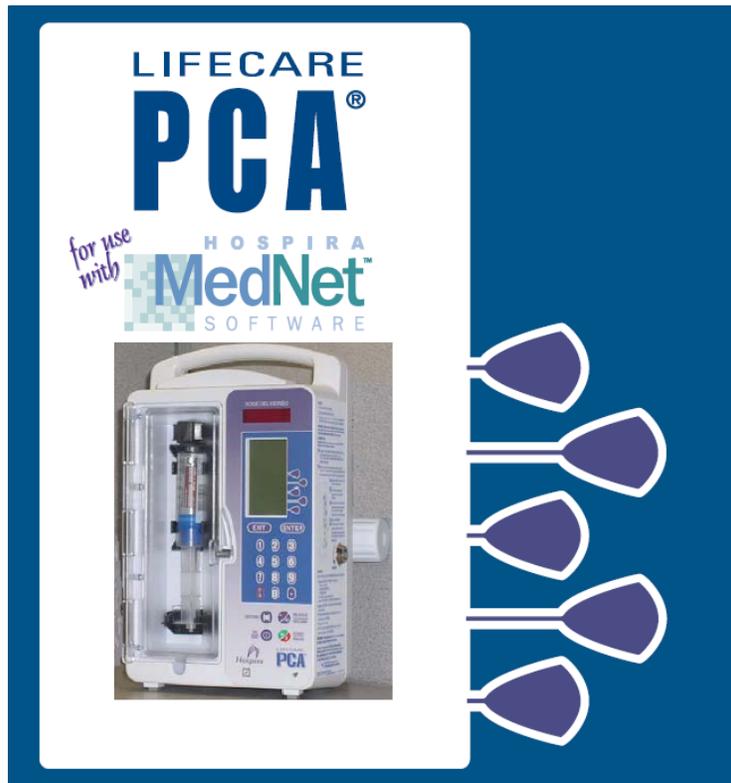


# LifeCare PCA<sup>®</sup> Infusion System With Hospira MedNet<sup>®</sup> Software Enabled



## Inservice Script

The health information contained herein is provided for informational purposes only. All decisions regarding patient care must be made with a healthcare provider and consider the unique characteristics of each patient.

The following training material is intended to be inclusive of multiple features and functions of the LifeCare PCA<sup>®</sup> device.

This inservice script supplements the complete instructions from the LifeCare PCA<sup>®</sup> for use with Hospira MedNet<sup>®</sup> Software Operations Manual. The trainer should consider each hospital's intended use and select those items from the enclosed material appropriate to that user.

## Introduction and Device Overview

Welcome to the LifeCare PCA<sup>®</sup> with Hospira MedNet<sup>®</sup> Software inservice.

The LifeCare PCA<sup>®</sup> Infuser is a pole mounted infusion device that allows safe and effective delivery of analgesics within programmed limits.

Hospira MedNet<sup>®</sup> Software contains drug library software designed to improve medication management at the patient's bedside and offer protection against medication errors that may lead to adverse drug events.

Hospira MedNet<sup>®</sup> Software can be customized to each healthcare system's needs. Each system can be programmed for up to 18 different clinical care areas (CCA). Possible categorizations for the CCAs include the following:

- ◆ CCA defined by clinical area: Pediatrics, Oncology, PACU, Med/Surg
- ◆ CCA defined by therapy groups: Low Dose, High Dose
- ◆ CCA defined by patient type: Pediatrics, Sickle Cell, Post Op

Your facility has chosen to establish the following CCAs:

- ◆ <Enter Customized CCA Names>
- ◆ \_\_\_\_\_
- ◆ \_\_\_\_\_
- ◆ \_\_\_\_\_
- ◆ \_\_\_\_\_

Hospira MedNet<sup>®</sup> Software allows your healthcare system to customize the Hard and/or Soft Limits for each drug in each Clinical Care Area.

The health information contained herein is provided for informational purposes only. All decisions regarding patient care must be made with a healthcare provider and consider the unique characteristics of each patient.

A dose set between the Upper and Lower Soft Limits is in an acceptable range per your facility's best practices. If a dose is programmed outside of the Upper and Lower Soft Limits, an override alert will appear. Soft Limits can be overridden.

The LifeCare PCA® Infusion System with Hospira MedNet® Software also allows your facility to establish Hard Upper and/or Hard Lower Limits. These are values which can not be overridden. A Hard Limit Alert notifies the user that the programmed dose is NOT within the facility's best practices and must be changed.

Hospira MedNet® Software helps to ensure that the healthcare system's best practices are followed by tracking alarms and alerts generated from programming. This information can be downloaded in reports and used for continuous quality improvement.

