of an attending and advanced practice clinician (either a physician assistant or nurse practitioner). The attending is the same for both pulmonary teams on any given day. Both teams consist of up to 12 patients with a total census of up to 24 patients throughout the hospital. The majority of pulmonary internal medicine patients are located on one of three internal medicine units (AIMA, AIMB, or WP5), however patients can be located throughout the hospital. All of the patients on the pulmonary internal medicine team have some form of underlying pulmonary condition, in addition to their other disease states. Common reasons for admission include infection, coagulopathies, pulmonary dysfunction, liver dysfunction, and renal failure. Patients often present with multiple disease states and complicated drug regimens.

#### Role of the pharmacist:

The Pulmonary Internal Medicine pharmacist functions as part of a multidisciplinary team. Primary responsibilities include daily review of medication profiles, patient educations, reconciliation of home medications and improving medication dosing and utilization in all patients.

#### Rotation Description:

Residents contribute to patient care by monitoring patients, making recommendations to the medical team to improve care, and by facilitating the delivery of medications. Residents will round with the pulmonary internal medicine team and will be expected to serve as that team's pharmacist.

Presentations include daily patient presentations, bi-weekly topic discussion, weekly formal case presentations, one journal club, and one educational presentation/in-service.

#### Expected Progression:

##### First Day:

- Preceptor will orient resident to the unit, health care professionals, and workflow. Preceptor will review learning activities and expectations with resident
- Resident is expected to arrive ready to discuss progress to date, areas of excellence and areas of improvement needed, and resident goals for rotation.
- Resident is expected to arrive on time and prioritize activities with a focus on exceptional patient care.

##### Week 1:

- Resident to work up approximately 1/3 of the team's patients and present to preceptor as interventions arise or at completion of triage workup by the end of the week.

- Resident is expected to be able to complete medication histories, anticoagulation education, and discharge medication reconciliation (when discharging to another facility) for all patients they are assigned
- Resident will prioritize patient care based on acuity and may have to pass off patient care information to preceptor in order to participate in RRTs, codes, residency-requirements, etc.
- Residents will take into account each patient's comorbidities, allergies, weight, laboratory values, vitals, renal function, hepatic function, and current medications prior to recommending a new drug therapy.
- The resident will document med histories in the patient chart for all assigned patients.
- Preceptor to stay in unit and participate in work up and bedside attendance with resident, modeling pharmacist's role on the health care team.

**Week 2:**

- Resident expected to work up all patients and independently intervene in a proactive manner without preceptor's confirmation for all decision making by the end of the week. Preceptor will be in the unit or available at all times through pager and/or personal phone.
- The resident will strive to develop excellent written and verbal communication skills.
- The resident will document on every assigned patient using the hand-offs tool daily.

**Week 3:**

- The resident must devise efficient strategies for accomplishing patient care prioritization, communication, and interpersonal skills.
- The team should be reaching out primarily to the resident to answer questions.
- The resident will identify all common issues and begin identifying and addressing more complex therapy issues.
- The resident will demonstrate that information learned in the first 2 weeks can be incorporated readily into their patient care recommendations moving forward.
- Residents will document anticoagulation educations, medication histories, pain management, iVents or hand offs, and pharmacokinetic notes (when applicable) on patients.
- Residents will complete assigned presentations/projects as assigned, turning in drafts for review in advance of the final due date.

**Week 4:**

- The resident is expected to provide comprehensive pharmaceutical care to all patients on their service.
- Residents will make recommendations during rounds after formulating evidence-based therapeutic regimens for all patients
- The resident will complete medication histories, analyze all appropriate patient-specific data, develop complete therapeutic and monitoring plans, round with the multidisciplinary team, resolve all medication-related issues, and provide patient education and counseling.
- All presentations and project documents or revisions will be due no later than the next to the last day of residency.
- The resident should be independent in the practice site by the last day of rotation.
- \*\*\*IF the resident is in the second internal medicine rotation, expectations are moved up 1 week for all clinical activities. The resident will be expected to precept any students on rotation, unless otherwise notified by the preceptor. Expectations for projects and presentations will be that they will need fewer edits and will have better accuracy and focus for the stated audience.

