

Expectations

- ALL PYXIS USERS -

- Follow hospital, Health PEI policies – expectations do not change when handling controlled substances, administering medications, etc.
- Medications will be removed under the correct patient
- Correct quantity of medication will be removed
- Temporary patients will not be created to restock kits
- All wastes will be documented before end of shift
- Accessed controlled substances will be counted weekly on a day chosen by the unit
- Always sign off when done – you are liable for any transactions under your name (removals, discrepancies, etc.)

Expectations

- END OF SHIFT CHECK -

At the end of shift **always** check for:

1. Unresolved discrepancies
2. Undocumented waste
3. Failed hardware
4. Label printer

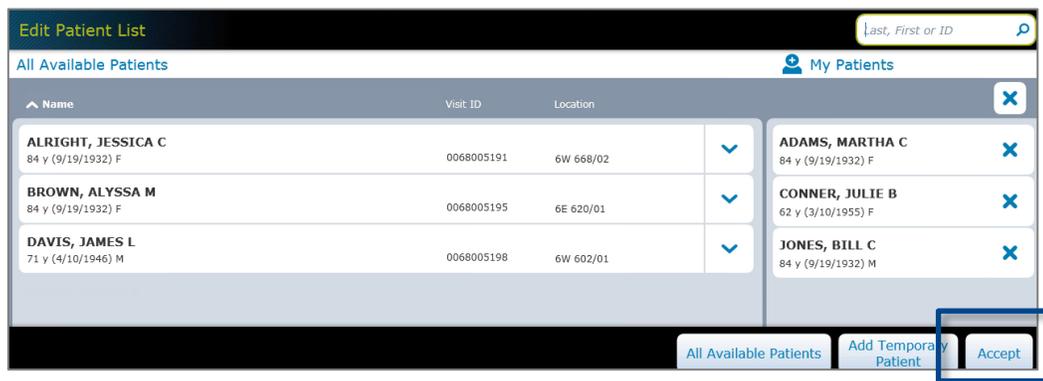
You create a discrepancy = you are on the hook to start the resolution process

BD Pyxis™ MedStation™ ES My Patients list

Find the patients that you've been assigned to care for faster using the My Patients feature. To get started, you'll need to add your patients to your My Patients list. Only patients on the All Available Patients list may be added to your My Patients list. The My Patients view limits the list of patients displayed to only those you have selected.

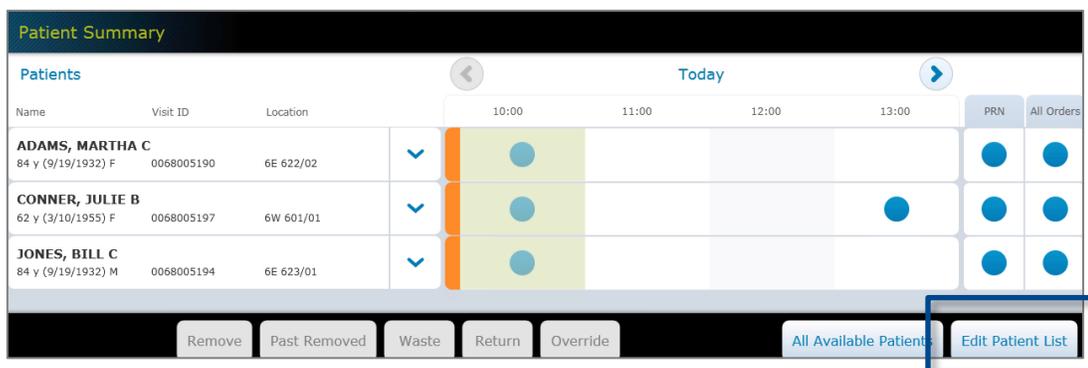
Create your My Patients list:

1. From the Home screen, select **My Patients**.
2. Select a patient record from the left side of the screen to add that patient to your My Patients list, which is shown on the right side of the screen.
3. When you are finished adding patients, select **Accept**. Your My Patients list will display on the Patient Summary screen.



Edit your existing My Patients list:

1. From the Home screen, select **My Patients**, then select **Edit Patient List**. Your My Patients list will display on the right side of the screen.
2. To *remove* a patient from your My Patients list, select the **X** next to the patient's name.
3. To *add* a patient to your My Patients list, select a patient record on the left side of the screen.
4. When you are finished editing your My Patients list, select **Accept**.



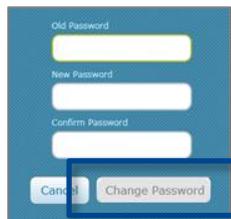
BD Pyxis™ MedStation™ ES Register BD Pyxis™ BioID

Only authorized users may sign in to a device in order to protect the medications stored at that location. BD Pyxis™ BioID is the recommended access method because the fingerprint scan is more difficult to compromise than a password. If your facility requires a username and BD Pyxis BioID to sign in, you will need to complete the BD Pyxis BioID registration process the first time you sign in. After successfully registering in the system, you have BD Pyxis BioID sign in permissions at each device where you have access permissions.

1. Select anywhere on the standby screen to sign in.
2. Depending on whether you are registering as a local user or your facility uses Active Directory, you will see one of two screens:
 - a. If your facility uses Active Directory, select **Register** to continue.



- b. If you are registering as a local user, complete the information on the screen then select **Change Password** to continue.



3. The BD Pyxis BioID Registration screen displays. When *Scanning fingerprint 1 of 3* appears on the screen, decide which finger will be used to log in and, with it centered over the lens, press down firmly and wait. The scanner flashes brightly as it evaluates characteristics of your finger. Follow the onscreen instructions to register all three scans of the same finger. Lift your finger between each scan.

Note: If the system is unable to register a scanned image of your finger, a red square displays to alert you. Typically, this occurs when your fingerprint does not match. Select the **Redo Scan** option and complete the registration process. If you continue to have problems signing in, contact your system administrator.

4. If your facility requires a Username and Password to sign in, enter them on the Sign In screen then select **Sign In**.

Note: If your BD Pyxis BioID fails when signing in, you must log in with a password. A witness may be required in order to complete the log in procedure.



BD Pyxis™ MedStation™ ES **Reregistering your Pyxis BioID**

You may need to reregister your Pyxis BioID. For example, if you cut your finger, you may need to reset your Pyxis BioID using a different finger.

1. Sign in to the device using the failure authentication mode that is configured for your facility.
2. On the Main Menu screen, select **More > User Preference** .
3. On the User Preference screen, select **Change BioID**.
4. On the Register BioID screen when **Scanning Fingerprint 1 or 3** appears on the screen, center your finger on the lens and press firmly.

Location: _____

Date and time: _____

ATTENTION: Your Pyxis device has **failed hardware** displayed at the top of your screen () and requires immediate resolution.

If failed hardware is not resolved: All contents in the failed space (drawer, tower or fridge door, etc.) remain **inaccessible to users**.