**The primary feature of the LifeCare PCA® Infusion System is the integral barcode reader. The barcode reader identifies the drug and concentration of the vial inserted in the device, and links it to the correct dosing parameters within Hospira MedNet® Software's drug library for the CCA you have selected.**

**The barcode reader is able to identify the barcode on Hospira and Abbott Laboratories prefilled vials. If your facility chooses to fill custom PCA vials, the pharmacy can generate a barcode label and link that barcode to a rule set in Hospira MedNet® Software's drug library. This allows for drug and concentration identification on custom-filled vials and decreases one source for potential for medication errors.**

---

---

#### *Protocol Feature...Read If Applicable*

*The LifeCare PCA® Infusion System also provides the ability to store frequently used physician's orders with the Protocol feature. The Protocol feature simplifies programming of common drug orders, by decreasing the number of steps needed to program the device. After confirming the program, an infusion can be started. Protocols must be set up through the Hospira MedNet® Software.*

---

---

The LifeCare PCA® Infusion System is able to deliver analgesic drugs intravenously or epidurally by any of the three modes of delivery: PCA Only, Continuous Only, and PCA + Continuous.

Now let's review some of the operating keys and other features of the device.

### **Back of the Device**

- ◆ The **Nurse Callback Relay Connector** can be connected to the nurse call system.
- ◆ The **Ethernet Jack** connects to a local area network or is used to interface with a host computer.
- ◆ The **Patient Pendant** is used by the patient to deliver patient controlled analgesia doses of pain medication by pressing the button. If the device is

The health information contained herein is provided for informational purposes only. All decisions regarding patient care must be made with a healthcare provider and consider the unique characteristics of each patient.

programmed with a PCA Dose and the Patient Pendant is not fully secured to the port, the device will alarm Pendant Fault. It is disabled in the Continuous Only mode. The Patient Pendant is specific to the LifeCare PCA<sup>®</sup> device and can not be interchanged with other PCA devices.

---

**WARNING:**

*Patient Pendant is only to be pressed by the patient.*

---

- ◆ The **Locking Pole Clamp** secures the device to the IV pole. When the door is locked the pole clamp may be tightened but not loosened. The security key must be in the open position in order to loosen the pole clamp.
- ◆ The **AC Power Cord** recharges the internal battery. A fully charged, new battery provides approximately 2.5 hours of continuous operation. To maintain maximum battery charge and to prolong battery life, connect AC power when possible.

### Side of the Device

- ◆ Basic directions and alarm responses are labeled on the sides of the LifeCare PCA<sup>®</sup> Infusion System. Refer to the Operating Manual for complete instructions.

### Front Panel Display

- ◆ The **antenna** is located on the top of the device in front of the handle bar. This may be activated to wirelessly transfer data.
- ◆ The **LED screen** displays the total dose delivered since the device was last cleared in bright red numbers.
- ◆ The **LCD screen** displays programming options, prompts, and the main screen display.
- ◆ The **Soft keys** are touch keys which are located to the right of the LCD screen. They perform a variety of functions correlating to the programming.
- ◆ The **Enter key** is used to select and accept various screen options.
- ◆ The **Exit key** is used to return to the main display from non-programming screens.
- ◆ The **Numeric Key Pad** is used to enter numeric values. The decimal point is located under the “9” key.
- ◆ The **CLEAR key** is located under the “7” key and is outlined in red. The Clear key is used to clear an entry and reset the field to zero.

- ◆ The **Silence/Volume Key** is used to temporarily silence an alarm while correcting a condition or adjust alarm volume when the device is infusing. Pressing the silence key during programming will also silence the Key Pad for two minutes.
- ◆ The **History Key** is used to review current program, dose history, and event log. It also provides access to the *Print History* soft key. The *Print History* soft key is only functional if a printer is attached to the device.
- ◆ The **Start/ Pause key** is used to start and pause an infusion.
- ◆ The **ON / OFF key** controls the power to the LifeCare PCA<sup>®</sup> device. The device may also be powered on by inserting a drug vial.
- ◆ The **AC power indicator** illuminates when the infuser is plugged into AC Power.
- ◆ The **Battery indicator** illuminates continuously when the infuser is running on battery power.

Now that we have examined the outside of the LifeCare PCA<sup>®</sup> device let's begin the programming steps.

## Set Up

- ◆ **Assemble the Morphine 1 mg/mL PF vial and injector** by threading the injector onto the blue stopper of the vial until it is secure.
- ◆ **Connect the PCA set to the vial.**

---

### **WARNING:**

*Failure to use Hospira approved vials, injectors, and PCA sets with an integral anti-siphon valve may cause an inaccurate dose delivery to the patient and invalidate the device warranty.*

---

## Priming the Set

- ◆ **Manually prime the PCA set** to the lower extension set by placing the top of the PCA Vial on a hard surface and slowly pressing down on the injector.
- ◆ **Close the slide clamp** on the PCA Set.
- ◆ **Attach the primary IV line to the extension set** located at the distal end of the PCA set and prime the remainder of the set with maintenance fluid.
- ◆ **Close the slide clamp** on the PCA extension set.

The health information contained herein is provided for informational purposes only. All decisions regarding patient care must be made with a healthcare provider and consider the unique characteristics of each patient.

