Our Digital Future
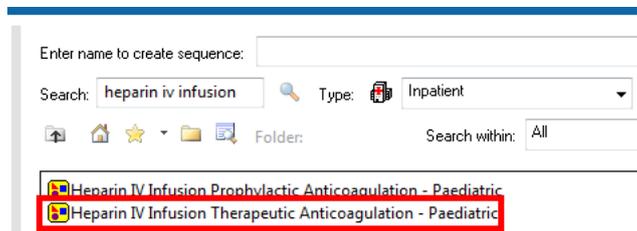IMAGINE WHAT'S POSSIBLE...

ieMR Advanced

Orders – heparin infusion PowerPlan

Medication Management

Quick reference guide

Ordering

1. Navigate to the *Orders* tab in the *Menu* and click the *Add* button.

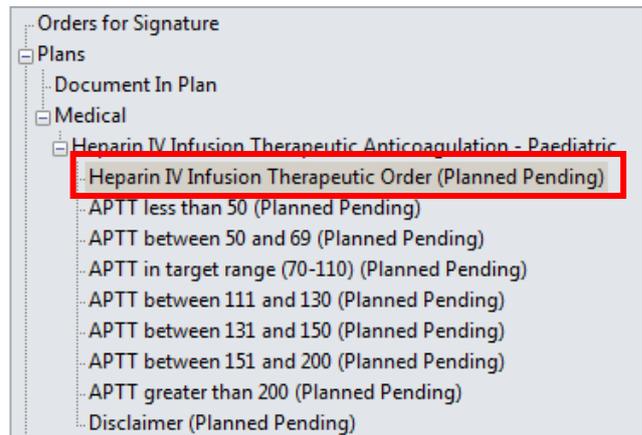2. Type *Heparin Infusion* in the search field. Select *Heparin IV Infusion Therapeutic Anticoagulation-Paediatric.*

3. Select the PowerPlan required.

4. Click *Done* on the search window.

Initiating

The Heparin Infusion PowerPlan will be displayed in the *View* navigator on the left hand side of the screen. There are a number of branches termed *Phases* containing guidelines enabling appropriate prescribing based on APTT result.

Note: The document icon 📝 will link to the LCCH Heparin policy.

1. To initiate the plan, select the *Heparin IV Infusion Therapeutic Order (Planned Pending)* phase.

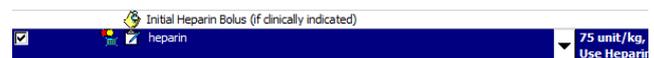2. Navigate to the right-hand side of the screen to select the required fields.

Note: The TOP section allows relevant **laboratory testing** and **weight collections** and the BOTTOM section is where you will **order the heparin infusion and bolus.**

Note: the baseline bloods are pre-selected.

Under the **Initiating Heparin** heading, there are three orders; the heparin bolus dose, heparin continuous infusion and APTT.

3. Select the **Heparin Bolus** by clicking on the checkbox to the left of the order if required.

Note: If your area does not bolus, then you are not required to order the bolus. Please apply clinical judgement.

Once you have selected this, a dosing calculator window will open on your screen.

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Note: The top left hand box contains dose information for the bolus. The top right hand box contains drug formulations. The dose is calculated based on the patients' weight. The suggested Heparin bolus dose is pre populated according to LCCH policy. However, you may be required to adjust the dose for dose capping or for any other clinical reasons specific to the patient.

4. To apply this bolus dose, click the *Apply Dose* button in the bottom right hand corner.

Note: Always check the calculated dose!

The system caps the maximum dose at the Adult dose of 8000units to accommodate for the state build. Ensure you follow the LCCH policy, capping at 5000 units.

5. The order entry form will appear on the bottom of the screen. Ensure all details are correct.

6. Select the appropriate **continuous heparin IV infusion and +4 hr APTT blood order**, click the white box to the left of the appropriate orders according to the patient's age and weight. For example; *Heparin 5,000 unit in sodium chloride 0.9% IV 50 mL (cont).*

7. Hover across the heparin order and Right Click and Select *Modify to bring up the order entry field.*

8. Under the Continuous Details tab a set rate is sometimes pre-populated. (Depending on your patient's weight) Check this is appropriate for you patient.