To recover, follow the steps below:

1. Select **Recover Storage Space** tab at the bottom of screen.
 - a. A list of failed cubies, drawers, and/or doors will appear.
 - b. Users must recover failed bins or cubies before recovering failed doors/drawers.
 - c. When recovering bins in the Pyxis fridges, push the bin in completely until the bins' blue light goes off then close the door.
2. To begin, select the failed space and press **Start**.
3. Follow instructions listed on the screen "*Open door and clear any obstructions*". Once complete, the screen will inform user if the storage space has been recovered or not. Continue steps 1-3 until the **Recover Storage Space** page displays no further failures.
4. If your attempt to recover storage space is unsuccessful, please contact Pharmacy. If outside of your location's Pharmacy hours, please select **Fail Hardware** option displayed on the bottom right corner. Once failed, the hardware will require **BD support and the user must call 1-800-727-6102** for further assistance (PCH Pyxis Account # 10146295, Version 1.6).

Symbol	Meaning
	<p>Discrepancy indicator appears on a device when the system detects a difference between the inventory count and physical count of a controlled drug.</p>
	<p>Failed Hardware indicator appears on a device when the system detects that a cubie or drawer experiences an issue functioning properly</p>
	<p>Critical Override indicator appears on a device after the device switches from Profiled or "Day" Mode into critical override during Pharmacy after hours (1601-0759hr).</p>

BD Pyxis™ MedStation™ ES

Add a temporary patient

There may be times, such as during system downtimes or in a trauma situation, when a patient has not been admitted yet, but needs to be administered medication. In these instances, a temporary patient record can be added at the device.

1. From the Home screen, select **All Available Patients**.
2. On the All Available Patients screen, select **Add Temporary Patient**.

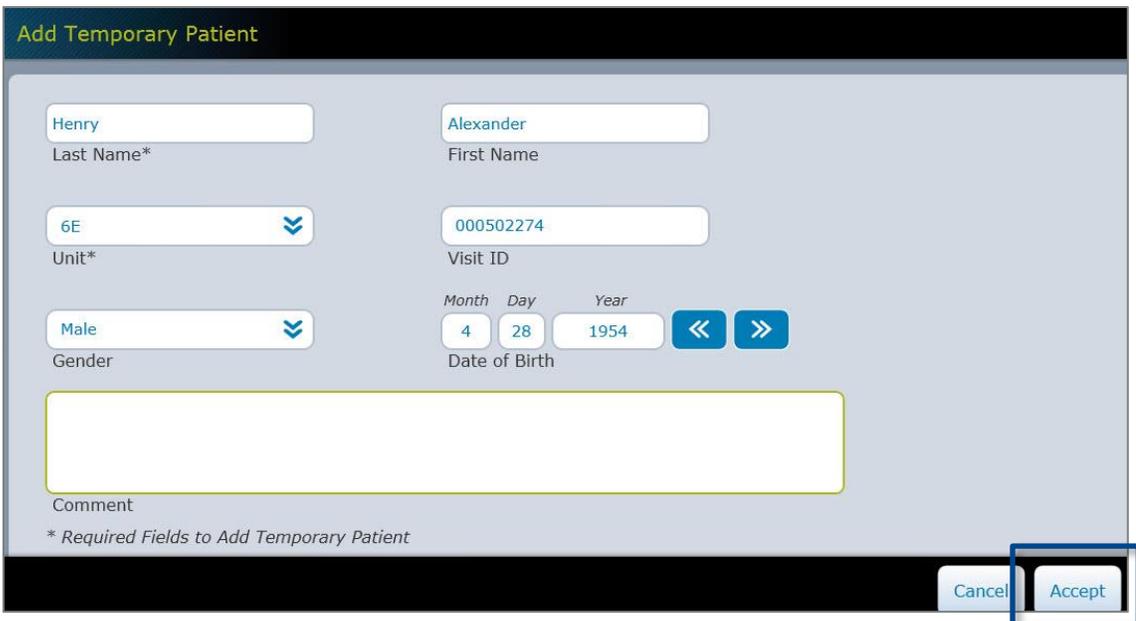
Note: Prior to adding a temporary patient, users should conduct a facility search to determine if there is an existing patient record.

3. Enter the patient's last name and unit, which are required fields to create a temporary patient. Add additional information as needed to help when later reconciling this patient's temporary record to the permanent record.

Note: When adding the primary patient identifier under Patient ID, the system will look for active patients matching that ID. If an active patient match exists, the system will alert you and allow you to select the active patient.

4. When you have finished entering patient information, select **Accept**.

Note: If entering the Date of Birth, all fields must be completed (Month, Day, and Year).



Add Temporary Patient

Henry
Last Name*

Alexander
First Name

6E
Unit*

000502274
Visit ID

Male
Gender

Month Day Year
4 28 1954
Date of Birth

Comment

* Required Fields to Add Temporary Patient

Cancel Accept

5. The patient is now included in the list of all available patients. Note that temporary patients are denoted by a blue "Temporary" banner.

BD Pyxis™ MedStation™ ES Clinical Data Category (CDC)

The Clinical Data Category feature can be used to provide end users with information or to collect information from end users. Some medications require you to respond to a CDC before proceeding because your facility has determined that you are required to review or provide information during the transaction.

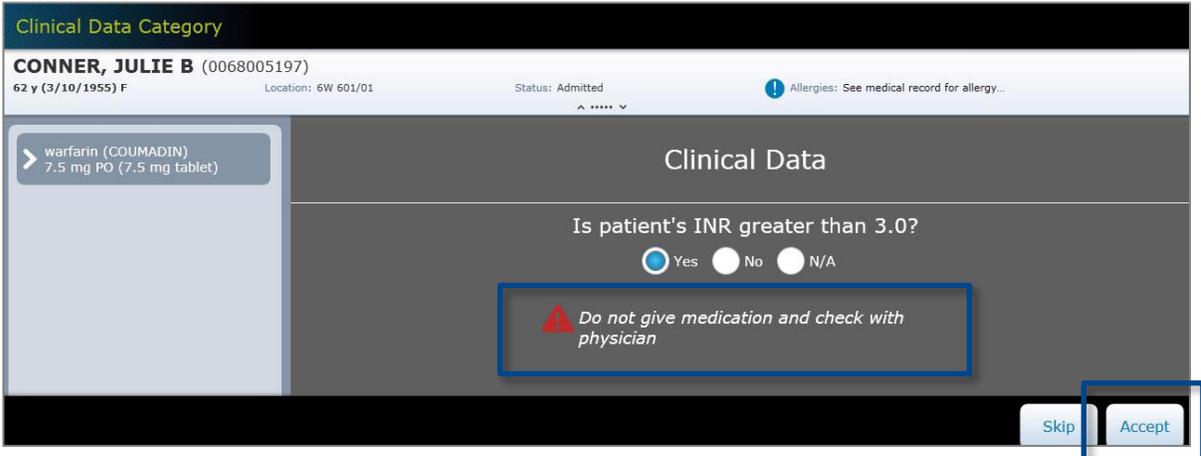
1. A CDC message may appear when you select a medication to remove, return, waste, or override. This example is a remove. During the transaction, a CDC will display. Review and respond to the CDC.

Note: When wasting a medication upon removal, the system will display the CDC configured for the Waste transaction after the Remove transaction is completed and before the Waste transaction begins.

2. Select **Accept** to confirm your response.

Note: If the Skip option is configured for your facility and you choose to skip a CDC, the system will provide a warning.

3. Some CDCs may provide or require additional information as seen below. Be sure to pay attention to system warnings. They are intended to increase patient safety.



