℞ CURLIN® MANAGER®

USER MANUAL

For use with the CURLIN 8000
Ambulatory Infusion Pump

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CURLIN **8000**

CURLIN® RxManager™
User Manual

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Chapter 1.   Introduction

Intended Audience

Pharmacy personnel can use this manual, along with training, to learn how to create a drug library and Patient Specific Protocols (PSPs) to use for programming the Moog CURLIN® 8000 Ambulatory Infusion System, "CURLIN 8000" pump.

CURLIN RxManager Medication Safety Software

CURLIN RxManager™ , "RxManager", is part of the CURLIN Enterprise Solution Software suite, which also includes CURLIN Admin Manager and CURLIN Service Manager (Figure 1-1).
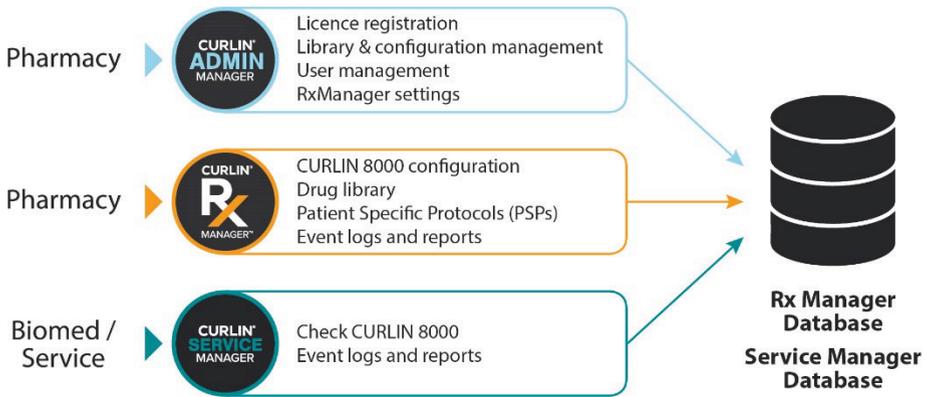
Figure 1-1: Enterprise Solution Software Suite

RxManager is a Dose Error Reduction Software (DERS), intended to help reduce programming errors and enhance the clinician's workflow. This system allows a pharmacy to create a list of drugs and fluids with facility-established safety parameters, define common delivery protocol templates for these drugs and fluids, and ultimately create PSPs, which can be loaded onto the CURLIN 8000 pump. After transferring a PSP from the RxManager to the CURLIN 8000 pump, the pump is programmed and ready for the patient, reducing the pharmacist's hands-on programming time.

The typical pharmacy workflow is depicted in Figure 1-2. User roles are listed in the middle column. Each RxManager user has a unique login ID and assigned user role. Each user role has a list of functions it has permission to access. These are defined in Table 11-2, p. 68.

System Set Up: Tasks that include assigning basic settings to the CURLIN 8000 pump (configuration) and creating a library of advisories, drugs and fluids, and templates.

Daily Use: Tasks that are performed frequently, creating individual PSPs using the established library and uploading the PSPs to the CURLIN 8000 pump.
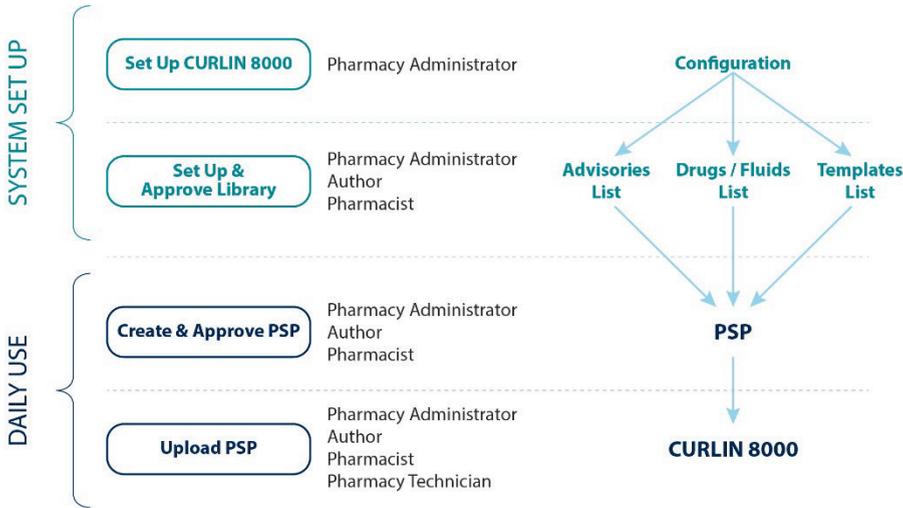
Figure 1-2: RxManager Workflow

Every time a CURLIN 8000 pump is connected to RxManager, the last patient's infusion history report is downloaded from the pump and stored in the RxManager database. This allows pharmacy personnel to track usage using reports. Other RxManager reports help pharmacy personnel track usage of drugs and fluids, templates, and uploaded PSPs.

Using RxManager to create PSPs is one of two ways to configure and program the CURLIN 8000 pump. The other way is to program the CURLIN 8000 pump using the pump keypad. This is called Basic Programming. Basic Programming is covered in the CURLIN 8000 Ambulatory Infusion System User Manual.

Warnings and Cautions

Warnings

Verify that all PSP settings are appropriate for the patient for whom the PSP is intended. Review and understand each setting whether you enter the setting or the setting is imported (from the configuration or template).

Cautions

Use of the lock level setting of "OFF" should be reserved only for situations where a clinician is present and monitoring the pump for the entire infusion, for example, in an infusion center.

Important   RxManager field names and terminology are defined in "Terminology and Definitions", p. 70. Use this glossary for details and ranges about the data you need to enter.

Computer Requirements

Minimum Computer Requirements

- Windows 10 or 11
- 8 GB of RAM
- 2.4 GHz processor
- Display resolution XGA, 1024 x 768*
- *Windows display scale set to 100%

*For XGA, leave scale at 100%

Chapter 2.   Screen Tour

Logging In

A user can sign in to RxManager from one computer at a time. If your facility has multiple computers, a user must log out from RxManager on the current computer before logging into a different one.

Note: Your IT Support personnel should install RxManager on your computer. For software installation information, refer to the ES Client Application Setup Guide.

1. Make sure you know your username and password. If you do not, contact your RxManager Pharmacy Admin. If you attempt to log in 10 times with an incorrect password, your account will lock. Contact your RxManager Pharmacy Admin to unlock it.

2. To open RxManager, double-click the RxManager icon on your desktop (Figure 2-1).

Figure 2-1: RxManager Icon

3. Type your username and password in the appropriate fields. Usernames and passwords are case-sensitive.

4. Click **Log in**. The Home screen appears (Figure 2-2).

Depending on your assigned user role, you will have access to different functions in RxManager (defined in Table 2-1). Your username and role are displayed at the top right corner of the screen. See Table 11-2, p. 68 for the list of permissions and user roles.

Note: To maintain security of the system, you should log out of RxManager when you will be away from your computer for an extended period of time. After 30 minutes of inactivity, the RxManager will automatically log out the user.
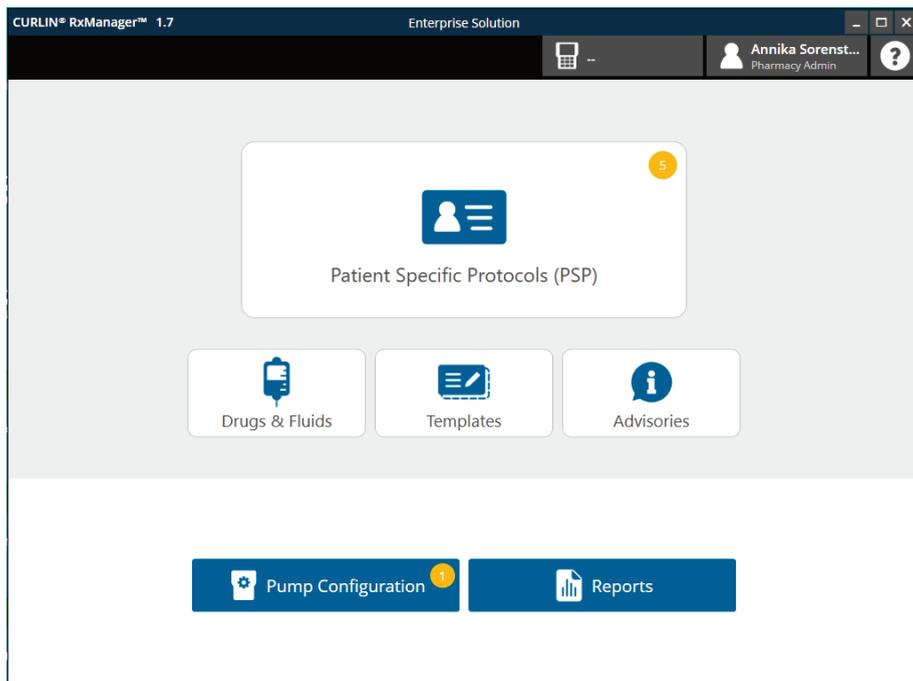
Figure 2-2: RxManager Home Screen

Table 2-1: Home Screen Functions

Function	You can…	For more information, see:
Patient Specific Protocols (PSP)	Create a PSP for an individual patient. It is a single infusion protocol, based on a particular drug and therapy. It contains customized program settings, delivery limits, and CURLIN 8000 pump settings.	Chapter 7. Patient Specific Protocol
Drugs & Fluids	Build a list of commonly-used drugs and fluids identified with specific therapy modes, dosing units, standard concentrations, and hard and soft limits.	Chapter 5. Drugs and Fluids
Templates	Create templates to establish standard infusion protocols that are used on a reoccurring basis at a facility.	Chapter 6. Templates
Advisories	Create and store clinical reminders that are associated with different drugs and fluids or specific therapies. Advisories are displayed on the CURLIN 8000 pump screen when the user starts the infusion.	Chapter 3. Advisories
Pump Configuration	Set the facility's default CURLIN 8000 pump settings for features such as lock levels, access codes, manual therapy modes, alarm settings, bolus options and delivery limits.	Chapter 10. CURLIN 8000 Configuration
Reports	Access reports, which you can save as a PDF and/or print.	Chapter 9. Reports

RxManager Screen Components

Figure 2-3 shows the main components of an RxManager screen.
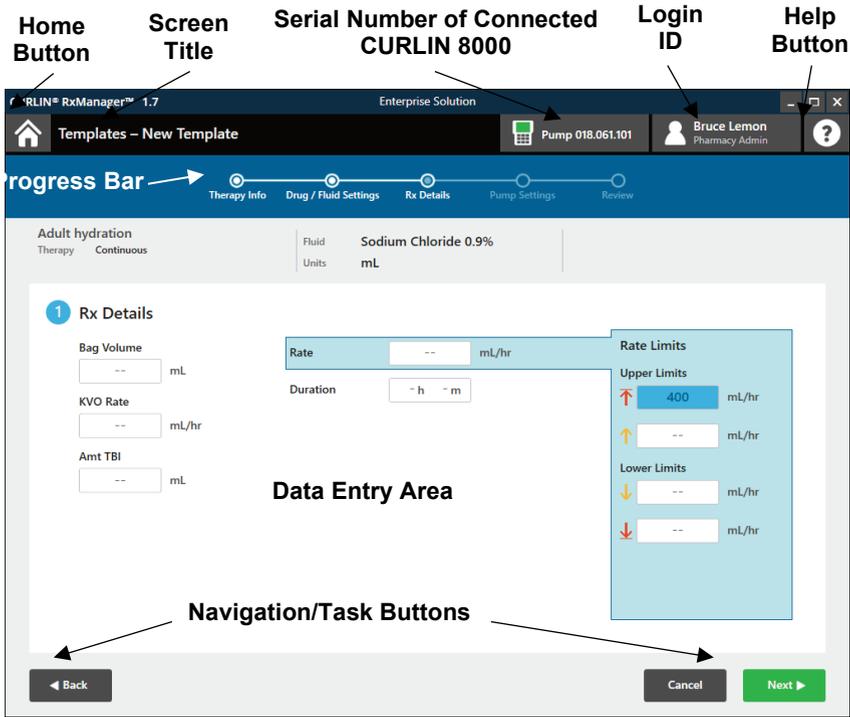
Figure 2-3: RxManager Screen Components

Screen Components	Definitions
Home Button	Click from any screen to return to the Home screen.
Screen Title	Name of displayed screen.
Serial Number of Connected CURLIN 8000	When a CURLIN 8000 is connected to the computer via a USB cable, the pump ID is displayed.
Login ID	Name and role of person logged in.
Help Button	Click to display a PDF of this user manual.
Progress Bar	Indicates the progression of a task.
Data Entry Area	Contains fields and options where you can add/update information.
Navigation/Task Buttons	Click to go to different screens or confirm the information in the Data Entry Area.

Chapter 3.   Advisories

Advisories are optional, informational text that are intended to reinforce special instructions for the infusion. They appear on the CURLIN 8000 pump screen when the user initiates the infusion. Instructions could include infusion monitoring or pump setup information. It is recommended to assign advisories sparingly as exceptions. If advisories appear too frequently, users may tend to skip over or ignore them.

The advisories you create here will be available for you to select and assign to drugs and fluids, templates, and PSPs. You can associate one advisory with a drug or fluid and you can associate up to two advisories with a template or PSP. The RxManager will store up to 50 different advisories. Advisories are saved in the database separately from the items with which you associate them. The only way to edit or delete an advisory is from the Advisories area of RxManager.

Note: If a patient's infusion therapy contains one or more advisories, before the infusion will begin, the CURLIN 8000 pump user must acknowledge the advisory by pressing the appropriate button on the pump's keypad.

Creating Advisories

1. From the Home screen, click **Advisories**.

2. From the upper right corner of the screen, click **New Advisory**.

① Advisory Information

3. In the Name field, type a unique title for the advisory, 1-25 characters long.

    This short description helps you find the specific advisory you want when there is a long list of them. The Advisory Name will be displayed as the title on the CURLIN 8000 pump screen.

4. In the Advisory Text field, type the descriptive text you want displayed on the CURLIN 8000 pump screen, 1-175 characters long.

5. Click **Next**.
   If you exceeded the character limit for the Name or Advisory Text, a message displays, requesting you to shorten the name or advisory text. Revise the name or advisory text within the character limits and then click **Next**.

   Once the Name and Advisory text is within the character limits, a review screen appears.

6. If you want to make changes to the name or advisory text, click **Edit**. Otherwise, go to step 8.

7. Make the necessary changes and then click **Next**.

8. When you are satisfied with the advisory, click **Submit**. The advisory is saved to the advisory list.

9. To add more advisories, repeat steps 2 through 8.

Working with Advisories

Advisories are stored separately from drugs and fluids, templates, and PSPs. When you edit an advisory that is already associated with a drug, fluid, or template, those revisions are automatically transferred to the drug, fluid, or template. Existing PSPs are not updated with the changes to the advisory text.

When you delete an advisory that is already associated with a drug, fluid, or template, RxManager displays a list of affected items so you know which ones will be impacted.

Note: Advisories do not require the "Approval" step, unlike the other items in RxManager.

Finding an Existing Advisory

If you want to edit or delete an advisory, you must first select it:

1. From the Home screen, click **Advisories**. Initially, the advisories are listed in alphabetical order (A-Z) by Advisory Name. (To reverse the alphabetical order of the advisories from Z-A, click ▲.)

2. If the list is long, in the Search by Advisory Name or Text field, type a keyword and click **Search**. One or more advisories that contain that keywords are displayed.

3. Double-click the advisory you want to work with.

Note: To display all the existing advisories (clear the search filter), delete the text from the Search by Advisory Name or Text field.

Editing an Advisory

If you make changes to an advisory that is already associated with a drug, fluid, or template, these changes automatically transfer to the item. If the advisory is associated with a PSP, you need to delete it from the PSP, then re-add the edited version.

1. Display the advisory you want to edit. See "Finding an Existing Advisory", p. 9.

2. Click **Edit**.

3. Change the Name or Advisory Text, and then click **Next**.

4. Click **Submit**. Your revisions are saved.

Adding an Advisory to an Existing Drug, Fluid, Template, or PSP

Advisories can always be added later. Use the edit feature to add an advisory to an existing drug/fluid, template or PSP.

