

**PGY 2 Critical Care Pharmacy Residency
ELECTIVE Cardiology Experience Description
Truman Medical Center Hospital Hill**

Experience Title: Cardiology (PGY2)

Preceptor:

Andrew Smith, Pharm.D., BCPS. (AQ Cardiology)

Cardiology Clinical Pharmacist

TMC Hospital Hill

Cardiology Center

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Overview:

This experience is 4 week and is structured to integrate cardiovascular therapeutic knowledge from PGY1 experiences into the resident's specialized practice of critical care pharmacy. The resident will participate in care of patients on the cardiovascular service. The role of the pharmacist on the cardiovascular service includes medication profile review and therapeutic optimization, patient education (both inpatient and outpatient), and student education. At the end of the experience the resident should be able to identify, manage, and counsel patients and physicians regarding medication therapy, with an emphasis on acute cardiovascular conditions.

Rotation Responsibilities:

- Attend interdisciplinary patient care rounds daily at 9am.
- Perform pharmaceutical care monitoring for all patients assigned to inpatient cardiology service.
- Provide prompt, evidence based pharmaceutical recommendations and drug information.
- Provide patient education as needed throughout rotation including:
 - Post-PCI
 - Heart failure
- Attend ALL pharmacy student/resident presentations
- Attend applicable cardiology focused internal medicine grand rounds/noon conference.
- Present one journal club on a cardiology topic of interest to preceptor and students
- Present one case presentation incorporating active learning to the pharmacy staff regarding drug therapy management of the critically ill cardiovascular patient.
- Lead at least one case based cardiovascular pharmacotherapy topic discussions with Pharm.D. students, PGY1 pharmacy practice residents and preceptor.
- Precept Pharm.D. students and/or PGY1 pharmacy practice residents (if applicable).
- Actively participate in all mid-point and final evaluations of Pharm.D. students and/or PGY1 pharmacy practice residents (if applicable).
- Document all therapeutic interventions in pharmacy intervention tracking software as applicable.
- Complete other duties as assigned by preceptor.

Requirements of Learning Experience:

Expected hours: 0700-1700; these times may vary depending on patient census and service requirements.

Preceptor interaction:

08:30	Pre-rounds with resident
09:00	Rounds with resident and cardiology team
PM (time varies with patient care needs)	Patient education, patient care follow up from rounds, topic discussion, self-directed work

Communication

- Daily scheduled meeting times – resident is to prioritize questions and problems to discuss during scheduled meeting times (as above and scheduled throughout the month)
- E-mail – at a minimum, residents are expected to read their email at the beginning, middle, and end of each day to facilitate communication. This is appropriate for routine, non-urgent questions and problems.
- Office extension – this is appropriate for urgent patient care needs.
- Pager – this is appropriate for urgent/emergent situations pertaining to patient care.
- Cell-phone (voice/text)- is appropriate for urgent/emergent situations pertaining to patient care or precepting.

Expected progression of resident throughout the rotation:

Day 1: Preceptor will review goals, learning objectives, expectations, and general calendar/activities for the month. Preceptor will provide orientation of the resident to the cardiology team, processes/activities for the month including:

- Where/when to meet for rounds
- Schedule of cardiac rehab classes, where to find class materials, sign in sheet, etc
- Expectations and process for doing heart failure, PCI, and warfarin educations
- List of topic discussions for the month

Thereafter: Based on the experience of the resident, the preceptor will encourage the resident to take on more responsibility and independence throughout the month. The first few days, the preceptor will attend rounds with the resident, modeling the pharmacist's role on the cardiology team. Thereafter, the resident will acquire more responsibility in working-up the patients and doing daily patient care activities, while continuing to discuss identified problems with the preceptor daily. By the end of the first week, the resident will attend rounds independently, while being facilitated by the preceptor. During the second week the resident will begin to lead pre-rounds discussion with students and independently review and sign patient education notes.

Required presentations/written assignments: One journal club/topic discussion to cardiology service and/or pharmacy staff, one formal presentation to pharmacy staff on cardiology related topic.

Required meetings:

1. Pharmacy presentations
2. Topic discussions
3. Student case presentations

Optional meetings (as determined by preceptor):

1. Internal medicine noon conference (cardiology topics)

2. Internal medicine grand rounds

Required readings:

*Topic will be discussed on a case-by-case basis and/or upon area(s) of interest but will focus on the areas of emphasis shown below

Areas of Emphasis:

<i>Acute Coronary Syndrome (ACS)</i> a. STEMI b. UA/NSTEMI c. Intra-aortic Balloon Counterpulsation	<i>Heart Failure (HF)</i> a. Chronic b. Acute decompensated HF c. Cardiorenal syndrome d. Left Ventricular Assist Devices e. Palliative care
<i>Arrhythmia management</i> a. Atrial Fibrillation (AF) b. Ventricular	<i>Hypertensive Emergency</i>

The resident should be familiar with these topics **prior to the discussion with the preceptor/students**. Please refer to the Cardiology Rotation resource folder on the pharmacy G: drive for current guidelines.