Clinical Data Category

CONNER, JULIE B (0068005197)
62 y (3/10/1955) F Location: 6W 601/01 Status: Admitted Allergies: See medical record for allergy...

warfarin (COUMADIN)
7.5 mg PO (7.5 mg tablet)

Clinical Data

Is patient's INR greater than 3.0?

Yes No N/A

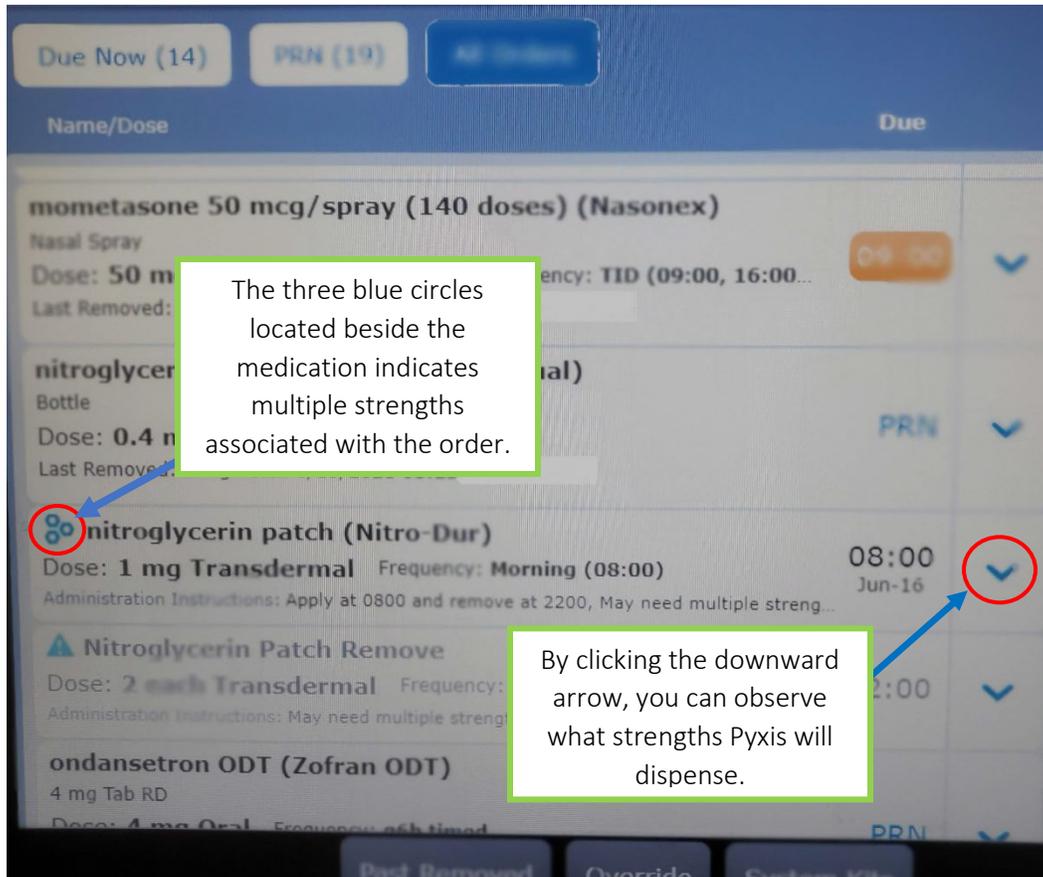
Do not give medication and check with physician

Skip Accept

Workflow Combination Doses (Orders Verified from Pharmacy)

June 29, 2021

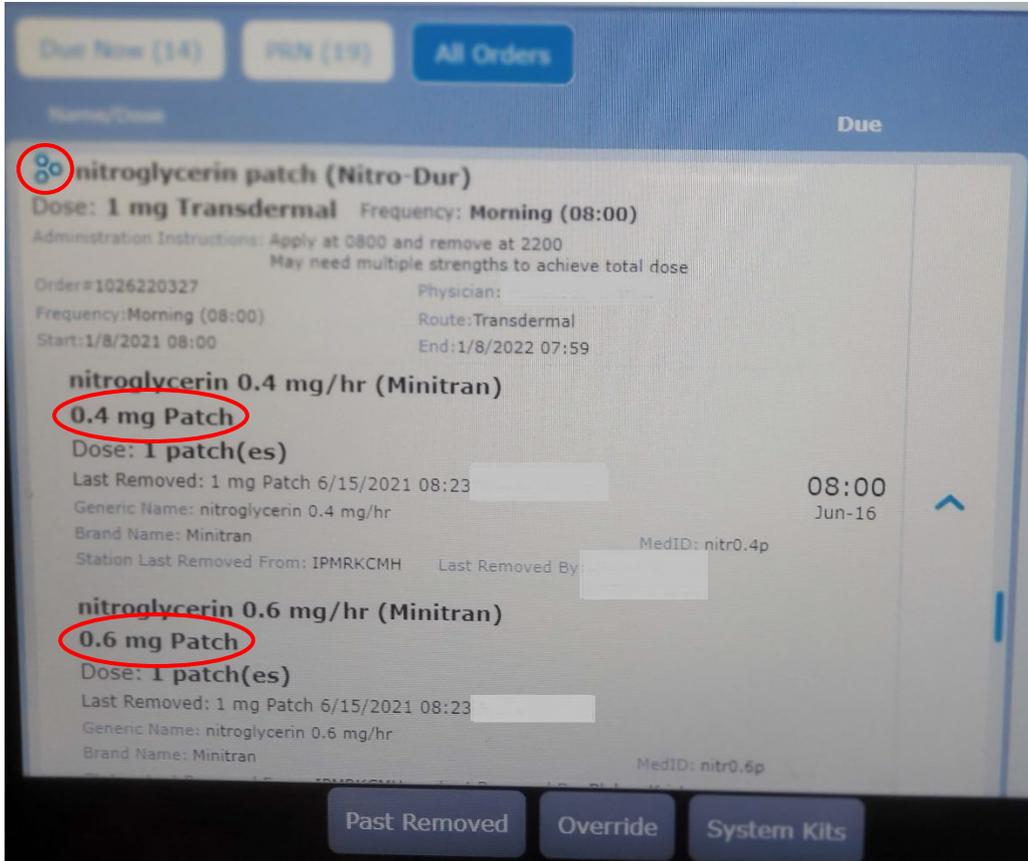
When removing a medication that requires multiple strengths for a patient with a verified medication order, pharmacists may adjust the order to provide the complete dose in the least amount of tabs, patches, etc. of the medication. For example, if the patient is ordered nitroglycerin patch (Nitro-Dur) 1mg transdermal, Pyxis will place an icon with three circles indicating that two strengths of nitroglycerin patches will be provided (0.4mg and 0.6mg). The circled icon below demonstrates the combination dose:



Click the downward arrow to see what strengths are associated with the medication order. See below how the screen appears once the arrow is clicked.