Deleting an Advisory

If you added an advisory to a drug, fluid, or template, deleting the advisory from the list will also remove it from the drug, fluid, or template.

Important   If the advisory is associated with a PSP, you can delete it from the Advisory area, but it will remain associated with the PSP (RxManager does not notify you that it is associated with a PSP). To remove an advisory from a PSP, you must edit the PSP and clear the selected advisory. For more information, see "Editing (Modifying) an Item", p. 43.

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1. Display the advisory you want to edit. See "Finding an Existing Advisory", p. 9.

2. Click **Delete**.

   If the advisory is associated with a drug, fluid, or template, a confirmation window appears prior to permanently deleting (Figure 3-1).
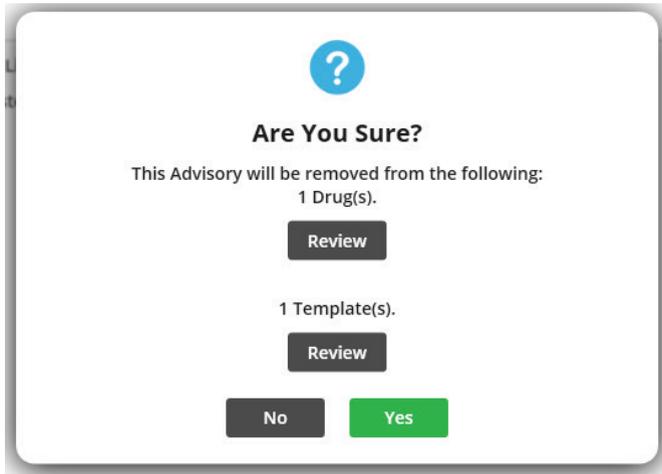
Figure 3-1: Advisory Removal Confirmation Window

3. To view the list of drugs, fluids, or templates that will be affected, click **Review**. A Save As window appears, allowing you to save a .csv file that contains details about each affected item.

4. Save the .csv file to an appropriate location. Then open this file and view the list to confirm that deleting the advisory does not affect that item.

5. Return to RxManager. To permanently delete the advisory, click **Yes**. Otherwise, to keep the advisory, click **No**.

Chapter 4. Dose Rate Limits

RxManager is a Dose Error Reduction Software (DERS), which allows the CURLIN 8000 pump to warn users of programming errors that could result in significant over- or under-delivery of a drug or fluid. Pharmacists use RxManager to create a list of drugs, fluids, and protocol templates with upper and lower hard and soft dosing limits. When a user enters a parameter value, RxManager checks that value against these preset hard and soft dosing limits. If the value is not within the limits, RxManager warns the user that there may be an error.

For each parameter, there is an absolute system programming range, for example, the pump's dose rate system range is 0.1 mL/hr to 500 mL/hr. Values cannot be entered outside the system programming range. Within that system programming range, a drug's dose rate can be further limited by setting an upper hard limit (UHL) and a lower hard limit (LHL). This becomes the new programming range for the drug. The hard limit is generally set to accommodate the clinically-appropriate delivery rate for all indications of a particular drug.

Within the established hard limit programming range, you can set the upper soft limit (USL) and lower soft limit (LSL). The soft limit range is generally set to accommodate the most common programming range. The soft limit is the typical rate range for the delivery of a particular drug or fluid. If the programmer enters a value outside of either the soft limit range or the hard limit range, the pump will alert the programmer. The hard limits cannot be exceeded when programming the pump. The soft limits can be exceeded after the programmer acknowledges that the value is outside of the commonly programmed range.

Only some parameters have associated hard and soft limits. Table 4-1 lists which parameters allow hard and soft limits to be set.

Table 4-1: Therapy Modes and Associated Parameters with Hard and Soft Limits

Therapy Mode	Parameters with Hard and Soft Limits
Continuous	Dose Rate or Rate
PCA	Basal Rate 1 Hour Limit PCA Bolus Loading Dose Lockout Time
TPN	Plateau Rate
Intermittent	Dose Rate
Variable	Step Rate

Hard and soft limits are components of a drug, fluid, template, and PSP. Basic Programming (infusion programs entered via the CURLIN 8000 pump keypad) do not allow setting hard and soft limits for a specific drug or patient program. Hard limits may be set for each therapy mode for the continuous/dose rate. See Chapter 10, CURLIN 8000 Configuration, for more information on setting Basic Programming hard limits for each therapy mode.

See Figure 4-1 for an example of how the programming ranges for the dose rate of a drug are displayed in RxManager.
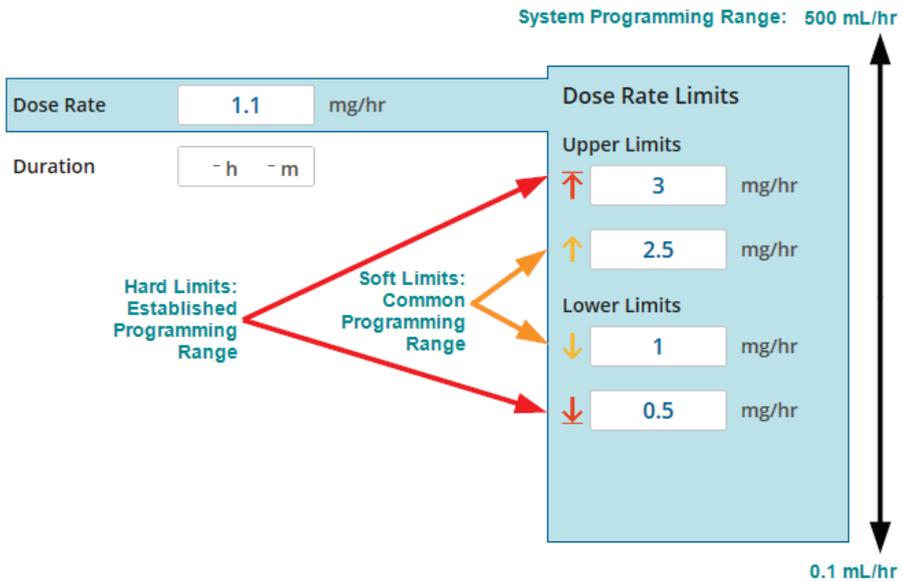
Figure 4-1: Dose Rate Limit Example

Chapter 5.   Drugs and Fluids

You can build a list of up to 1500 drugs and fluids with your facility's standard concentrations and dosing limits for any of the selected therapy modes.

Once a drug or fluid is created, a second reviewer must approve the drug or fluid before it is available to be used to create a template or PSP. Your facility will determine if the same pharmacist who created the drug or fluid can also complete the second review.

If you delete a template or PSP that contains a drug or fluid from the list, the drug or fluid remains in the drug and fluid list. The only way to remove a drug or fluid is to delete it from the Drugs & Fluids area of RxManager.

Building the Drug and Fluid List

Your facility should decide whether to place a drug or solution into either the drug list or fluid list. However, RxManager only allows the TPN therapy mode to be associated with items in the fluid list and it only allows the PCA therapy mode to be associated with items in the drug list. In general, the drug list contains medications that are typically dosed in milligrams (mg), micrograms (mcg) and sometimes milliliters (mL). The fluid list typically contains solutions that are dosed in milliliters (mL), such as hydration solutions.

1. From the Home screen, click **Drugs & Fluids**.

2. From the upper right corner of the screen, click **New Drug/Fluid**.

➊ Drug or Fluid Selection

3. For the Type, select **Drug** or **Fluid**.

   Note: The Formal Name box may contain the generic name of a drug or fluid. The Display Name box may contain a more familiar brand name. The formal and display names are not required to be different.

4. In the Formal Name box, type the appropriate name, between 1-50 characters long. The Formal Name is used by the pharmacy to further describe the drug within RxManager and is **not** visible to the CURLIN 8000 user.

5. In the Display Name box, type the name of the drug or fluid as you want the CURLIN 8000 user to see, between 1-22 characters long.

6. If you are adding a fluid: Continue with step 7. (Fluids are only dosed in mL.)

   If you are adding a drug: From the Units drop-down list, select the units that will be used for programming the pump when delivering this drug: either mL, mg, or mcg.

If you selected mg or mcg: Add the standard concentrations used in your pharmacy (up to 8 different ones). Click ➕ to add more concentration entry boxes.

② Selected Therapies

7. Click one or more therapy modes that will be used to deliver the drug or fluid, then type the maximum limit for the dose rate for each therapy mode in use.

    While recommended, drug hard limits are optional fields. Where applicable, limits can be further tightened when creating templates. If you do not set drug hard limits, RxManager displays an alert when you click **Next**. Click **Yes** to confirm. Click **No** to return to the screen, where you can set the hard limit.

    Note: In the Admin Manager software application, the RxManager setting, "Allow users to override hard limits", determines if a pharmacist can overwrite a drug's hard limits or a template's hard limits when creating a PSP. Users with the Pharmacy Admin role can always override hard limits.

③ Advisories

If you want to add an advisory that is not already in the list, you must first create it in the Advisory area. Finish adding the drug or fluid and submit it to the approval queue. Go to the Advisory area and add the new advisory (see Chapter 3, Advisories). Then, locate the drug or fluid in the Approval Queue tab and edit it to add the new advisory.

8. Optional: You can assign one advisory to the drug or fluid. To find the name of an advisory, scroll through the alphabetical list of advisory names or type a keyword in the search box. Click the checkbox to assign an advisory to the drug or fluid.

9. Click **Next**.

10. If you selected a PCA therapy mode for this drug: Continue with the next section, "PCA Limits", p. 16.

    For all other drugs or fluids except PCA therapy mode: Continue with "Review Drugs and Fluids", p. 17.

PCA Limits

When creating a new drug that will use the PCA therapy mode, there are several limits that can be set. The following PCA Limits cay be set for each selected route of delivery:

- Max Basal Rate

- Max PCA Bolus

- Max Loading Dose

- Max Clinician Bolus

- Delivery Limit Mode: Only one of these delivery limit modes will be used when creating each PSP in the PCA therapy mode. However, you have the option to set limits for both modes when creating the drug so that you are prepared to receive orders that dictate either method.

    - 1 Hour limit

    - Max # of Boluses per hour

Important: For definitions of the terms on this screen, see "Terminology and Definitions", p. 70.

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① PCA Routes

11. Select one or more routes into which this drug will be delivered (IV, SQ, Epi).

② PCA Limits

12. For each selected route, type the appropriate values in the PCA Limits boxes.

    At this time, you are setting limits for all indications of this drug. Your values should reflect the highest possible amounts that could be needed for all patient populations for each field. You will be able to further restrict these values when you create templates for each specific indication of use.

13. Click **Next**. Continue with the next section, "Review Drugs and Fluids".

Review Drugs and Fluids

14. Review the values and selections you made. If you need to make changes, click **Edit** in the appropriate area. Revise as necessary.

15. When you are satisfied with all the entered drug or fluid information, click **Submit**. The drug or fluid is sent to the approval queue (Figure 5-1).
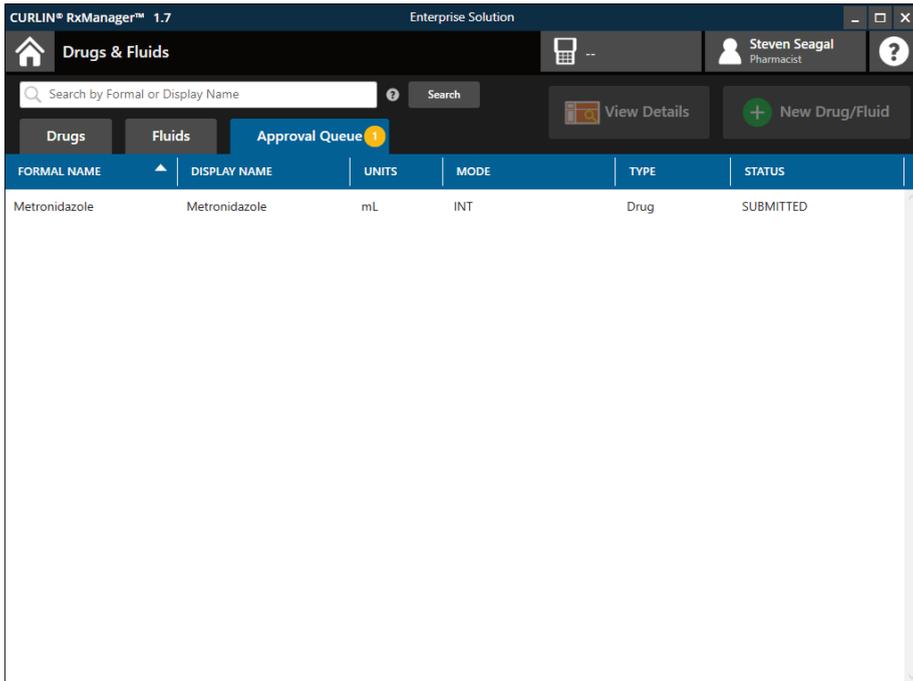
Figure 5-1: Submitted Drug Awaiting Approval

After the drug or fluid is sent to the approval queue, a yellow circle is displayed on the Approval Queue tab with a number that indicates how many approvals are pending.

Note: Once a drug or fluid is in the Approval Queue tab, you can view details, edit, delete, reject, view the historical log, print the drug or fluid information, or approve the drug or fluid for use in templates and PSPs. See the next section, "Working with the Drugs & Fluids Approval Queue Tab".

Working with the Drugs & Fluids Approval Queue Tab

Click on the Approval Queue tab to display a list of drugs and fluids that are waiting to be approved. The status will be SUBMITTED. Double-click the drug or fluid to view it.

Do you want to:	Then go to this section:
Approve the drug or fluid, adding it to the drug and fluid list, so it can be used in templates and PSPs?	"Approving an Item", p. 42
Make changes to the drug or fluid?	"Editing (Modifying) an Item", p. 43
See a log of who worked on the drug or fluid?	"Viewing the Change History", p. 44
Create a PDF that summarizes the drug or fluid information so you can save the file electronically or print out a paper copy?	"Printing the PSP Details", p. 44
Reject the drug or fluid? This keeps the drug or fluid in the Approval Queue tab, but changes its status to REJECTED.	"Rejecting an Item", p.43
Delete a drug or fluid from the drug and fluid list?	"Deleting an Item", p. 44

Chapter 6.   Templates

Templates allow your facility to create and save common infusion protocols that can be reused when creating PSPs. These templates allow the facility to drive common practice. Templates contain the drug or fluid and dose information (including dose amount, frequency, duration, and rate limits). When building a template, fill in as much information as known. This will streamline the work of the pharmacist who is using the template to create a PSP.

Once created, a template must be approved (moved from the Approval Queue tab to the Approved tab) before it is available to be used to create a PSP. When creating a PSP, the pharmacist first selects a therapy mode and then a drug or fluid. After those are selected, all templates associated with the chosen therapy mode and drug or fluid are displayed. Once selected, the template populates the PSP fields. This saves the pharmacist time and introduces safety associated with standardizing protocols and dosing limits (both hard and soft). You can create and approve up to 1500 templates to save to the list.

Templates may have all Rx Details infusion parameters filled in or some fields left blank, depending on how much information is known when setting up the template. The following are examples:

- **TPN therapy templates:** The bag volume, volume to be infused, and plateau rate are left blank if these values change from patient to patient, but the ramp up/ramp down durations and total duration are filled in because they are the same for all uses of this template.

- **PCA therapy opioid tolerant vs. PCA opioid naïve templates:** The dosing limits and lock out duration are filled in to ensure safety limits are established for specific patient populations.

- **Variable therapy templates:** For all patients in a certain weight category, all fields for IVIG are filled because the same program is repeated. Multiple templates are created based on patient weight range.

Templates may have the Pump Setting parameters left blank (e.g., Occlusion Sensitivity). When a PSP is created with a template containing blank Pump Setting parameters, the PSP will use the default Pump Settings from the configuration. See Chapter 10, CURLIN 8000 Configuration.

Important   Before you create a template, make sure you added and approved the drug or fluid for which you are building the template. For more information, see Chapter 5, Drugs and Fluids.

Creating a Template – All Therapies

1.   From the Home screen, click **Templates**.

2.   From the top right corner of the screen, click **New Template**.

Important	For definitions of the terms on any screen, see "Terminology and Definitions", p. 70.

