

smiths medical cadd®



Administrator Guide
for Clinicians

PharmGuard® Medication Safety Software

Version 4

For use with the
CADD®-Solis Ambulatory
Infusion Pump



Contents

Introduction.....	1
Menu Bar Information for Administrator Users.....	2
Log In	6
Creating a Protocol Library.....	7
Setup a Protocol Library.....	8
Library General Settings	8
Setup Therapies, Qualifiers, and Drugs	9
Specify Protocols	11
User accounts	18
Reset Password	19
Connecting the Pump to the Computer.....	22
Send a Protocol Library to a Pump.....	22
Pump Reports	24
Connect/Disconnect Library.....	24
Log Out.....	24

Refer to the Help files within the software for warnings, important notes and additional information. Consult the PharmGuard® Administrator installation guide for details on installing the software.

WARNING: Read the entire Help files located on the PharmGuard® Administrator CD-ROM before operating this software program, and read the entire Operator's Manual before operating the CADD®-Solis ambulatory infusion pump. Failure to properly follow warnings, cautions and instructions could result in death or serious injury to the patient.

Introduction

The PharmGuard® Administrator medication safety software allows you, the protocol administrator, to set up protocol libraries that will be sent to a CADD®-Solis ambulatory infusion pump or used by the PharmGuard® Point of Care medication safety software - point of care user.

A protocol is a collection of pump settings including a therapy, qualifier, drug and the pump parameters of the CADD®-Solis ambulatory infusion pump.

A protocol library consists of a collection of these protocols. Each protocol is specific to the protocol library it is in. Protocols can be assigned to one or more Profiles (e.g. care areas) if Profiles are enabled and created for the Protocol Library. You will create the protocol library/

libraries, protocols, and profiles that will be sent to the CADD®-Solis pump or used at the point of care.

The protocol administrator user can also:

- Determine user access to send protocol libraries to the CADD®-Solis ambulatory infusion pump.
- Determine user access to protocol libraries at the point of care.
- Determine the amount of flexibility the point of care user can have in editing the protocols to be sent to the CADD®-Solis ambulatory infusion pump.

The PharmGuard® Administrator medication safety software can also be used to print barcodes and view reports.



Main log in screen

Menu Bar Information for Administrator Users

The menu bar is a row of onscreen buttons that, when clicked, activate certain functions of the program. You may need to be logged in to use some of these functions. The menu bar functions are described on the following pages.

File

File	Pump Communications	Log Reports	Print Barcode	Settings	Help
New Library... Save Library As... Delete Library... Export Library... Import Library... Create Package...					
Exit					

New Library

1. Enter the **New Protocol Library Name**.
2. From the pump drop-down list, select the pump to be used with this new protocol library, if applicable.
3. Click **OK**.

Save Library As

1. Select the existing **Protocol Library** you want to copy.
2. Type in the new **Library Name** in the space provided.
3. Click **OK**.

Delete Library

1. Select the **Library** you want to delete from the drop-down list.
2. Click **OK**.
3. Answer "Are you sure you want to permanently delete the selected library?" by clicking **Yes** or **No**.

Note: Clicking yes will delete the entire library and all protocols associated with it.

Export Library

1. Select the **Protocol Libraries** you want to export by clicking in the box next to the Library name.

You may **Select All** or **Clear All** by clicking on the appropriate button.

2. Select **Export Options** as desired by clicking to place a check mark next to the desired options: include users, include usage logs, include pump logs, export protocols as not active

3. Click **OK**.
4. When the **Export Library To** window pops up, determine the **Save In** location, and enter the file name you wish to create for the exported libraries.
5. Click **Save**.
6. When the export is complete, you will see a message informing you that the export was successful; click **OK**.

Import Library

1. Select the location where the library was saved.
 - a) **Import From Server:** to import from another database server; enter Server Name and Advanced Connection Settings for the database server.
 - b) **Import From File:** to import from a previously-exported database file; click Browse and select the location and filename for the exported database files (*.smd file).
3. Verify permission; enter a **User ID** and **User Password** if not already logged in.
4. Select **Get Library List**; a list of protocol libraries is displayed.
5. Within the **Select Protocol Libraries** box, click to place a check mark next to the Protocol Library/Libraries you want to import.
6. Select (or unselect) the desired **Import Options**.

Note: Import options will not be available for selection if the source database server or file does not contain the applicable data. For example, usage logs will not be available to import if the protocol library was exported without the usage logs included.

7. Click **OK**.
8. When the import is complete, you will see a message informing you that the import was successful; click **OK**.

Create Package

1. Select the **Protocol Library** you want to send to the PharmGuard® Server software.
2. Click **OK**.
3. Determine the proper location for saving the file, create a name for the PharmGuard® Server Software Package File; click **Save**.
4. Click **OK** on message indicating the package was saved successfully.

Exit - exits the program.

Pump Communications



Note: A protocol library may be sent to the CADD®-Solis pump. The pump must be connected in order to send a library. The pump must be powered on with the home screen displayed.

CADD®-Solis Pump

1. Click **Send Library** or **Get History**. See Connecting the Pump to the Computer (page 22) for more details on send library, get history, and view pump reports.

Log Reports



View Log Reports

1. Select the type of report you want to generate.
2. For the selected report, make filtering selections using drop-down lists. The filtering fields will vary based upon the selected report.
3. Click **Show Report** to open the report.
4. From the report window you can print the report using the printer icon on the toolbar or you can export the report by clicking on the export (floppy disc icon) button on the toolbar.

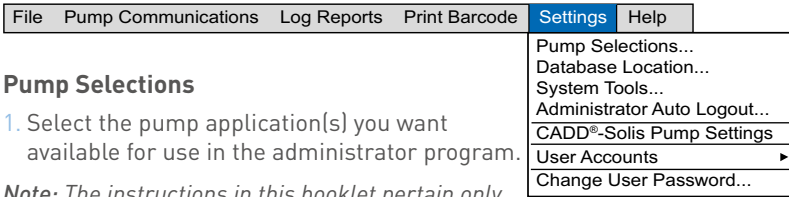
Print Barcode



Print Barcode

1. Click the desired drug.
2. Click **Print**.
3. Confirm that displayed barcode and drug name is correct; click **Print**.
4. Select printer and number of copies.
5. Click **OK** to print the barcode.