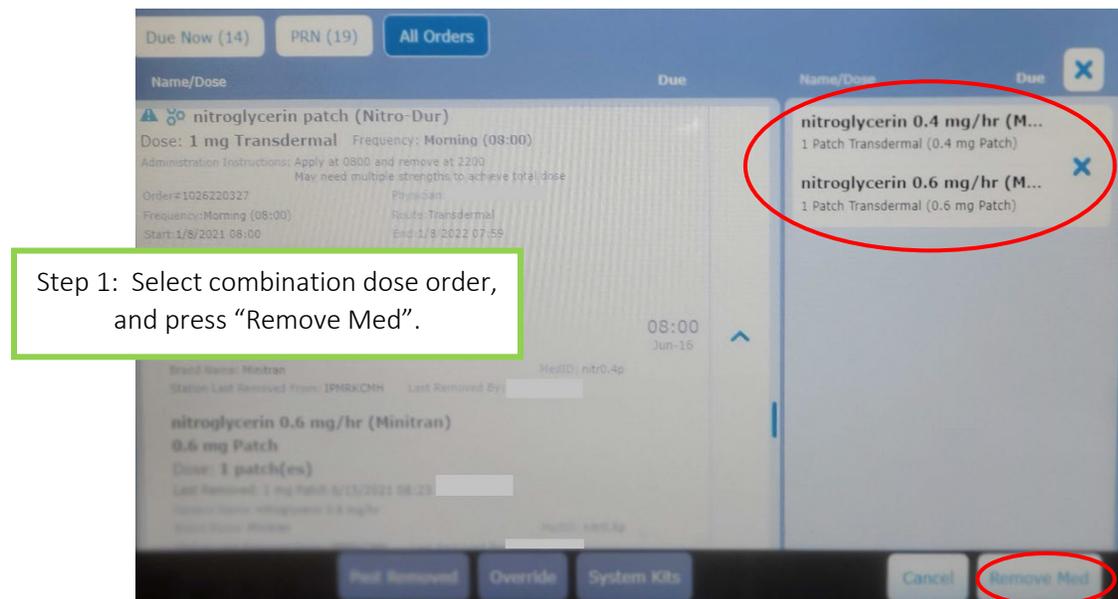
Workflow Combination Doses (Orders Verified from Pharmacy)

June 29, 2021



Above shows that Pyxis will complete the Nitroglycerin 1mg patch order by dispensing one 0.4mg and one 0.6mg patch.

Once the order is selected, the two patches will be shown on the right hand side. You will then select "Remove Med" and follow through prompts to obtain the two patches. The lower strength of medication is always first, followed by the greater strength. Examples are as follows:



Workflow Combination Doses (Orders Verified from Pharmacy)

June 29, 2021

nitroglycerin 0.4 mg/hr (Minitran) 0.4 mg Patch
Dose: 1 patch(es) Transdermal
Last Removed: 1 mg Patch 6/15/2021 08:23

Administration Instructions: Apply at 0800 and remove at 2200
May need multiple strengths to achieve total dose

How much do you need?

Patch
(Patch = 0.4 mg)

Cancel OK

Step 2: Lower strength

nitroglycerin 0.6 mg/hr (Minitran) 0.6 mg Patch
Dose: 1 patch(es) Transdermal
Last Removed: 1 mg Patch 6/15/2021 08:23

Administration Instructions: Apply at 0800 and remove at 2200
May need multiple strengths to achieve total dose

How much do you need?

Patch
(Patch = 0.6 mg)

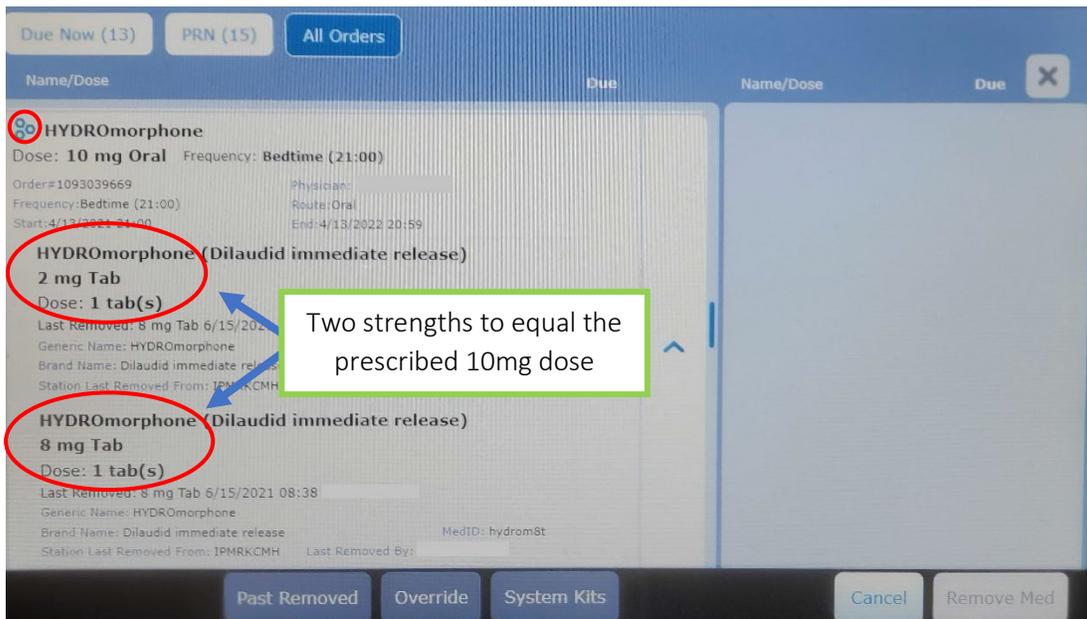
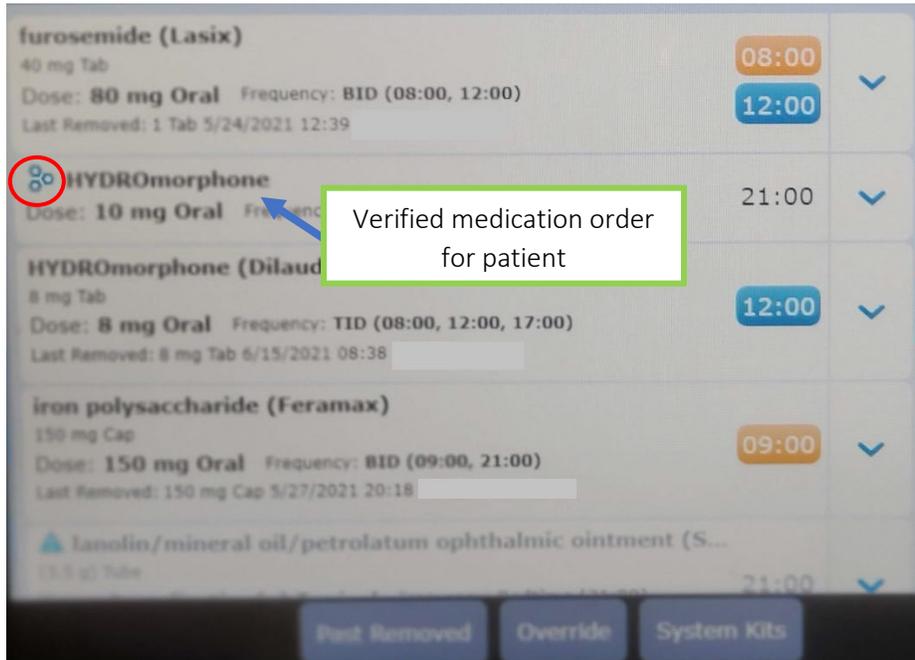
Cancel OK

Step 3: Higher strength

Workflow Combination Doses (Orders Verified from Pharmacy)

June 29, 2021

You will go through the same process for combination doses of narcotics. See the quick run-through below:



Workflow Combination Doses (Orders Verified from Pharmacy)

June 29, 2021

HYDROMORPHONE (Dilaudid immediate release) 2 mg Tab
Dose: 1 tab(s) Oral
Last Removed: 8 mg Tab 6/15/2021 08:38

How much do you need?