① Therapy Mode

3. Select the therapy mode (e.g., Continuous, Intermittent) you want to create a template for.

4. **For Patient Controlled Analgesia (PCA):** If you selected PCA, click the appropriate delivery route. A single drug can have multiple templates. For example, you may want to create one or more templates for morphine IV and another template for morphine SQ.

5. Click **Next**.

① Drug or Fluid Selection

Find the drug or fluid you want to assign to the template. Initially, all the drugs and fluids associated with the selected therapy mode are displayed in the list.

6. Click **Drugs Only** or **Fluids Only** to filter by either.

7. To narrow down the list further, type the first letter of the formal name of the drug or fluid in the search box. Only those drugs and fluids are displayed. To clear the filter, delete the text from the search box.

8. Click the appropriate drug or fluid from the list to select it.

   Note: Templates do not specify a concentration. The concentration is specified when creating the PSP.

② Template Information

9. Type the Name (1-50 characters long) and Display Name (1-22 characters long). The Name is visible only by the pharmacist in RxManager and can be more descriptive. The Display Name appears on the CURLIN 8000 screen in the header section.

10. Click **Next**.

① Rx Details

Rx Details are separated into three columns (fields are dependent on the selected therapy mode):

- Bag Volume / KVO Rate / Total Dose (Amt TBI); PCA has Delivery Limit Mode

- Dose delivery parameters (e.g., Rate, Duration, PCA Bolus, Loading Dose)

- Hard and Soft Limits

Bag Volume / KVO / Total Dose

11. Enter the volume and KVO infusion parameters for this template, or leave blank.

> **Note:** The PCA Delivery Limit Mode from the template cannot be changed when a PSP is created from the template (all other parameters, in all therapy modes, can be modified in the PSP).

Dose delivery parameters

12. Enter the dosing parameters specific to this template infusion protocol.

Variable therapy requires a value for "# of Steps" in the first column in order to specify dose rate and dose amounts.

Hard and Soft Limits

These limits are part of the Dose Error Reduction System. For more information about rate limits, see Chapter 4, Dose Rate Limits.

From the CURLIN 8000 pump, clinicians cannot edit PSP programs beyond the hard limits and are notified if the changed dosing parameters exceed the soft limits.

On this screen, any hard limits inherited from the selected drug or fluid are displayed, if they exist.

The pharmacist entered these values when building the drug and fluid list. If overriding limits is enabled (set in Admin Manager), you can exceed these values, but make sure that you consider proper patient use.

> **Note:** In the Admin Manager software application, the RxManager setting, "Allow users to override hard limits", determines if a pharmacist can overwrite a drug's hard limits or a template's hard limits when creating a PSP. Users with the Pharmacy Admin role can always override hard limits.

13. After entering parameters for the three columns, click **Next**.

1 Pump Settings

On this screen, the options are pulled from those set during Configuration (see Chapter 10, CURLIN 8000 Configuration). "- -" in a drop-down box indicates that whenever this template is used to create a PSP, the value for this setting will be what is defined in the Configuration.

The pump settings can be left as "- -" or set to an appropriate level based on the therapy implemented in the template, e.g., "Low" Occlusion Sensitivity for subcutaneous infusions.

② **Advisories**

If you want to add an advisory that is not already in the list, you must first create it in the Advisory area. Finish adding the template and submit it to the approval queue. Go to the Advisory area and add the new advisory (see Chapter 3, Advisories). Then, locate the template in the Approval Queue tab and edit it to add the new advisory.

> If the drug or fluid associated with this template already has an advisory attached to it, the advisory is selected (indicated with a checked box and delivery bag icon).

14. Optional: You can assign previously-created advisories to the template. To find the name of an advisory, type a keyword in the search box.

15. Click the checkbox to assign an advisory to the template and then click **Next**.

Review the Template

16. Review the values and selections you made. If you need to make changes, click **Edit** in the appropriate area. Revise as necessary.

17. When you are satisfied with the template information, click **Submit**. The template is sent to the approval queue.

    After the template is sent to the approval queue, yellow circle is displayed on the Approval Queue tab with a number that indicates many approvals are pending.

Note: Once a template is in the Approval Queue tab, you can edit, reject, approve, delete, or print the template information and view the historical log. See the next section, "Working with the Template Approval Queue Tab".

Working with the Template Approval Queue Tab

Click on the Approval Queue tab to display what is waiting to be approved. Double-click the template to be approved. Approved templates will be available to select when creating a PSP.

Do you want to:	Then go to this section:
Approve the template so it can be used in creating PSPs?	"Approving an Item", p. 42
Make changes to the template?	"Editing (Modifying) an Item", p. 43
See a log of who worked on the template?	"Viewing the Change History", p. 44
Create a PDF document that summarizes the template information so you can save the file electronically or print out a paper copy?	"Printing the PSP Details", p. 44
Reject the template? This keeps the template in the Approval Queue tab, but changes its status to REJECTED.	"Rejecting an Item", p. 43
Delete the template permanently from the list?	"Deleting an Item", p. 44

CURLIN® 8000

Notes

Chapter 7.   Patient Specific Protocol

A Patient Specific Protocol (PSP) is a single drug treatment assigned to an individual patient with customized delivery limits and CURLIN 8000 settings. PSPs and the required pharmacy reviews are intended to reduce potential programming errors that could cause under- and over-delivery of drugs and fluids at the point of care. PSPs are designed to streamline the pharmacy work flow, saving time, money, and resources. The user can set up safety parameters for various drugs in RxManager that will be used in the CURLIN 8000 pump.

Warning   Verify that all PSP settings are appropriate for the patient for whom the PSP is intended.

Creating a PSP – All Therapies

1. From the Home screen, click **Patient Specific Protocol (PSP)**.

2. In the top right corner of the screen, click **New PSP**.

Important   For definitions of the terms on any screen, see "Terminology and Definitions", p. 70.

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① Patient Information

The patient information is stored in the secure, encrypted database, which allows the facility to ensure HIPPA compliance while supporting the clinician in meeting the Five Rights of Medication Administration delivery. The gathering of patient information also allows correct tracking of the patient's prescription from pump programming through completion of the infusion. The patient data on the pump is encrypted and remains encrypted when the logs are retrieved from the pump, ensuring security of patient details if the pump falls outside the normal chain of trusted control.

3. In the appropriate fields, type the Patient ID, Rx #, and Patient Name. The Patient ID and Rx# must be unique. The Display Name is what appears on the CURLIN 8000 pump Patient Verify screen after power up. You may want to use a shortened form (e.g., the first name and last initial), if there are privacy concerns.

Note: The facility determines which patient identifiers (other than the Display Name of the patient) are displayed on the pump when the Configuration is set up (see Chapter 10, CURLIN 8000 Configuration). However, for tracking purposes, all patient information is required to be entered in RxManager.

4. From the drop-down lists, select the patient's date of birth.

② Therapy Mode

5.   Click the therapy type.
     If this is a PCA therapy mode, also click the delivery route (patient's
     catheter insertion location), and then click **Next**.

① Drug or Fluid Selection/Single Use Drug

The approved drugs and fluids associated with this therapy mode are listed.
Drugs and/or fluids currently listed in Drugs & Fluids Approval Queue tab are
not available to use when creating PSPs. If the drug and fluid list is long, you
can search to shorten the list, making it easier to find the drug or fluid you
want to use. To separate the list by either drugs or fluids, click **Drugs Only**
or **Fluids Only**. Or, type the first few letters of the formal name in the text
box.

> **Note:** If you are using a version of RxManager that does not include
> drug lists or templates, use the Single Use drug option.

6.   If you found the drug or fluid you want to use, select it from the list. If
     one or more versions of the drug appears in the list, be sure to choose
     the version with the appropriate units of measure (mg, mcg, or mL) for
     this PSP.

     If the drug or fluid that has been prescribed is not in the drug or fluid
     lists, click **Single Use**. Enter the drug name, infusion units, and
     concentration (for mg or mcg). This drug will be available only for this
     PSP and will not be saved to the drug or fluid list.

② Concentration

7.   If the PSP being created will be programmed in mg or mcg, you must
     define the concentration of drug in the reservoir that will be used. Select
     one of your facility's preset standard concentrations for the drug or enter
     the custom concentration in the blank field.

8.   Click **Next**.

① Rx Details

If no approved templates were created for this therapy mode with this drug
or fluid, no template will be available and you need to fill in all the values.
Also, if you are creating a PSP with a single use drug, no template can be
applied. Templates listed in the Templates Approval Queue tab are not
available to use when creating PSPs.

It is very important to select the appropriate template for the drug/fluid and
therapy you are delivering. If you are unsure which template to select,
consult your Pharmacy Admin.

9.   Template Name

     If one or more therapy-specific templates were created and approved
     for this drug or fluid, from the Template Name drop-down list, select one
     of the following:

- A facility set, therapy-specific template (Rx Details will automatically populate with the saved template settings). Review this information. If you need to make changes, edit the values as necessary. Your facility may restrict you from editing the hard and soft limits.

- Proceed without Template (you will manually enter all the pump settings).

To learn more about each of the Rx Details settings for each therapy mode, see "Terminology and Definitions", p. 70.

Important   For PCA PSPs: You may program a "0" value for the Basal Rate, PCA Bolus, Max # of Boluses per Hour, and/or Loading Dose. When this PSP runs on the pump, a clinician with an access code can reprogram any of the settings with a "0" value to a value within the established hard limits.

To completely disable the Basal Rate, PCA Bolus, Max # of Boluses per Hour, and/or Loading Dose, set a "0" value for the hard upper limit. This will prevent anyone from programming these settings on the pump throughout the use of this PSP. The pump will display a "0" value or "–" on the pump for these settings.

---

10. Click **Next**.

① Pump Settings

These fields automatically populate with the information entered for the current configuration and template (if used). You can edit any of the options/selections and these edits will be applied to this PSP only. These changes will not affect the active configuration or applied template.

Note: It is important for all clinicians to understand the meaning and implications of each pump setting. This information should be used in conjunction with the CURLIN 8000 Ambulatory Infusion Pump User Manual to determine appropriate pump settings. For definitions of the terms, see "Terminology and Definitions", p. 70.

* Settings which are editable on the pump itself require the use of the access code, if the lock level is set to LL1, 2, or 3. Therefore, anyone with the access code will have the ability to adjust these settings. Ensure your policies address these settings and when it is allowable to adjust them on the pump.

Consider the following when selecting a setting:

Clinical Settings	Consideration	Default Source when Creating New PSP in RxManager	Default Source when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
Occlusion Sensitivity	The lower the sensitivity setting, the greater the time to alarm will be. Consider the therapy being delivered and the impact of non-delivery during the time it takes for the occlusion alarm to be triggered. Refer to the CURLIN 8000 Ambulatory Infusion System User Manual, Technical Specifications chapter, for down occlusion detection time. Refer to Default Clinical Settings p.56 for more information	Template If template is not used or if template value is not set (shown as --), default value comes from configuration.	Patient's existing PSP If no PSP on pump, default comes from pump's configuration settings.	Yes	Yes

Clinical Settings	Consideration	Default Source when Creating New PSP in RxManager	Default Source when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
Air in Line Sensitivity	This determines the amount of air that is allowed to pass through the pump before the pump will stop and the alarm will sound. Consider the drug being infused, the infusion rate, administration set being used (filtered or not), the patient's catheter type, and catheter location (route). Consider the therapy being delivered and the impact of non-delivery during the time it takes for the air in line alarm to be triggered. Refer to Default Clinical Settings p.56 for more information	Template If template is not used or if template value is not set (shown as --), default value comes from configuration.	Patient's existing PSP If no PSP on pump, default comes from pump's configuration settings.	Yes	Yes

It is recommended that a printout of the PSP Details Record is provided to the clinician managing the infusion. This printout will include the Clinical Settings listed above. See "Review the PSP", p. 35.

Security Settings	Consideration	Default Value when Creating New PSP in RxManager	Default Value when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
Lock Level	Refer to Table 11-1, Lock Level Definitions, p. 64 to determine the appropriate level of access to features a user may have without entering the access code. It is important to prevent unauthorized users from accessing features that will affect the infusion delivery. The lock level should never be set to OFF unless an authorized clinician will manage and monitor the pump throughout the delivery of the infusion.	Template If template is not used or if template value is not set (shown as --), default value comes from configuration.	Patient's existing PSP If no PSP on pump, default comes from pump's configuration settings.	Yes	Yes

Security Settings	Consideration	Default Value when Creating New PSP in RxManager	Default Value when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
Access Code	Each facility should keep their standard access codes confidential. If needed, further customization is allowed at the PSP creation level for a specific patient. Ensure clinical users are aware of the code if they will need to access features locked out according to the chosen lock level.	Active configuration	Patient's existing PSP If no PSP on pump, default comes from pump's configuration settings	No	No

Note: Patient Permissions are advanced tasks and should be enabled only when advanced patient training is guaranteed to occur.

Patient Permissions	Consideration	Default Value when Creating New PSP in RxManager	Default Value when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
Patient Prime (not applicable to PCA therapy mode)	If this setting is enabled, anyone will be able to use the pump to prime the administration set without entering the access code. The pump will use this setting regardless of the access granted by the programmed lock level (see Table 11-1 for lock level definitions).	Template	Patient's existing PSP If no PSP on pump, setting is disabled.	No	No
Edit Next Dose Start Time (Intermittent therapy mode only)	Enabling this setting will allow anyone to change the next dose start time without an access code. If a user changes the next dose start time, two things will happen: 1. The start times for all subsequent doses will be adjusted to maintain the programmed dose frequency. 2. If a dose is in progress, the remainder of the dose currently in progress will be cancelled. See the CURLIN 8000 Ambulatory Infusion System User Manual – Setting the Intermittent Therapy Next Dose Start Time in chapter 11 for more information.	Template	Disabled	No	No

Other Settings	Consideration	Default Value when Creating New PSP in RxManager	Default Value when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
Basic Rx	Disable this setting to prevent anyone from programming a Basic infusion on the pump containing this PSP.

If Enabled, the pump will need to be reconnected to RxManager to program a new infusion. | Template

Enabled if no template | Patient's existing PSP

If no PSP on pump, default comes from pump's configuration settings | No | No |
| Near End Of Infusion Alarm | Enable this setting when you want the pump to alert the user that the infusion is nearing completion. This may be used to inform the user that it is time to prepare the next IV bag.
In Continuous, TPN, Variable and Intermittent therapy modes, the alert will sound approximately 30 minutes prior to the VTBI reaching zero. In the PCA therapy mode, the alert will sound when approximately 10% of programmed bag volume remains. | Template

Disabled if no template | Disabled | No | No |

Other Settings	Consideration	Default Value when Creating New PSP in RxManager	Default Value when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
End Of Infusion Escalation (not applicable to PCA therapy mode)	Disable this setting when the end of the infusion alert would cause undue distraction, e.g., TPN finishing late at night with adequate KVO reserves. This setting should be Enabled when it is crucial that the user respond to the end of the infusion alert immediately. This may be useful for therapies where there should not be an extended interruption in delivery (e.g., between bag changes). When enabled, once the programmed VTBI reaches zero, the "infusion complete" audible alarm will beep 3 times every 20 seconds with increasing alarm volume. After 2 minutes of no response, the pump will sound a louder, repeating alarm.	Enabled	Enabled	No	No
Clinician Bolus included in 1 Hour Limit (PCA therapy mode only)	When using the delivery limit mode of 1 Hour Limit, enable this setting to have all clinician boluses included towards the delivery limit. When disabled, there are no limits to the number of times the clinician bolus can be administered. The amount of a single clinician bolus can be limited by setting a hard upper limit.	Template	Not Applicable	Yes, on Clinician bolus program-ming screen	No

Other Settings	Consideration	Default Value when Creating New PSP in RxManager	Default Value when Programming Basic Infusion on Pump	Is Setting Visible on Pump?	*Edit Setting on Pump?
Bolus Delivery Rate (PCA therapy mode only) Setting is retained on pump until a new patient is selected.	This setting controls the speed at which a Clinician Bolus, PCA Bolus, and Loading Dose is delivered. Consider adjusting the rate depending on the drug being delivered and the route of delivery. For example, the delivery rate may need to be decreased if delivering via the subcutaneous route to prevent triggering of downstream occlusion alarms. The value set in the PSP will be the maximum bolus delivery rate the pump will allow for this PSP. Authorized pump users can decrease the rate via options.	Template	Patient's existing PSP If no PSP on pump, default is 125 mL/hr.	Yes	Yes

When a setting is changed from the default value, the new value will be retained on the pump until

- a new patient is selected

- the pump is connected to RxManager (configuration is reloaded or new PSP is loaded)

Caution: Use of the lock level setting of "OFF" should be reserved only for situations where a clinician is present and monitoring the pump for the entire infusion, for example, in an infusion center.