Settings



Pump Selections

1. Select the pump application(s) you want available for use in the administrator program.

Note: The instructions in this booklet pertain only to the CADD®-Solis pump. Other features may be visible if the CADD®-Solis VIP pump is selected for use. See the help files for more information on other features.

Database Location

Note: This task is used to modify the database location settings. The user must have administrator or system permission.

1. Enter the **Server Name** and **Advanced Connection Settings**.
2. Enter your **User ID** and **Password**.
3. Click **OK**.

System Tools

Note: Users with the protocol or system administrator permission can use the archive data, backup database, restore database, and transfer data features located under system tools. See the help files for details regarding these features.

Administrator Auto Logout

1. Enter the amount of time in the **Auto Logout** box.
2. Click **OK**.

CADD®-Solis Pump Settings

You can choose to allow PharmGuard® Administrator software to set the pump's clock to the local PC date and time automatically every time a pump is connected for communication (i.e., when sending a Library, sending a Protocol, or getting history). You may also send time settings (time zone and daylight saving time information) or an Asset ID to an individual pump by choosing to complete one or both of these tasks at the time the pump is connected to the PC.

To allow pump time to be set to PC clock time automatically during any pump communications:

In the CADD®-Solis Pump Settings dialog box on the Date/Time Settings tab, click to place a check in the checkbox next to Set pump date/time to local PC date/time when connected, and then click **Apply**.

To send time settings to a connected pump:

In the CADD®-Solis Pump Settings dialog box on the Date/Time Settings tab, set the Time Zone as appropriate, select whether or not to adjust for Daylight Saving Time, and then click **Send Time Settings**.

To send an Asset ID to a connected pump:

In the CADD®-Solis Pump Settings dialog box on the Pump Asset ID tab, enter the Asset ID you want to assign to the pump and then click **Send Asset ID**.

User Accounts

See User Accounts information (page 18).

Change User Password

1. Enter your **User ID**, if not logged in already.
2. Enter your old **password**.
3. Enter a new **password**, then confirm the new **password**.
4. Click **OK**.

Help

File	Pump Communications	Log Reports	Print Barcode	Settings	Help
					Administrator Help Topics F1
					About Administrator...

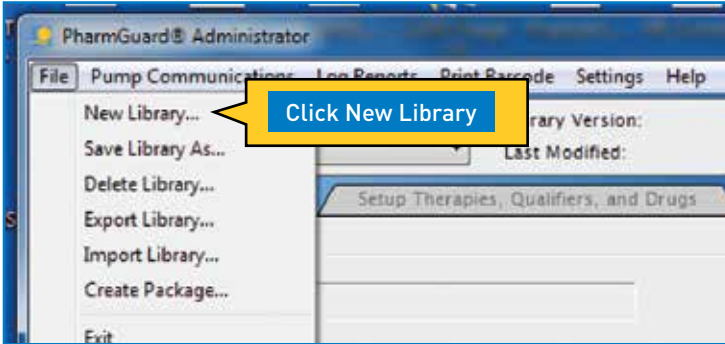
1. Click **Help** or **F1**.
2. Scroll to Administrator Help Topics or About Administrator.

Log In

1. Turn on your computer and log in, if required.
2. Double click the **PharmGuard® Administrator** icon.
3. Click **Log In**.
4. Enter your **User ID** and **Password**.
5. Click **OK**.

Creating a Protocol Library

To create a new protocol library



Creating a new library

1. Select **File** from the menu bar and click **New Library**.
2. Enter the **New Protocol Library** name.
3. Confirm pump selection.
4. Click **OK**.
5. Create a new library with desired settings. See **Set Up a Protocol Library** (page 8).

Note: See the help files for additional information.

Creating a new protocol library based on an existing protocol library

You may create a new protocol library based on one that has already been defined. A new library created in this way will contain the same user accounts, Therapies, Qualifiers, Drugs, Protocols and Profiles, if applicable, as the previously-existing library.

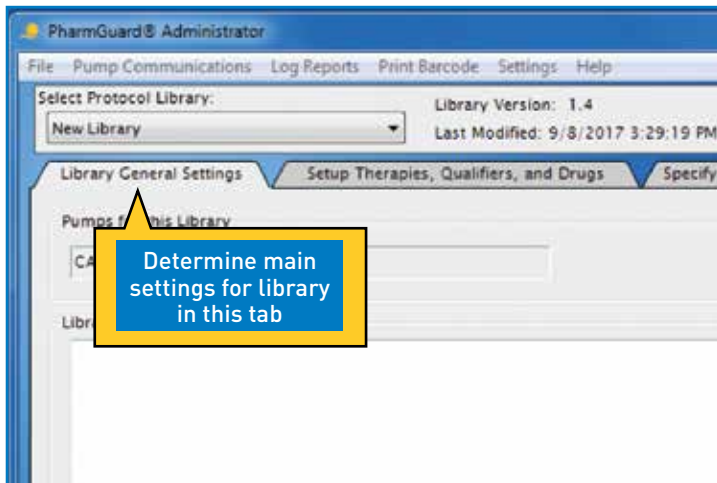
Note: *Protocols that were active in the previously existing protocol library will not be active in the new protocol library. To make a protocol active, see page 16. Library permissions will need to be assigned to the user accounts for the new protocol library. To assign library permissions, see page 19.*

1. Select **File** from the menu bar and click **Save Library As**.
2. Select the existing **Protocol Library** from the list provided.
3. Enter the new **Protocol Library Name** in the “Save Library As” box and click **OK**.
4. Edit the new **Protocol Library** for desired settings.

Note: See the help files for additional information.

Set up a Protocol Library

Library General Settings



Library General Settings tab

Once you are logged into the administrator program and have selected a protocol library from the Select Protocol Library drop-down menu, the Library General Settings tab is where you determine the main settings for the library. On this tab you can provide a description of the library, manage the library version, view a library summary report (once the library has been created and contains active protocols), enable point of care options and choose to require users to log in at the point of care (if you will use the point of care in your facility).

Library description: Enter an appropriate protocol library description. Use this field to differentiate your protocol libraries.