Reminder: The **lower** dose comes first!

Tab
(Tab = 2 mg)

Cancel OK

The selection of the hydromorphone 8mg tabs with a dose of 1 tab would follow the above screen, followed by the physical removal of medication from the specified cubies.

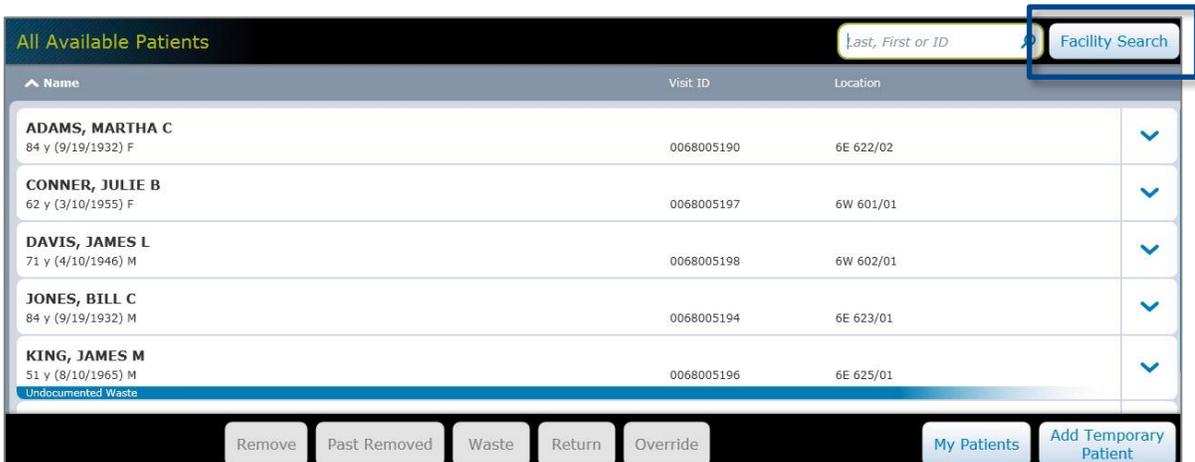
If you have any further questions, please don't hesitate to reach out to your pharmacy team – we're here to help!

BD Pyxis™ MedStation™ ES Facility Search

If you need to give a patient medication and they have not yet been transferred in the system, you may be unable to locate the patient within your area. You may conduct a facility search to locate the patient and dispense the medication.

1. On the All Available Patients screen, select **Facility Search**.

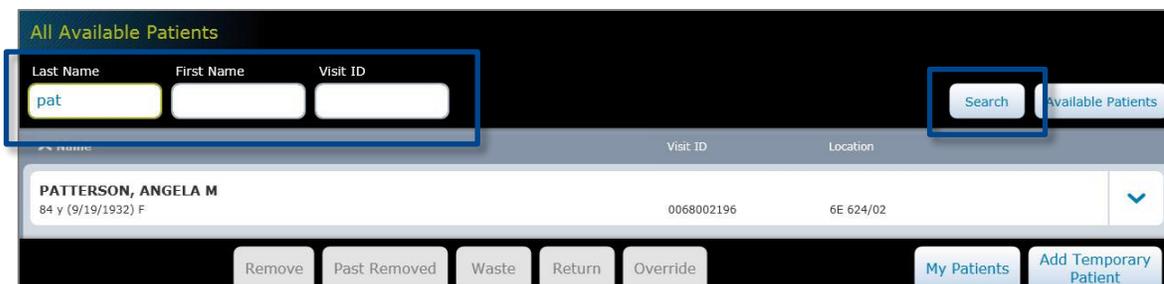
Note: Entering the patient's name on this screen will not conduct a facility search. The search box on this screen searches only the areas assigned to your device. You must select **Facility Search** first, then enter the patient name.



The screenshot shows the 'All Available Patients' interface. At the top right, there is a search box containing the text 'Last, First or ID' and a 'Facility Search' button. Below the search box is a table with columns for Name, Visit ID, and Location. The table lists five patients: ADAMS, MARTHA C; CONNER, JULIE B; DAVIS, JAMES L; JONES, BILL C; and KING, JAMES M. At the bottom of the screen, there are buttons for 'Remove', 'Past Removed', 'Waste', 'Return', 'Override', 'My Patients', and 'Add Temporary Patient'.

Name	Visit ID	Location
ADAMS, MARTHA C 84 y (9/19/1932) F	0068005190	6E 622/02
CONNER, JULIE B 62 y (3/10/1955) F	0068005197	6W 601/01
DAVIS, JAMES L 71 y (4/10/1946) M	0068005198	6W 602/01
JONES, BILL C 84 y (9/19/1932) M	0068005194	6E 623/01
KING, JAMES M 51 y (8/10/1965) M Undocumented Waste	0068005196	6E 625/01

2. Start typing the patient's last name or enter the visit ID, then select **Search**.



The screenshot shows the 'All Available Patients' interface with search filters. The 'Last Name' field contains 'pat', and the 'First Name' and 'Visit ID' fields are empty. A 'Search' button is highlighted. Below the search filters is a table with columns for Name, Visit ID, and Location. The table lists one patient: PATTERSON, ANGELA M. At the bottom of the screen, there are buttons for 'Remove', 'Past Removed', 'Waste', 'Return', 'Override', 'My Patients', and 'Add Temporary Patient'.

Name	Visit ID	Location
PATTERSON, ANGELA M 84 y (9/19/1932) F	0068002196	6E 624/02

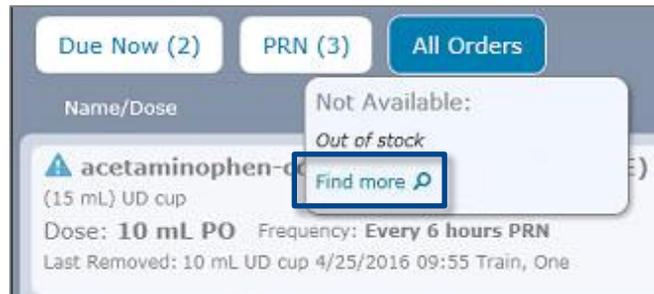
3. Select the patient from your search results and begin your transaction.

BD Pyxis™ MedStation™ ES Global Find

The Global Find feature allows a user to search for any active facility formulary item. If a medication is unavailable at a device, Global Find allows the end user to see where that medication is available and whether they have access to remove it. The Extended Global Find feature allows users to search for available medications within both Profile and Non-Profile device types throughout the facility.

Access Global Find via the Med Profile screen:

1. If you see the medication you want to remove greyed out on the Med Profile screen, select the **All Orders** tab if it isn't already selected. Select the medication.
2. A list of alternate locations will appear. These locations include items available at accessible devices within the same area without requiring a search (Alternate Med Location is a default setting, not a user permission). Select the **Find More** hyperlink, which is related to Global Find, to search both inside and outside the area.