For definitions of the Patient Permissions and Other Settings options, place your cursor over **Enabled**.

11. Review the settings. Make any necessary changes.

② Advisories

If you want to add an advisory that is not already in the list, you must first create it in the Advisory area. Finish creating the PSP and submit it to the approval queue. Go to the Advisory area and add the new advisory (see Chapter 3, Advisories). Then, locate the PSP in the Approval Queue tab and edit it to add the new advisory.

12. (Optional) If appropriate, select up to 2 advisories. If the advisory list is long, type a keyword in the box to filter the list.

   Note: There may be a third advisory inherited from the drug or fluid, which is indicated by an delivery bag icon. This inherited advisory cannot be removed.

③ Notes

13. These notes will appear in the PSP Details Record (PDF). This is an optional field but can be used to relay information that would benefit the patient caregiver. Add the desired information and then click **Next**.

14. Continue with the next section, "Review the PSP".

Review the PSP

15. Review the values and selections you made. If you need to make changes, click **Edit** in the appropriate area. Make any necessary changes.

16. (Optional) To preview what will be displayed on the CURLIN 8000 Verify Patient and Infusion Summary screens, click **Preview** (Figure 7-1). These are the screens that the CURLIN 8000 user will see.

17. To create a PSP Details Record that contains the details of this PSP, click **Print**. The report contains all the patient information, Rx details, CURLIN 8000 settings, clinical advisories, the Verify Patient and Infusion Summary screen captures, notes, equipment checklist, and signature area. You can either save this PDF to your computer or print it out. You can print the PSP Details Record at any time during the process.

   The PSP Details Record is designed to be used by the clinician initiating the therapy. Therefore, you may want to send it with the pump and associated documents.

18. When you are satisfied with the information contained in this PSP, click **Submit**. The PSP is sent to the approval queue with a status of SUBMITTED.

   After the PSP is sent to the approval queue, a yellow circle is displayed on the Approval Queue tab. The white number on the tab indicates how many PSP approvals are pending.

Note: Once a PSP is in the Approval Queue tab, you can edit, reject, approve, delete, or print the PSP information and view the historical log. See the next section, "Working with the PSP Approval Queue Tab".

Chapter 7. Patient Specific Protocol

Working with the PSP Approval Queue Tab

Click on the Approval Queue tab to display what is waiting to be approved. Double-click the PSP to be approved. Approved PSPs can be uploaded to the CURLIN 8000.

Do you want to:	Then go to this section:
Approve the PSP for use?	"Approving an Item", p. 42
Make changes to the PSP?	"Editing (Modifying) an Item", p. 43
Reject the PSP?	"Rejecting an Item", p. 43
Delete the PSP?	"Deleting an Item", p. 44
See a log of who worked on it?	"Viewing the Change History", p. 44
See the patient and infusion summary information that will be displayed on the CURLIN 8000?	"Previewing PSP Information Displayed on CURLIN 8000", p. 37
Create the PSP Details Record, a PDF document that summarizes the information so you can save the file electronically or print out a paper copy?	"Printing the PSP Details", p. 44

Previewing PSP Information Displayed on CURLIN 8000

You can preview the patient and infusion summary information that will be displayed on the CURLIN 8000 screens. This is what the CURLIN 8000 user will see after confirming this PSP on the pump.

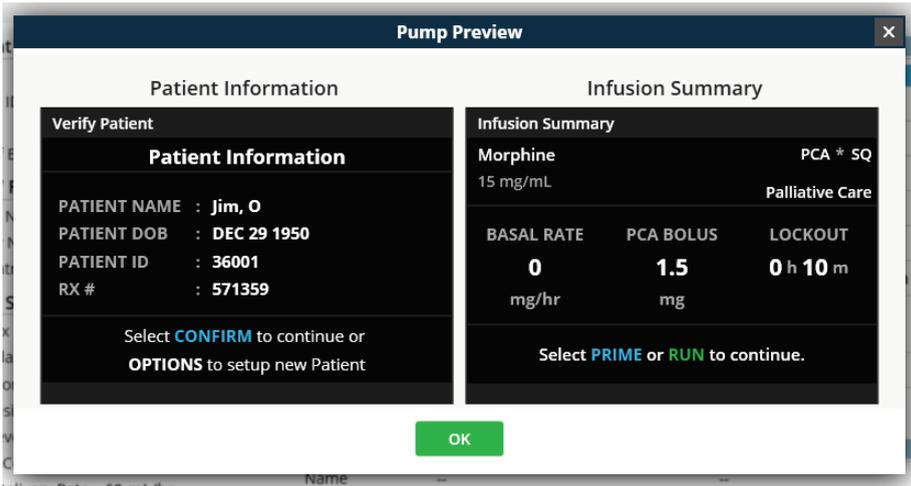1. In the Patient Specific Protocols – PSP Details screen, click **Preview** (Figure 7-1).

Figure 7-1: Pump Preview

2. Click **OK**.

Upload a PSP to the CURLIN 8000

Before uploading a PSP to the CURLIN 8000, make sure:

- You have the CURLIN 8000-specific USB cable to connect the CURLIN 8000 to the computer.

- You are logged into the CURLIN RxManager software and the PSP you want to upload is listed in the PSP Approved tab.

- The C-Cell batteries or rechargeable battery pack is installed (and not in "low battery" state), or external AC power is connected to the CURLIN 8000.

Then follow these steps:

1. Turn on the CURLIN 8000 by pressing the power button. Wait for the CURLIN 8000 to boot up.

2. Connect the USB cable from the computer with the CURLIN RxManager software installed to the CURLIN 8000 Bolus/Data port.

   The CURLIN 8000 screen graphic shows that the pump is connected to the CURLIN RxManager (Figure 7-2).

Pump is connected to PC application.
Disconnect cable and Restart pump after done.
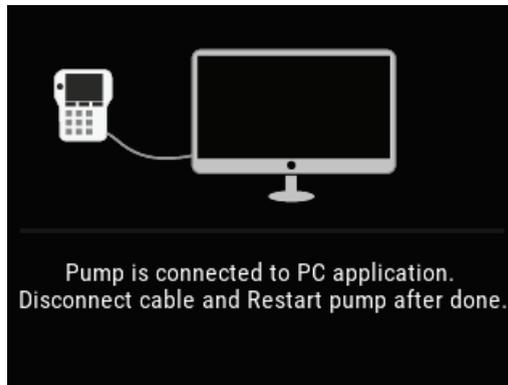
Figure 7-2: Pump Screen Showing Successful Connection to RxManager

On successful connection, the RxManager Home screen displays the pump ID (Figure 7-3). The facility's active configuration will automatically transfer to the pump (the previous configuration is always replaced), the previous patient and stored data will be cleared, and the pump's stored reports and logs will be transferred into RxManager. Reports and logs can be reviewed in the Patient Infusion History and Known Pumps reports (for more information, see Chapter 9, Reports).

The date/time displayed on the pump are synchronized with the PC (network time) when the pump is connected.

Pump ID

Figure 7-3: Home Screen Header with Pump ID

3. From the Home screen, click **Patient-Specific Protocols (PSP)**.

4. If the PSP has not been uploaded before, then click the Approved tab.

   If you want to duplicate a previously-uploaded PSP to another pump, click the Uploaded tab.

5. Double-click the PSP that you want to upload to the CURLIN 8000 pump, and then click **Send to Pump**. In RxManager, the PSP moves from the Approved tab to the Uploaded tab. The CURLIN 8000 pump screen displays a message that the PSP was transferred, listing the patient name, PSP name, therapy type, and concentration (Figure 7-4).
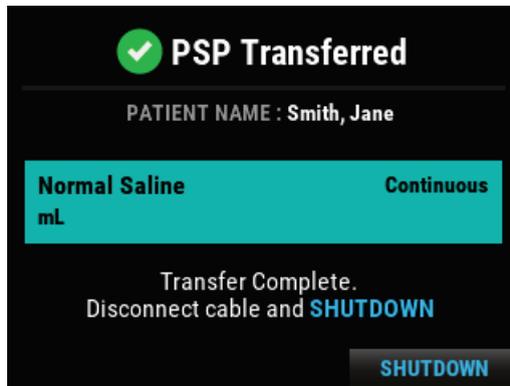

Figure 7-4: Pump Screen Showing Successful PSP Transfer

6. Disconnect the USB cable from the pump.

7. Power off the pump.

Note: The Uploaded tab displays the last 30 days of uploaded PSPs. PSPs older than 30 days can be viewed in the Uploaded PSP report.

Edit a PSP from the Uploaded Tab

Once a PSP has been uploaded to a pump, it is listed in the Uploaded tab. You can edit this previously-uploaded PSP, creating a new copy. For example, you may need a new Rx for a patient because the doctor changed the dosing rate. Or, you may need to change the hard or soft limits, bag volume, or access code.

1. From the Uploaded tab, double-click the PSP you want to edit. The PSP Details screen appears.

2. Find the information you want to change and then click **Edit**.

3. Make any necessary changes, then click **Next**. A message appears, reminding you that you can change the Rx Number.

4. To go back and update the Rx Number, click **Yes**. In the Patient Information area, type the new Rx # in the box.

   Otherwise, click **No**.

5. Click **Next** until the Edit PSP screen appears. Review the information. Repeat steps 2-4 if you need to make more changes. Otherwise, click **Submit**. A message appears, confirming that you want to make changes.

6. Optional: Type a comment that indicates why changes are necessary. While optional, this step is recommended to easily determine what changes were made to the PSP using the history report.

   Click **Yes**.

   The status changes to Submitted and the PSP is listed in Approval Queue tab.

7. Follow the steps in "Approving an Item", p. 42. Once it is approved, it will be listed in the Approved tab. Then this PSP will be ready to be upload to a pump.

Note: If you did not edit the Rx number, the revised PSP will be indicated with (1) after the Rx Number in the Approved tab (Figure 7-5). This number indicates that you are working with a copy of the PSP which has been altered from its original version. The copy number will increment every time the uploaded PSP is modified. The uploaded PSP and copies will be viewable in the PSP "Uploaded" tab for 90 days.
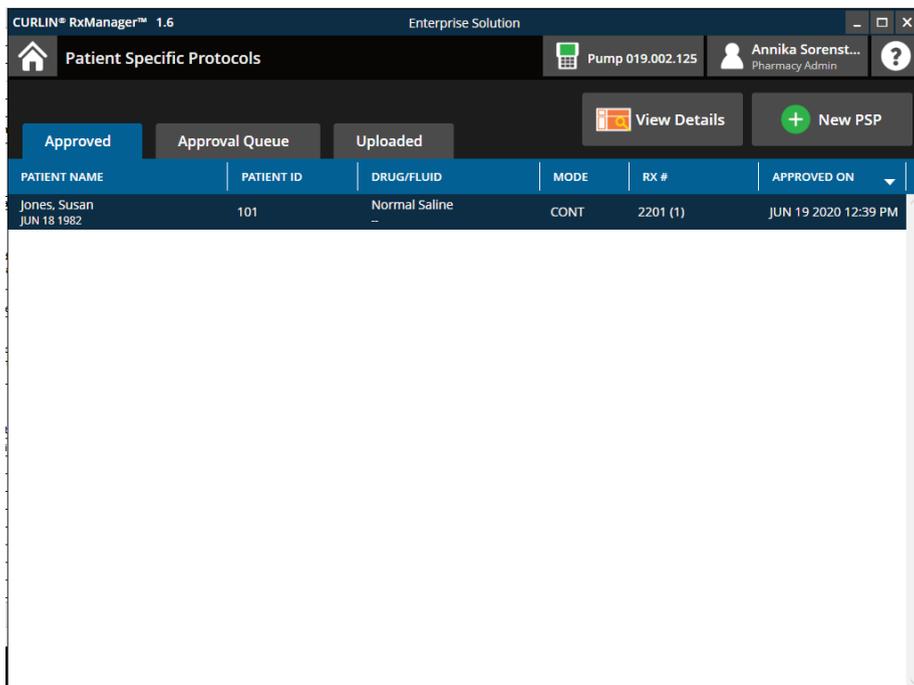
Figure 7-5: PSP Approved Tab with Unedited Rx #

Chapter 8.   Working with Submitted Items

Depending on your user access, you can work with submitted PSPs, Templates, Drugs and Fluids, and the Pump Configuration by approving, editing, rejecting, deleting, viewing the change history, and printing the information to a PDF. The steps to do this are common to the different RxManager elements.

For more information about tasks and authorized user roles, see Table 11-2, p. 68.

Viewing an Item from the Approval Queue Tab

1.   From the Home screen (Figure 2-2), click the element you want to work with.

2.   Click the Approval Queue tab.

3.   Click the item you want to work with and then click **View Details**.

Approving an Item

If enabled, Author and Pharmacist user roles can approve their own work. Pharmacy Admin user roles can always approve their own work. This is called Single Source Approval. If this feature is disabled, an authorized user other than the one who submitted the item must approve it.

1.   Once you are satisfied with the PSP, template, drug or fluid, or configuration, click **Approve**.

2.   Click **Yes**.

   For Configuration only: The status changes to PENDING PUBLISH. The configuration is now approved and ready to be published (released) by the Pharmacy Admin.

   Depending on the changes being made to the configuration, the administrator may choose to notify pharmacy staff that a new configuration will go into effect at a specific date and time.

   For all other items: This approved item is ready to be used.

Editing (Modifying) an Item

Note:　　When editing a PSP, the following parameters cannot be changed:

- Therapy Mode

- Route (for PCA)

- Delivery Limit Mode (for PCA)

- Drug or Fluid (except concentration)

- One-Time Drug (except concentration)

- Template

1. If you want to change any of the parameters, click **Edit** in the appropriate area. Make the changes, continuing with **Next** until the Review screen appears.

2. Click **Submit**. A confirmation window appears.

   Optional: Type a comment that indicates why you made revisions to the configuration. This comment will appear in the Change History, and helps remind you or communicate to other RxManager users why you made changes.

3. Click **Yes**. The Approval Queue tab is displayed.

Rejecting an Item

When you reject a non-approved (submitted) PSP, template, drug, or fluid, its status changes to REJECTED in the Approval Queue tab. You cannot reject an approved PSP. A rejected item is not deleted. Once its status changes to REJECTED, you can re-submit it for approval or delete it.

1. From a PSP, Template, Drug, or Fluid Details screen, click **Reject**. A confirmation message appears.

2. In the Comment box, type the reason for rejecting. Click **Yes** to change its status to REJECTED. The rejected item will continue to be displayed in the Approval Queue tab with a status of REJECTED.

   Click **No** to cancel.

Changing a Rejected Item Back to Submitted

Once an item's status is REJECTED, it must be changed back to SUBMITTED status before it can be approved.

1. From the item's Approval Queue tab, double-click the item whose status is REJECTED.

2. Edit the item as needed.

3. Click **Submit**. A confirmation message appears.

4. Click **Yes** to change its status to SUBMITTED, which will display in the Approval Queue tab.

   Click **No** to cancel.

Deleting an Item

Deleting a PSP, template, or drug or fluid permanently removes it from the RxManager. You can delete submitted, approved, or rejected configurations. You cannot delete archived configurations or uploaded PSPs.

Important   When you delete a drug or fluid associated with one or more templates, the template(s) are also deleted.

---

1. From a PSP, Template, Drug, or Fluid Details screen, click **Delete**. A confirmation message appears.

2. If you want to delete a drug or fluid and it is associated with a template, you can view the affected template(s) information. Click **Review**. A spreadsheet is created, containing the drug or fluid and template information. Use this to determine if you still want to permanently delete the drug/fluid and associate template(s).

3. Click **Yes** to delete the selected item.

    Click **No** to cancel.

Printing the PSP Details Record

You can create a PDF document, which summarizes the configuration, drugs and fluids, template, or PSP information.

•   From a Details screen, click **Print**. A PDF document is generated and displayed. You can save this PDF to your computer and/or print it.

Viewing the Change History

Every time a configuration, drugs and fluids, templates, or PSP is edited, a log entry is created, which contains the user name, date/time, and any comments.