Manage library: Allows you to update or restore a library version. Updating a library saves a restoreable version of the library and updates the current version number. Restoring a library allows you to revert to a previously-updated protocol library version.

Note: Restoring a protocol library will replace the current protocol library in use with the version you select to restore. See help files for more information.

Library summary report: Allows you to view a summary report containing information about the protocol library and all its active protocols.

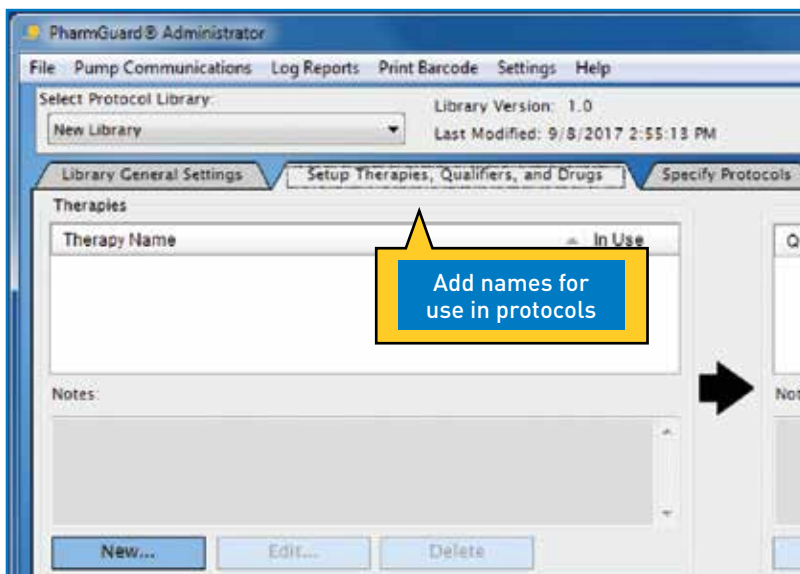
Profiles: If your facility has decided to use Profiles, then click in the box to insert a check mark in the box next to Enable Profiles. If you will not be using Profiles, confirm there is no check mark in the box.

Note: Enabling Profiles will add a tab titled Profiles next to the Specify Protocols tab.

Point of care settings: If your facility has decided to use point of care, then confirm there is a check mark in the box next to **Enable Point of Care Options**. If you will not be using the point of care application, remove the check mark by clicking in the box.

- Click in the box **Require User Login** if your facility has determined the users are required to log in when using the point of care application.
- If your facility requires users to log in at the point of care, an auto logout time must be designated. Enter the amount of time in minutes that the point of care program may remain inactive before automatically logging out the user. The default is 5 minutes.

Setup Therapies, Qualifiers, and Drugs



Setup Therapies, Qualifiers, and Drugs tab

The **Setup Therapies, Qualifiers, and Drugs** tab allows you to create specific therapies, qualifiers and drugs that are unique to each protocol library. Once they have been created, you may also use this tab to view the names, edit the notes, edit a therapy or qualifier name that is not in use, edit a drug ID, and delete any therapy, qualifier or drug name that is not in use. The information added for the therapies, qualifiers and drugs is automatically saved.

Build the therapy, qualifier and drug names for use within a protocol library. Verify that the **Select Protocol Library** menu states the library name you will be setting up.

To Add a New Therapy:

Select the **Setup Therapies, Qualifiers, and Drugs** tab.

In the Therapies box, click on **New**.

1. Enter the new **Therapy Name**.
2. If desired, add **Therapy Notes**, which will be viewable by the point of care user.
3. Click **OK**.

To Add a New Qualifier:

All qualifiers are specific to the selected therapy. You must create at least one qualifier for each therapy.

After a therapy name has been selected, click on **New** under the qualifiers box.

1. Enter the new **Qualifier Name**.
2. If desired, add **Qualifier Notes**, which will be viewable by the point of care user.
3. Click **OK**.

To Add a New Drug:

The drugs added are specific to the entire protocol library and can be used throughout. Unlike the qualifiers, you do not need to create new drugs for each therapy.

Verify that the drug box title displays the **Protocol Library** that you want to add a new drug to.

1. In the **Drugs available for...** box, click on **New**.
2. Enter the **Drug Name, Units, Concentration, and a unique Drug ID** if Drug Verification will be required for the point of care user.

***Note:** The number of characters that can be used with Drug names is limited by the pump display. The software will not allow you to enter a name longer than the pump display will allow. There are three text boxes available for entering drug names to allow for combination medications (i.e. drug cocktails). Underneath the three text boxes for drug names is a box that will display how the drug name(s) will appear on the pump display. When the drug name(s) reach a certain length, the name(s) will begin to scroll in the display box. This is how the scrolling drug names will appear on the pump.*

3. Click **OK**.

Complete the **Verify New Drug** screen by clicking in the box next to each item once you have verified the information. Confirm the drug name and verify the spelling. This is how the drug name will be displayed on the pump. Follow facility policies and procedures for verifying information.

Click **OK**.

***Note:** "In Use" indicates (yes or no) whether a therapy, qualifier and drug have been used to specify a protocol.*

Specify Protocols

Select the Specify Protocols tab to begin adding protocols to the chosen Protocol Library. Once the tab has been selected, verify that the Select Protocol Library menu states the library name in which you want to specify protocols. Confirm that the correct pump is displayed in the Protocols box. Specifying protocols allows the CADD®-Solis pump or point of care user to choose the necessary therapy, qualifier, and drug to receive the predetermined parameters. Active indicates (yes or no) whether the Protocol Available to Send to Pump option is enabled.