---

*If the purge function is activated per facility protocols, the set may also be primed mechanically once the vial has been loaded into the device. The [Purge] Screen will appear with prompts and confirmation screens guiding the process. The maximum amount of fluid that may be purged is 3 mL.*

---

---

**WARNING:** *The patient must be disconnected from the PCA infuser set before the purge cycle.*

---

## Loading the Vial

---

**NOTE:** *Always confirm barcode reader window is clean before inserting vial. Wipe with a dry, soft, clean cloth or alcohol swab, if needed.*

**CAUTION:** *Do not load the top portion of the vial into upper clip first. The lower vial lip may crack or chip when inserted into the lower clip. Cracked vials may not show evidence of damage until pressure is applied by starting an infusion.*

---

- ◆ **Squeeze cradle release mechanism and bring it to the top position.**
- ◆ **Holding the vial with the label and graduated markings facing you** will ensure the barcoded label faces the barcode reader on the **right** side of the vial compartment.
- ◆ **Insert bottom of the glass vial into the middle of the black bracket.**
- ◆ Gently **press upper end of glass vial into upper black bracket.** The barcode reader will flash a red light as it scans the barcode and the device will power on, starting the self-test. The device may also be powered up by pressing the ON/OFF key.
- ◆ **Squeeze the top of the cradle release mechanism and push down until the vial injector snaps into the bottom bracket.**
- ◆ **Unclamp the slide clamp.**

Press the **Continue>** soft key to advance to the programming screen. The System Settings screen allows you to adjust the Screen Contrast, Volume, and Date & Time. We will review the Systems Settings option towards the end of the inservice.

---

**NOTE:** The LifeCare PCA® device will alarm after 2 minutes of inactivity. Pressing the SILENCE/VOLUME button will silence the alarm for another two minutes. If the device is actively engaged this alarm will not sound.

A facility can choose from 5 different cadences for the alarm sound.

The sounds can only be changed through the Hospira MedNet® Software.

---

## Programming

Now that a vial is loaded, we can begin programming an infusion.

---

**NOTE:** To clear an entry and reset a number back to zero press the CLR key, located under the number “7”.

To return to previous screen, select the PREVIOUS> soft key. This will scroll back one screen at a time.

---

### New Patient Screen

If the device has been powered off for less than 4 hours the NEW PATIENT? screen will appear. Selecting YES> on the NEW PATIENT? screen will clear History and Rx Setting. Selecting NO> will give the option of clearing the History and/or Rx settings on the next screen.

If the device has been powered off for more than 4 hours the New Patient Screen will not appear.

- ◆ Press the YES> soft key and the device will clear the History and Rx Settings.

### Drug and Concentration Confirmation

After the SELF TEST screen the DRUG AND CONCENTRATION CONFIRMATION screen appears. Hospira MedNet® Software allows a facility to use TALLman lettering in order to differentiate between drugs. For example, a facility may choose to capitalize only the “M” in Morphine 1 mg/mL or capitalize the first part of the drug name for MORPHine 5 mg/mL. *If Applicable: Your facility has chosen to use Tallman lettering for the following drug names:*

- ◆ < Enter Facility’s Drug Names which use Tallman Lettering>
- ◆ < Enter Facility’s Drug Names which use Tallman Lettering>
- ◆ < Enter Facility’s Drug Names which use Tallman Lettering>

Confirm the Right Drug and Right Concentration, Morphine PF 1 mg/mL, by **pressing the CONFIRM> soft key.**

The health information contained herein is provided for informational purposes only. All decisions regarding patient are must be made with a healthcare provider and consider the unique characteristics of each patient.

## Selecting a CCA

If a facility has a drug library with more than 1 Clinical Care Area (CCA), the SELECT CCA screen will appear.

If the facility has only one CCA entered in drug library, the SELECT CCA screen will not appear.

If there are more than 4 CCAs programmed, the *NEXT>* soft key will appear at the bottom of this screen. Selecting the *NEXT>* soft key will move the screen forward until all CCAs have been viewed. The *PREVIOUS>* soft key will scroll back one screen at a time. The last CCA selected will flash on screen.

- ◆ Press the (Enter Customized CCA Name) or *Low Dose>* soft key.

From this point forward the Drug Name, Concentration, and CCA will appear at the top of the main screen and all programming screens.

## Initial Loading Dose

- ◆ Press the *YES>* soft key to program a Loading Dose.
- ◆ Using the numeric key pad (Enter a dose within the soft limits) or enter **2 mg** Loading Dose, then press the **ENTER** button.

---

*Notice: The unit of measure is spelled out and underlined to minimize errors.*

*The only time an infusion can be administered with the door unlocked is when an initial or supplemental Loading Dose has been started.*

---

With the LifeCare PCA<sup>®</sup> device a clinician has the option to program and administer the initial loading dose before completing the remainder of the programming, or defer delivery until after programming is complete.

