

Thrombosis Service (PGY1 Rotation - Transitions of Care)

Preceptors

Heidi Weber, PharmD, BCACP

Supporting Pharmacist

Beth Young, PharmD, BCPS

Duration: 4 weeks

Site Description

The University of Utah Health (UUH) Thrombosis Service is a nationally recognized anticoagulation management service, which consists of many pharmacists and technicians who manage ~3,000 patients throughout the intermountain states, and specializes in safely, effectively, and seamlessly transitioning high-risk patients on high-risk anticoagulant therapy, into and out of the hospital, into and out of skilled nursing facilities, and into and out of the care of home health nurses, outside physician practices, and other hospital systems. The Thrombosis Service pharmacists and technicians all work together to provide exceptional patient-centered care by using unique communication tools and strategies across 3 physical locations. Also, several pharmacists, including the rotation preceptors, rotate working both inpatient and outpatient.

Role of the Pharmacist

The clinical pharmacists manage anticoagulation throughout the health-system, for inpatients, outpatients, and patients transitioning between care settings. Inpatient duties includes managing anticoagulation for patients who present to the ER or vascular clinic with an acute clot, patients on the Ortho Trauma Surgical Service (OTSS), patients with a Left Ventricular Assist Device (LVAD) for end-stage heart failure, patients at the Huntsman Cancer Hospital, patients on the rehabilitation unit at the University Hospital, and various other inpatient consults. Pharmacists also work in the outpatient Thrombosis Clinic at the University Hospital where patients are referred for treatment of acute thrombosis (deep vein thrombosis, pulmonary embolism, and stroke) or prevention of thrombosis in high-risk conditions (atrial fibrillation, mechanical heart valve replacement, LVAD, thrombophilia, cancer, etc.).

Rotation Description

The resident will learn to function as a clinical pharmacist on the Hospital Thrombosis Team, located on CVMU of the University Hospital. The resident will also rotate through the on-site Thrombosis Clinic at the University Hospital, where

they provide point-of-care INR testing, anticoagulation drug therapy selection and education (including the direct oral anticoagulants (DOACs)), and management for outpatients within the UUHC system via collaborative practice agreement with the referring provider. Resident will be responsible for providing transition of care from the hospital to the outpatient clinic, or transition to providers outside of the University system. The daily activities may be customized based on the resident's interest, experience, and progression.

Typical Daily/Weekly/Monthly Activities

Schedule 8:00am – 4:00pm, Monday through Friday

Thrombosis Clinics meetings (teleconference) every 4th Wednesday, noon-1pm

Expected Progression

First Day:

- The Preceptor will orient the resident to the unit, health care professionals, workflow and service line. The Preceptor will review and discuss learning activities and expectations of the resident.
- Resident will come ready to discuss resident progress to date, areas of excellence and areas of improvement needed; and three goals for the rotation.
- The resident will be punctual and will prioritize activities as they come up during the day, focusing on exceptional patient care.

Week 1:

- Resident will provide anticoagulation regimens for all inpatients and outpatients on the Hospital Thrombosis Service.
- Resident work-up all patients scheduled for knee & hip surgeries in the next week, and present for review by the preceptor.
- Resident will take into account each patient's comorbidities, allergies, weight, laboratory values, renal function, hepatic function and current medications prior to recommending an anticoagulant regimen.
- Resident will learn documentation procedures pertinent to pharmaceutical care interactions on the Hospital Thrombosis Service.
- Preceptor will be available on the unit to participate in work-ups, dosing, and answering questions, modeling the pharmacist's role on the Thrombosis Service.

Week 2:

- Resident will provide anticoagulation education to patients, work-up all new consults and develop anticoagulation plans for patients on the Service with minimal guidance from the preceptor.
- Resident will begin to provide continuity of care during patient transitions between care settings of care activities with minimal guidance from the preceptor.
- Resident will provide professional communications, both written and oral; regarding anticoagulation therapy to health care personnel, patients and their families.
- Resident will provide a first draft of either the presentation/ project to the preceptor(s).
- Preceptor will direct questions and transition of care issues to the resident.

Week 3:

- Resident will independently create warfarin dosing plans for patients on inpatient & outpatient service.
- Resident will identify patients who are candidates for warfarin or ASA for VTE prophylaxis and work up all potential warfarin patients on schedule for joint replacement surgery.
- Resident will answer drug info questions related to thrombosis topics.
- Resident will be fully integrated into the clinical team.
- Resident will provide accurate patient education at the correct level for each patient without errors.
- Resident will document patient care with minimal errors or omissions.
- Resident will transition anticoagulation management to providers.
- Resident will use training document to independently work through each step of work flow tasks, without errors.
- Resident will continue to use assigned reading list and other resources to develop plans.
- Resident will notify preceptor of presentation topic and provide update on progress.

Week 4:

- Resident will complete presentations/project with satisfactory performance as defined by preceptor.
- By the last Wednesday, the resident should be working independently – developing warfarin dose plans.
- Resident will efficiently use best evidence to answer drug information questions and create daily recommendations for patient care.

