# **CADD Solis Infusion Pump – Set Up and Operation**

# **Site Applicability**

Acute Care and Palliative Care PHC Sites

# **Practice Level**

Nurses who have completed basic pump education /Q2 year review

• RNs are responsible for epidural and perineural infusions

# **Need to Know**

Ensure you have the correct tubing for your infusion.

- Epidural/Perineural Infusions use the epidural/perineural specific tubing has a yellow strip, no ports and an air filter in the line.
- IV/SUBCUT tubing with ports is only to be used on palliative care units.

Independent Double Check (IDC) is required when setting up for all medications via CADD Solis pump infusions by 2 RN's and for administering a clinician bolus. IDC is cosigned in the Cerner Electronic Health Record

Independent Double Check (IDC) is a process where two health care clinicians work independently to verify the medication. The second health clinician performs another check of the medication without assistance or prior knowledge of the conclusions and steps followed by the first clinician. Results are compared and any discrepancies addressed before any action is taken with the medication

# **Procedure**

# **Priming the Tubing**

The CADD Solis tubing can be primed either manually by the nurse prior to setting the pump for a patient <u>OR</u> mechanically by the pump after you begin the sequence to set the pump for a new patient (which can take several minutes to complete).

# **Manual Priming**

- 1. Begin with obtaining the appropriate Smith CADD Solis tubing and the correct patient specific IV medication bag ensuring the "7 Rights" are completed.
- 2. Have 2 RN's each complete an independent double check for the medication(s) and set up of the Smith CADD Solis pump.

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- 3. Remove the tubing from the package and close the distal clamp. Leave blue clamp on cassette in place while priming.
- 4. Aseptically spike the IV medication bag.
- 5. Prime the tubing ensuring there is no air in either the filter or the tubing.
- 6. Proceed with setting the pump for the patient.

# **Mechanical Priming**

- 1. Begin with obtaining the appropriate Smith CADD Solis tubing and the correct patient specific IV medication bag.
- 2. Remove the tubing from the package and close the distal clamp.
- 3. Aseptically spike the IV drug bag ensuring the "7 Rights" are completed.
- 4. Proceed with setting the pump for the patient.

# **Setting the Pump for a New Patient**

- 1. Begin with NO cassette attached to the pump.
- 2. Press the power on switch (on side of pump).

#### **Start New Patient**

- 3. Screen displays "Do you want to start a new patient?" Press YES.
- 4. Unlock the keypad using the security code.
- 5. The "Select Therapy" menu is displayed.
- 6. Scroll  $\uparrow$  or  $\downarrow$  to highlight the ordered therapy. Press SELECT.
- 7. Scroll  $\uparrow$  or  $\downarrow$  to highlight the ordered qualifier. Press SELECT.
- 8. Scroll  $\uparrow$  or  $\downarrow$  to highlight ordered drug and concentration. Press SELECT.
- 9. Confirm that you have selected the correct therapy, qualifier, drug and concentration. Verify and Press YES.
- 10. "Review Pump Settings" is displayed. Press REVIEW.
- 11. To edit for a patient specific parameter press SELECT. Scroll  $\uparrow$  or  $\downarrow$  to the new value and then press SAVE.
- 12. Continue until all patient specific parameters have been reviewed &/or edited. Press ACCEPT VALUE for each setting. A checkmark appears next to each patient specific parameter you have accepted. When completed press NEXT.
- 13. To change a patient specific parameter after you have accepted it, repeat step 12.
- 14. "Cassette not attached. Attach cassette before starting pump" is displayed.

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When programming for new patient is complete.

- 15. Using the pump key, open latch, attach cassette to the pump, close latch and lock.
- 16. "Prime Tubing?" displays. Press YES if priming is needed. Otherwise Press NO and proceed to line 20.
- 17. "Disconnect tubing..." displays. Press PRIME. Press STOP PRIMING when complete.
- 18. "Continue Priming?" displays. Press YES or NO.
- 19. "Start Pump?" displays. Press YES and the pump begins running.

# Changing a Patient's Current Program While the Pump is Running

# Program the Pump

- 1. Scroll  $\uparrow$  or  $\downarrow$  to highlight the patient specific parameter you want to change. Press SELECT.
- 2. Unlock the keypad using the security code or the pump key.
- The patient specific parameter is displayed. Scroll ↑ or ↓ to the new value then press SAVE. (Note: If the desired value is outside the soft limit, press CONFIRM. Verify the soft limit override by pressing YES.)
- 4. Verify that the keypad and cassette are locked. (Note: If a security code was used to unlock the keypad, always relock the keypad after making the change by pressing the right soft key twice. If a key was used then turn the key clockwise to relock the cassette and keypad).

# Changing a Patient's Current Program with the Pump Stopped

# Stop the Pump

- 1. Press STOP / START.
- 2. "Stop Pump?" displays. Press YES.

# Program the Pump

- 3. Scroll  $\uparrow$  or  $\downarrow$  to highlight the patient specific parameter you want to change. Press SELECT.
- 4. Unlock the keypad using the security code.
- The patient specific parameter is displayed. Scroll ↑ or ↓ to the new value then press SAVE. (Note: If the desired value is outside the soft limit, press CONFIRM. Verify the soft limit override by pressing YES.)

#### When Programming is Complete.

- 6. Press STOP / START.
- 7. "Review pump settings" displays. Press REVIEW.
- 8. Choose ACCEPT VALUE to confirm the value is correct for the highlighted patient specific parameter or press SELECT to edit the highlighted parameter.