- ◆ Press the *YES>* soft key to administer the Loading Dose now.
- ◆ Follow the directions on the screen, and press the **START/PAUSE** button to start the infusion.

---

*NOTE: To interrupt or discontinue the delivery of a Loading Dose at any time during the infusion press the **START/PAUSE** button again.*

---

- ◆ Press the **START/PAUSE** button again.
- ◆ The screen will display the amount delivered. To resume the Loading Dose infusion press the *YES>* soft key. For this demonstration, press the **NO>** soft key.

## Programming an Infusion

The SELECT DELIVERY MODE screen allows you to select between PCA Only, PCA + Continuous, and Continuous Only modes. *If Applicable: Protocols can also be selected on this screen. This will be discussed later in the inservice.*

- ◆ From the Select Delivery Mode screen, **press the PCA + CONT> soft key.**
- ◆ Using the numeric keypad, (Enter a dose within the soft limits) or enter a **PCA DOSE of 1.5 mg, then press the ENTER button.**

---

*Note the  $\frac{3}{4}$  font size difference between the whole and decimal numbers helps to minimize dosing errors.*

---

- ◆ Using the numeric keypad, enter a Lockout Interval of (Enter a time within the limits) or 10 minutes, then press the ENTER button.
- ◆ Using the numeric keypad, enter a CONT. RATE of (Enter a dose within the soft limits) or 1 mg, then press the ENTER button.

### Dose Limits

A Dose Limit is a physician prescribed value that limits the total amount that can be delivered in any rolling period of time. Because the device does not autocalculate the dose limit, the physician has the flexibility to prescribe a dose limit independent of the continuous and PCA dose programmed.

If there is no Soft or Hard Upper Limit set in the Dose Limit field of the drug library, the clinician has the option of selecting YES> or NO> on the SET DOSE LIMIT? screen. If there is a Soft and/or Hard Limit set in the drug library, then a numeric value must be entered.

Your facility has chosen to set a (Enter the facility's Dose Limit) **Hour Dose Limit.** Hospira's MedNet® Software allows a facility to customize Dose Limits per CCA needs. For example a Pediatric CCA could have a 1 Hour Dose Limit, whereas a Med Surg unit may have a 4 Hour Dose Limit. *If Applicable: Your facility has chosen to set the following Dose Limits per CCA.*

- ◆ (Enter the facility's customized Dose Limit)

An infusion will stop when the dose limit is reached, and the message, "4 HR LIMIT REACHED", is displayed on the main screen. As the oldest dose "ages out" of the rolling 4 hour limit, the device will again accept patient-initiated dose requests in PCA modes and resume infusion at the continuous rate, if a continuous rate was programmed.

A loading dose can be delivered anytime during setup or operation, even if the Dose Limit has already been reached or will be exceeded after delivery.

Setting a new dose limit will NOT erase the previous dose history.

- ◆ Using the numeric key pad, **enter a Dose Limit of** *(Enter a customized Dose Limit for this drug)*, **then press the ENTER button.**

## Confirmation Screen

After programming is completed a one page confirmation screen appears. Prior to locking the device and removing the key, the clinician must review each programmed parameter and ensure that the displayed program agrees with the physician's order. An infusion can not be started without pressing the *CONFIRM*> soft key on this screen.

- ◆ Press the *CONFIRM*> soft key to confirm the right program.
- ◆ Following the instructions on the screen, close and lock the door, and press the *START/PAUSE* button to begin the infusion.

## Main Screen Display

The main screen displays the

- 1) Drug name and concentration
- 2) CCA Name
- 3) Mode of delivery
- 4) PCA Dose Available or PCA Lockout
- 5) Total volume delivered in units of measure programmed
- 6) Continuous Rate being delivered

## Supplemental Loading Dose

When the door is unlocked the LifeCare PCA<sup>®</sup> Infusion System will pause the current program and the screen will display the options available to the programmer. The soft key options are: *Loading Dose*>, *Change Rx*>, *Clear Shift*>, and *Change CCA*>.

To deliver a supplemental Loading Dose at any time during an infusion, **unlock the door, and select the *LOADING DOSE*> soft key.**

If a Dose Limit is set, and has been reached, using the Loading Dose function may result in exceeding the dose limit.

- ◆ Using the numeric keypad, **enter a Loading Dose of** *(Enter a customized dose within Soft Limits)*, **then press the ENTER button.**

Ensure that the set is connected to the patient and the slide clamp is disengaged.

- ◆ **Press the START button** to infuse supplemental Loading Dose.
- ◆ **After loading dose is complete, turn the key to the lock position and close the door if opened. Press the START button to continue the infusion.**

The health information contained herein is provided for informational purposes only. All decisions regarding patient are must be made with a healthcare provider and consider the unique characteristics of each patient.

After a Loading Dose has been administered the main screen will display **PCA LOCKOUT** until the Lockout Interval is reached.

## Making Changes, Hard Limits, and Soft Limits:

To make any changes to the program, the key must be turned to the unlock position.