1. Select the **Specify Protocols** tab.

2. The following options are available:

- **Sort Protocols** – Custom sort the order in which the therapy, qualifier and drug names will appear on the pump during pump programming. *(see page 16)*

Note: *If custom sorting of protocols is desired, this should be performed after protocols have been created.*

- **Manage Templates** – Customise the selection of the alarms, security and display sound settings as a template that can be used when creating new protocols. *(see page 12)*

Note: *If a template will be used during the creation of the library, this task should be performed before specifying any protocols. Modifications to protocol templates affect the initial settings when creating new protocols only. Changing a template does not modify any previously created protocols.*

- **New Protocol** – Create a new protocol. *(see page 12)*
- **Edit Protocol** – Edit the selected protocol. *(see Help files for more information)*
- **Print Protocol** – View and/or print the protocol details report for the specified protocol. *(see Help files for more information)*
- **Delete Protocol** – Delete the selected protocol. *(see Help files for more information)*
- **Rx Form** – Print the selected protocol prescription form. *(see Help files for more information)*

Note: *A protocol must be active in order to print a protocol prescription form.*

3. Click the option you want to perform.

To Manage a Template

Using a template when creating new protocols is optional; however, when a template is used, it provides a common starting point for the alarms, security and display/sound settings when creating new protocols.

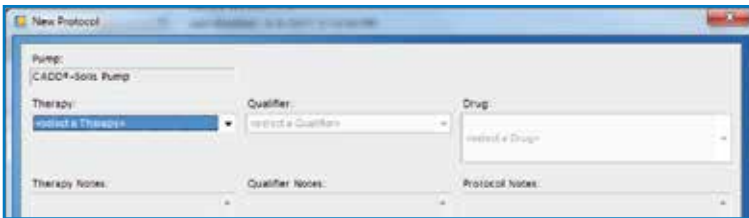
1. Click on **Manage Templates**.
2. In the manage templates dialog box, click to select the **CADD®-Solis pump**.
3. Click **Edit Template**.
4. In the edit template window, click on each tab to modify the alarms, security, and display/sound settings.

Note: The tabs containing programmable delivery parameters specific to a protocol cannot be modified in the template.

5. After modifying the protocol template, click **Save**. To confirm the changes to the template, click **OK** at the confirmation message.
6. Click **Close** to close the manage templates dialog box.

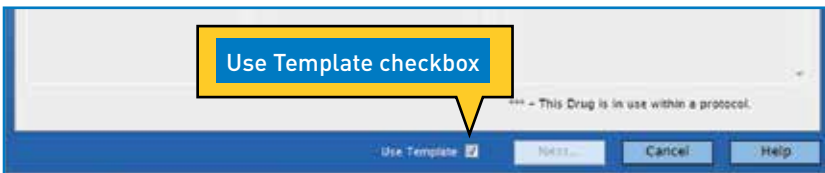
To Create a New Protocol

1. Click on **New Protocol**. Verify that the pump box displays the CADD®-Solis pump.



New Protocol screen

2. Select a **Therapy**, **Qualifier** and **Drug** from the drop down menus.
3. If desired, enter protocol notes in the **Protocol Notes** box. Notes will be viewable to the point of care user.
4. Choose whether or not to use the modified protocol template for this new protocol. To use the template, confirm that the use template checkbox has a check. If you do not want to use the template, click in the box to remove the check.

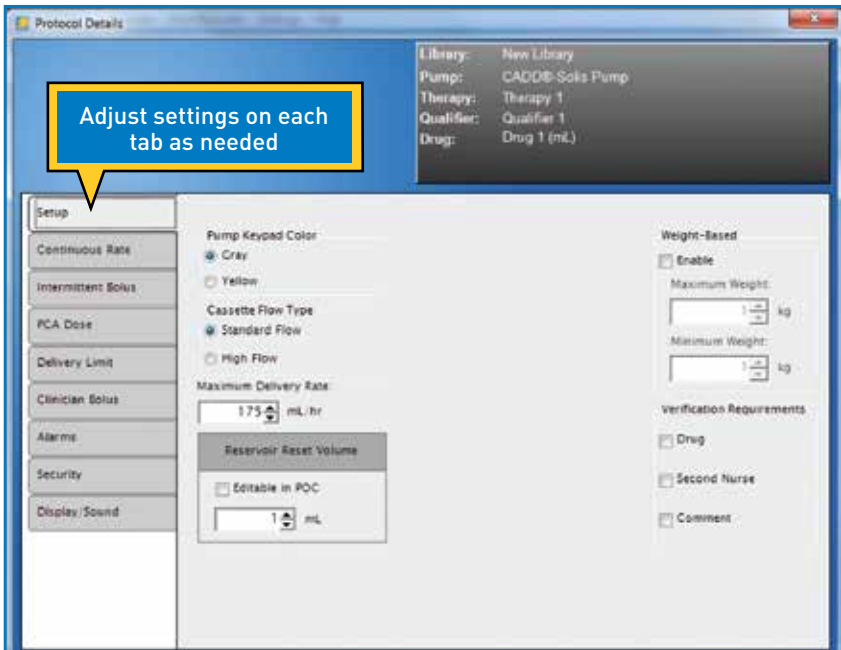


New Protocol screen - use template checkbox

5. Click on **Next**.

6. On the **Protocol Details** screen, adjust settings on each tab as needed.

Consult the CADD®-Solis Operator's Manual for a complete description of these pump configurations.



Protocol Details screen for protocols created for the CADD®-Solis pump

The **Setup**, **Continuous Rate**, **Intermittent Bolus**, **PCA Dose**, **Delivery Limit**, and **Clinician Bolus** tabs contain programmable delivery parameters for the protocol and are specific to their therapy – including hard and soft maximum, hard and soft minimum, and other settings. To provide further information, some parameter headings feature tooltip text when you hover the mouse cursor over them; for more information, see the product literature provided with the pump.

*Note: On the **Continuous Rate**, **Intermittent Bolus**, and **PCA Dose** tabs you must put a checkmark in the **Enable** box on each tab in order to make the parameter available for use in the Protocol you are creating.*

The **Setup** tab allows you to select the Pump Keypad Color, the Cassette Flow Type, the Maximum Delivery Rate, and the Reservoir Reset Volume.

*Note: Selecting **Yellow** for the Pump Keypad Color will change the acronym 'PCA' to become 'PCEA' in the protocol settings and on the pump display.*

Note: Selecting the Cassette Flow Type will determine which type of disposable (standard or high volume) the pump will require when the protocol is selected for use.

If Profiles will be used in the Protocol Library and if Profile names have already been created, they will appear on the Setup tab. You may assign the protocol to a Profile by clicking to put a checkmark in the box next to the appropriate Profile name(s). Otherwise protocols can be assigned to profiles later after profile names have been created.