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- 9. Continue until all patient specific parameters have been reviewed, accepted and display checkmarks. Press NEXT.
- 10. "Start Pump?" displays. Press YES. (Note: If a security code was used to unlock the keypad, always relock the keypad after making the change by pressing the right soft key twice. Keypad will automatically relock after pump is started.)

# Resetting the Reservoir Volume Without Changing the Cassette

(Changing the IV bag without changing the tubing)

# Stop the Pump

- 1. Press STOP / START.
- 2. "Stop Pump?" displays. Press YES.

Aseptically remove the empty IV bag from the tubing and attach the new IV bag.

#### Reset Reservoir Volume

- 3. Scroll  $\downarrow$  until Reservoir Vol is highlighted. Press SELECT.
- 4. Unlock the keypad using the security code.
- 5. The screen displays the current reservoir volume and a scroll range.
- 6. Press SELECT to reset the reservoir volume or scroll  $\uparrow$  or  $\downarrow$  to adjust the value. Press SAVE.

### When Programming is Complete

- 7. Press STOP / START.
- 8. "Review pump settings?" displays. Press REVIEW.
- 9. Choose Accept Value to confirm the value is correct for the highlighted patient specific parameter or press SELECT to edit the highlighted parameter.
- 10. Continue until all patient-specific parameters have been reviewed, accepted and display checkmarks. Press NEXT.
- 11. "Start Pump?" displays. Press YES. (Note: If a security code was used to unlock the keypad, always relock the keypad after making the change by pressing the right soft key twice. Keypad will automatically relock after pump is started).

### **Clinician Bolus**

### Pump must be running

- 1. From the home screen press TASKS.
- 2. "Give Clinician Bolus" displays. Press SELECT.
- 3. Enter the clinician security code.

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- 4. The screen displays the clinician bolus scroll range available. Scroll ↑ or ↓ until the desired value appears. Press DELIVER. (Note: If the desired value is outside the soft limit, press CONFIRM. Verify the soft limit override by pressing YES.)
- 5. Choose Stop Bolus anytime during delivery to cancel bolus. (Note: Never leave pump unattended while on the Clinician Bolus Edit screen or while the bolus is delivering. You must press DELIVER to deliver the programmed value or CANCEL to leave the screen. If interrupted, the pump will recall the amount the amount delivered when Clinician Bolus is requested again.)

# **Viewing Reports**

Pump reports should be cleared in accordance with hospital policy. Pump may be running or stopped to view reports.

# Option 1:

- 1. From the home screen press REPORTS. Scroll  $\uparrow$  or  $\downarrow$  to the desired report and press SELECT.
- 2. Press BACK to return to the reports menu and then press BACK again to return to the home screen.

# Option 2:

- 1. From the home screen press TASKS. Scroll  $\downarrow$  to View Reports and press SELECT. Scroll  $\uparrow$  or  $\downarrow$  to the desired reports and press SELECT.
- 2. Press BACK to return to the Reports menu. Press BACK again to return to the home screen.

# To clear Given and PCA dose counters

- 1. From the home screen press REPORTS. Scroll  $\uparrow$  or  $\downarrow$  to the "Given and PCA Dose Counters" report. Press SELECT.
- 2. Choose Clear Given to clear Total Given and set a new time.
- 3. Scroll down to "PCA doses Given / Attempted". Press CLEAR DOSES to clear and set a new time.
- 4. Press BACK to return to the reports menu, and then press BACK again to return to the home screen.

# **Changing the Batteries**

#### Stop the Pump

- 1. Press STOP / START.
- 2. "Stop Pump?" displays. Press YES.
- 3. Remove the used batteries (located in slot on top of pump).
- 4. Insert 4 new 1.5 volt AA alkaline batteries.
- 5. Press the Power switch to turn the pump on.

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- 6. The screen displays "Do you want to start a new patient?" Press NO.
- 7. Press STOP / START to start the pump.
- 8. "Start Pump?" displays. Press YES.

# **Changing the Date and Time**

The pump does not need to be stopped to complete this task.

- 1. From Home screen select Tasks.
- 2. Scroll  $\downarrow$  to Time and Date and press SELECT.
- 3. Press SELECT to edit the Time.
- 4. Enter the appropriate keypad code.
- 5. Scroll  $\uparrow$  or  $\downarrow$  to select the correct hour. Press SAVE.
- 6. Scroll ↓ to Current Date. Press SELECT.
- 7. Scroll  $\uparrow$  or  $\downarrow$  to select the correct Day. Press SELECT.
- 8. Scroll  $\uparrow$  or  $\downarrow$  to select the correct Month. Press SELECT.
- 9. Scroll  $\uparrow$  or  $\downarrow$  to select the correct Year. Press SAVE.
- 10. To return to home page press BACK twice.
- 11. Ensure that the keypad is locked again by pressing the soft key to Lock.

# **Related Documents**

- 1. CADD Solis Infusion Pump resource materials
- 2. CADD Solis videos, Learning Hub
- 3. B-00-12-10012 Epidural Analgesia: Continuous Infusion, Set-up and Administration
- 4. <u>B-00-12-10060</u> Subcutaneous Butterfly Cannula: Insertion, Maintenance, and Medication Administration

# References

Smith's Medical CADD Solis pump User Guide

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# **Author:**

Clinical Nurse Specialist, Pain Management Advanced Practice Nursing Student, UVic

# **Revised By**

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