1. From a Details screen, click **History**.

2. When you are finished viewing the information, click **OK**.

Notes

Chapter 9.   Reports

Reports provide CURLIN 8000 history and information. Available reports depend on your user access. For more information, see "Roles and Permissions", p. 68.

Save a Report to a CSV File

For all reports except Patient Infusion History, you can save the information to a CSV (comma-separated value) file, which you can open in any spreadsheet software. This CSV file contains more information than what is displayed in the online report.

1.   From a displayed report, click **CSV Export**. The Save As window appears.

2.   Navigate to the location you want to save the file.

3.   In the File name box, type a descriptive name.

4.   Click **Save**. After the CSV file is downloaded, a Success confirmation message appears.

Note: You can perform analysis on these reports by importing them into Microsoft Excel or an equivalent software.

View Reports

From the Home screen, click **Reports**.
Some or all of the following reports will be available:

Patient Infusion History

The patient infusion history displays the uploaded PSP, based on the patient and Rx identifiers (Figure 9-1).

UPLOADED ON	PATIENT NAME	PATIENT ID	RX #	DRUG NAME	APPROVED ON
AUG 09 2019 03:07 PM	Joe, Sm FEB 02 1943	963	073976	Morphine Morphine	AUG 09 2019 02:55 PM
AUG 07 2019 03:06 PM	sm, s DEC 30 1956	87654321	1234567	FentaNYL FentaNYL	AUG 07 2019 03:03 PM
AUG 06 2019 07:03 PM	Tell, William JUL 05 1963	12345600	12134	Morphin Morphin	MAY 19 2019 05:31 PM
JUL 23 2019 11:21 AM	add, advisory FEB 02 2018	1234	1234	Blinatumomab Blinatumomab	JUN 12 2019 03:43 PM
JUN 24 2019 09:03 AM	B, James JUL 07 1956	28348hs	938387	Morphine Morphine	JUN 24 2019 06:35 AM
JUN 19 2019 06:09 PM	Tom, Jo JUL 04 1964	88493000	73849	Primaxin Primaxin	JUN 19 2019 06:09 PM
JUN 18 2019 04:42 PM	B, Garity MAR 02 1971	19710302	19710302	Morphin Morphin	MAY 29 2019 10:58 AM
JUN 17 2019 03:45 PM	Sara, Fo JAN 01 2007	0909123	12345	Ampicillan Ampicillan	JUN 17 2019 03:38 PM
JUN 12 2019 08:57 PM	Jo, S DEC 05 1966	77665544	123456	Metronidazole Metronidazole	MAY 27 2019 09:03 PM
JUN 05 2019 11:31 AM	Garity, Brenda JAN 01 2019	1234	VariableTherap...	Flebogamma (IVIG) Flebogamma	JUN 05 2019 11:29 AM
MAY 29 2019 12:30 PM	Gr, B AUG 20 1948	090909	12345%	Milrinone Milrinone	MAY 27 2019 08:50 PM
MAY 28 2019 01:41 PM	sm, s DEC 30 1956	87654321	9999999	FentaNYL FentaNYL	MAY 28 2019 01:41 PM

Figure 9-1: Patient Infusion History Report

Initially, the list of uploaded PSPs is organized chronologically by the uploaded date. Reverse the chronological order by clicking the arrow in the UPLOADED ON column header. To filter the list to find a specific PSP, you can type the patient's last name, first name, ID, Rx#, or range of uploaded dates, then click **Search**.

From the Patient Infusion History screen, select a patient and then click **View Details** to display the PSP Details screen (Figure 9-2). From this screen, to export the details of the actual infusion, click **Export Pump Events**.

Figure 9-2: PSP Details Screen

The actual infusion details (e.g., when the infusion started, how much fluid was used to prime, etc.) is obtained when the pump is returned from use with the patient and reconnected to the computer running RxManager.

Single Use Drugs

When creating a PSP, you can either select a drug or fluid from the list or create a single use drug, which is not saved to the drug list. This report lists any drugs that were added to PSPs as "single use" (Figure 9-3). Initially, the list of single use drugs is alphabetical from A-Z. Reverse the order by clicking the arrow in the DRUG NAME column header. To filter the list to find a specific single-use drug, select a range of dates and then click **Search**.

To re-display the entire list, expand the range of dates.

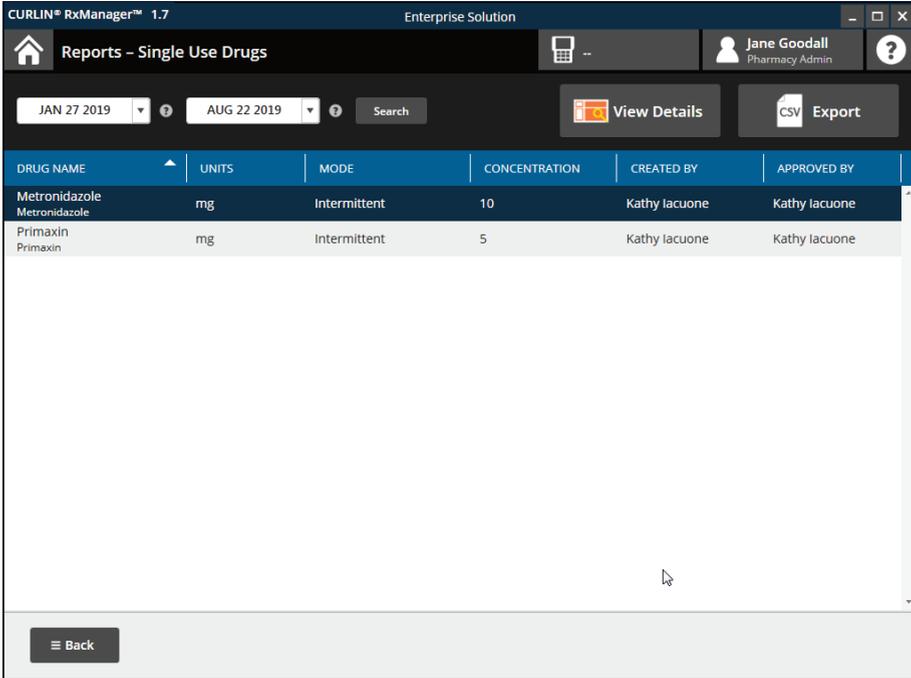| DRUG NAME	UNITS	MODE	CONCENTRATION	CREATED BY	APPROVED BY
Metronidazole Metronidazole	mg	Intermittent	10	Kathy Iacuone	Kathy Iacuone
Primaxin Primaxin	mg	Intermittent	5	Kathy Iacuone	Kathy Iacuone

Figure 9-3: Single-Use Drugs Report

To view the PSP Details where this single-use drug was used, select the specific drug and then click **View Details** to display the PSP Details screen (Figure 9-2). From this screen, to export the details of the actual infusion, click **Export Pump Events**. Click **Back** to return to the Single Use Drugs screen.

Known Pumps

Every time you connect a CURLIN 8000 to the computer running RxManager, usage information is downloaded from it. A known pump is one that has been connected to RxManager one or more times (Figure 9-4).

Initially, the list of known pumps are numerical starting with the highest number at the top. Reverse the order by clicking the arrow in the PUMP S/N column header. To filter the list to find a specific pump, type the pump serial number in the Search by Pump S/N field and then click **Search**.

To re-display the entire list, delete the text in the field.

CURLIN® RxManager™ 1.7		Enterprise Solution					
Reports – Known Pumps						**Jane Goodall** Pharmacy Admin	

Search by Pump S/N		Search				CSV **Export**	
PUMP S/N	**FIRMWARE**	**MAINTENANCE**	**LIFETIME VOLUME**	**LIFETIME HOURS**	**CONFIGURATION**	**LAST SEEN**	
190.020.085	0.15.1	DEC 01 2019	24	25	3	AUG 07 2019 03:06 PM	
019.002.195	1.0.4	JUN 04 2020	1078	5	2	JUN 24 2019 09:02 AM	
019.002.113	1.0.6	MAY 13 2020	39456	680	3	AUG 09 2019 02:55 PM	
019.002.112	1.0.7	APR 24 2020	47224	738	1	AUG 15 2019 09:07 AM	
019.002.108	1.0.6	JAN 01 2016	16922	441	3	AUG 13 2019 11:27 AM	
019.002.089	1.0.6	OCT 22 2019	50865	1002	3	AUG 09 2019 03:02 PM	
019.002.074	1.0.2	JAN 01 2016	56489	769	2	AUG 09 2019 03:06 PM	
019.002.034	1.0.2	JAN 01 2016	104750	918	3	JUN 24 2019 06:35 AM	
019.002.008	1.0.2	JAN 01 2016	15657	371	1	MAY 29 2019 12:29 PM	

≡ Back

Figure 9-4: Known Pumps Report

Uploaded PSPs

This report lists every PSP that was uploaded to a CURLIN 8000, organized by pump serial number and template name (Figure 9-5).

Initially, this list is sorted by uploaded date. To filter the list to find a specific pump, type the pump serial number in the Search by Pump S/N field or range of uploaded dates, then click **Search**.

To re-display the entire list, delete the text in the field or expand the range of dates.

Figure 9-5: Uploaded PSPs Report

Drugs & Fluids

This report lists all the approved drugs and fluids and when they were last used (Figure 9-6). This report does not list any drugs or fluids currently in the Approval Queue tab.

Initially, the list of drugs and fluids is alphabetical from A-Z. Reverse the order by clicking the arrow in the FORMAL NAME column header.

FORMAL NAME ▲	DISPLAY NAME	UNITS	MODE	APPROVED BY	LAST TIME USED
0.9% NaCl w/20 meq KCL	0.9% NaCl w/20 meq KCL	mL	CONT	Kathy Iacuone	--
0.9% Sodium Chloride	0.9% Sodium Chloride	mL	CONT	Kathy Iacuone	--
Acyclovir Sodium	Acyclovir Sodium	mg	INT	Kathy Iacuone	--
Advisory test	Advisory test	mg	PCA	Jane Goodall	--
Ampicillan	Ampicillan	mg	INT	Kathy Iacuone	JUN 17 2019 03:38 PM
Ampicillan/Sulbactam	Ampicillan/Sulbactam	mg	INT	Kathy Iacuone	--
Azithromycin	Azithromycin	mg	INT	Kathy Iacuone	--
Blinatumomab	Blinatumomab	mL	CONT	Kathy Iacuone	AUG 25 2019 03:15 PM
Cefazolin	Cefazolin	mg	INT	Kathy Iacuone	--
Ciprofloxacin	Ciprofloxacin	mg	INT	Kathy Iacuone	--
Clindamycin	Clindamycin	mg	INT	Kathy Iacuone	--
D5 1/2 NS	D5 1/2 NS	mL	CONT	Kathy Iacuone	--

CURLIN® RxManager™ 1.7 — Enterprise Solution — Reports – Drugs & Fluids — Jane Goodall, Pharmacy Admin — CSV Export — ≡ Back

Figure 9-6: Drugs & Fluids Report

Templates

This report lists all the approved templates and when they were last used (Figure 9-7). This report does not list any templates currently in the Approval Queue tab.

Initially, the list of templates is alphabetical by drug name from A-Z. Reverse the order by clicking the arrow in the DRUG NAME column header.

Figure 9-7: Templates Report

Chapter 10. CURLIN 8000 Configuration

A user in the Pharmacy Admin role can enter and select general information, called the configuration, which becomes the default entries when templates and PSPs are created. Once the configuration is established for the first time, other options in RxManager are available to set up.

For Basic Programming (infusion therapies programmed at the pump), the configuration controls the features that are available, such as specific infusion therapies, and sets the hard limits for those therapies.

The configuration provides the defaults for air in line and occlusion limits, the lock level, and defines the access code.

When a CURLIN 8000 pump is connected to a computer running RxManager, the active configuration is automatically updated (uploaded) to the pump.

Only one configuration can be active at a time, although an additional one can be in the Approval Queue with a status of Submitted or Pending Publish. Once a new (additional) configuration is approved and published, the previously active configuration is saved and archived. Any archived configuration can be submitted for approval to become the active configuration again.

1.   From the Home screen, click **Pump Configuration**.

2.   Click **New Configuration** (Figure 10-1).
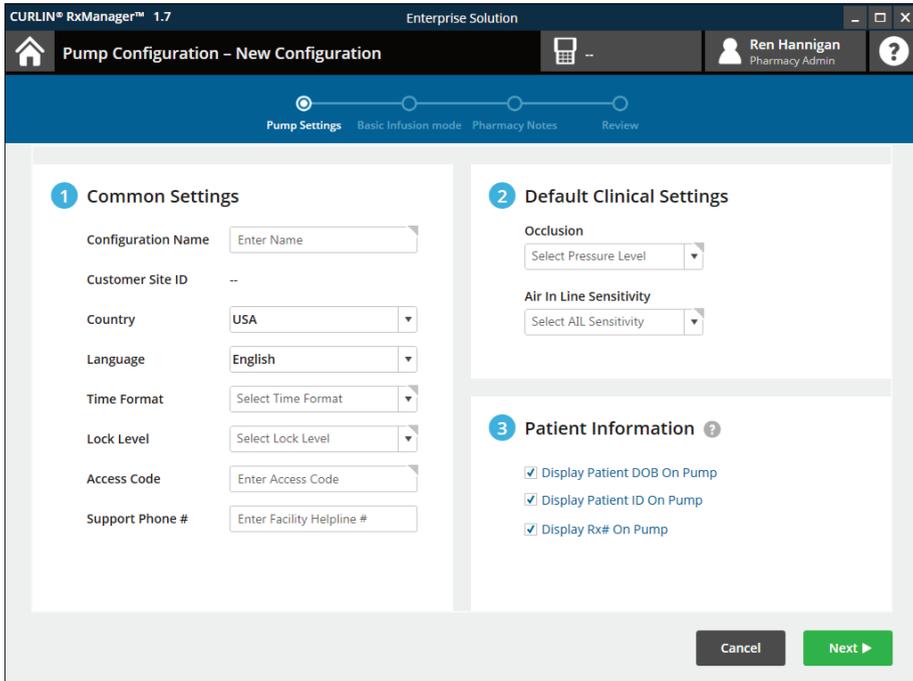
Figure 10-1: New Configuration Screen

Pump Settings

① Common Settings

3. Type the Configuration Name. You may want to identify the configuration using your facility name, such as "Acme Home Infusion".

    Note: The Customer Site ID is assigned to you and cannot be changed. Currently, there is only one option for Country and Language.

4. From the Time Format drop-down list, select either 24 hours or 12 hours display format (12 hour time is qualified by AM/PM).

Caution: Use of the lock level setting of "OFF" should be reserved only for situations where a clinician is present and monitoring the pump for the entire infusion, for example, in an Infusion Center.

---

5. From the Lock Level drop-down list, choose either OFF, 1, 2, or 3, depending on how you want the CURLIN 8000 features to be accessed. For specific lock level information, see Table 11-1, p. 65. **Note:** With the access code, the clinician can set the lock level per patient.

6. In the Access Code field, type a 5-digit number, using digits 0-9. This is the code that the CURLIN 8000 clinician will type to access any functions that are locked per the lock level. An access code cannot be comprised of a single digit (for example, 11111, 22222, 33333) and cannot be 12345.

Important Do not share the access code with unauthorized users. This code is for unlocking the CURLIN 8000 features that are secured according to the lock level.

---

7. In the Support Phone # field, type the phone number of the facility that will provide help to the CURLIN 8000 user. This phone number will displayed on the pump screen at the end of the troubleshooting text when the user presses the Help button on the pump keypad.

❷ Default Clinical Settings

The Default Clinical Settings are defaults only. They can be adjusted when creating the PSP and through the options menu on the pump according to the Pump Settings table on page 28.

The Occlusion Sensitivity feature allows the CURLIN 8000 to sense an occlusion, based on pressure, in the line between the CURLIN 8000 and the patient access site. Low Sensitivity means the pump will take longer to build up enough pressure to set off the occlusion alarm than it would if High Sensitivity is chosen.

> **Note:** It is important to consider the occlusion sensitivity level along with the dose rate when infusing critical drugs. The lower the rate, the longer it will take to build up pressure in the line when an occlusion occurs. For critical medications delivered at low rates, you may want to set the occlusion level to be high sensitivity. For more information, reference the CURLIN 8000 Ambulatory Infusion System User Manual.

