

## Medication Safety – PGY1 Rotation

### Preceptor:

Shantel Mullin, PharmD, BCPS - Pharmacy Quality, Safety & Training Director

**Duration:** 4 weeks

### Site Description:

University of Utah Health is composed of 4 hospitals, 12 free standing clinics, 16 retail pharmacies, 4 infusion centers, ambulatory clinic services, home infusion service, and a comprehensive drug information service. University Hospital is a 490 bed, level 1 trauma center with strong critical care, emergency medicine, surgical services, obstetrics and gynecology, neonatal, internal medicine and subspecialties, neurosciences, and rehabilitation. The University Neuropsychiatric Institute is a 130 bed inpatient psychiatric facility. The Huntsman Cancer Center consists of a 100 bed inpatient service including an ICU, an ambulatory infusion suite, and extensive ambulatory cancer clinics, including bone marrow transplant. The University Orthopaedic Hospital provides mostly ambulatory care surgery services plus orthopedic specific clinics. The ambulatory care network includes the Community Clinics located throughout the Salt Lake Valley and the 4 surrounding counties that provide both primary and specialty care, plus the specialty clinics and infusion room at University Hospital. This specific rotation site is located in University Hospital, and the resident uses their own office for project planning and management. The pharmacy serves all locations in the hospital 24 hours a day with a USP 797-compliant IV center, CPOE order verification, and Automated scanning and dispensing, and barcode medication administration. Direct clinical pharmacy services are provided to all hospitalized patients for a minimum of 8 hours per day. Safety issues affecting all pharmacy service, both inpatient and outpatient, are assessed during this rotation.

### Role of the Pharmacist:

The preceptor for this rotation directs the medication safety initiatives of the Department of Pharmacy Services for the health system. She is involved with coordinating responses to medication error reports system-wide. She is involved in participating in or identifying staff for involvement in RCAs and key interdisciplinary quality improvement projects for the organization. She is co-chair of the UUH Medication Safety Committee and Medication Error Review Committee. She participates in a wide range of committees including the system Patient Safety Committee and ADR sub-committee of P&T. She works on key medication safety initiatives in collaboration with managers and front line staff in pharmacy and outside of pharmacy.

### Rotation Description:

This rotation is a reading, discussion, committee and project-based rotation. The resident will have opportunities to develop his or her understanding of medication safety issues in hospitals and clinics. Audits and projects will help the resident have a more clear understanding of their role in medication and patient safety in the health system.

### Expectations of the Resident:

The resident is expected to be on time each day and for each assigned meeting. They need to use their time wisely to complete a variety of projects during the day. Residents may need to take readings home if they are unable to complete readings during the day. Residents are expected to “sign-post” on how their projects are coming along every week, flag out if they feel stuck in moving a project forward, and turn in drafts and final copies as agreed upon in the rotation calendar. Residents must maintain the

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confidentiality of patients and staff for each medication error reviewed or RCA that they participate in. Residents are expected to maintain a high level of professionalism in timeliness, dress and communication throughout the resident.

**Expected Progression:**

Day 1: The resident is expected to arrive on time with a list of personal goals for the rotation. We will review the rotation description and assign projects and deadlines. Readings and examples will be provided on day 1, and residents are encouraged to ask lots of questions this day and throughout the rotation to ensure they stay on track. Sign posting should occur with a daily check-in with the preceptor. In order to stay on track, residents will need to schedule time for assigned readings each day of the rotation. Daily RLs will be summarized throughout the rotation for safety huddle Monday through Friday.

Week 1: During the first week, the resident will identify a medication safety topic to write a newsletter article and begin pulling references for this topic. The resident will receive an MUE topic and a data set to begin a general review. The data collection plan will be established by the end of the first week in collaboration with the preceptor and invested managers. The RCA/CCA topic will be selected by Friday. The resident should plan to read 4 chapters per week of the *Handbook*, and be ready for discussion. The resident will begin the ISMP gap analysis. The student will select relevant data points with which to assess the safety of a product or class selected for a safety MUE.

Week 2: Drafts of the newsletter will be turned in electronically with references during week 2. The resident will manage their projects, audit, and readings to meet the stated deadlines. The resident will follow up on emails and meetings associated with the ISMP gap analysis. The resident will begin working on their MUE data collection.

Week 3: Residents are expected to respond to feedback on data analysis and written drafts within 1-2 days of receiving the edits. The resident should be researching a process associated with an error in order to make a workflow diagram. The resident should be completing a review of data associated with a safety MUE and begin to calculate descriptive statistics.