Note: *If Enable Point of Care Options on the Library General Settings tab was enabled, then the Weight-Based and Verification Requirements options will appear on the Setup tab. There will also be checkboxes on the Continuous Rate, Intermittent Bolus, PCA Dose, and Delivery Limit tabs that can be selected to make the parameters editable in PharmGuard® Point of Care software prior to sending a single protocol to a pump.*

Note: *Weight-based protocols can only be built if your facility is going to use the Point of Care application. In the Weight-Based box, click in the Enable box if you would like this protocol to be weight-based and enter a maximum weight and minimum weight in kilograms (kg) for the protocol. The maximum weight value must be greater than the minimum weight value.*

Note: *When using a weight-based protocol, the continuous rate is programmed using units/kg/hr input, and the PCA/PCEA dose amount and delivery limit are programmed using units/kg input in the Point of Care application. Once a protocol is sent to the pump, the pump LCD screen displays the continuous rate in units/hr, and the PCA/PCEA dose, and delivery limit are displayed in units. Units may be milligrams (mg), micrograms (mcg) or milliliters (mL).*

Values may be entered by typing the value directly into the form field or by using the arrow keys. When entering values verify or confirm values entered are in the correct units for the drug selected. For the continuous rate, intermittent bolus, bolus interval, PCA/PCEA dose, PCA/PCEA dose lockout, delivery limit, maximum PCA/PCEA doses per hour, and clinician bolus fields values must be entered starting from the top down with the hard maximum value first and the hard minimum value last. If the hard minimum value is entered greater than the soft minimum, initial value and soft maximum the values are automatically increased to match the greater value, but cannot exceed what is entered for the hard maximum value. Always verify the values entered into these fields.

Note: *The soft maximum value may not be greater than the hard maximum value. The hard minimum value may not be greater than the soft minimum value. The hard minimum and soft minimum may not be greater than the hard maximum and soft maximum values. The initial value may not be greater than the hard maximum value or less than the hard minimum value.*

The **Alarms** tab contains pump alarm, air detector, sensor, reservoir low/empty alarm settings, and preventative maintenance settings for the pump.

The **Security** tab contains security codes and security level settings for the pump.

The **Display/Sound** tab contains pump settings related to backlight intensity; alarm volume and sound settings; date, time and numeric format; and the color theme, support note and/or clinical advisory message visible in the pump software (for CADD®-Solis pumps that support this feature).

Note: *Color choices are available to allow color-customization of protocols according to pain management programs. The color chosen for the protocol in the administrator program will also be the screen color on the CADD®-Solis pump when that protocol is sent to the pump.*

Note: *It is important to use colors consistently. For example, if yellow is chosen to represent epidural infusions, yellow should be selected as the background color on the pump and color-coordinated accessories such as yellow CADD® medication cassette reservoirs and/or lockboxes.*

Note: *A customized support message can be entered into the Support Message text field on the Display/Sound tab. The message will appear on the last screen of each help screen sequence on the CADD®-Solis pump when viewing the help screens while troubleshooting specific alarms.*

Note: *A customized clinical advisory note can be entered into the Clinical Advisory Note text field on the Display/Sound tab. The note is specific to the Protocol for which it is entered. On the pump, once a clinician has selected a Protocol, reviewed and accepted the values and presses **Next**, the Clinical Advisory Note screen will be displayed. The clinician will be required to press **OK** to acknowledge the screen before the pump will allow an infusion to begin.*

Note: *When setting date and time format for pumps other than the CADD®-Solis (Revisions A, A1, C, and E) pump it is recommended to set the date and time format to match that of the PC to avoid confusion when comparing pump and PC data.*

The parameters on each tab must be adjusted and verified before the protocol is made active.

7. If you are ready to make the protocol active to be sent to the CADD®-Solis pump or for use at the point of care place a check mark in the Active - Protocol Available to Send to Pump box (located at the bottom of the protocol details screen) and click **Save**.

If you aren't ready to make the protocol active, click **Save**. This will save the protocol but it will not be available to send to a pump.

Once a protocol is saved, it remains available to be reopened for review or further editing.

Warning: *It is strongly recommended that another user verify each new or edited protocol before it is made active and available to send to a pump. Failure to do so could result in undesired programming of the pump and, depending on the type of drug being administered, death or serious injury to the patient.*

Note: *For detailed instructions and information about programming the CADD®-Solis pump, refer to the product literature supplied with the pump.*

Sorting Protocols:

Once protocols have been built in a library for a CADD®-Solis pump, you can specify the order in which the list of Protocols are displayed on the pump's screen (CADD®-Solis pump, Rev. 3 or later only) after the library is sent to the pump or displayed in PharmGuard® Point of Care software, if in use. By default, the list of Protocols is presented in character, numeric, and then alphabetical order by Therapy, then Qualifier, and then Drug; however, you can specify a custom sort order. Custom sorting the protocols can only be done once two or more protocols have been created.

To sort Protocols:

- Confirm the correct Protocol Library has been selected in the **Select Protocol Library** drop-down list.
- Select the **Specify Protocols** tab (or the **Profiles** tab, if Profiles are enabled for a CADD®-Solis Protocol Library).
- Click **Sort Protocols**.
- In the **Protocol Sort Order** dialog box:
 - If Profiles are enabled for a CADD®-Solis Protocol Library, select the Profile containing the Protocols you want to sort.
 - Select the sorting method **Alphabetical** (which is the default) or **Customized Order**.
 - When **Customized Order** is selected, the controls for “Customized Sorting for Protocols” become enabled to allow you to set the customized order for Therapies, Qualifiers, and Drugs. To move the position of any Therapy, Qualifier, and Drug name in its list, click on a name to highlight it, and then click the up or down arrow button to move the name into the desired order. Repeat as needed for each name. Alternatively, you may click and drag a name to change its position in the list. Start with the Therapy names. To view the Qualifier names, a Therapy name must be highlighted. To view the Drug names, a Therapy and a Qualifier name must be highlighted.

If Profiles are enabled, repeat these steps for each Profile in the Protocol Library.

Note: only protocols assigned to a profile will be available for sorting.

After making your desired sorting changes, click **OK**.