The Air In Line Sensitivity feature allows the CURLIN 8000 to detect the amount of air in the administration set tubing before it goes into an alarm state.

8. From the Occlusion drop-down list, select the occlusion sensitivity (pressure level) you want:

   - LOW: (~900 mmHg)

   - MEDIUM: (~400 mmHg)

   - HIGH: (~250 mmHg)

9. From the Air in Line Sensitivity drop-down list, select the level of responsiveness (air bubble size).

   - 0.1, 0.5, 1, or 2 mL

- OFF: Air In Line sensor is disabled. An air eliminating filter must be used with the administration set.

Note: When the air in line sensor is set to OFF, the pump will still report when it senses approximately 3 mL of air pass through the sensor. When this occurs, the pump displays the AIR MAY BE PRESENT CHECK IV BAG alarm. For more information, reference the CURLIN 8000 Ambulatory Infusion System User Manual.

Important   Clinicians should understand the impact of potential air delivery to their patient when choosing the air in line setting. If the setting is set to OFF, you must use an air -eliminating filter. The pump will require confirmation of use of the filter each time there is an attempt to run the infusion.

---

③ Patient Information

10. Determine the level of patient information you want displayed on the pump when using PSPs.

Note: The patient Display Name is always displayed (see "Creating a PSP – All Therapies", p. 25). Select the options you want displayed on the CURLIN 8000 when the programmed CURLIN 8000 is first turned on:

- Patient DOB (Date Of Birth)
- Patient ID
- Rx#

11. Click **Next**.

Basic Infusion Mode

① Enabled Basic Therapies And Units

Therapies and units not selected here will be disabled (not visible) when creating a Basic Program using the CURLIN 8000. These selections do not affect the options available in RxManager. All therapies and units are available when programming a PSP using the RxManager.

Important　　If you do not select any therapies, Basic Programming will be disabled from the pump. The user will not be able to program a therapy at the pump, and will operate solely on uploaded PSPs.

12. Enable the required therapies and associated dosing units by checking the appropriate box(es).

② Basic Infusion Hard Limits

13. Set the upper limits for each of the selected therapies. During Basic Programming, the CURLIN 8000 user will be unable to exceed these values. PCA limits for Basic Programming are set by the system limits (Table 10-1).

Note:　When dosing is in mg or mcg in Basic Programming, the limit is applied as the mL/hr equivalent. For example, during a Basic Program Continuous therapy hard upper limit of 200 mL/hr, the concentration of 0.5 mg/mL would have a maximum dose rate of 100 mg/hr.

Table 10-1: PCA Administration Route Default Settings for Basic Programmed Infusions

Administration Route	Max Occlusion Setting (mmHg)	Max Basal Rate (mL/hr)	Max Bolus Dose (mL)	Max Load Dose (mL)	Default Bolus Delivery Rate (mL/hr)
Intravenous (IV)	900	10	10	10	125
Subcutaneous (SQ)	900	10	10	10	60
Epidural (EPI)	900	10	10	10	90

14. Click **Next**.

Pharmacy Notes

① Printout Pharmacy Notes

You can add text that will appear on the completed Pump Configuration PDF and the PSP Details PDF (for more information, see "Printing the PSP Details", p. 44). For example, you could add notes to instruct the clinician/caregiver on how to access pharmacy assistance or any facility-specific instructions that all clinicians may need to know.

15. In the field, type the appropriate notes and then click **Next**.

Review the Configuration

16. A summary of all the pump configuration information is displayed. Make sure that all the information is correct. If you want to make changes to any area, click **Edit** and revise as necessary.

17. When you are satisfied with the configuration information, click **Submit**.

18. The configuration is submitted to be approved. In Figure 10-2, the Approval Queue tab shows that one configuration is pending. The STATUS column shows that it was submitted for review and approval.
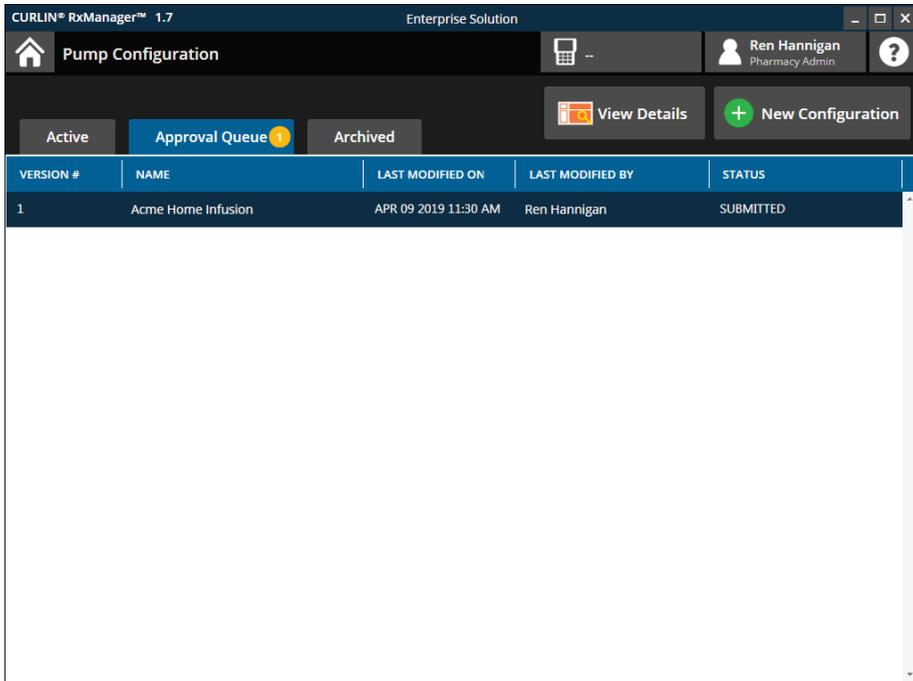
Figure 10-2: Pump Configuration Approval Queue

Working with a Configuration

After you create a configuration, the configuration needs to be approved before publishing it. Once published, this basic information will be applied when creating Basic Programs on the updated CURLIN 8000s and as default pump setting values when creating PSPs (see Chapter 6, Templates, for exceptions). The published configuration will be listed in the Active tab. Only one configuration can be active at a time. When you create, approve, and publish a new configuration, the existing configuration moves to the Archived tab.

1. From the Home screen, click **Pump Configuration** (Figure 10-3).
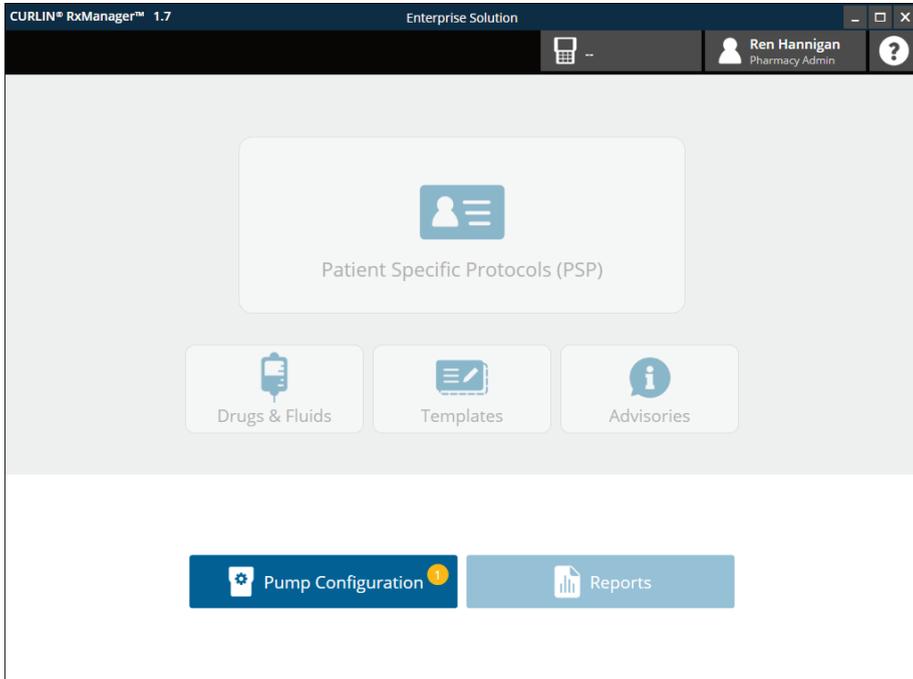
Figure 10-3: Pump Configuration Waiting for Approval

2. Click the **Approval Queue** tab (Figure 10-2).
3. Double-click the configuration to display it.

4.   Review the configuration details.

Do you want to:	Then go to this section:
Approve the configuration for pending publication?	Approving the Configuration, p. 61
Publish the approved configuration for use for all templates and PSPs?	Publishing an Approved Configuration, p. 62 **Note:** Only users with the Pharmacy Admin role can publish configurations.
Make changes to the configuration?	Editing (Modifying) an Item, p. 43
See a log of who worked on the configuration?	Viewing the Change History, p. 44
Create a PDF document that summarizes the configuration information so you can save the file electronically or print out a paper copy?	Printing the PSP Details Record, p. 44
Reject a non-approved or unpublished configuration?	Rejecting an Item, p. 43
Delete a non-archived configuration?	Deleting an Item, p. 44

Approving the Configuration

1.   From the Pump Configuration – Configuration Details screen, click **Approve**.

2.   If you were the person who created the configuration, a Single Source Approval message appears. Click **Yes** to approve. The status of this configuration in the Approval Queue tab changes to PENDING PUBLISH.

Publishing an Approved Configuration

The publish function allows the Pharmacy Admin to easily activate the new configuration at the appropriate time.

Note: Imported configurations will appear in the Approval Queue tab with a status of PENDING PUBLISH. For more information about importing configurations, see the CURLIN Admin Manager User Manual.

1. From the Pump Configuration screen, click the Approval Queue tab (Figure 10-4), and then double-click the configuration.
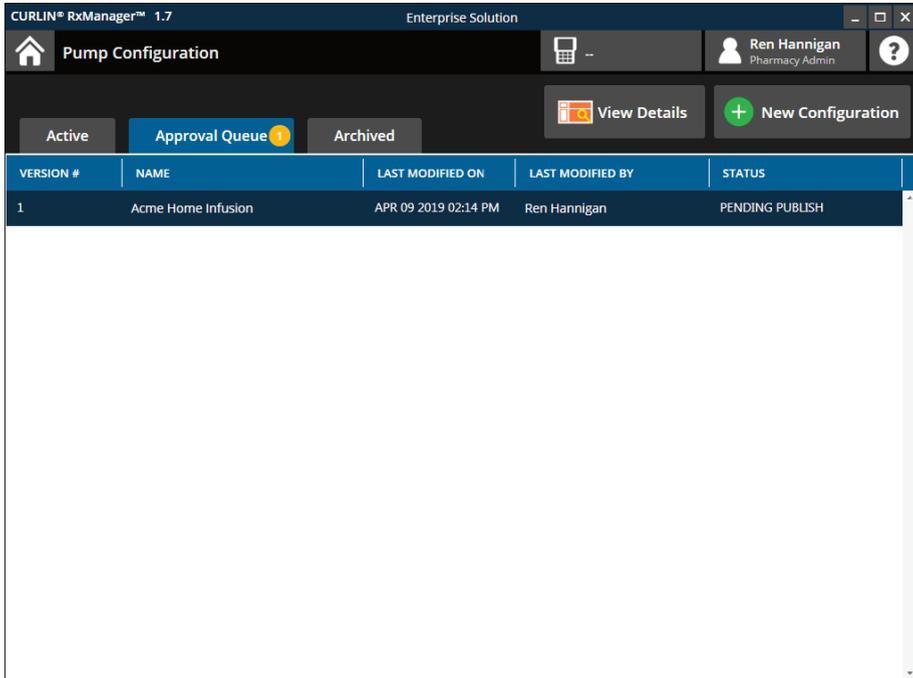
Figure 10-4: Configuration Pending Publish

2. To publish the pump configuration, click **Publish**. Now the pump configuration is listed in the Active tab and will be applied when a CURLIN 8000 is connected to the computer with RxManager running.

   After publishing the first configuration, PSP, Drugs and Fluids, Templates, Advisories and Reports are available in RxManager.

Notes

Chapter 11. User Assistance and References

Online Help

User Manual

You can display an online version of this user manual. You must have Adobe Acrobat installed on your computer. If you do not, contact your IT Admin.

- At top right corner, click the Help icon .

    The RxManager downloads a PDF version of this user manual.

Note: If the user manual was not installed with RxManager, a message appears, "User Manual was not found." Contact your IT administrator.

Context-Sensitive Help

On some RxManager screens, next to a field or adjacent to a screen area name indicates that context-sensitive help is available. Similarly, some fields also have context-sensitive help associated with them. Move your mouse cursor over the or field to view the information:
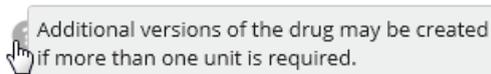
Additional versions of the drug may be created if more than one unit is required.

On RxManager screens, a (red triangle) in the upper right corner of an entry field indicates an error with the field; move your mouse cursor over the entry field with (red triangle) to view information regarding the error condition:
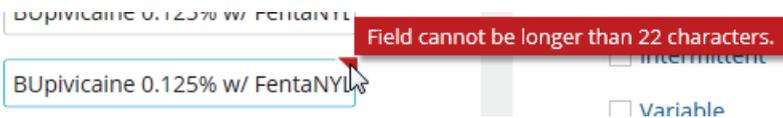
BUpivicaine 0.125% w/ FentaNYL

Field cannot be longer than 22 characters.

☐ Intermittent

BUpivicaine 0.125% w/ FentaNYL

☐ Variable

Customer Support Help

If you need to speak directly with a CURLIN Enterprise Solution Software support person, call 800.970.2337.

Lock Level Settings

Table 11-1 lists which features are controlled under which lock settings. A cell with a checkmark indicates that the correct access code must be entered in order

to perform the CURLIN 8000 operation. The CURLIN 8000 must be unlocked in order to set the lock level.

Caution: *Use of the lock level setting of "OFF" should be reserved only for situations where a clinician is present and monitoring the pump for the entire infusion, for example, in an infusion center.

Table 11-1: Lock Level Definitions

CURLIN 8000 Feature	Location	Active Therapy	Lock OFF*	Lock 1	Lock 2	Lock 3
General Functions						
Power Pump Off	--	All				
Run/Pause/Resume Infusion	Home screen	All				
Access Help screens	Most screens	All				
Silence Alarm	Alarm screen	All				
Confirm Alarm	Alarm screen	All				
Initiating/Running an Rx Program						
Verify Patient	Power up	All				
Select Patient's Active Rx	Select Pt's Rx screen	All				
Select Patient's Inactive Rx	Select Pt's Rx screen	All				✓
Options						
View Options	Most screens	All				
Repeat Current Rx	Program	All				✓
Enter Initial Basic Rx	Program	All			✓	✓
Enter a New Basic Rx (Delete current Basic program)	Program	All		✓	✓	✓
Enter New Patient (when no patient exists)	Program	All				
Enter New Patient (Delete Current Patient)	Program	All		✓	✓	✓

CURLIN 8000 Feature	Location	Active Therapy	Lock OFF*	Lock 1	Lock 2	Lock 3
Edit Rx: PSP Program	Rx Tasks	All		Within limits	✓	✓
Edit Rx: Basic Program	Rx Tasks	All		✓	✓	✓
Prime Administration Set using the Pump	Rx Tasks	CON, TPN, VAR, INT				Not required if Patient Prime is enabled in PSP
Prime Administration Set using the Pump	Rx Tasks	PCA		✓	✓	✓
Deliver Clinician Bolus	Rx Tasks			✓	✓	✓
Pause, Resume or Cancel: Loading Dose, Clinician Bolus, or PCA Bolus	Bolus Specific screen	PCA				
Edit Bolus Delivery Rate	Rx Tasks	PCA		✓	✓	✓
Initiate Immediate Ramp Down	Rx Tasks	TPN				
Program Constant Rate	Rx Tasks	VAR			✓	✓
Program Next Dose Start Time	Rx Tasks	INT			Not Required if Edit Next Dose Start Time is enabled in PSP	Not Required if Edit Next Dose Start Time is enabled in PSP
Delay Start of Program; Cancel Current Delay	Rx Tasks	CON, TPN, VAR			✓	✓
View Clinical Reports	Options	All				
Clear Infusion Totals Report (cleared values saved in Patient History log)	Clinical Reports	All				
Adjust Lock Level Setting	Clinical Settings	All		✓	✓	✓

CURLIN 8000 Feature	Location	Active Therapy	Lock OFF*	Lock 1	Lock 2	Lock 3
Adjust Occlusion Sensitivity Setting (for downstream occlusion)	Clinical Settings	All			✓	✓
Adjust Air in Line Sensitivity	Clinical Settings	All			✓	✓
View Device Settings	Tools	All				
Change Audio Level	Tools	All				
Change screen Brightness	Tools	All				
Change Date and Time	Tools	All				✓
View Device Info	Tools	All				

CONT = Continuous
INT = Intermittent
PCA = Patient Controlled Analgesia
TPN = Total Parenteral Nutrition
VAR = Variable

CURLIN® 8000

Roles and Permissions

Each RxManager user has an assigned role, which defines the options and features available to that person. Users are entered and assigned to a role using the CURLIN Admin Manager application. Refer to the Admin Manager User Manual for more information on user management.