Method of Evaluation:

Evaluation of the resident will be based on the Residency Learning System. The resident will develop personal goals specific to the cardiology rotation. The resident and preceptor will prepare and discuss the evaluations.

The evaluations and resident progress toward personal goals will be evaluated by including but not limited to the following:

- Formative evaluations/Snapshots: Formative evaluation can be verbal feedback to the resident or via the use of Snapshots. Snapshots provide feedback to residents on specific activities on the rotation in which the resident will benefit from specific feedback on their performance. The snapshot should be completed based on 1 patient/experience, not as an overall evaluation of their performance.
- Summative evaluations: This evaluation summarizes the resident's performance throughout the learning experience. Specific comments should be included to provide the resident with information they can use to improve their performance in subsequent learning experiences.
- Preceptor and Learning Experience evaluations must be completed by the last day of the learning experience.

Rotation Activities:

Activity	Objectives Covered
<p>Develop a daily routine that demonstrates the prioritization of care for critically ill patients. Be aware of changes in patient condition throughout the day. Develop ability to incorporate appropriate primary literature results and patient data into a daily plan that maximizes appropriate pharmaceutical care to the cardiology patient population</p> <ul style="list-style-type: none"> • Attend interdisciplinary patient care rounds daily at 9am. • Provide prompt, evidence based pharmaceutical recommendations and drug information. • Establish professional pharmacist-patient and pharmacist-physician relationship. • Document all therapeutic interventions in pharmacy software. 	<p>R2.1 R2.2 R2.5.2 R2.7 R2.8 R2.10 R2.11</p>
<p>Perform pharmaceutical care monitoring for all patients assigned to inpatient cardiology service.</p> <ul style="list-style-type: none"> • Generate and maintain patient specific monitoring sheets that contain all pertinent data (laboratory values, vital signs, daily weights, echocardiograms, etc.) for making drug therapy recommendations. • Evaluate patient’s drug therapy each day to determine the presence of problems in the current medications or specialized nutrition support. • Construct an evidenced based treatment regimen including goals for critically ill patients that take into consideration patient-,age-, disease- and drug-specific information as well as ethical and financial considerations for various disease states using the most current evidence based resources. 	<p>R2.2 R2.4 R2.5 R2.6 R2.8 R2.9</p>
<p>Provide patient education as needed throughout rotation including:</p> <ul style="list-style-type: none"> • Post-PCI • Heart failure • Anticoagulation • Cardiac Rehabilitation Classes 	<p>R2.2.1 R2.3.1 R2.4.4</p>
<p>Attend all pharmacy student/resident presentations. Attend applicable cardiology focused internal medicine grand rounds/noon conference.</p>	<p>E3.1</p>
<p>Present one journal club/topic discussion on a cardiology topic of interest to cardiology service and/or the pharmacy staff.</p>	<p>R3.1.3 R3.1.5</p>
<p>Present one case presentation to the pharmacy staff at the conclusion of the rotation regarding drug therapy management of the cardiovascular patient rotation and present information in a concise and efficient manner.</p>	<p>R3.1</p>
<p>Precept Pharm.D. students and/or PGY1 pharmacy practice residents (if applicable).</p> <ul style="list-style-type: none"> • Lead cardiovascular pharmacotherapy topic discussions with Pharm.D. students, PGY1 pharmacy practice residents and preceptor 1-2 times monthly. 	<p>R3.1</p>

Goals and Objectives to be Taught and Evaluated:

Objective		Activity used for evaluation
R2.2.1	(Synthesis) Devise a plan for deciding which critical care patients to focus on if given limited time and multiple patient care responsibilities.	Develop a daily routine that demonstrates the prioritization of care for critically ill patients. Be aware of changes in patient condition throughout the day. Develop ability to incorporate appropriate primary literature results and patient data into a daily plan that maximizes appropriate pharmaceutical care to the cardiology patient population.
R2.5.2	(Synthesis) Design a regimen that meets the evidence-based therapeutic goals established for a critically ill patient; integrates patient-specific information, disease and drug information, ethical issues and, when possible, quality-of-life issues; and considers pharmacoeconomic principles.	Construct an evidenced based treatment regimen including goals for critically ill patients that take into consideration patient-, age-, disease- and drug-specific information as well as ethical and financial considerations for various disease states using the most current evidence based resources.
R3.1.4	(Application) Use skill in case-based teaching.	Present one journal club/topic discussion on a cardiology topic of interest to cardiology service and/or the pharmacy staff. Precept Pharm.D. students and/or PGY1 pharmacy practice residents (if applicable).
R3.1.5	(Application) Use public speaking skills to speak effectively in large and small group situations.	Present one case presentation to the pharmacy staff at the conclusion of the rotation regarding drug therapy management of the cardiovascular patient rotation and present information in a concise and efficient manner.

I have read and acknowledged the responsibilities of this rotation.

Pharmacy Resident

Primary Preceptor
(Andrew Smith, Pharm.D., BCPS)