Profiles:

Profiles allow high level categorization (e.g. by care area) of Protocols in a library. When Profiles are enabled for a Protocol Library, they can be used as criteria when running reports using PharmGuard® Server software.

Within a Protocol Library, any one Protocol can be associated with one or more Profiles. For example, a Profile named Labor and Delivery may include all Protocols used in that care area, while a Profile named Oncology may include

Protocols specific to that care area. As another example, a single Protocol named IV PCA could be assigned to two Profiles – one named ICU and another named Oncology.

Profiles are an optional feature that may be enabled on the Library General Settings tab for a CADD®-Solis Ambulatory infusion Pump Protocol Library. When enabled, Protocols may be assigned to one or more Profiles when a new Protocol is added or edited or when a new Profile is added or edited in the Protocol Library.

Profiles may be used to categorize your Protocols, for example into care areas.

When Profiles are enabled for a Protocol Library, the **Profiles** tab is available. From the **Profiles** tab, you may create new Protocols and assign Protocols to a Profile.

***Note:** Protocols may also be added to any existing Profile when adding or editing a Protocol.*

To create a new Profile:

1. In the left pane of the **Profiles** tab, click **New**.
2. In the New Profile dialog box, enter the desired **Profile Name**, and then click **OK**.

***Note:** PharmGuard® software does not include a tool that checks spelling. Fields that allow open text entry are sent to the pump as entered and viewed on the PC screen.*

To edit a Profile name:

1. In the left pane of the Profiles tab, click **Edit**.
2. In the Edit Profile dialog box, enter the desired **Profile Name**, and then click **OK**.

To assign existing Protocols to a Profile:

1. On the left pane of the Profiles tab, click to select the **Profile Name** to which you want to assign Protocols.
2. The Protocols in the Protocol Library are listed in the right pane by Therapy, Qualifier, and Drug combination. For any Protocol that you want to assign to the selected Profile, click to place a checkmark in the Assigned column.

***Note:** Protocols may be unassigned from the Profile by clicking to remove the checkmark from the Assigned column for that Protocol.*

3. After Protocols have been assigned or unassigned using the checkmarks, they are automatically saved to the Profile.

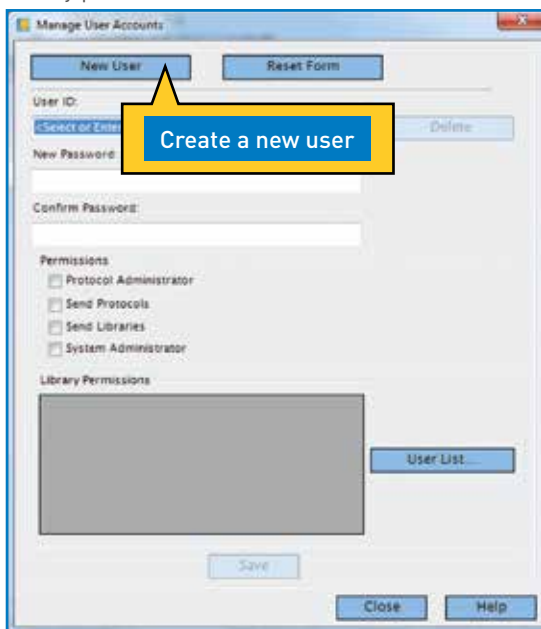
***Note:** Protocols to assign to a Profile may be sorted by clicking the column headings. The Sort Protocols button is used to specify how the list of Protocols is sorted in the pump display after the Library is sent to the pump.*

Profiles can be sorted either in alphabetical order or by clicking the arrow buttons to move Profile up or down in the list of Profile names.

1. On the left pane of the Profiles tab, select the Profile Name.
2. To change the order of the Profile, click the up arrow or down arrow buttons. To sort all Profile names alphabetically, select Alphabetical.

User Accounts

The PharmGuard® Administrator software allows you to create and manage user accounts. User accounts may be created for use in all libraries. Permissions for administrator access and point of care access may be enabled or disabled for each individual user ID. You must be logged in as a protocol or system administrator to add, edit or delete user accounts and set user passwords, user permissions, and library permissions.



Manage User Accounts screen

To Create a New User Account

1. Select **Settings** from the main menu bar.
2. Click **User Accounts**, then **Manage User Accounts**.
3. Click on the **New User** button.
4. Enter a new **User ID** and **password**. The user ID and password must each contain a minimum of three alphanumeric characters (letters, numbers, or a combination of both).
5. Confirm **password**.
6. Set **Permissions** by placing a check in the box next to the desired permission level. Users may have permissions set to protocol administrator, send protocols, send libraries, or system administrator. (See Help files for information about each permission level.)

If protocol libraries have been created, the list of libraries is displayed. To grant the user access to a protocol library, click to place a check next to the library to which you want to give the user access.

Note: User access to a protocol library may also be assigned later by following the steps below for "To Assign Library Permissions."

7. When finished, click on the **Save** button.

To Delete a User

1. Select or type in the **User ID**.
2. Click the **Delete** button.
3. Confirm delete by clicking **Yes**.

To Reset a Password

1. Select or type in the **User ID**.
2. Enter the new **password** and confirm it.
3. Verify permissions.
4. Click **Save**.

To Assign Library Permissions

1. Select **Settings** from the main menu bar.
2. Click **User Accounts**, then **Library Permissions**.
3. Select a **Library Name**.
4. Click in the box next to the **User ID** to give the selected user permission to the selected library.
5. You may select all or clear all by clicking on the appropriate button.
6. Click **Save**.

To Export or Import User Lists

1. Select **Settings** from the main menu bar.
2. Click **User Accounts**, then **Import/Export Users**.



Import/Export Users screen

To export a user list:

The PharmGuard® Administrator software allows you to export the users list template as an empty file (no predefined users), or with the currently defined users. The file is exported as an editable comma separated value (.csv) file, which is a Microsoft® Excel compatible file format.

This list must remain a .csv file if it is to be imported back into the PharmGuard® Administrator software.

You can manage the user list by adding users or changing user pump applications permissions. You cannot remove users from the database by deleting them from an exported user list. To remove a user, use the **Manage User Accounts** feature.