The cells with a checkmark in Table 11-2 show what options are available to each of the different roles.

If enabled in CURLIN Admin Manager, Author and Pharmacist user roles can approve their own work. Users with the Pharmacy Admin role can always approve their own work. When a user approves their own work, it is called Single Source Approval.

Note: Users with the Role of IT Root and Service Technician do not have permission to use (log into) RxManager application

Table 11-2: User Roles and Permissions

	Pharmacy Admin	Author	Pharmacist	Technician
Create, Manage, and Publish Pump Configurations	✓			
Approve Pump Configurations	✓	✓	✓	
Reject Pump Configurations	✓	✓	✓	
Delete Unpublished Pump Configurations	✓	✓		
View Pump Configuration Details	✓	✓	✓	✓
Create and Manage Drugs/Fluids, Templates, and Advisories	✓	✓		
Approve and Reject Drugs/Fluids, Templates, PSPs	✓	✓	✓	
Create and Manage PSPs	✓	✓	✓	
Upload PSPs	✓	✓	✓	✓
Access Patient Infusion History Report	✓	✓	✓	✓

	Pharmacy Admin	Author	Pharmacist	Technician
Access Single Use Drug Report	✓	✓	✓	✓
Access Known Pumps Report	✓	✓	✓	✓
Access Uploaded PSP Report	✓	✓	✓	✓
Access Drugs & Fluids Report	✓	✓	✓	
Access Templates Report	✓	✓	✓	

Changing Your Password

Once you have successfully logged in to RxManager, you can change your password. Passwords must be between 8-32 characters and must contain at least one uppercase letter, one lowercase letter, and one number.

Note: If you attempt to log in 10 times with an incorrect password, your account will lock. Contact your RxManager Pharmacy Admin to request unlocking it.

1. From the Home screen, click your name in the upper right corner, then click **Change Password**.

2. Type your current password, then your new password (twice). The new passwords must match.

3. Click **OK**. A message appears, confirming a successful password change.

Note: If you attempt to create a new password that is found in the PwnedPasswordsTop100k list, you will get an on-screen message that states: "The password you have entered is commonly used and not secure. Please choose a different password." If you get this message, you must create a different password.

Moog recommends that user passwords are changed at least once a year, unless there is an immediate threat or if the user suspects their password has been compromised in some way, in which case the password should be updated immediately.

Logging Out

To maintain security of the system, you should log out of RxManager when you will be away from your computer for an extended period of time. Your log in name is displayed in the top right corner of the screen.

To sign out of RxManager, click your name and then click **Log Out**.

Servicing the CURLIN 8000 between Patients

For information about cleaning and servicing the CURLIN 8000 between patients, refer to the CURLIN Service Manager User Manual.

Terminology and Definitions

This section contains terms that you will see when using the RxManager software. Although you may be familiar with most terms, CURLIN 8000 and RxManager-specific definitions are included here.

# of Steps	(For Variable therapy) The number of distinct combinations of amount, rate and duration that will make up the infusion profile.
	Up to 24 steps may be programmed in one infusion profile. There is no restriction on increasing or decreasing step amounts from one step to another.
1 Hour Limit	(For PCA therapy) This delivery limit mode is only available when programming a PSP using the RxManager. This is the maximum amount of medication the patient can receive in any 60 minute window. Medication delivery that is included in the 1 Hour Limit includes: the basal rate, PCA boluses, and may or may not include the clinician bolus. The loading dose is not included in the 1 Hour Limit. Inclusion of the clinician bolus is determined by the pharmacist when setting up the PSP.
Access Code	A 5-digit number that the user must enter on the CURLIN 8000 in order to work with certain features. The Lock Level determines which features require an Access Code.
	An access code cannot be comprised of a single digit (for example, 11111, 22222, 33333) and cannot be 12345. Refer to the Pump Settings table, p. 28.
Advisory	Clinical information or reminder for the CURLIN 8000 user, which will be shown on the CURLIN 8000 screen after a PSP is selected to run.
Air In Line Sensitivity	Refer to the Pump Settings table, p. 28.

Amount Per Dose	(For Intermittent therapy) The amount of medication that will be given during each dose. It is programmed in the units selected on the Dose Units programming screen.
	The Amount per Dose multiplied by the Number of Doses must be less than the Bag Volume.
Amt TBI/AMT TBI (Amount To Be Infused)	(For Continuous therapy) The Amt TBI is the total dose that will be delivered from the programmed Bag Volume.
	It is entered and displayed in the units in which the program is being entered. For example, if programming in mg, the amount to be infused will be programmed in mg.
	[range: 1 – 9,999 mL equivalent]
ASV	Anti-Siphon Valve
Bag Volume/Bag VOL	This is the actual volume of fluid that is contained in the IV bag/drug reservoir. The displayed value will decrease after priming and while the infusion is in progress.
	When repeating an infusion program, the Bag Volume will reset to the original bag volume amount.
	It is recommended that the actual bag volume contain enough overfill to account for priming volume and pump delivery accuracy.
	[range: 1 – 9,999 mL]
Basal Rate	(For PCA therapy) This is the amount of medication per hour that is being delivered continuously throughout the infusion. This is an optional setting.
	[range, PSP: 0.1 – 100 mL/hr equivalent]
	[range, Basic Program: 0.1 – 10 mL/hr equivalent]
Basic Program	A clinician enters patient and prescription information into the CURLIN 8000 using the pump's keypad. A Basic Program has no dose error prevention safeguards. This is one of two methods of programming the CURLIN 8000. See also PSP.
Basic Rx Enabled/Disabled	Refer to the Pump Settings table, p. 28.
Bolus Delivery Rate	The speed at which the boluses will be delivered during use of the PCA therapy. This includes the loading dose, clinician boluses, and PCA boluses. Refer to the Pump Settings table, p. 28. Also refer to the Delivery Specifications table in the CURLIN 8000 Pump User Manual chapter 17.
Clinician Bolus	A single bolus administered by the clinician in PCA therapy. The bolus is generally given by prescriber's order during a pain crisis to bring the pain down to a manageable level.

Clinician Bolus included in 1 Hour Limit	Refer to the Pump Settings table, p. 28.
Concentration	The amount of the drug in milligrams or micrograms per milliliter of solution. This is displayed on the pump home screen in the Header below the words "Basic Infusion" or the name of the drug.
CSV	Comma-Separated Value. File type used to export data to a spreadsheet (e.g., Microsoft Excel).
Delivery Limit Mode	(For PCA therapy) Two modes are available for further restricting the amount of medication the patient may receive. See 1 Hour Limit and Max # of Boluses per Hour.
DERS	Dose Error Reduction Software
Delay Start	(For Continuous, TPN, and Variable therapies) OFF means that the infusion will start immediately when the user presses RUN from the pump. Entering a delay start time (time of day) will determine when the infusion starts. The pump must be in RUN mode in order for the infusion to start at the programmed time. The KVO rate will be infused before the first dose and between doses. [range: 00:01 – 23:59 hours:minutes]
Display Name	Name of drug or fluid intended to be seen by all pump users. This version of the drug name is displayed on the pump screen when a PSP is used. See also Formal Name.
DOB	Date Of Birth. The Patient's DOB is displayed on the pump screen when enabled in the configuration.
Dose	The quantity or amount of medication taken at one time.
Dose Duration	(For Intermittent therapy) The length of time from the beginning of a dose to the end of a dose. [range: 1 minute – 288 hours]
Dose Frequency	(For Intermittent therapy) The amount of time between the beginning of one dose and the beginning of the next dose. When repeating the entire infusion program (for example, when changing the IV bag) the pump will maintain the dose frequency schedule.
Dose Rate	(For Intermittent therapy) The speed at which each dose will be delivered.

Doses per Bag	(For Intermittent therapy) The number of doses that will be delivered from the programmed Bag Volume. The pump will not allow programming of more doses than the programmed Bag Volume will be able to provide, or the 200 dose system limit, whichever is lower.
Duration	This is the length of time in hours:minutes.
End Of Infusion Escalation (EOIE)	Alarm audio escalation at the end of an infusion. This setting defaults to "enabled" Refer to the Pump Settings table, p. 28.
EPI/Epidural	Administration upon or over the dura mater within the spinal canal.
ES	Enterprise System
Formal Name	Name of drug or fluid to be used by the pharmacist within the RxManager software. This version of the drug name is not displayed on the pump screen. See also Display Name.
Hard Limit	These are the maximum and minimum values allowed for a program setting within a PSP. There may be upper hard limits (UHL) and lower hard limits (LHL) that cannot be overridden.
HH:MM	Hours and Minutes (to set time entry 24 hour or AM/PM 12 hour).
hr, h	Hour
IA/Intra-Arterial	Administration within an artery or arteries.
INF/Infusion	Fluid or medication pumped into an access site via various routes of delivery. Used interchangeably with Program or Rx.
INT	Intermittent; one of five therapy modes in the CURLIN 8000 pump.
IT/Intrathecal	Administration within the cerebrospinal fluid at any level of the cerebrospinal axis, including injection into the cerebral ventricles.
IV/Intravenous	Administration within or into a vein or veins.
KVO	Keep Vein Open. The delivery of small amounts of infusate (fluid or medication) for the purpose of maintaining patency of the access site.
KVO Rate	The KVO is the rate at which fluid will be delivered in a "Keep Vein Open" state. The default KVO infusion rate is 0.0 mL/hr, which is "off". The KVO Rate cannot be programmed to a value greater than the therapy's programmed dose rate.
LHL	Lower Hard Limit. See also Hard Limit.

Library	A collection of drug, fluid, infusion templates, and advisories.
Loading Dose	(For PCA therapy) This is a one-time dose that is delivered at the beginning of the infusion. Loading doses do not get repeated when the patient is repeating the same infusion (e.g., after a bag change). This is an optional setting.
Lock Level	This level (OFF, 1, 2, 3) determines which features require an Access Code to be entered at the pump. See "Lock Level Settings", p. 64.
Lockout Time	(For PCA therapy) This is the minimum time that must pass after one PCA bolus starts and the next PCA bolus is available. Note: Clinician bolus is not affected by the lockout time.
Lower Limits	Low-end programming value that is either hard (not-to-drop-below value) or soft (typical bottom value).
LSL	Lower Soft Limit. See also Soft Limit.
Max # of Boluses per Hour	(For PCA therapy) This is the highest number of requested PCA boluses a patient may receive in any 60 minute window. The PCA bolus will be restricted by whichever is more limiting between the lockout time and the max # of boluses. (This delivery limit mode is available when programming a Basic program using the pump or a PSP using the RxManager.)
mcg	Microgram. A unit of measurement equal to one millionth of a gram.
mcg/hr	Micrograms per hour
mcg/mL	Micrograms per milliliter. Used to define the concentration of the solution.
mg	Milligram. A unit of measurement equal to one thousandth of a gram.
mg/hr	Milligrams per hour
mg/mL	Milligrams per milliliter. Used to define the concentration of the solution.
Min, m	Minute
mL	Milliliter. A unit of measurement equal to one one-thousandth of a liter or one cubic centimeter.
mL/hr	Milliliter per hour
NA	Not Applicable. It is used to indicate when information in a certain field is not provided because it does not apply.

Near End Of Infusion Alarm (NEOI)	Refer to the Pump Settings table, p. 28.
Next Dose Start Time	(For Intermittent therapy) OFF means that the infusion will start immediately when the user presses RUN on the pump. Enter the next dose start time (time of day) to set a specific start time. The pump must be in RUN mode in order for the infusion to automatically start. The KVO rate will infuse before the first dose and between doses.
Occlusion	A blockage in the administration set or patient's catheter, which prevents the delivery of medication to the patient. Downstream occlusion is set as: Low, Medium, or High Sensitivity. Refer to the Pump Settings table, p. 28.
Patient ID	When creating a PSP or a Basic Program, the pharmacist or clinician can enter a unique number to identify the patient.
Patient Prime Permission	Refer to the Pump Settings table, p. 28.
PCA	Patient Controlled Analgesia. A type of therapy where pain is controlled by various methods such as a continuous rate of infusion, patient-controlled boluses, and clinician boluses. Also a specific therapy mode in the CURLIN 8000 pump.
PCA Bolus	(For PCA therapy) This is the amount of medication that is delivered each time the patient presses the bolus button on the pump keypad or the button on the PCA bolus handset. The PCA bolus must not be in a lockout period for the bolus to be delivered.
	PCA boluses given and attempted are tracked in the Hourly Totals report.
Perineural	Administration surrounding a nerve or nerves.
Plateau Rate	(For TPN therapy) The plateau rate is the rate that the entire dose will be delivered after the ramp up period and before the ramp down period.
Protocol	A defined set of parameters for a course of medication therapy.
PSP	Patient Specific Protocol. A defined set of parameters for a course of medication therapy created with a specific patient in mind. A pharmacist uses the RxManager Software to create the PSP. It is transferred from the RxManager to the CURLIN 8000 pump, and is immediately ready for a nurse or patient's caregiver to initiate. This is one of two methods of programming the CURLIN 8000 pump. See also Basic Programming.

Ramp Down	The Ramp Down duration is an optional setting that allows the infusion to gradually decrease from the Plateau Rate down to zero or to the programmed KVO rate.
Ramp Up	The Ramp Up duration is an optional setting that allows the infusion to gradually increase from 0.1 mL/hr up to the Plateau Rate.
	Once the ramp up is initiated, it cannot be edited.
Rate	(For Continuous therapy) The Dose Rate is the amount of the medication in mg or mcg that will be delivered in one hour. The Rate is the equivalent volume mL/hr.
Remaining Bag Volume	The amount of the programmed bag volume that has not been delivered.
Repeat Rx	Repeat the present therapy from the beginning. For example, this is used when hanging a new IV bag or reservoir with the same prescription.
Resume	To restart the infusion again after a pause or interruption. The infusion continues from where it left off.
Route	(For PCA therapy) The fluid delivery method. See also EPI, IV, or SQ.
Rx	Prescription. Written order for medication with instructions of how to administer as time, dose, amount, limits, and route. The written order is turned into an infusion program, which is entered into the pump.
Rx #	Prescription number. A unique identifier that correlates to a specific patient, specific drug-related information, and other information related to a prescription. This number is automatically generated by the pharmacy each time a new prescription is ordered, and may be displayed on the pump when a PSP is programmed.
RxManager	Software used to program patient-specific therapies for the CURLIN 8000.
Soft Limit	Parameters within a protocol. These are suggested not-to-exceed limits that the health care facility sets. These limits can be exceeded after the programmer acknowledges that the value is outside of the soft limit range.
SQ/ Subcutaneous	Administration beneath the skin.
Step Amt TBI	(For Variable therapy) The amount of medication to be delivered in a single step. Each step will contain a step amount, which may be unique from the other steps.

