

TITLE: CLINICAL PHARMACY ANTICOAGULATION STEWARDSHIP PROGRAM

PURPOSE: To outline components of the Anticoagulation Stewardship Program and define how the program addresses required elements of The Joint Commission National Patient Safety Goal on Anticoagulation.

POLICY STATEMENT:

The Anticoagulation Stewardship Program at UHS promotes optimal and safe use of anticoagulants and continuously evaluates anticoagulation safety practices. This policy was revised in 2019 to reflect TJC updates to NPSG.03.05.01.

POLICY ELABORATION:

I. COMPONENTS OF THE ANTICOAGULATION STEWARDSHIP PROGRAM:

A. Guidelines and Protocols

1. The Anticoagulation Safety Committee develops and reviews evidence-based medication specific guidelines and protocols for the initiation and maintenance of anticoagulation, guidelines for the reversal of anticoagulants and the management of bleeding, and the management of anticoagulants in the perioperative setting.
2. The Anticoagulation Safety Committee ensures that guidelines and protocols routinely reviewed (at minimum every 3 years) and updated as necessary.
3. Evidence-based practice guidelines and protocols are approved by the Pharmacy and Therapeutics Committee.
4. Approved protocols and evidence-based practice guidelines are available in the "Anticoagulation" section of the Clinical Pathways and Guidelines page of the UHS intranet.

B. Inpatient Anticoagulation Management by Pharmacy

1. Prospective Review of Inpatient Anticoagulation Orders
 - a. Pharmacists shall prospectively review anticoagulant orders for correct dosing based on age, weight, renal and hepatic function, and address drug-drug and drug-food interactions.
 - b. Drugs ordered in conjunction with anticoagulants will be screened for drug interactions through use of the electronic medical record (EMR) drug interaction alert system and pharmacist clinical judgement.

- c. As necessary, pharmacists will intervene to ensure proper medication selection and/or dose.
 - d. The pharmacist will also review medication profiles and contact physicians to make recommendations as needed.
- 2. Pharmacists are available on a consult basis for therapeutic recommendations for hospital inpatients.
 - 3. Inpatient Anticoagulation Monitoring Service
 - a. The Inpatient Anticoagulation Monitoring Service by pharmacy shall be available Monday through Friday.
 - b. A pharmacist assigned to cover the Service will provide review of inpatients receiving treatment dose anticoagulation to ensure proper medication selection, baseline and ongoing lab tests to monitoring and adjust therapy (see policy 3.0117d), correct dosing based on age, weight, renal and hepatic function, and address drug-drug and drug-food interactions.

C. UHS Anticoagulation Clinic

- 1. Ambulatory patients may be referred by a provider to the UHS Anticoagulation Clinic for management of their anticoagulation therapy by an ambulatory care clinical pharmacist.
- 2. An ambulatory care clinical pharmacist manages patients' anticoagulation therapy at the UHS Anticoagulation Clinic, in accordance with the collaborative practice agreement approved by the Texas State Board of Pharmacy.
- 3. An ambulatory care clinical pharmacist working in the Anticoagulation Clinic will be credentialed by University Medicine Associates.

D. Patient Education

1. Education on anticoagulant therapy will be provided to patients and families specific to the anticoagulant medication prescribed.
 - a. Patient education brochures are available on Exit Care and on the Clinical Pathways and Guidelines page under “Anticoagulation” → “Patient Education”.
 - b. Patients being managed by a pharmacist in the Anticoagulation Clinic will receive education from the pharmacist.
 - c. Pharmacist may provide education on a consult basis, to inpatients and other ambulatory patients not managed in the Anticoagulation Clinic. (See Clinical Pharmacy Services: Medication Discharge Education Consults 4.0204d). Completion of the consult will be documented in the electronic medical record.

E. Anticoagulation Safety Practices

1. Pharmacists will review and select appropriate medication formulations during the order verification process.
2. The pharmacy will dispense only oral unit dose products, pre-filled syringes, or pre-mixed infusion bags when available from the manufacturer.
 - a. Pediatric enoxaparin doses < 20mg will be prepared in the pharmacy’s sterile compounding lab from a 20mg/mL dilution. See Inpatient Pediatric Enoxaparin Dispensing Policy 3.0117b.
 - b. Warfarin will be dispensed as described in Warfarin Unit Dose Dispensing Policy 3.0117c.
3. The hospital will use programmable infusion pumps to administer continuous IV infusions of heparin to provide consistent and accurate dosing.
4. Anticoagulation safety practices will be evaluated through drug utilization evaluations (DUE), collection and review of adverse drug reactions and outcomes, clinical pharmacist interventions, and therapeutic drug monitoring metrics.
 - a. Information will be reported to the Anticoagulation Safety and the Pharmacy and Therapeutics committees on a quarterly basis.
 - b. An annual summary of Anticoagulation Quality and Process Improvement Initiatives will be kept on file as a reference.

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REFERENCES:

Joint Commission on Accreditation of Healthcare Organizations. 2019 National Patient Safety Goals Manual Chapter. Available at :
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US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. National Action Plan for Adverse Drug Event Prevention. Washington, DC, 2014. Available at: <http://helth.gov/hcq/pdfs/ade-action-plan-508c.pdf>

Wychowski MK, Ruscio CI, Kouides PA, et al. The scope and value of an anticoagulation stewardship program at a community teaching hospital. *J Thromb Thrombolysis* 2017;43:380-386.

OFFICE OF PRIMARY RESPONSIBILITY:

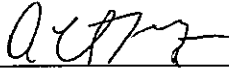
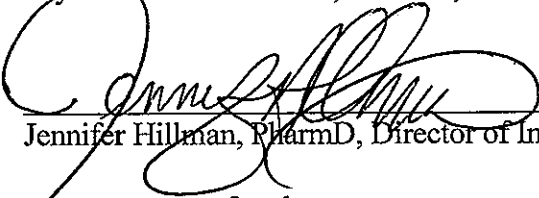

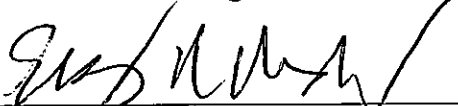
Department of Pharmacotherapy and Pharmacy Services

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Page Number: 5 of 5

POLICY AUTHORIZATION AND REVIEW FORM

POLICY NUMBER: 4.0204b

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