NOTE: The progression for residents who have had prior acute care rotations at University Hospitals should progress faster by 2 to 5 days.

Activities Evaluated and Taught on Acute Care I:

RLS Objective	Rotation Activity	Teaching Method
<b><i>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</i></b>		

OBJ R1.1.1 Interact effectively with health care teams to manage patients' medication therapy	<p>Residents will act as an effective member of the medication-use safety team to ensure the safety and welfare of the patient. Examples: assisting physicians with medication dosing/route, assisting nursing staff with questions such as IV compatibility.</p> <p>Residents will round daily with one of six internal medicine teams. Residents will have the option of rounding with the preceptor the first day but will round independently for the remainder of the rotation, which will allow the resident to establish a collaborative, professional relationship with members of their medical team. The number of patients will vary daily, but each internal medicine team can have a maximum of 22 patients.</p>	Direct Instruction Modeling Coaching Facilitation
OBJ R1.1.2 Interact effectively with patients, family members, and caregivers	Residents will complete admission medication histories, provide anticoagulation educations and provide medication counseling to patients and their families when appropriate.	Coaching Facilitation
OBJ R1.1.4 Analyze and assess information on which to base safe and effective medication therapy	Residents will take into account each patient's comorbidities, allergies, weight, laboratory values, vitals, renal function, hepatic function, and current medications prior to recommending a new drug therapy.	Modeling Coaching Facilitation
OBJ R1.1.5 Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Residents will adjust medication recommendations based on changes in patient's conditions (ie. SCr, BP, BG, drug levels, labs, cultures)	Modeling Coaching Facilitation
OBJ R1.1.7 Document direct patient care activities appropriately in the medical record or where appropriate	Residents will document anticoagulation educations, medication histories, pain management, iVents or Handoffs, and pharmacokinetic notes (when applicable) on patients.	Direct Instruction Modeling Coaching Facilitation
OBJ R1.1.8 Demonstrate responsibility to patients	Residents will evaluate each patient thoroughly and follow-up on recommendations and medication management of the patient throughout the day.	Coaching Facilitation
<b>Goal R1.2 Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1 Manage transitions of care effectively	Residents will update pharmacy pass-off notes daily to ensure continuity of care during transitions of care. If information needs to be communicated in a timely manner, resident will call or page the new pharmacist with the information. Residents will also review patient's discharge medication list to	Modeling Coaching Facilitation

	ensure proper medications are continued or stopped upon discharge.	
<b>Goal R3.1 Demonstrate leadership skills</b>		
OBJ R3.1.1 Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Residents will make recommendations during rounds after formulating evidence-based therapeutic regimens for all patients on their internal medicine team. Residents will present patients to the preceptor daily and make follow-up recommendations with their internal medicine team if needed after rounds.	Modeling Coaching Facilitation

Activities Evaluated and Taught on Acute Care II: (Residents are expected to enter a second acute care rotation functioning at a higher level than the first acute care rotation.)

RLS Objective	Rotation Activity	Teaching Method
<b>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</b>		
OBJ R1.1.1 Interact effectively with health care teams to manage patients' medication therapy	<p>Residents will act as an effective member of the medication-use safety team to ensure the safety and welfare of the patient. Examples: assisting physicians with medication dosing/route, assisting nursing staff with questions such as IV compatibility.</p> <p>Residents will round daily with the pulmonary internal medicine teams. Residents will round with the preceptor the first few days but will round independently for the remainder of the rotation, which will allow the resident to establish a collaborative, professional relationship with members of their medical team. The number of patients will vary daily, but the pulmonary internal medicine team can have a maximum of 22 patients.</p>	Direct Instruction Modeling Coaching Facilitation
OBJ R1.1.3 Collect information on which to base safe and effective medication therapy	Residents will collect and update daily pharmacy progress notes with the newest laboratory results, microbiology results, pertinent imaging results and review any pertinent progress notes related to the patient's care. Residents are expected to update daily pharmacy progress notes prior to the start of rounds each day. Residents will complete accurate medication histories and provide appropriate documentation.	Modeling Coaching Facilitation