Step Duration	(For Variable therapy) The time over which the step amount will be delivered. Each step will contain a step duration, which may be unique from the other steps.
	The total duration of all steps combined in a single infusion profile must not exceed 288 hours.
Step Rate	(For Variable therapy) The rate at which the step amount will be delivered. Each step will contain a step rate, which may be unique from the other steps.
TBI	To be Infused. The volume (Vol TBI) or amount (Amt TBI) that will be given to the patient.
Template	Non-patient specific protocol that contains the drug/fluid, concentration, therapy type, and any advisories.
Template Display Name	This appears on the CURLIN 8000 screen in the header section.
Template Name	This is visible only by the pharmacist in RxManager and can be more descriptive.
Total Duration	Displays the entire time period over which the infusion will be delivered.
	For TPN therapy: This time period includes up and down ramp times.
	For Intermittent and TPN therapies: This time period does not include the final KVO time after the last dose.
	Total Duration will automatically calculate when the user provides the volume to be infused and the rate at which to infuse.
Total Volume	This value is calculated and cannot be edited.
	For Intermittent therapy: It includes the volume needed for each dose plus the volume needed for one KVO period per dose.
	For Variable therapy: It is the combined volume used to deliver the programmed steps. The Total Volume cannot be more than the Bag Volume.
TPN	Total Parental Nutrition. A method of feeding that bypasses the gastrointestinal tract. Fluids are given into a vein to provide most of the nutrients the body needs. Also a specific therapy mode in the CURLIN 8000 pump.
UHL	Upper Hard Limit. See also Hard Limit.
USB	Universal Serial Bus
USL	Upper Soft Limit. See also Soft Limit.
Variable Therapy	A type of therapy where 1 to 24 individual programs or doses are delivered. Also a specific therapy mode in the CURLIN 8000 pump.

VOL   Volume. Amount of fluid.

Vol TBI/VTBI   Volume To be Infused. (For TPN therapy) The Vol TBI
                             is the total dose that will be delivered from the
                             programmed bag volume.

Chapter 12. Troubleshooting

While using RxManager, you may encounter messages that require your response. Figure 12-1 shows an example of a message, and Table 12-1 defines the most common messages. If the information in the User Response column does not help you solve the problem, or if you have any questions, call 800.970.2337.
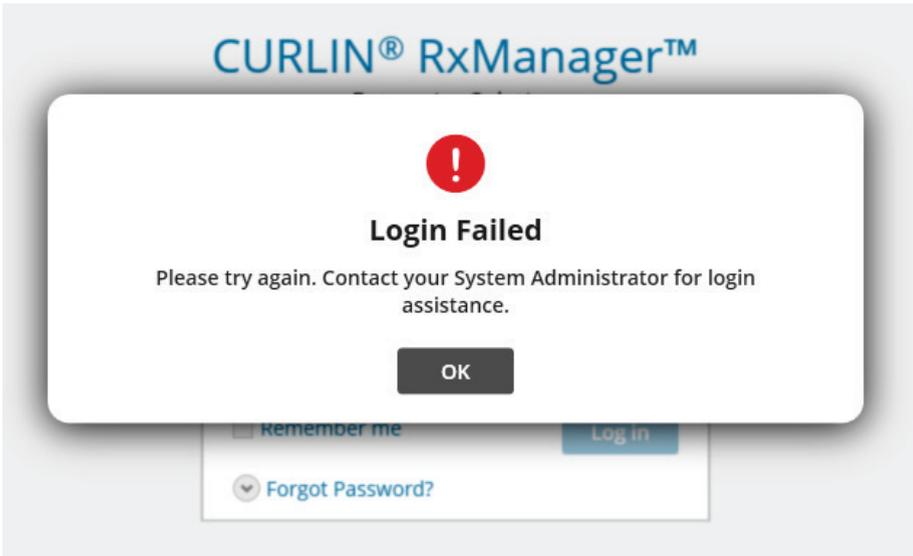
Figure 12-1: Example Message

Note: For notification, alert, and alarm message definitions and how to acknowledge them from the pump, see the CURLIN 8000 Ambulatory Infusion System User Manual, User Assistance and References chapter.

Table 12-1: Message Definitions and Resolutions

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Advisory Unavailable Selected Item no longer exists. It might have been deleted by other user.	Another user deleted the selected Advisory while you were editing.	Contact your Pharmacy Admin to determine if the Advisory was deleted in error. The Advisory may be re-created if it is still needed.
All Delivery Disabled Basal Rate, PCA Bolus and Clinician Bolus are disabled. Enable at least one of the parameters to proceed.	All methods of delivery were disabled due to the setting of all upper hard limits to zero.	Adjust upper hard limits to allow programming of at least one of the listed parameters.

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Application Malfunction CURLIN RxManager™ encountered an error and will shut down.	There was a system failure. Work in progress may have been lost.	Login to RxManager and review/re-enter work in progress.
Application Timeout You have been logged out due to inactivity.	Automatic logout due to user inactivity	Log in to RxManager.
Application Timeout All work in progress has been lost. User has been logged out.	Automatic logout due to user inactivity.	Log in to RxManager. Review/re-enter work in progress. Work in progress has been lost.
Are You Sure <description of what will occur if user proceeds>	This message is displayed when it is critical that the user understands the impact of proceeding. The message will contain additional information to instruct the user.	Click No if action was in error. Click Yes to continue.
Configuration Unavailable Selected Item no longer exists	User selects the configuration from the Approval Queue tab or Archive Queue tab while a second user deleted the item.	Contact the Pharmacy Admin and ensure changes to the configuration are coordinated.
Connection Error – Database Connection Lost All work in progress has been lost. User has been logged out.	A network error caused a disconnection between the RxManager and the database.	Log in to RxManager. It may take up to one minute before you can log in again. Contact your IT Admin or Moog if problem persists.
Connection Error – Incompatible Database Database is not compatible with the current CURLIN RxManager™ version. Contact Administrator.	A database error has occurred.	Contact your IT Admin or Moog if problem persists.
Connection Error – Incompatible Pump Pump is not compatible with the current CURLIN RxManager™ version. Return the pump to Biomed.	The version of pump connected cannot communicate with the version of RxManager in use.	Replace pump with compatible pump. Contact Biomed or Moog if problem persists.

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Connection Failed Failed to connect to the pump. Please try re-connecting.	Cable or connection error.	Inspect cable connection, restart pump and RxManager application. Contact IT Admin or Moog if problem persists. Wait for the pump and RxManager applications to "boot up" before connecting the cable.
Critical Error An error occurred while logging previous error. Please contact IT Administrator.	An error occurred with the application.	Restart the application and review/re-enter work in progress. *Work in progress may have been lost. Contact IT Admin or Moog if problem persists.
Database Error Database server does not have SSL enabled. Please contact System Administrator.	Network compatibility / Installation error.	Contact your IT Admin or Moog if problem persists.
Document Error User Manual was not found. Please contact IT Administrator.	Installation error. The manual should be installed as part of the setup.	Installation error. Contact your IT Admin or Moog if problem persists.
Document Error – Unable to Open Adobe Acrobat Reader was not found. Please contact IT Administrator.	Adobe Acrobat is not installed on this computer.	Contact your IT Admin.
Drug/Fluid Unavailable Selected Item no longer exists. It might have been deleted by other user	Another user deleted the selected drug/fluid while you were editing.	Contact your Pharmacy Admin to determine if the drug or fluid was deleted in error.
Duplicate Advisory Name Advisory names must be unique. Change the Advisory name to proceed	User entered a duplicate advisory name when creating a new advisory.	Use a unique advisory name.
Duplicate Drug/Fluid	The combination of Display Name, Formal Name and Units must be unique.	Review the drug/fluid list to review the existing drug/fluid. Edit your new entry, ensuring that the combination of identifiers is unique.

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Duplicate Template The combination of Template Name and associated Drug/Fluid must be unique change the values to proceed	Duplicate Template name	Review the existing template. If the new entry is still needed, edit the new entry, ensuring that the combination of identifiers is unique.
Hard Limit Overridden (Drug/Fluid or Template) is overridden	Hard limit specified is greater than the value in the Drug/Fluid or Template	The hard limit entry is not within the limits already established for this drug/fluid. Review and continue if appropriate and allowed to do so by facility policy. If you do not wish to override the already established drug/fluid hard limit, select No. Then enter a value within the pre-established hard limit range.
License Expired Current license has expired. Contact Administrator for renewed license. Press OK to continue using the application.	Your software license has expired. You are currently using this application outside of your license agreement.	Contact Moog for new license code.
License Unavailable All available licenses are currently in use. Please try again later.	The user attempted to log into RxManager, but all available seats are in use.	Contact Pharmacy Admin or Moog for additional seats.
Login Failed Please Try again. Contact your System Administrator for login assistance.	User tries to log in with incorrect username or password.	Contact Pharmacy Admin.
Low Battery: Pump Insufficient power to connect. Replace pump batteries or connect AC power.	Cannot connect to a pump with low batteries.	Replace the batteries in the pump (or connect AC adaptor) and then reconnect the pump.
Missed Dose Start Time First Dose Start time has passed, start time was removed. Dosing of first Dose will begin when RUN selected on pump.	A dose start time was specified when the PSP was created. At the time the PSP is loaded onto the pump, the start time had passed. (Intermittent Therapy Mode)	Acknowledge if delay is not required. Modify and reapprove the PSP if a new First Dose start time is required or program the appropriate dose start time through the pump Options menu.

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Multiple Pumps Connected Disconnect all pumps and re-connect the pump you want to work with.	Multiple pumps are connected to RxManager at the same time.	Disconnect all pumps and re-connect only one pump at a time.
Network Error Undefined network error occurred.	Due to network error, the RxManager application cannot be opened.	Retry opening the application and logging in. Contact your IT Admin or Moog if problem persists.
PSP Unavailable Selected Item no longer exists. It might have been deleted by other user	Another user deleted the selected PSP while you were in process of selecting it.	Re-enter the PSP if it was deleted in error.
Registration Required Please contact System Administrator to register software.	Installation error.	Contact your IT Admin or Moog if problem persists.
Removed Delay Period Delay Start time has passed, delay was removed. Dosing will begin when RUN selected on pump.	A delay start time was specified when the PSP was created. At the time the PSP is loaded onto the pump, the start time had passed. (Continuous, TPN, and Variable therapies)	Acknowledge if delay is not required. Modify and reapprove the PSP if a new First Dose start time is required or program the appropriate dose start time through the pump Options menu.
Report Unavailable No report data available for exporting	No report data available; e.g., no pumps have been attached to the RxManager or Service Manager applications.	No action required; reports are available when data is accumulated.
Rx# Not Unique Entered Rx# is not unique. Please change the Rx# before proceeding.	Rx #s cannot be duplicated in multiple PSPs.	If the same Rx # needs to be used again for the same patient, search for the uploaded PSP Rx# in Patient Infusion History reports, and/or in the Uploaded PSPs, which is limited to the last 90 days.
Second Reviewer Required You cannot approve your own Drug/Fluid	Second reviewer is required.	Contact your Pharmacy Admin if the review policy needs to be changed (in Admin Manager).
Second Reviewer Required You cannot approve your own PSP	Second reviewer is required.	Contact your Pharmacy Admin if the review policy needs to be changed (in Admin Manager).

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Second Reviewer Required You cannot approve your own Template	Second reviewer is required.	Contact your Pharmacy Admin if the review policy needs to be changed (in Admin Manager).
Setting Hard Limit is Restricted	The entered hard limit exceeds the hard limit specified in the Drug/Fluid or Template.	Contact your Pharmacy Admin to determine if the drug/fluid and template limits are correct. Overriding hard limits policy can be changed by the Pharmacy Admin in Admin Manager.
Single Source Approval (item description)	This is displayed whenever the creator approves his or her own work.	Follow your facility's policy related to reviewing and approving your own work. Acknowledge if you wish to confirm your own work. Contact your Pharmacy Admin if the review policy needs to be changed (in Admin Manager).
Template Unavailable Selected Item no longer exists. It might have been deleted by other user	Another user deleted the selected template.	Contact your Pharmacy Admin to determine if the template was deleted in error.
Transfer Failed PSP failed to transfer to the pump	An error occurred when transferring the PSP to the attached pump.	Disconnect data cable, power cycle the pump, and then reconnect pump to PC, power up, and try again. Contact Pharmacy Admin or Moog if problem persists.
Unable to Add Advisory limit reached. Deselect unneeded Advisory to add a new one.	You may associate one advisory with a drug or fluid and up to two advisories with a template or PSP (for a maximum of three per PSP).	Review and select advisories appropriately.
Unable to Approve Maximum allowed number of Drugs and Fluids already approved.	The maximum number of approved drugs/fluids of 1500 has been reached.	Contact your Pharmacy Admin to review the drug/fluid list to determine if there are drugs/fluids which are no longer needed and can be deleted.

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Unable to Approve Maximum allowed number of Templates already approved.	The maximum number of approved templates of 1500 has been reached.	Contact your Pharmacy Admin to review the template list to determine if there are templates, which are no longer needed and can be deleted.
Unable To Approve Selected Drug/Fluid is currently in use by <User First Name><User Last Name>.	Only one user can edit a drug/fluid at a time.	Contact the listed user to request that he or she closes the desired drug/fluid record.
Unable to Connect An Active Configuration does not exist. Contact your Pharmacy Administrator.	The facility must have an active configuration before the other features of the RxManager are available.	The Pharmacy Admin must publish a configuration.
Unable to Create Advisory limit reached.	A maximum of 50 advisories is supported in RxManager.	Review your list of advisories to see if some can be combined or eliminated.
Unable To Initiate Only one instance of Enterprise Solution application can run at a time.	Currently there is another CURLIN Enterprise Solution application open on the computer. Only one can be open at a time.	Ensure that there are none of the following CURLIN applications open on the computer before proceeding: Admin Manager, Service Manager or RxManager (2nd instance).
Update Available New Version of CURLIN RxManager is available. Please contact MOOG representative for the latest update.	Software update is available.	This does not impact on-going work with RxManager. Contact your Pharmacy Admin / Moog for update.
Another session is active in the network.	The same user is logged into a CURLIN Enterprise Solution application on another computer.	Check to see if you are logged into another computer. Log out of application and try to log in again. Contact Pharmacy Admin or Moog if problem persists.

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
CURLIN RxManager™ connections have been disabled.	Connections to RxManager are currently blocked by your administrator. Maintenance may be in progress.	Contact Pharmacy Admin or Moog if problem persists.
Fix erroneous fields in current step.	The fields with an error/inappropriate value will be identified with a red triangle. See "Context-Sensitive Help", p. 64.	Identify the data error and correct.
Display Scaling is Incorrect The current display scale setting in Microsoft Window will result in truncation of the application window, some application controls may not be displayed. Please correct the display scale setting and restart the application	The Windows Display Scale setting % is too high and may result in not displaying some elements in the application.	Recommend setting the Microsoft Display Scale to 100%. (Windows ⚙ Settings / System / Display) Contact your IT resources if this problem continues.
Download Failed There was an error while downloading the latest User Manual. Try logging in again to correct the error. Press OK to continue using the application without the latest manual.	RxManager was unable to download the latest User Manual.	Try logging in again. Contact your IT Administrator or Moog if problem persists.
Maximum number of Configurations reached. Please contact IT Administrator.	The maximum allowed number of configurations is reached.	Contact your IT Administrator or Moog if problem persists.
Second Reviewer Required You cannot approve your own configuration.	Self-approval is disabled for configurations.	Contact Pharmacy Admin or Moog if problem persists.
Fix erroneous fields in current step.	An invalid value(s) was entered or a mandatory field(s) was left empty.	Correct any invalid value(s) or fill in any mandatory field(s) on the advisory page before selecting Next key. Contact Moog if problem persists.

Title and Message on Screen	Cause	User Response (Click OK to Clear the Message)
Are You Sure? Entered Rx # is not unique. Do you want to continue?	The entered Rx # already exists in another PSP.	Select "Yes" and RxManager will continue to the next page in the workflow. Select "No" and RxManager will return to the Patient Information page.
Language of the application has been changed. Pressing OK will restart the application in the new language.	The current language in RxManager is different from the language set by the Pharmacy Admin.	Contact Pharmacy Admin or Moog if problem persists.

Cybersecurity

The Pharmacy Administrator or IT Administrator should periodically review the History Events Report in Admin Manager to determine if unauthorized login attempts have occurred and take appropriate actions upon detection of a cybersecurity event.

The IT Administrator should ensure that Microsoft security updates are applied at an appropriate frequency.

The IT Administrator should ensure that appropriate security measurements are in place, including virus / malware detection and isolation.

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For over 20 years, Moog Medical has been designing industry-leading curvilinear peristaltic infusion pumps. Our infusion expertise and collaboration with customers and patients continues to benefit healthcare delivery and enhance caregiver and patient outcomes.

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