Promedica Laboratories offers the Heparin Anti-Xa Assay specific for Unfractionated or Low Molecular Weight heparin. **Effective January 3, 2018, the Heparin Anti-Xa will replace the APTT on Heparin Infusion order sets.** The Heparin Anti-Xa directly measures the functional activity of heparin present, and is therefore less affected by various biological factors than the aPTT. Use of the Heparin Anti-Xa has been shown to achieve therapeutic levels faster, with fewer laboratory tests and dosage adjustments required.

Unfractionated heparin should be measured 6 hours after administration of heparin and continued every 6 hours until two consecutive therapeutic levels are reached (0.3-0.7 IU/L), then once daily. Testing must be performed within four hours of collection.

Low molecular weight heparin has a predictable dose response; therefore, monitoring is usually not required except in certain conditions such as renal insufficiency, obesity, pregnancy, or unexplained bleeding with low molecular weight heparin. Testing should be performed 4-6 hours after subcutaneous injection.

The Heparin Anti-Xa offered by Promedica Laboratories cannot be used to monitor newer anticoagulants such as Xarelto or Eliquis.

**Reference Intervals:**

1. UFH therapeutic range: 0.3 - 0.7 IU/mL
2. LMWH therapeutic range: 0.6 - 1.0 IU/mL for twice daily dosing
   1.0 - 2.0 IU/mL for once daily dosing
3. LMWH prophylactic range: 0.2 - 0.5 IU/mL
4. Critical Values: UFHXA ≥ 0.9 IU/mL    LMWHXA ≥ 2.0 IU/mL

EPIC order codes: 1. **Heparin Anti-Xa, Unfractionated, Lab 317**
2. **Heparin Anti-Xa, Low molecular weight, Lab 316**

The Heparin Anti-Xa for UFH will be performed at Toledo, Flower, Monroe, Bixby, Bay Park, and Defiance Labs 24 hours a day, 7 days a week. Fremont and Fostoria Hospitals will send samples to the Toledo Hospital for testing. Herrick will send samples to Bixby Lab. Heparin Anti-Xa for LMWH will be performed at Toledo Hospital only.