

# University of Utah Health: PGY1 Residency Program

## Pharmacy Informatics Elective

**Rotation Name:**

Pharmacy Informatics – PGY1 Elective Rotation

**Preceptor(s):**

Dallas Moore, MS, RPh – Director of Pharmacy Informatics & Technology, University of Utah Health Care

**Duration:** 4 weeks

**Site Description:**

University of Utah Hospitals & Clinics (UUHC) is comprised 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 orthopaedic 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 at 102 Tower (102 South 200 East, Salt Lake City, Utah). It serves a diverse group of patients who are managed by our electronic health record systems. Pharmacy services at this site include informatics.

**Role of the Pharmacist:**

The informatics pharmacist is responsible for performing review, design, build, test, training of new build functionality and maintenance of existing Epic Willow functionality. Informatics pharmacists participate in the selection and software integration of pharmacy automation.

**Rotation Description and Expectations of the Resident:**

Residents will be trained in the safe and effective use of information technology and automated systems including assessment, planning and appropriate use of various technologies. This rotation will include time for projects, informatics meetings, and technology training.

The resident will have discussions with the preceptor(s) multiple times per week. The weekly planning meeting (usually Monday morning first thing) will serve as a place for providing feedback to the resident and making adjustments to the rotation as needed. Resident also needs to give feedback to the preceptor if anything can help make the rotation better for the resident.

Residents are trained in the operational side of associated information systems and technologies. They will gain an understanding of basic informatics principles and best practices and how they relate to assessing, analyzing, and implementing pharmacy information systems and technology. Training focuses on informatics pharmacist responsibilities and requirements, team standards for managing, creating and maintaining medication orders builds, and other residency requirements.

**Readings and Preparatory Work:**

“The Pharmacy Informatics Primer.” By Doina Dumitru, ASHP

**Projects Description:**

Projects will be determined for residents based on institutional needs and resident interests at the time of the rotation.

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

The resident will split their time between projects, technology training, related technology and automation meeting attendance, and evaluations. The resident will receive a calendar of meeting times and project deadlines at the beginning of the rotation.

8:00 – 4:30, Monday through Friday

Attend bi-weekly pharmacy IT staff meeting

Other meetings as assigned

Formal evaluation meeting at midpoint and last day of the rotation

**Pre-rotation and First Day:** Confirm with preceptor starting dates and time for the first day. Review schedule for the rotation. Request required access for automated systems.

**Week 1:** Orientation to Informatics; Introduction to informatics primer book; Reporting and analytics; Identify project

**Week 2:** Understand MARF process; Introduction to Clinical Decision Support; Work on project

**Week 3:** Introduction to medication build; Introduction to order set build; Continue working on project

**Week 4:** Introduction to Beacon/treatment plans; Complete project

**Evaluation:**

The resident will receive feedback on a regular basis regarding their progress through the rotation. A 5-point summative evaluation will be done at the midpoint and a full summative evaluation will be recorded in PharmAcademic at the conclusion of the rotation and completion of all projects.

**RLS Goals:**

Goal R1.3: Prepare, dispense, and manage medications to support safe and effective drug therapy for patients.

OBJ R1.3.3      Manage aspects of the medication-use process related to oversight of dispensing

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

OBJ R2.1.3      Identify opportunities for improvement of the medication-use system

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.

OBJ R2.2.1      Identify changes needed to improve patient care and/or the medication-use system

OBJ R2.2.2      Develop a plan to improve the patient care and/or the medication-use system

Goal R3.2: Demonstrate management skills

OBJ R3.2.1      Explain factors that influence departmental planning

OBJ R3.2.2      Explain the elements of the pharmacy enterprise and their relationship to the health care system

**Activities Evaluated and Taught:**

Outcome, Goal, Objective Number (Level of Learning Required) & Description	Related Rotation Activities	Teaching Method
<b>Outcome R1:</b>		
Goal R1.3: Prepare, dispense, and manage medications to support safe and effective drug therapy for patients.		
OBJ R1.3.3 Manage aspects of the medication-use process related to oversight of dispensing	Describe the functionality and inter-operability of automated and information systems within the pharmacy. Review override reports on two nursing units and make recommendations as to appropriate over-ridable medications. Attend assigned meetings to support a more complete understanding of the informatics systems at University Hospitals and Clinics.	I, C
<b>Outcome R2:</b>		
Goal R2.1: Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization		
OBJ R2.1.3 Identify opportunities for improvement of the medication-use system	Describe and demonstrate the process for doing a compliance audit of patient's medication charges.	I, C, M, F
<b>Outcome E2:</b>		
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.		
OBJ R2.2.1 Identify changes needed to improve patient care and/or the medication-use system	Demonstrate the ability to run a report in the Pharmacy Information System.	I, M, F
OBJ R2.2.2 Develop a plan to improve the patient care and/or the medication-use system	Describe the medication use process and how each part utilizes technology to function correctly and safely for the patient.	I, C, M, F
<b>Outcome E3:</b>		
Goal R3.2: Demonstrate management skills		
OBJ R3.2.1 Explain factors that influence departmental planning	Demonstrate the ability to run a report in the Pharmacy Information System.	I, M, F
OBJ R3.2.2 Explain the elements of the pharmacy enterprise and their relationship to the health care system	Describe the medication use process and how each part utilizes technology to function correctly and safely for the patient.	I, C, M, F

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