

The Heparin Conversion from Oral Factor Xa Inhibitors Protocol is ordered by a provider when a patient has taken a Factor Xa Inhibitor (apixaban (Eliquis), edoxaban (Savaysa), rivaroxaban (Xarelto)) in the past 48 hours who also requires Heparin therapy. The protocol uses PTT monitoring of heparin.

### Heparin Conversion from Oral Factor Xa Inhibitors Protocol (NLMERCY)

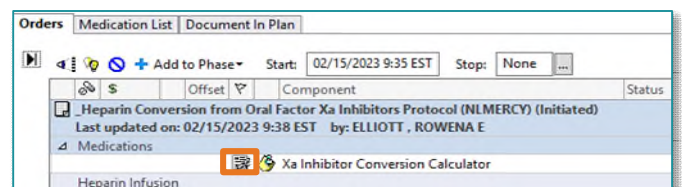
The Heparin Conversion from Oral Factor Xa Inhibitors Protocol (NLMERCY) should be ordered by providers on all patients requiring Heparin therapy who have been on an Oral Factor Xa Inhibitor within the last 48 hours.

- Heparin Infusion and PRN Heparin Boluses options are prechecked.
- Laboratory
  - Order baseline PTT and CBC if there are no previous results within 24 hours.
  - Nurses may order PTT levels as instructed by the Heparin Calculator.
  - CBC without Differential every AM is preselected.
  - Nurses are to notify the provider if a PTT is greater than 125 seconds or if bleeding occurs.
  - PTT target is between 48 seconds and 87 seconds.

### Heparin Calculators

Xa Inhibitor Conversion Calculator link is located in the Heparin Conversion from Oral Factor Xa Inhibitors Protocol (NLMERCY) PowerPlan.

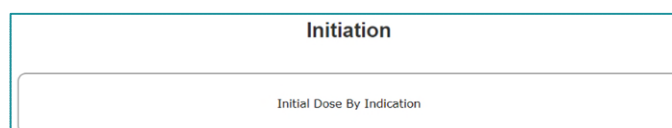
- Click the first icon to the left of Xa Inhibitor Conversion Calculator to open Heparin Calculators.



**NOTE:** [Heparin Calculators](#) can also be accessed in the Applications tab located in the Northern Light Mercy Hospital Intranet page.

- Initial Dose by Indication used by nursing on patients who have been on an Oral Factor Xa Inhibitor within the last 48 hours and are beginning heparin therapy.

**STEP 1:** Click the Initial Dose by Indication button.



**STEP 2:** Select Conversion from Oral Factor Xa Inhibitors.

**STEP 3:** Enter the Patient Dosing Weight.

**STEP 4:** Click Calculate.

- Initial Bolus, New Infusion Dose, and Next PTT will populate.

**STEP 5:** Per the Heparin calculator, administer a **Bolus** if indicated, start the **New Infusion Dose**, and order the **Next PTT**.

**Initial Dose By Indication**

Select Type

High Intensity

Moderate Intensity

Low Intensity

Conversion from Oral Factor Xa Inhibitors

Patient Dosing Weight (kg)

Calculate Reset

Initial Bolus  
New Infusion Dose  
Next PTT

Patient Dosing Weight (kg) 100

Calculate Reset

Initial Bolus None  
New Infusion Dose 10 units/kg/hr  
Next PTT 6 hours

➤ **Rate Change (PTT Monitoring)** used by nursing on patients who have been on an Oral Factor Xa Inhibitor within the last 48 hours and now require a rate change in heparin therapy.

**Rate Change (PTT Monitoring)**

Mercy

Conversion from Xa Inhibitors

**STEP 1:** Click the **Mercy Conversion from Xa Inhibitors** button.

**STEP 2:** Enter the **Patient Dosing Weight**.

**STEP 3:** Enter the **Current Infusion Dose**.

**STEP 4:** Enter the **Current PTT**.

**STEP 5:** Click **Calculate**.

**STEP 6:** Per the Heparin Calculator, administer a **Bolus** if indicated, adjust the **Infusion Dose**, and order the **next PTT**.