- Resident will consistently document recommendations independently without error.
- Resident will provide accurate information and recommendations to the team and patients.
- Resident will provide high quality pass-off or transitions of care notes that support seamless patient care.

RLS Goals and Objectives

- 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.
 - OBJ R1.1.1 (Applying) Interact effectively with health care teams to manage patients’ medication therapy.
 - OBJ R1.1.2 (Applying) Interact effectively with patients, family members, and caregivers.
 - OBJ R1.1.3 (Analyzing) Collect information on which to base safe and effective medication therapy.
 - OBJ R1.1.7 (Applying) Document direct patient care activities appropriately in the medication record where appropriate.
- Goal R1.2: Ensure continuity of care during patient transitions between care settings.
 - OBJ R1.2.1 (Applying) Manage transitions of care effectively.
- Goal R3.1: Demonstrate leadership skills.
 - OBJ R3.1.1 (Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership.
- Goal R4.1: Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups).
 - OBJ R4.1.2 (Applying) Use effective presentation and teaching skills to deliver education.

Rotation Activities and Teaching Methods Linked to Objectives

Goal/Objective	Teaching Methods	Rotation Activities
Goal R1.1: In collaboration with the health care team, provide safe and effective patient care to a diverse range of	Coaching Facilitation	Manage anticoagulation therapy and transitions between care settings. Pre-surgery Perform a review of the patient’s history including concomitant disease states, prior

<p>patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process.</p> <p>OBJ R 1.1.1 (Applying) Interact effectively with health care teams to manage patients' medication therapy.</p> <p>OBJ R1.1.2 (Applying) Interact effectively with patients, family members, and caregivers.</p> <p>OBJ R1.1.3 (Analyzing) Collect information on which to base safe and effective medication therapy.</p> <p>OBJ R1.1.7 (Applying) Document direct patient care activities appropriately in the medication record where appropriate.</p>		<p>thrombotic and bleeding events, current medications, laboratory results Design a plan for initiating drug therapy</p> <p>During inpatient visit Conduct patient/caregiver interview to confirm patient's history Provide daily warfarin management</p> <p>Prior to discharge Provide anticoagulant education to the patient/caregiver Communicate the drug therapy and monitoring plan to the patient/caregiver, home health nurse, skilled nursing facility, and/or responsible outpatient provider</p> <p>Post-discharge Conduct patient/caregiver interview to obtain appropriate information about medication compliance, dietary or medication changes, changes in health status, upcoming procedures, bleeding or thrombotic complications Assess the efficacy and safety of warfarin therapy, and formulate an alternative therapy plan as appropriate Analyze the information obtained in the patient interview to design a warfarin dosing and monitoring plan Communicate the dosing and monitoring plan to the patient/caregiver Document the pre-surgery workup, assessments, plans, and anticoagulant education in the electronic medical record (EMR)</p>
<p>Goal R1.2: Ensure continuity of care during patient transitions between care settings.</p> <p>OBJ R1.2.1 (Applying) Manage transitions of care effectively.</p>	<p>Coaching Facilitation</p>	<p>Design a peri-procedural anticoagulation plan. Determine the bleeding risk associated with the procedure and patient Determine the thrombotic risk associated with the procedure and patient If applicable, design a plan for discontinuing anticoagulation pre-procedure If applicable, employ a bridging strategy using heparin or LMWH Design a plan for re-initiating anticoagulation post-procedure Coordinate a plan for follow-up monitoring</p>
<p>Goal R3.1: Demonstrate leadership skills.</p> <p>OBJ R3.1.1 (Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership.</p>	<p>Coaching Facilitation</p>	

		Communicate the plan to the patient/caregiver, proceduralist, and referring provider Document the assessment and plan in the EMR.
Goal R4.1: Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups). OBJ R4.1.2 (Applying) Use effective presentation and teaching skills to deliver education.	Coaching Facilitation	Conduct a practice-based project.

Readings and Preparatory Work

- Review the Outpatient Thrombosis Service Collaborative Practice Agreement.
<https://pulse.utah.edu/policies/Lists/Policies/DispForm.aspx?ID=2361>
- Review the Thrombosis Service Anti-thrombotic Therapy Guideline.
<https://pulse.utah.edu/policies/Lists/Policies/DispForm.aspx?ID=2936>
- Review the Thrombosis Service Direct Oral Anticoagulation Resources.
<https://pulse.utah.edu/site/throserv/Pages/DOAC.aspx>
- Also, an electronic folder will be maintained containing readings that include but is not limited to current guidelines for review and topic discussion throughout the experience.

Orientation Materials

Your preceptor will meet with you on the first day of rotation to make an individual orientation plan with you.

Project Description

Conduct a practice-based project, topic tailored to resident's interest and needs of the Thrombosis Service.

Evaluations

Evaluations will be documented in PharmAcademic™.

At the midpoint of the rotation, the preceptor will evaluate the resident. At the end of each rotation, the resident will self-evaluate, the preceptor will evaluate the resident, and the resident will evaluate both the preceptor and the learning experience.

Updated May 2018