1. Select either **All Users** or **Blank User Template** by clicking in the appropriate space.
2. Click **Export**.
3. Click **Save In** to choose the location for your exported file, create a file name and click **Save**.
4. Click **OK** to answer the message "User List Exported."

To edit an exported template or list:

1. Open the exported file in an application that can edit .csv files (e.g., Microsoft® Excel.)

Note: You cannot remove users by deleting them from an exported user list. To remove a user, use the user accounts feature.

2. Edit the user list, if desired, by adding users to the USERID column.
3. Set the user's permissions by adding the word TRUE (permission granted) or FALSE (permission denied) for each of the following permissions:

- Send Protocols
 - Send Libraries
 - System Administrator
 - Protocol Administrator
4. Save changes in the .csv compatible format.
 5. After making additions or changes, **Save** the user list.

Note: A message may appear on the computer screen: "{yourfilename}.csv may contain features that are not compatible with CSV (comma delimited). Do you want to keep the workbook in this format?" – Click Yes.

6. Close the spreadsheet.

Note: A message may appear on your computer screen: "Do you want to save the changes to '{yourfile name}.csv?" – Click No. (You already saved your changes in the correct format.)

To import a user list:

A	B	C	D	E	F
1	USERID	SEARCH	ADMINISTRATOR	PROTOCOL ADMINISTRATOR	
2	User 1			FALSE	
3	User 2			TRUE	
4	User 3			FALSE	
5	User 4				
6	User 5				

The user list file can be imported back into the administrator program to update the user list with the changes made to the file. You cannot remove users from the database by deleting them from an exported user list then importing the edited user list. To remove a user, use the Manage User Accounts feature.

1. Select **Import**.
2. Browse to the location where the user list was saved.
3. Select the user list (in .csv format) you want to import.
4. Click **Open** to import the user list.
5. When the import is complete a message appears informing you that the import is complete – click **OK**.

Note: Up on import, new users will have the default password. To ensure proper security, passwords should be modified for each user. The default password can be modified by the administrator, using the Manage User Accounts feature, or can be reset by the user, using the Change User Password feature.

6. Verify changes to the **User Account** within the PharmGuard® Administrator software program.
7. Assign Library permissions to each new user, as appropriate.

Setting User Password Policy:

- Select **Settings** from the main menu bar.
- Click **User Accounts**, then **User Password Policy**.
- Set the Password Requirements for **Characters** and for **Minimum Length**.
- Select either **Never** or the **Days** option and then set the number of days a password can be active before it expires.
- Click **OK**.

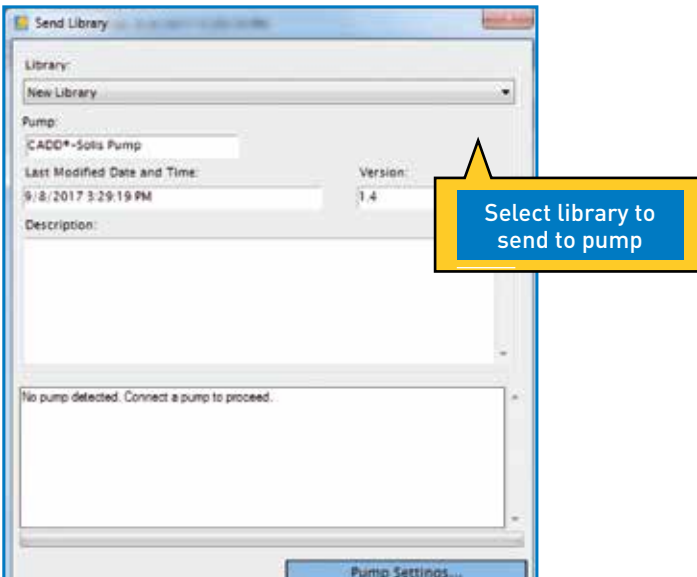
Connecting the Pump to the Computer

If a CADD®-Solis v4.0 pump does not have a Communications Module installed for wireless communications, it must be connected to the computer in order to send a protocol library or get the event history.

1. Insert 4 AA batteries or a rechargeable battery pack into the battery compartment of the pump, and/or attach an AC adapter and power cord and wait for the power up sequence and until six beeps are heard. Respond to the question on the pump screen, “Do you want to start a new patient?” by pressing the soft key **No**. This will display the home screen on the pump.
2. Connect the USB type A plug to the USB port on the computer.
3. Connect the USB mini-B plug to the USB port on the pump.

Send a Protocol Library to the CADD®-Solis Pump

Note: A protocol library may be sent to the CADD®-Solis pump. The pump must be powered on, displaying the home screen, and connected in order to send a protocol library.



Select library to send to pump screen

1. Select Pump Communications from the main menu bar.
2. Select CADD®-Solis Pump and click Send Library.
3. Enter your User ID and password (if not logged in), click OK.
4. Click on the drop down arrow to select the Library to send to the pump.
5. Click on Pump Settings if Date/Time Settings or Pump Asset ID need to be configured and sent to the connected pump. (see page 6 for more information.)
6. Click on Send Library.

Get History from the CADD®-Solis Pump

Note: If the CADD®-Solis v4.0 pump does not have a Communication Module installed for wireless communications, the pump must be connected to the PC in order to get the history from the pump.

Note: You must be logged into the application as a user with protocol administrator or system administrator permission in order to get history from a pump.

1. Select Pump Communications from the main menu bar.
2. Select CADD®-Solis Pump and click Get History.
3. Click Get Current Data from Pump.