9. You may modify the rate in units/kg/hr under the *Normalized Rate* field and hit enter on your keyboard. Note, the rate in ml/hr will auto-populate.

10. Enter a weight if the field has not automatically pulled though

11. Depending on the area/s you work in, you may wish to sign the order without *initiating* it. This will put the order in a planned state. Make sure you create a progress note detailing when and who can initiate the PowerPlan.

Note: Clicking on Sign only will not prompt if there are any outstanding order details. You must review each individual order and complete the details.
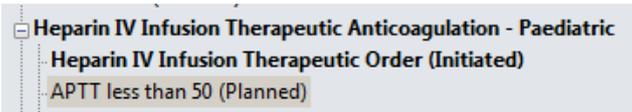
12. Click *Initiate* and *Orders for Signature* in the bottom right hand corner, *Sign* and enter your password.

13. *Refresh* your screen.

Maintaining Heparin

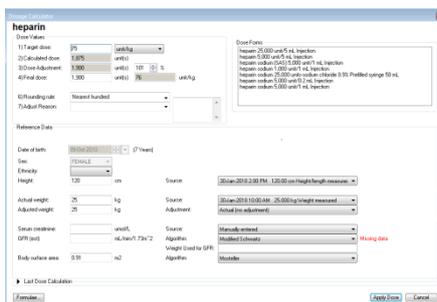### Sub-therapeutic APTT result

In this example, the APTT result has returned at 48.

1. Navigate to the *Orders* tab and locate the Heparin PowerPlan.

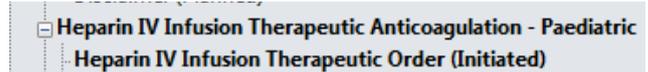2. Select the phase; APTT less then 50 (Planned).

Instructions will be listed to the right of the view column, requesting an additional heparin bolus (if clinically indicated), adjustment of the IV infusion and another APTT collection.

3. Begin by selecting the heparin bolus order. A dose calculator screen will appear, with a dose already calculated based on the patient's weight. Leave or adjust the dose as you see fit and select *Apply Dose* in the bottom right hand corner.

4. Order another APTT collection.

5. In the yellow highlighted field it states to *"Modify existing heparin infusion order by increasing the rate by 4unit/kg/hour".*

6. To adjust the IV infusion, select the original order in the view column *Heparin IV Infusion Therapeutic Order (Initiated)*.

7. On the right side of the screen, locate the IV infusion order previously select e.g. *heparin additive 5000units …*, right click and select *Modify*.

The order entry form will appear below.
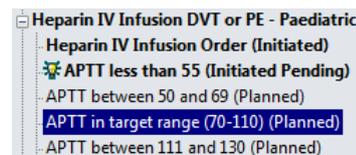
Modify the infusion rate in units/kg/hour.

8. Click *Initiate*, *Orders for signature* and *Sign* to finalise the order.

9. *Refresh* your screen.

Target APTT result

In this example, the APTT result has returned at 80.

1. Navigate to the orders tab and locate the heparin power plan.

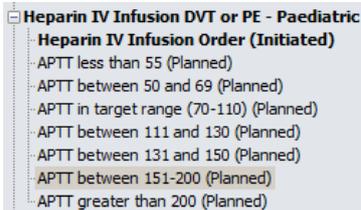2. Select the phase; APTT in target range (70-110) (Planned).

Instructions will be listed to the right of the view column, stating no adjustment to existing heparin infusion order is necessary. Repeat APTT daily (within 24 hours).

3. In this case, no adjustments are required; all that is needed is an additional APTT collection. Select the APTT order.

4. Click *Initiate*, *Orders for signature* and *Sign* to finalise the order.

5. *Refresh* your screen.