3. Global Find results will list other devices where the medication is available and accessible.
4. Select the chevron to show/hide devices associated with an area.



Note: If a user has the Extended Global Find permission, Global Find will search and display all facility Profile and Non-Profile device types in which the item is available.

Access Global Find via the Home screen:

1. On the Home screen, select **Global Find**.

Note: Depending upon your permissions, you may need to select **More**, then select **Global Find**.

2. Enter the medication name in the search box on the Global Find screen. A list of medications that match your search will display. Select the medication then select **Accept**.
3. You will see the list of devices where the medication is available and accessible.



Global Find

acetaminophen-codeine (TYLENOL-CODEINE)
(15 mL) UD cup

Med ID: 91914

Other Areas

- ED
- 6E (> 0 UD cup)
- 6W (> 0 UD cup)

Done

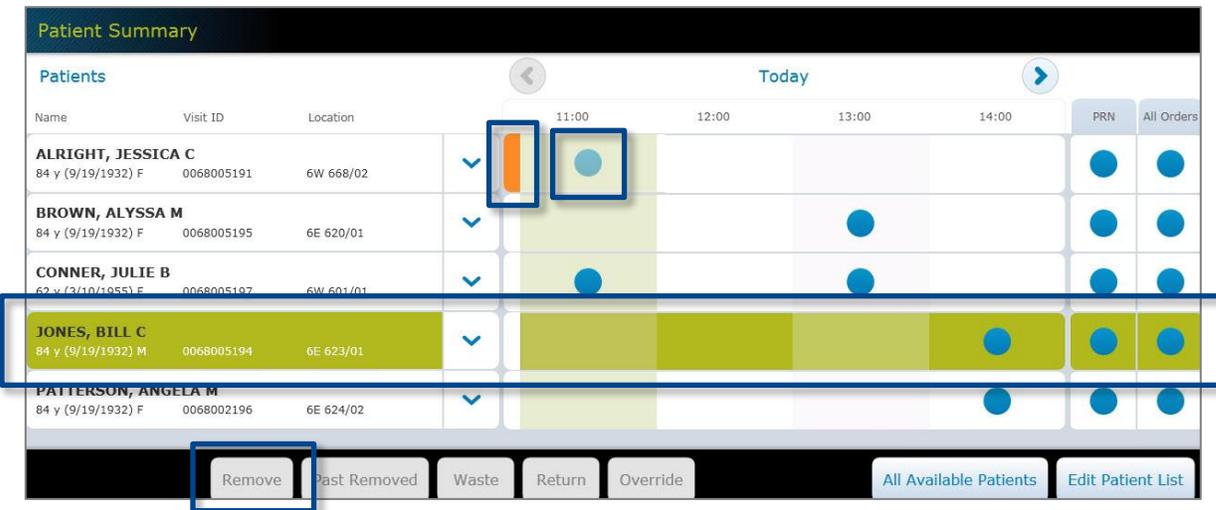
BD Pyxis™ MedStation™ ES

Remove a medication in Profile mode

Other than short override lists, Profile devices only display medications associated with pharmacy-approved orders. You can remove medications ordered for a patient that are due within a specified time (Due Now), given as needed (PRN), or by viewing any active and future orders (All Orders) listed. Removal options help nursing users prioritize removal of medications for their patients and reduce issues related to delayed dosing.

1. From the Home screen, select **My Patients**.
2. On the Patient Summary screen:
 - a. Select the patient, then select **Remove**, or
 - b. Select a blue dot in the time, PRN, or All Orders column.

Note: An orange bar indicates that the patient has past due medication. A light blue dot indicates that the order is past due, but still available to be removed as due now. This does not apply to future orders, which will fall under their time window. Stat Orders that are currently due are flagged with a visual indicator (not pictured). Future Stat Orders are not flagged.



The screenshot shows the 'Patient Summary' screen. At the top, it says 'Patients' and 'Today'. Below is a table with columns for Name, Visit ID, Location, and a timeline of medication orders (11:00, 12:00, 13:00, 14:00). The 'Remove' button is highlighted at the bottom. An orange bar highlights the patient 'JONES, BILL C' and a blue dot is highlighted in the 11:00 column for this patient.

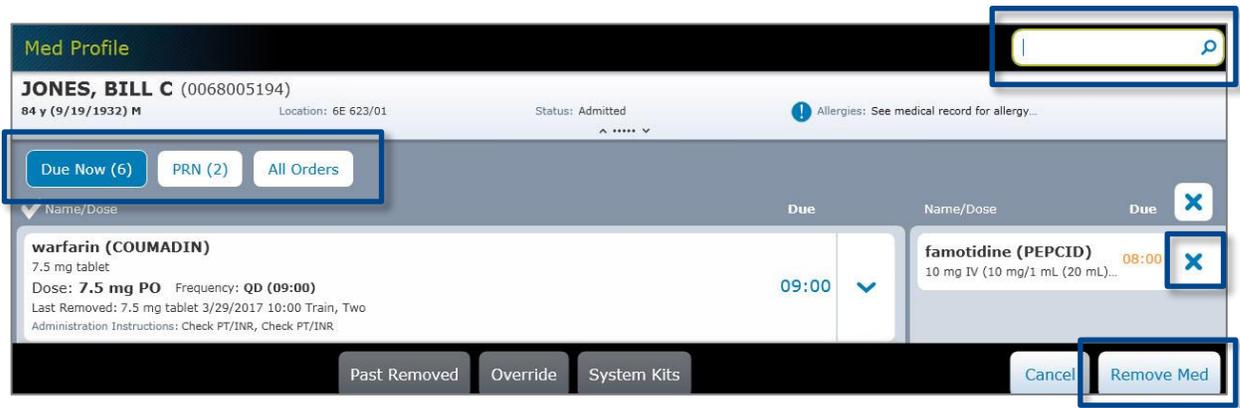
Name	Visit ID	Location	11:00	12:00	13:00	14:00	PRN	All Orders
ALRIGHT, JESSICA C 84 y (9/19/1932) F	0068005191	6W 668/02	●				●	●
BROWN, ALYSSA M 84 y (9/19/1932) F	0068005195	6E 620/01			●		●	●
CONNER, JULIE B 62 y (3/10/1955) F	0068005197	6W 601/01	●		●		●	●
JONES, BILL C 84 y (9/19/1932) M	0068005194	6E 623/01	●			●	●	●
PATTERSON, ANGELA M 84 y (9/19/1932) F	0068002196	6E 624/02				●	●	●

3. On the Med Profile screen, select the medication you wish to remove or begin typing the first three characters of the medication in the search box to filter the list (see image on next page).

Note: The Med Profile screen contains valuable information about the ordered medication. The time at which the medication is due appears in the Due Now column and medications that are due now appear in blue. **Priority: STAT** appears under the name of Stat ordered medications that have not yet been removed and disappears after the medication has been removed for the first time (not pictured). This field does not appear for routine priority medications. You can use the Due Now, PRN and All Orders buttons to filter orders for the selected patient. The Med Profile screen may default to show all or due now orders depending on your facility's settings.