- ◆ **Unlock the door using the security key.**
- ◆ **Select *Change Rx*>.**

The SELECT SETTING TO CHANGE screen allows the clinician to change portions of the program without the need to reprogram the entire order. This screen allows access to change the *MODE*>, *PCA DOSE*>, *CONT. RATE*>, *NEXT*>, and *SAVE & EXIT*>. Selecting the *NEXT*> soft key, displays the options on the next screen which are *LOCKOUT*> and *DOSE LIMIT*. Selecting the *SAVE & EXIT*> soft key will save the changes and return the user to the Confirmation Screen. Again, the order must be confirmed before the door is locked and infusion is started.

Let's change the Mode of the current infusion to PCA Only.

- ◆ **Press the *MODE*> soft key to change the mode.**

The current programmed mode will flash.

- ◆ **Press the *PCA ONLY*> soft key.**

### Hard Limit Alert and Soft Limit Override Screens

While we are making changes to the program, let's use this opportunity to demonstrate the Hard Limit Alert and Soft Limit Override screens.

A Hard Limit Alert appears when a dose entered is outside of the Hard Upper or Hard Lower Limits established by your facility for the drug and/or CCA selected. Hard Limits can not be overridden and the value must be changed in order to continue programming the infusion.

**To demonstrate a Hard Limit Alert**, using the numeric key pad, **enter a PCA Dose of** *(Enter a customized PCA Dose outside of the Upper Hard Limit)*, **then press the ENTER button.**

The **Hard Limit Alert Screen** will display "PCA DOSE **NOT** ALLOWED FOR MED AND CCA MAX ALLOWED = *(Enter a customized PCA Dose Upper Hard Limit)*". The only option allowed is to press the *CHANGE*> soft key.

- ◆ **Press the *CHANGE*> soft key to return to the previous screen.**

A Soft Limit Override screen appears when the entered dose is above or below your facility's customized Upper and/or Lower Soft Limits. Your facility considers doses in-between the Upper and Lower Soft Limits as acceptable values. Because there are

The health information contained herein is provided for informational purposes only. All decisions regarding patient care must be made with a healthcare provider and consider the unique characteristics of each patient.

times when a physician's order may go outside of these limits, Soft Limits can be overridden after the dose has been confirmed on the Soft Limit Override screen. Hospira's MedNet® Software system allows for Soft and/or Hard, Upper and/or Lower limits to be established per your facility's protocols.

**To demonstrate a Soft Limit Override screen**, using the numeric key pad, **enter a PCA Dose of** *(Enter a customized PCA Dose outside of the upper Soft Limit)*, then **press the ENTER button.**

The **Soft Limit Alert** screen states **"PCA DOSE** *(Enter customized PCA Dose used above)* **IS OVER** *(Enter the customized Upper Soft Limit for this drug and parameter)* **LIMIT, CONFIRM OVERRIDE"**.

- ◆ **Press the CONFIRM> soft key** to confirm a soft limit override. If a value is entered incorrectly, press the CHANGE> soft key to return to the previous screen and enter another value.
- ◆ **Press the ENTER button to confirm the previously entered Lockout Interval.**
- ◆ **Press the ENTER button to confirm the previously entered Dose Limit.**
- ◆ **Press the SAVE & EXIT> soft key.**
- ◆ **Review the program on the Confirmation Screen and press the CONFIRM> soft key.**
- ◆ Following the directions on the screen, **CLOSE AND LOCK DOOR TO BEGIN** the infusion.

---

*Note: The cautionary symbols  and/or  are displayed on the screen to indicate that a Soft Upper and/or Soft Lower Limit Override has been selected.*

*If your facility chooses not to establish any limits in the Hospira MedNet® Software for a drug, the Cautionary Symbol  appears on the main screen.*

---

Since the PCA Only mode is activated by the patient pressing the Patient Pendant, there is no need to press the start key.

- ◆ **Press the Patient Pendant to deliver a PCA Dose.**

After the PCA Dose has been administered, the main screen will display PCA LOCKOUT.

---

**NOTE:** *Partial delivery of a PCA dose can be a result of interrupting delivery by pressing START/PAUSE button, opening the door, loss of power, reaching the dose limit, an empty vial, or a malfunction alarm.*

---

The health information contained herein is provided for informational purposes only. All decisions regarding patient care must be made with a healthcare provider and consider the unique characteristics of each patient.

## Reviewing Programmed Settings

The program may be reviewed at any time by pressing the History Key.

- ◆ **Press the HISTORY BUTTON twice**, and the one page Confirmation Screen will display allowing a quick view of the programmed parameters.
- ◆ To return to the main screen **press the EXIT button**. If the EXIT button is not pressed, the main screen will automatically display after one minute.