Supra-therapeutic APTT result

In this example, the APTT result has returned at 160

1. Navigate to the orders tab and locate the heparin power plan.

2. Select the phase; *APTT between 151-200 (Planned Pending)*.
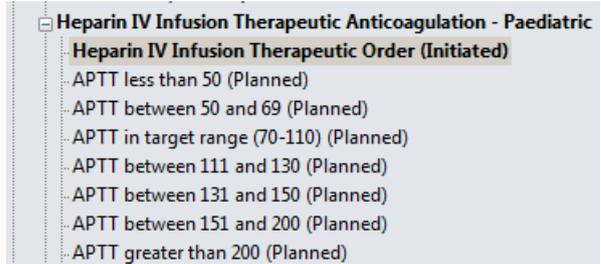

Instructions will be listed to the right of the view column, requesting the IV infusion be withheld for 60 minutes, along with adjustment of the IV infusion rate and another APTT collection.

3. Select the *WITHOLD* order and order the additional APTT collection (NOTE: This acts as a placeholder for the nurses but DOES NOT replace verbal communication)

4. Navigate to the original heparin infusion order phase.

5. On the right side of the screen, locate the IV infusion order *heparin additive 5,000 …*, right click and select *Modify*.

The order entry form will appear below.

6. Modify the dose as per the instructions from the phase; APTT between 151-200 (Planned). In this example, the dose is to be reduced by *6 units/kg/hour.*
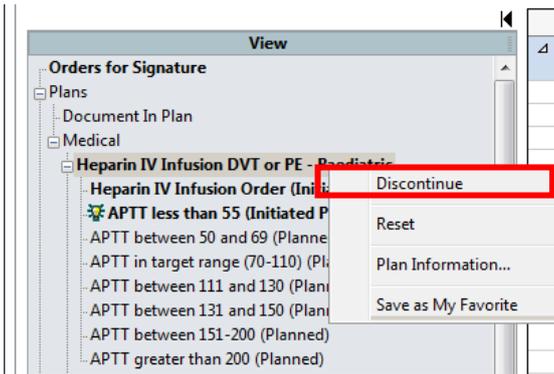

7. Click *Initiate*, *Orders for signature* and *Sign* to finalise the order.

8. *Refresh* your screen.
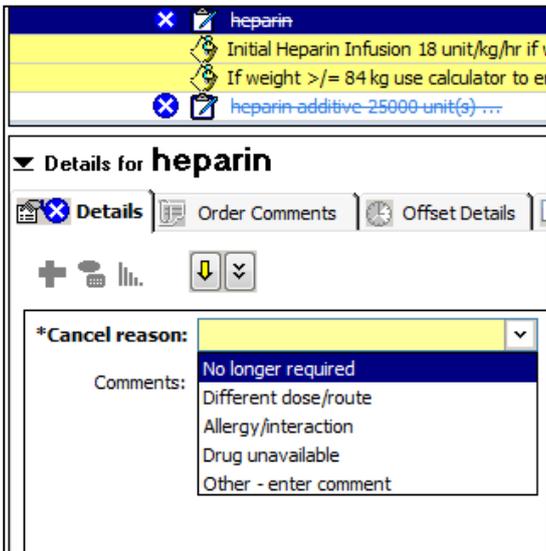
Discontinue

When the patient no longer requires the heparin infusion, the PowerPlan must be discontinued. To discontinue the PowerPlan, the whole PowerPlan must be discontinued, not just a phase.

1. Right click on the title of the PowerPlan.
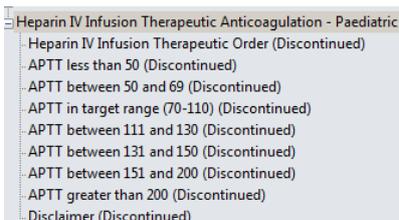
2. Select *Discontinue*.

The Heparin infusion will now remain on the MAR in a discontinued state.

5. Click on the *Incomplete Order* details icon (blue circle) and select the discontinue reason from the dropdown menu.

6. Click *Initiate*, *Orders for signature* and *Sign* to finalise the order.

7. *Refresh* your screen.

The PowerPlan is now discontinued.