4. Enter the quantity required if prompted and select **OK**.
5. The medication is moved to the Selected Meds column. If you decide against removing an item, select the **X** next to the medication.

6. Select **Remove Med** when you are finished adding medications and continue the removal process.



The screenshot shows the 'Med Profile' interface for a patient named JONES, BILL C. The interface includes a search bar at the top right, a patient information section with buttons for 'Due Now (6)', 'PRN (2)', and 'All Orders', and a medication list. The medication list contains two entries: 'warfarin (COUMADIN)' and 'famotidine (PEPCID)'. At the bottom of the interface, there are buttons for 'Past Removed', 'Override', 'System Kits', 'Cancel', and 'Remove Med'. Red boxes highlight the search bar, the 'Due Now (6)' button, the 'Remove Med' button, and the 'X' icon next to the 'famotidine (PEPCID)' entry.

7. The applicable drawer opens. Remove the medication as directed on the screen.

Note: Depending on your facility's configuration, you may be prompted to remove a dose amount or a dispense amount. If you remove a medication amount greater than the dose amount, you may need to document the waste. Medications configured to allow for removal of a dispense amount will not track undocumented waste. Also depending on your facility's configuration, you may or may not be prompted to waste during the remove transaction. You may also be given the option of wasting now or wasting later. If you do not document the waste during the remove transaction, you will need to resolve the Undocumented Waste at a later time. See the **Document Medication Waste at the Time of Removal** and **Resolving Undocumented Waste** job aids for more information.

8. Select **Accept** and/or secure the storage space.

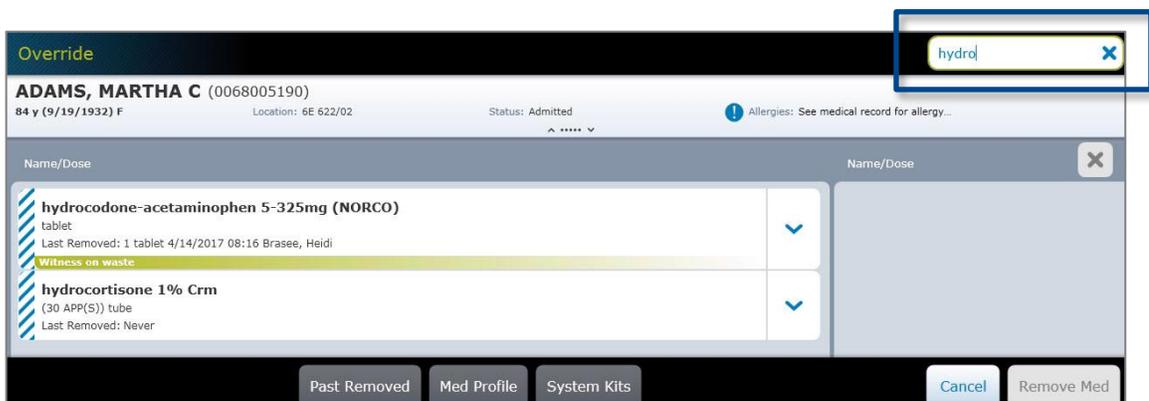
BD Pyxis™ MedStation™ ES

Remove on override

Use the Override feature to remove medications that have been ordered by a physician but not yet verified by a pharmacist. This option allows end users to remove medications for their patients if the pharmacy is closed or in the event of an emergency. Access to medications on Override is determined by a combination of user role, device and medication settings. Therefore, users may have access to different Override medications at different devices. Medications should be removed against the patient's profile whenever possible since pharmacist review of the order is critical to helping prevent medication errors.

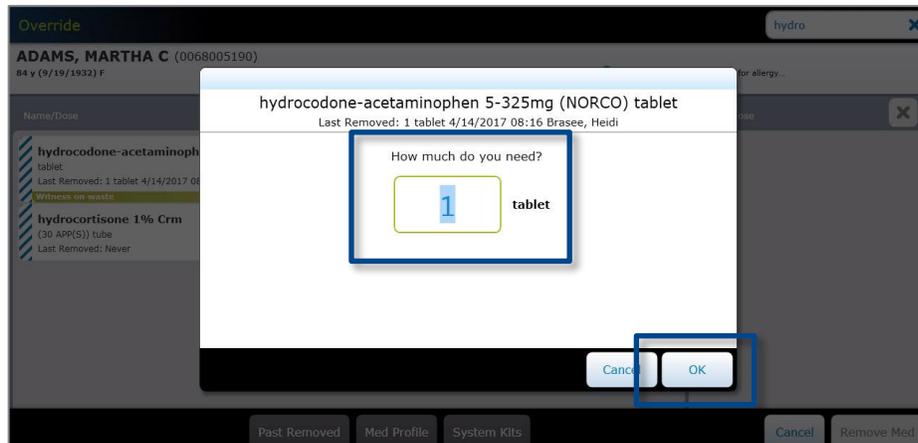
1. From the Home screen, select **All Available Patients** or **My Patients**.
2. Select the patient and select **Override**.
3. Select a medication from the list, or begin entering the medication name in the search box to find and select the medication.

Note: The striped lines next to the medication name indicate that it is an override medication.

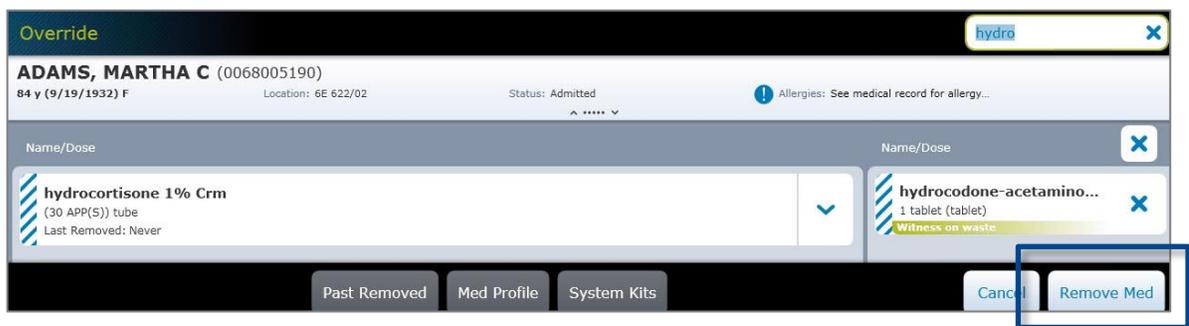


4. A pop-up box will display. Enter the amount of medication to remove and select **OK**.

Note: If you select **Cancel**, the medication will not appear in the Selected Meds column.



5. The medication is moved to the Selected Meds column. If you decide against removing an item, select the **X** next to the medication. Select **Remove Med** when you are finished adding medications.



6. If your facility requires an override reason, indicate the reason on the Override Warning screen and select **Remove Meds**.
7. The drawer opens. Remove the medication and select **Accept** and/or secure the storage space.

Note: If attempting to override a medication for a patient, you may be prompted with an Order Exists warning. This may occur when the patient already has a similar medication on their orders list.