## Checking the History

- ◆ **Press HISTORY button** to scroll through history screen by screen. The screens displayed include:
  - Total amount delivered since the last time the shift totals were cleared including the amount delivered toward the Dose Limit,
  - PCA Summary for the Last 1-Hour, Last 24-Hours, and
  - The Event Log, which includes all events since last time the History was cleared.
- ◆ **Press the EXIT button** to return to the Main Delivery screen.

## Clearing Shift Totals

Review and document shift totals per facility protocols prior to clearing shift totals.

- ◆ To clear shift totals, **turn the key to the unlock position, and press the CLEAR SHIFT> soft key**.
- ◆ **Press the YES> soft key** to confirm clearing the shift total. Pressing the *NO>* soft key will exit the clear shift screen.

The device will clear the shift totals in the following screens:

- ◆ The Red LED screen
- ◆ The Main LCD screen
- ◆ Under the HISTORY button:
  - The amounts delivered since the last time the shift was cleared, except the amount delivered toward the Dose Limit
  - The Last 1 Hour
  - The Last 24 Hours

The time and amount cleared can be found in the Event log by pressing the HISTORY button until the desired time and event are reached.

## Changing an Empty Syringe

When a syringe is empty, the device will alarm and the message “EMPTY SYRINGE” will appear on screen.

To change an empty syringe:

- ◆ **Press the SILENCE/VOLUME button** to silence the alarm.
- ◆ **Close the slide clamp on the PCA administration set.**
- ◆ **Insert key and unlock the door.** This will pause the infusion.
- ◆ **Remove old vial** by grasping glass vial on both sides and pulling straight out. A “CHECK SYRINGE” alarm will sound. The only way to silence this alarm is to insert a vial with the barcode facing the barcode reader.
- ◆ **Load in a new vial. (For this demonstration, use the same drug and concentration as the vial removed.)**
- ◆ **Press the CONFIRM> soft key** to confirm the Right Drug and Right Concentration.
- ◆ The next screen will ask if you want to *CLEAR HISTORY>*, *CLEAR RX>*, *CLEAR BOTH>*, or *CONTINUE>*. Since we are assuming the same patient with no changes in the physician’s orders, for this demonstration, **press the CONTINUE> soft key.**
- ◆ Review the entered parameters and if correct, **press the CONFIRM> soft key.**
- ◆ Following the instructions on the screen, **close and lock the door. Since this program is in PCA Only mode, the patient can start the infusion by pressing the Patient Pendant.**
- ◆ **Unclamp the slide clamp.**

## Changing a Drug and or Concentration, Working with Custom-Filled Vials, and if Applicable, Protocols

- ◆ Using the security key, **unlock and open the door.**
- ◆ **Close the slide clamp.**

- ◆ Remove the current vial and insert the (Enter the facility's custom-filled vial which is not allowed in the current programmed CCA. If applicable use a drug dosed in micrograms.) This is a custom-filled vial with a pharmacy generated, barcode label.
- ◆ Unclamp the slide clamp.
- ◆ Press the **CONFIRM>** soft key to confirm the Right Drug and Right Concentration.

Since (Enter the name if the drug inserted) is not allowed in the (Enter the current, programmed, CCA name) CCA the message “**MED NOT ALLOWED IN (Enter the current, programmed, CCA name), REMOVE VIAL AND INSERT CORRECT VIAL OR CHANGE CCA**” message appears on screen.

- ◆ Press the **CHANGE CCA>** soft key.
- ◆ Press the (Enter the correct CCA name for the drug vial) soft key.

Since the drug and or concentration has changed since the last program, the message “**WARNING! DRUG AND/OR CONCENTRATION CHANGE DETECTED! CONTINUE OR REMOVE VIAL IF INCORRECT**” appears on screen.

- ◆ Press the **CONTINUE>** soft key, to advance to the programming screens.
- ◆ Press the **CLEAR HISTORY>** soft key, to clear the existing history.
- ◆ Press the **CONFIRM>** soft key to confirm clearing the history.
- ◆ Press the **YES>** soft key, to set a Loading Dose.
- ◆ Using the numeric key pad, enter a Loading Dose of (Enter a customized dose within Soft Limits. If the drug concentration is in micrograms, enter a fractional microgram, i.e., 12.5mcg to demonstrate the Decimal Point Not Allowed screen).

---

*If Applicable: For Microgram Delivery*

*Note: Fractional micrograms are not allowed. When the unit of measure for a drug is in micrograms, the message “**DECIMAL POINT NOT ALLOWED!**” appears on screen when delivery of a fraction of a microgram is attempted.*

---

- ◆ Follow the instructions on screen, and Press the **CLR** button to continue.
- ◆ Using the numeric key pad, enter a Loading Dose of (Enter a customized dose within Soft Limits.), then press the **ENTER** button.

- ◆ Press the **DELIVER LATER>** soft key to deliver the Loading Dose after the programming is complete.

