

# THE METROHEALTH SYSTEM POLICIES

<b>ANTICOAGULATION SAFETY</b>	<b>POLICY No: III-53</b>
<b>Originated By: Pharmacy</b>	<b>Original date: October, 2008</b>
	<b>Policy Owner(s): Pharmacy</b>
<b>Last Review Date:</b> <b>Last Revised Date: April 15, 2012</b>	<b>Approval:</b> <b>President and Chief Executive Officer or Designee</b>  <b>Policy Committee (Signatures on file)</b>  <b>MEC:</b> <b>NURSING:</b>

- I. **POLICY:** The MetroHealth System (MHS) is committed to the safe use of anticoagulant medications.
- II. **PURPOSE:** To provide guidelines for the use of anticoagulation agents to "reduce the likelihood of patient harm associated with the use of anticoagulation therapy." ,
- III. **SCOPE:** The MHS.
- IV. **PROCEDURE:**
  - A. The inpatient pharmacy will only use manufacturer unit-dosed warfarin, when available. Doses of warfarin should be dispensed using only commercially available tablet sizes. Pill splitting is discouraged unless absolutely necessary to do. Retail pharmacies are NOT required to use unit-dosed warfarin.
  - B. The inpatient pharmacy will only use commercially available heparin premixed products, when available. There are currently two exceptions:
    1. Heparin NICU arterial line infusion, 0.5-1 unit/ml, 100 ml (size not commercially available).
    2. Heparin coronary catheter flush infusion, 5 units/ml, 500 ml (concentration/size not commercially available).
  - C. The inpatient pharmacy may not dispense warfarin unless a recent (less than 72 hours from the time of warfarin order) INR value is available. However, if warfarin is ordered as part of joint replacement order sets, the baseline INR value is not required. Pharmacists will receive an alert in Epic verification screen if recent values of INR are not available.

- D. Inpatient pharmacy may not dispense heparin, fondaparinux, or argatroban unless a recent (within 30 days) platelet count is present.
- E. Inpatient pharmacy may not dispense enoxaparin unless a recent (within 30 days) platelet count and a recent (within 30 days) BMP is present.
- F. If any of the above base line values are not available, the pharmacist may initiate an order for an INR, CBC, or BMP test to be done. The pharmacist may either contact the physician to enter the order OR enter the needed laboratory order directly into the Epic system.
- G. The following documents are available in Epic and the MIV as guidelines in dosing and monitoring anticoagulation therapy.
  - 1. Weight-Based Heparin Guidelines for the Management of Thromboembolic Disorders (See Pharmacy Policy VII-M-2)
  - 2. Enoxaparin Guidelines
  - 3. Anticoagulant Protocol –  
<http://miv/Departments/Medical/Anticoagulation/>
  - 4. Heparin Induced Thrombocytopenia (HIT) Guidelines  
<http://miv/Departments/Medical/Anticoagulation/>
    - a) Diagnosis Flow Chart
    - b) Guidelines
  - 5. Warfarin Interactions – Ambulatory Pharmacy (See Pharmacy Policy XIX-I)
  - 6. Anticoagulation Therapy (See Nursing Service Policy A2.1)
- H. The following table serves to identify recommended guidelines for laboratory test frequency and monitoring in the inpatient setting.

Medication	Lab Test	Frequency
Warfarin	INR	3 times/week
Heparin	Platelets	Q72H
Enoxaparin (LOVENOX)	Platelet	Q72H
	BMP	Weekly
Fondaparinux (ARIXTRA)	Platelet	Q72H

	BMP	Weekly
Argatroban	Platelet	Q72H
Dalteparin (FRAGMIN)	Platelet	Q72H
	BMP	Weekly
Dabigatran (PRADAXA)	BMP	Weekly

- I. The Pharmacy and Therapeutics Steering Committee will evaluate drug-drug interaction alerts.
- J. Heparin and other infusion-based anticoagulants will only be infused using programmable pumps.
- K. Dietary identifies patients on warfarin therapy and will provide food-drug education. Education will be documented in the electronic medical record. If dietary has been unable to provide this education before the time of discharge, nursing will be responsible for the patient education before the patient leaves the hospital.
- L. Education to the patient and family to include the importance of follow-up monitoring, compliance, and the potential for adverse drug reactions and interactions.
- M. Education will continue to be provided and reinforced during prescribed visits in the anticoagulation clinics and other clinics prescribing anticoagulation therapy.
- N. The Medication Safety Subcommittee will perform ongoing review of medication errors and adverse drug reactions with anticoagulant therapy. At a minimum, there will be an intense review of anticoagulation by this group annually.