**Mercy - Conversion from Xa Inhibitors**

Patient Dosing Weight  kg

Current Infusion Dose  units/kg/hour  
(Enter 0 if infusion is off)

Current PTT

Calculate Reset

Bolus  
New Infusion Dose  
Next PTT

Patient Dosing Weight 100 kg

Current Infusion Dose 10 units/kg/hour  
(Enter 0 if infusion is off)

Current PTT 45

Calculate Reset

Bolus 1000 units  
New Infusion Dose 11 units/kg/hour  
Next PTT 6 hours

## What to do during a Millennium Downtime

During a Millennium downtime or a downtime in which Millennium and the Intranet are both down, the **Heparin Conversion from Oral Factor Xa Inhibitors Protocol (NLMERCY)** Order Set is available. The second and third pages of the Order Set contain a **Heparin Downtime Calculator Table** to assist nursing with rate changes.

➤ Cerner Millennium is in downtime and Intranet is available

**STEP 1:** Navigate to the **Mercy Hospital Intranet Home Page**.

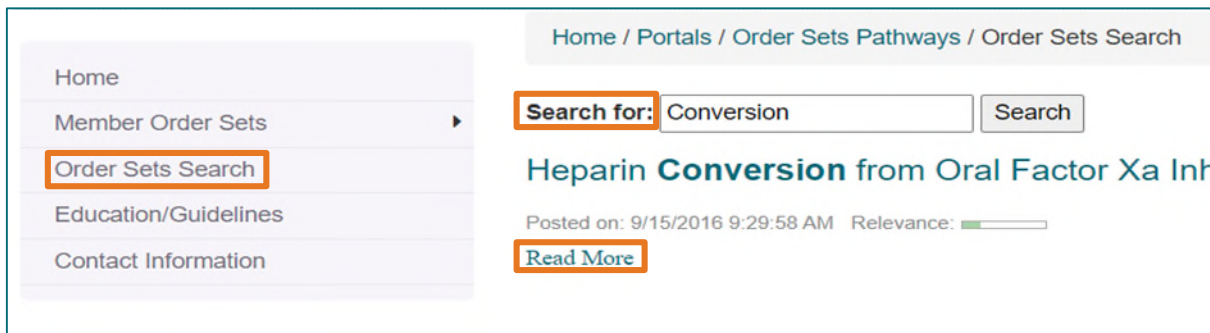
**STEP 2:** Select the **Applications** tab.

**STEP 3:** Scroll down and select **Order Sets/Pathways (Order Sets)**.

**STEP 4:** Click **Order Sets Search** and enter **Conversion** in the **Search For** field.

**STEP 5:** Click **Search**.

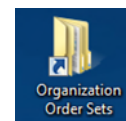
**STEP 6:** Click **Read More** to open the Order Set.



➤ Both Cerner Millennium and the Intranet are down.

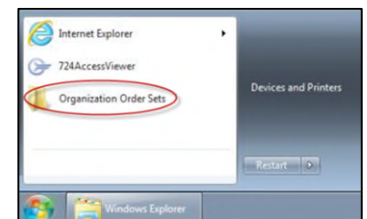
**STEP 1:** Locate a **724Access Device** on the nursing unit, indicated by a red sticker.

**Option 1:** Click **Organization Order Sets** from the Desktop on the 724Access Device



or

**Option 2:** Click the **Windows** icon and select **Organization Order Sets** on the 724Access Device.



### Heparin Downtime Calculator Table

The Heparin Downtime Calculator Table has PTT ranges from **Less than 43** to **Greater than 135** to guide the nurse on **Bolus** if indicated, **Infusion Rate**, and **Next PTT**.

Heparin Conversion from Oral Factor Xa Inhibitors Protocol					
Heparin Downtime Calculator Table					
Green = requires patient data to be entered			Yellow = actions that occur when the infusion is held		
Enter Patient Weight in kg	Enter Current Rate units/kg/hr	Enter PTT	Bolus	Infusion	Next PTT
Weight kg	rate	Less than 43	25 units/kg (Not to Exceed 2,500 units)	Increase 2 units/kg/hr	6 hours
Weight kg	<b>Held</b> <b>Rate=0</b>	Less than 43	0	<b>**ENTER LAST RATE WHEN PATIENT ON HEPARIN** &amp; Decrease 1 unit/kg/hr</b>	3 hours