OBJ R1.1.6 Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Residents will be responsible for implementing the medication changes discussed during rounds and subsequent medication monitoring (efficacy, side effects). Residents will follow-up with their team daily after discussing patients with their preceptor.	Modeling Coaching Facilitation
OBJ R1.1.8 Demonstrate responsibility to patients	Residents will evaluate each patient thoroughly and follow-up on recommendations and medication management of the patient throughout the day.	Coaching Facilitation
<b><i>Goal R1.3 Prepare, dispense, and manage medications to support safe and effective drug therapy for patients</i></b>		
R1.3.2 Manage aspects of the medication-use process related to formulary management	Residents will assess all requests for non-formulary medications for their patients and determine appropriateness of use in the hospital. Residents will find cost-effective alternate medications or follow the patient's own medication policy to use patient-supplied medications for expensive, non-formulary therapies.	Direct instruction Modeling Coaching Facilitation
<b><i>Goal R3.1 Demonstrate leadership skills</i></b>		
R3.1.2 Apply a process of on-going self-evaluation and personal performance improvement	Residents will be conscientious of their work and strive toward providing the best possible care at all times. Residents will provide written self-evaluations in PharmAcademic.	Facilitation
<b><i>Goal R3.2 Demonstrate management skills</i></b>		
R3.2.4 Manages one's own practice effectively	Residents are expected to act as the primary pharmacist for their pulmonary internal medicine team. Residents are expected to update all pharmacy progress notes for patients on their internal medicine team daily before rounds and to complete all patient care activities prior to meeting with the preceptor in the afternoons. Residents are to take personal responsibility for following up on all recommendations and task items daily before leaving.	Direct Instruction Modeling Facilitation Coaching
<b><i>Goal R4.1 Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and group)</i></b>		
OBJ R4.1.1 Design effective educational activities	Residents are expected to provide patient education as appropriate. These include anticoagulation educations, medication education of an existing home medication, or new medication educations.	Direct Instruction Facilitation Coaching

	<p>Residents will tailor education to their specific audience. Patient educations, physician in-service, case-presentations, topic discussions, and journal clubs are examples of educational activities on rotation.</p> <p>Residents will provide specific learning objectives during formal presentations.</p> <p>When applicable, residents will serve as a role-model for DP4 students on their pulmonary internal medicine rotation.</p> <p>Residents will present weekly formal case presentations on Fridays. The formal case presentation will focus on a topic related to a specific patient's reason for admission and a formal handout will be required.</p> <p>Residents will present a final in-service on an internal medicine topic to an assigned audience. The presentation will include formal handouts.</p> <p>Residents will provide a handout to their preceptor for topic presentations, journal club, and case presentations. Residents will provide a handout to the internal medicine team during the final in-service.</p>	
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**Project Description:**

- Case presentation (weekly)
  - Patient presentation in SOAP note format
  - Topic presentation that focuses on a specific disease state relevant to a patient
  - Formal hand-out and presentation
  
- Topic discussion (weekly)
  - Formal hand-out and presentation
  - Examples of topics: AKI, infections, asthma/COPD, and pneumonias
  
- Journal Club (1)
  - Topic must be related to pulmonary internal medicine
  - Article published within the last year
  - Likely to impact patient care
  - Formal hand-out and presentation
  
- In-service presentation (1)

- Examples of past topics include: DVT prophylaxis, insulin review, bowel regimens, overview of QTc prolonging medications, antibiotic coverage, overview of NOACs
- Formal hand-out and presentation

**Typical Daily/Weekly/Monthly Activities:**

A typical day will be 0700-1530 but additional hours are usually necessary to complete projects, readings for topic discussions, journal club and attend meetings.

0700-0900 Round preparation- patient monitoring and med reconciliations

0900-1200 Internal medicine rounds

1300-1400 Patient presentations- identify and resolve follow-up issues with medical team

1400-1500 Topic discussion with preceptor

1500 + Additional time to work on medication reconciliations, projects, topic discussions and resolve any remaining follow-up issues with medical team

**Evaluation:**

The resident will receive feedback on their progress each day as they discuss patients with the preceptor. The preceptor will provide formative feedback for case presentations, journal clubs and in-service. There will be a snapshot of their progress at 2 weeks and a summative evaluation of strengths, areas for development, and specific feedback to take to the next rotation. A formal final summative evaluation will occur on the last day of rotation.