Choose one of these two options:

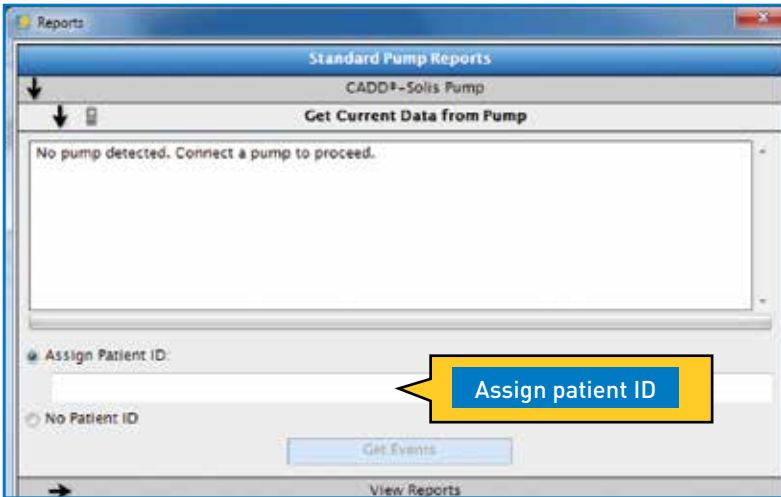
- Select and assign a Patient ID to associate all new events that have occurred on the pump for the most recent patient which allows viewing of patient specific reports as well as continuous quality indicators and event log reports.

Note: A Patient ID will be required for viewing patient specific reports: Given and PCA Dose; Delivery History and Pie Chart; Delivery Log; PCA and Intermittent Bolus Graph; and the Intermittent Bolus Graph.

Note: Even when associating events with a Patient ID, all events also will be associated with the pump serial number for future report viewing.

- Select **No Patient ID** to save the history data according to pump serial number which only allows viewing of continuous quality indicators and event log reports.

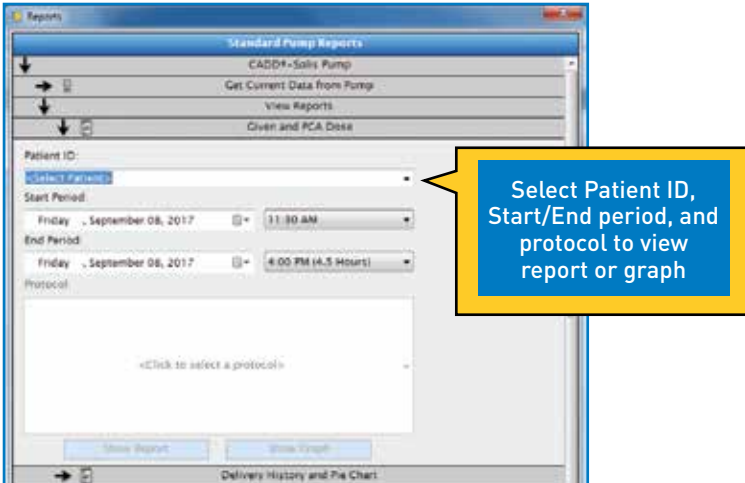
Click **Get Events**.



Standard pump reports screen - get current data from pump

View Pump Reports for the CADD®-Solis Pump

1. Select Pump Communications from the main menu bar.
2. Select CADD®-Solis Pump and click Get History.
3. Click View Reports.



Standard pump reports screen – view reports

4. Select the report to be viewed.

Click **Given and PCA Dose** and select a patient ID, start period, end period, and protocol, and click **Show Report** to view the data in report form, or **Show Graph** to view the data graphically.

OR

Click **Delivery History and Pie Chart** and select a patient ID, start period, end period, and protocol, and click **Show Chart** to view the report.

OR

Click **Delivery Log** and select a patient ID, start period, end period, and protocol, and click **Show Report** to view the report.

OR

Click **PCA and Intermittent Bolus Graph** and select a patient ID, start period, end period, and protocol, and click **Show Graph** to view the report.

OR

Click **Intermittent Bolus Graph** and select a patient ID, start period, end period, and protocol, and click **Show Graph** to view the report.

OR

Click **Continuous Quality Indicators** and select either total soft limit overrides or protocol soft limit overrides, start period, end period, and protocol, and click **Show Report** to view the report or click **Show Chart** to view the data in a chart.

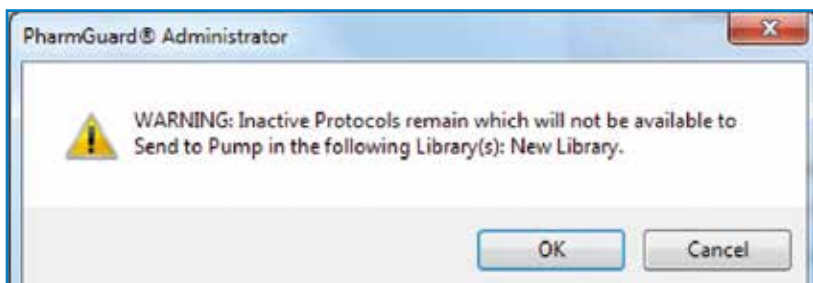
OR

Click **Event Log** and select either patient ID, pump serial number, or pump asset ID, and a start period, end period, and protocol, and click **Show Report** to view the report.

5. Once the report is generated, you can print the report using the printer icon on the toolbar or you can export the report to Excel or PDF by clicking on the export (floppy disc icon) button on the toolbar.

Log Out

To log out of the PharmGuard® Administrator software, click **Log Out**.



Inactive protocols warning screen

You will be notified of protocol libraries that contain any inactive protocols every time you log out of the software. You may check the status of a protocol on the Specify Protocols tab. Inactive protocols are not available to send to pump.

To exit the software, click **File** in the menu bar and click on **Exit**.

Smiths Medical offers outstanding clinical and technical support, and education and training materials for clinicians and patients

For more information visit our website at
www.smiths-medical.com

PRODUCT(S) DESCRIBED MAY NOT BE LICENSED OR AVAILABLE FOR SALE IN CANADA AND OTHER COUNTRIES

MPAUC-1766

Smiths Medical ASD, Inc.
6000 Nathan Lane North
Minneapolis, MN 55442 USA
Tel: 1-614-210-7300
Toll-free USA: 1-800-258-5361

**Rx
ONLY**

smiths medical

Find your local contact information at: www.smiths-medical.com/customer-support

Smiths Medical is part of the global technology business Smiths Group plc. Please see the Instructions for Use/Operator's Manual for a complete listing of the indications, contraindications, warnings and precautions. CADD and the Smiths Medical design mark are trademarks of Smiths Medical. The symbol ® indicates the trademark is registered in the U.S. Patent and Trademark Office and certain other countries. All other names and marks mentioned are the trademarks or service marks of their respective owners. ©2018 Smiths Medical. All rights reserved. IN193520EN-102018