Week 4: The resident will facilitate an RCA/CCA, update the workflow diagram, and develop a summary document of the findings and recommended actions. The resident will send an edited copy to participants. A final draft of the MUE summary will be turned in for edits and revisions.

**RLS Goals and Objectives:**

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

R2.1.2 Participate in a medication-use evaluation
R2.1.3 Identify opportunities for improvement of the medication-use system
R2.1.4 Participate in medication event reporting and monitoring

**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**

R2.2.1 Identify changes needed to improve patient care and/or the medication-use system
R2.2.2 Develop a plan to improve the patient care and/or the medication-use system
R2.2.4 Assess changes made to improve patient care or the medication-use system

**R3.2 Demonstrate management skills**

R3.2.2 Explain the elements of the pharmacy enterprise and their relationship to the health care system
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**R4.1 Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)**

R4.1.3 Use effective written communication to disseminate knowledge

**Activities Evaluated:**

Rotation Activity	RLS Goal	Teaching Method
Attend System and Pharmacy Medication Safety Committees. Attend ADR Committee and report on pharmacist involvement in RL reporting & describe what can be done to prevent ADRs listed as “preventable”. (If ADR is not meeting during the rotation, a review of prior agendas will occur.) Attend other safety-related meetings as they arise. The resident will take notes and ask questions regarding key topics discussed in each meeting.	R2.1.4 R2.1.3	I, M
Complete and ISMP or related gap analysis. The resident will use interdisciplinary team resources, policies, and observation to determine our current state of practice. The resident will develop a recommendation for closing the gap, an owner, and a proposed deadline. ISMP gaps will be presented to System and Pharmacy Med Safety Committees.	R2.2.1 R2.2.2 R2.2.4 R4.1.3	C,F
Review and research several RLs per week as assigned. Enter manageable recommendations for improvements in the RL link with communication to the area managers. For a portion of the rotation, the resident will summarize the daily RLs for huddle. The resident and preceptor will discuss formal and informal networking opportunities.	R2.1.4	I, C, F
Facilitate a root cause analysis (RCA) or common cause analysis (CCA) related to an RL or a problem-prone process identified in RL quarterly reports.	R2.2.2 R3.2.2	I, M, C, F
Complete a project related to process improvement. Determine if the process improvement will need a policy or SOP to be written or updated. Networking with nursing, physicians, other pharmacy departments, and Quality and Patient Safety staff will be necessary to complete projects	R2.1.3 R2.2.1 R2.2.2 R2.2.4	C, F
Complete a safety-related MUE. Present the results to staff with plans for related improvements as needed. The resident may also audit an operational process to ensure standard operating procedures are used.	R2.1.2 R2.2.1 R2.2.2 R2.2.4	C, F
Create a newsletter article related to medication Safety that is evidence based and cites current literature.	R4.1.3	C, F
Discuss required readings how the information impacts safe pharmacy practice	R3.2.2	I, F

Teaching Methods include: I=direct instruction, M=modeling, C=coaching, and F=facilitation

**Readings and Preparatory Work:**

- National Patient Safety Goals (NPSG)
- Selected sections of *To Err is Human*
- Selected chapters of *Medication Safety: A Guide for Health Care Facilities*
- Selected chapters of *Medication Safety Officer’s Handbook*
- Selected sections of ASHP Best Practices <http://www.ashp.org/bestpractices>
- Most recent 3 months of ISMP Inpatient Newsletter
- Other readings will be assigned as related to med safety issues that arise on rotation

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

Monday: Meet with preceptor to discuss projects at 8:30AM.

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Monday-Friday: The resident will then have time to read, plan projects, and execute the projects during the week. They will receive a list of meetings to attend at the beginning of the rotation, and this list will be updated weekly. The resident is HIGHLY encouraged to check in with the preceptor each morning to ask questions and ensure projects are on track.

Fridays at 3:30PM: The resident will summarize the work completed that week, review partial and final documents, discuss related topics or readings, plan projects for the coming week, and discuss progress and evaluations.

### **Evaluations:**

The resident will receive feedback through verbal discussions and evaluation of knowledge, skills, attitudes and abilities. The resident will receive written edits on their written projects (formative), verbal feedback on their participation in committees and progress on projects (formative). A summative midpoint and final evaluation that will be completed in person and then recorded in PharmAcademic. The resident will evaluate the learning experience, preceptor and their progress on learning objectives at the end of the rotation.