---

***If Applicable: Skip to Protocols section below if the Stored Protocols feature will be demonstrated.***

---

- ◆ Press the **CONTINUOUS>** soft key.
- ◆ Using the numeric key pad, enter a **Continuous Rate of** *(Enter a customized rate within Soft Limits.)*, then press **ENTER** button.
- ◆ Using the numeric key pad, enter a **dose limit of** *(Enter a customized Dose Limit.)*
- ◆ After confirming the program, press the **CONFIRM>** soft key.

The next screen will remind you that the “**LOADING DOSE IS NOT GIVEN**”. The screen will display “**DELIVER LOADING DOSE NOW?**” The Loading dose may be canceled by pressing the **CANCEL>** soft key.

- ◆ Press the **YES>** soft key to deliver the Loading Dose.
- ◆ Following the directions on screen, **close and lock the door. Press the START** button to deliver the Loading Dose and begin the program.

## Protocols

- Press the **PROTOCOLS>** soft key, to retrieve stored protocols.

---

*Note:*

*With Hospira MedNet<sup>®</sup> Software, if there are stored protocols in the drug library for a CCA, then the PROTOCOLS> soft key will appear on the SELECT DELIVERY MODE screen.*

*ONLY stored protocols for the drug and concentration entered will appear when the PROTOCOLS> soft key is pressed.*

*If NO protocols have been programmed for the inserted vial, a “**NO PROTOCOLS FOUND FOR INSERTED VIAL**” message will appear.*

*If there is more than one stored protocol for a drug and concentration, then all protocols for that drug and concentration can be reviewed by pressing the **NEXT>** and/or **PREVIOUS>** soft keys.*

---

- ◆ **Select Protocol # (Enter custom Protocol #) by pressing the ENTER button.**
- ◆ **Press the CONFIRM> soft key.**

The next screen will remind you that the “**LOADING DOSE IS NOT GIVEN**”. The screen will display “**DELIVER LOADING DOSE NOW?**” The Loading dose may be canceled by pressing the **CANCEL>** soft key.

- ◆ **Press the YES> soft key to deliver the Loading Dose.**
- ◆ Following the directions on screen, **close and lock the door. Press the START button** to deliver the Loading Dose and begin the program.

### Discontinuing a program

- ◆ To discontinue an infusion, **unlock the door to pause the infusion.**
- ◆ Document totals per your facility’s protocols.
- ◆ **Clamp the slide clamp.**
- ◆ **Remove vial** by firmly grasping glass vial on both sides and pulling straight out.
- ◆ **Press the ON/OFF button** to power off the LifeCare PCA® Infusion System with Hospira MedNet® Software.

---

***Note: The device will maintain the history and settings last programmed for 4 hours. If the device is powered on in less than 4 hours a NEW PATIENT? screen will appear, giving the clinician an opportunity to save or delete previous settings.***

---

### Adjusting Settings (Optional)

System Settings such as Screen Contrast, Date/Time, and Volume, can be adjusted when the device is first powered on.

- ◆ **Press ON/OFF button** to turn power on the device.
- ◆ At the self test complete screen, **press the SYSTEM SETTINGS> soft key.**
- ◆ Choose the setting to change by selecting the appropriate soft key.

- ◆ The settings that can be changed include:
  - Volume
  - Contrast
  - Time/Date
- ◆ To change the Time and or Date on the device, **Press the *TIME/DATE*> soft key.**
- ◆ The warning screen that appears next reminds the user that “**CHANGING THE DATE OR TIME WILL CLEAR ALL TOTALS!**” Press the ***CONTINUE*> soft key.**
- ◆ Using the numeric key pad, **enter the current time.** To reset the number back to 00:00, press the CLR button, located under the number 7.
- ◆ **Press the *AM/PM*> soft key to toggle between AM and PM setting.**
- ◆ **Press the *NEXT*> soft key.**
- ◆ Using the numeric key pad, **set the current date by entering the numbers in the Month/Day/Year format.** To reset the number back to 00/00/00, press the CLR button, located under the number 7.
- ◆ **Press the *NEXT*> soft key.**
- ◆ **Press the *CONFIRM*> soft key to confirm the current Time and Date.**
- ◆ **Press the *CONTINUE*> soft key to return to the programming screens.**

## ALARMS:

---

***NOTE: The pump stops delivery when any of these alarms occur: CHECK INJECTOR, CHECK VIAL, CHECK SYRINGE, EMPTY SYRINGE, OCCLUSION, DEAD BATTERY, OR MALFUNCTION.***

---

**To Silence an alarm press the [SILENCE] key, then follow the displayed messages. All alarms except the MALFUNCTION, CHECK VIAL, CHECK INJECTOR, and CHECK SYRINGE alarms can be muted.**

Clear the cause of the alarm if possible, and press the [START/PAUSE] key to resume operation for Continuous or PCA + Continuous modes. The original display message will be restored.

**NOTE: If the MALFUNCTION alarm sounds, press the [ON/OFF] key to turn the pump off. Turn the pump on. If the malfunction repeats, remove the pump from service.**

The following is a list of alarm messages and corrective steps:

MESSAGE	MUTING TIMES	POSSIBLE CAUSE(S)	CORRECTIVE ACTION(S)
BARCODE NOT READ	1 minute	Vial not loaded properly Barcode reader window not clean Non-compatible vial Verify barcode is not obscured with label	<ul style="list-style-type: none"> <li>◆ Position vial correctly</li> <li>◆ Clean barcode reader window with soft, dry cloth or alcohol swab</li> <li>◆ Use Hospira vials</li> </ul>
CHECK SETTINGS	1 minute	Door locked without appropriate therapy settings	<ul style="list-style-type: none"> <li>◆ Open the door, complete settings</li> </ul>
OCCLUSION	1 minute	Occlusion detected	<ul style="list-style-type: none"> <li>◆ Make sure slide clamp is closed, even if it is cause of occlusion, until the back pressure is relieved</li> <li>◆ Open security door if closed</li> <li>◆ Remove back pressure by squeezing and releasing the cradle release handles</li> <li>◆ Identify and correct the cause of the occlusion. Release slide clamp. Alarm will self correct</li> </ul>

<b>CHECK SYRINGE</b>	<b>NONE</b>	Syringe (vial and injector) not properly loaded	<ul style="list-style-type: none"> <li>◆ Properly insert syringe into holder assembly</li> </ul>
<b>CHECK VIAL</b>	<b>NONE</b>	Injector detected and vial not properly loaded	<ul style="list-style-type: none"> <li>◆ Properly insert vial into holder assembly or removal of injector</li> </ul>
<b>CHECK INJECTOR</b>	<b>NONE</b>	Vial detected and injector not properly loaded	<ul style="list-style-type: none"> <li>◆ Properly insert injector into holder assembly or removal of vial</li> </ul>
<b>EMPTY SYRINGE</b>	<b>15 minutes</b>	Empty vial detected	<ul style="list-style-type: none"> <li>◆ Press [Silence] key to silence the alarm</li> <li>◆ Unlock and open the security door and remove old vial by firmly grasping glass vial on both sides and pulling straight out</li> <li>◆ May turn infuser OFF while preparing new vial</li> </ul>
<b>DOOR OPEN</b>	<b>N/A</b>	Door left open or unlocked for more than 2 minutes	<ul style="list-style-type: none"> <li>◆ Close door and lock</li> </ul>
<b>INFUSER PAUSED</b>	<b>5 minutes</b>	Infusion paused for more than 2 minutes	<ul style="list-style-type: none"> <li>◆ Press [START/PAUSE] key again, or unlock door</li> </ul>
<b>LOW BATTERY</b>	<b>10 minutes</b>	Battery life has less than 30 minutes remaining and currently operating on battery power	<ul style="list-style-type: none"> <li>◆ Connect to AC power</li> </ul>
<b>DEAD BATTERY</b>	<b>NONE</b>	Battery life has expired	<ul style="list-style-type: none"> <li>◆ Connect to AC power</li> </ul>

The health information contained herein is provided for informational purposes only. All decisions regarding patient care must be made with a healthcare provider and consider the unique characteristics of each patient.

<b>PENDANT FAULT – 0</b>	<b>Visible Flashing Occurs</b>	<b>Pendant not secured into port</b>  <b>Faulty connection or Pendant</b>  <b>Partial Pendant press</b>  <b>Using PCA PLUS II Pendant (white handle)</b>	<ul style="list-style-type: none"> <li>◆ <b>Secure Pendant into port</b></li> <li>◆ <b>Replace Pendant or pump</b></li> <li>◆ <b>Release Pendant button</b></li> <li>◆ <b>Confirm use of LifeCare PCA<sup>®</sup> Patient Pendant (blue handle)</b></li> </ul>
<b>PENDANT FAULT – S</b>	<b>Visible Flashing Occurs</b>	<b>Electrical short in Pendant</b>	<ul style="list-style-type: none"> <li>◆ <b>Replace Pendant</b></li> </ul>

## STATUS MESSAGES

MESSAGE	DEFINITION
DOOR LOCKED	Message indicates the security door is closed and locked. It displays for 10 seconds and disappears.
PCA LOCKOUT	The PCA lockout message indicates that a PCA dose is not available. This message appears only when the security door is locked in the PCA or PCA + CONTINUOUS mode. The message remains until the lockout interval elapses and is displayed after a successful patient-originated dose delivery.
4 (or 1,6,12) HOUR LIMIT REACHED	Message displayed if 4 (or 1, 6, 12) hour Dose Limit has been selected and reached with security door locked.
PCA AVAILABLE	Message indicates patient can initiate a dose in PCA or PCA + CONTINUOUS mode.
PCA ONLY	Message is displayed when pump is in the PCA mode.
CONTINUOUS	Message is displayed when pump is in the CONTINUOUS mode.
PCA + CONTINUOUS	Message is displayed when pump is in the PCA + CONTINUOUS mode.
PAUSED	Message displayed when pump is stopped, but door is locked. Or, if door is opened.