BD Pyxis™ MedStation™ ES

Remove a Variable Dose Group order

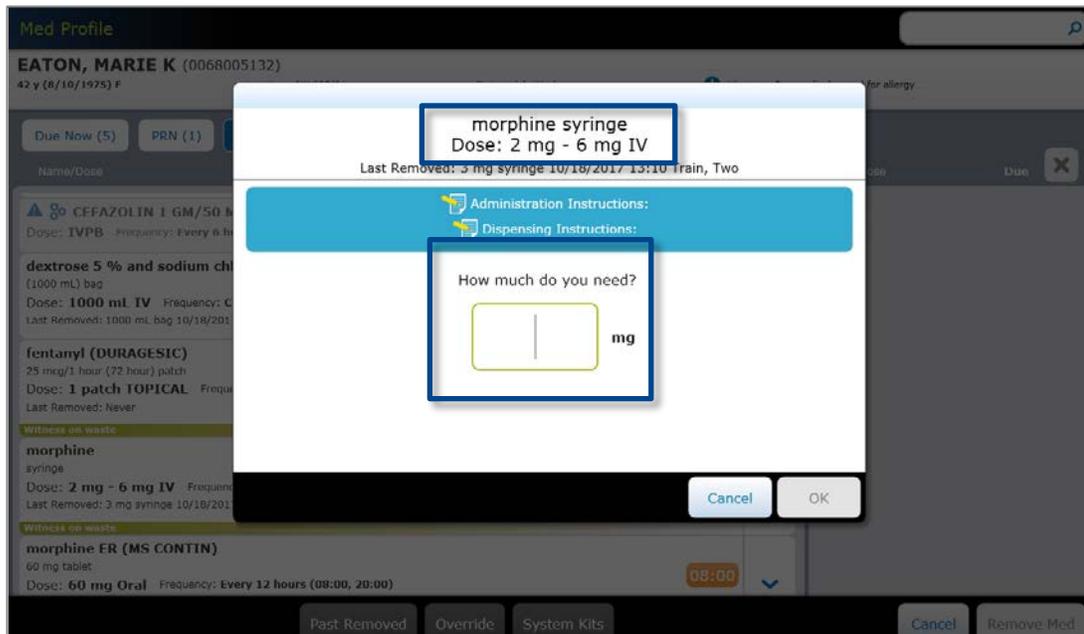
Variable Dose Groups are collections of items configured at the server that allow for removal of a medication in an amount that falls within a specified range. When removing a Variable Dose Group order, you must indicate the amount to be administered to the patient.

1. From the Home screen, select **My Patients**.
2. On the Patient Summary screen:
 - a. Select the patient, then select **Remove**, or
 - b. Select a blue dot in the time, PRN, or All Orders column.

Note: See the **Remove a Medication in Profile Mode** job aid for more detailed information about removing medication orders.

3. Select the medication.
4. You will be prompted to enter the amount to be administered to the patient. You must enter an amount that falls within the dose range displayed on the screen.

Note: Medications that are configured at the server to be Variable Dose medications can also be ordered with a defined amount. In those cases, proceed with the standard order removal workflow.



5. Select **OK**.
6. The medication is moved to the Selected Meds column. If you decide against removing an item, select the **X** next to the medication.
7. Select **Remove Med** when you are finished adding medications and continue with the removal

process.

8. The appropriate storage space opens and the location is displayed on the screen. If you are removing an item from a secure drawer in the BD Pyxis™ ES Refrigerator, the open drawer will light up.
9. You may be prompted to count the medication in the storage space. Confirm or enter the count on the screen, then select **Accept**.
10. Remove the medication as directed on the screen.

***Note:** Depending on your facility's configuration, you may or may not be prompted to waste during the remove transaction. You may also be given the option of wasting now or wasting later. If you do not document the waste during the remove transaction, you will need to resolve the Undocumented Waste at a later time. See the **Document Medication Waste at the Time of Removal** and **Resolving Undocumented Waste** job aids for more information.*

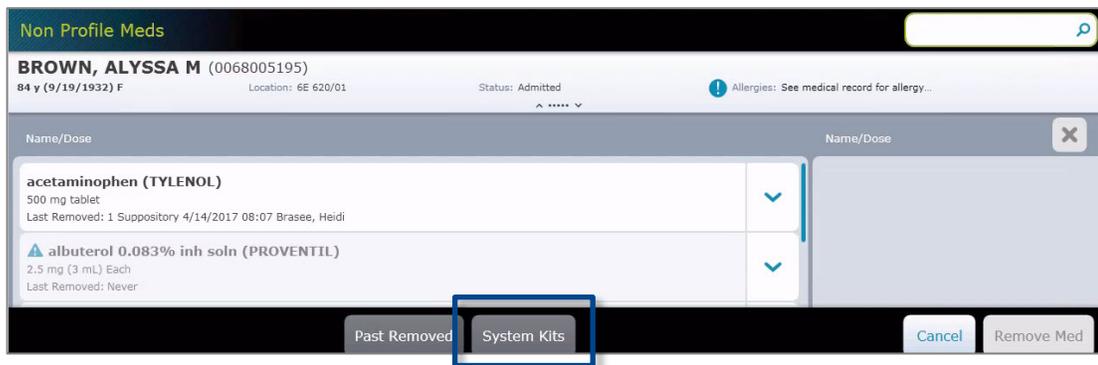
11. Select **Accept** and/or secure the storage space.

BD Pyxis™ MedStation™ ES

Remove a kit

A kit is a set of facility formulary items that allow you to remove a group of items commonly used together. System Kits are created on the BD Pyxis™ Enterprise Server and assigned to the device. Kits are typically used in Non-Profile devices because they are removed outside of the patient's profile.

1. From the Home screen, select **All Available Patients** or **My Patients**.
2. Select the patient and select **Remove**.
3. On the Med Profile screen, select **System Kits**.



4. The system displays all System Kits. Select the kit you want to remove.
5. The medications are moved to the Selected Meds column. If you decide to not remove an item, select the **X** next to the medication.
6. Select **Remove Med**.

Note: When removing kits on a Profile device, the device treats it as an override and you may be required to enter an override reason.

7. The storage space containing the first item in the kit opens and the location is displayed on the screen. If you are removing an item from a secure drawer in the BD Pyxis™ ES Refrigerator, the open drawer will light up.
8. You may be prompted to count the medication in the storage space. Confirm or enter the count on the screen, then select **Accept**.

Note: For MiniDrawers, leaving the count field blank during a blind count will register a quantity of zero.

9. Remove the first medication as directed on the screen.
10. Select **Accept** and/or secure the storage space. Repeat until all medications have been removed (see image on next page for steps 4-10).

Note: Select **Cancel Med** to cancel removal of an individual item. Select **Cancel All** to abort the transaction.

Remove

BROWN, ALYSSA M (0068005195)
84 y (9/19/1932) F Location: 6E 620/01 Status: Admitted Allergies: See medical record for allergy...

belladonna elixir (Donnatal) (10 mL) UD cup
Dose: 1 UD cup
Last Removed: 1 UD cup 4/20/2017 12:22 Howard, Kim

Remove 1 UD cup
From **MAIN Drw 1-Pkt 10**

belladonna elixir (Donnatal)
1 UD cup ((10 mL) UD cup)

lidocaine viscous 2% (XYLOCAIN...
1 UD cup ((15 mL) UD cup)

magnesium/aluminum/simethico...
1 UD cup ((30 mL) UD cup)

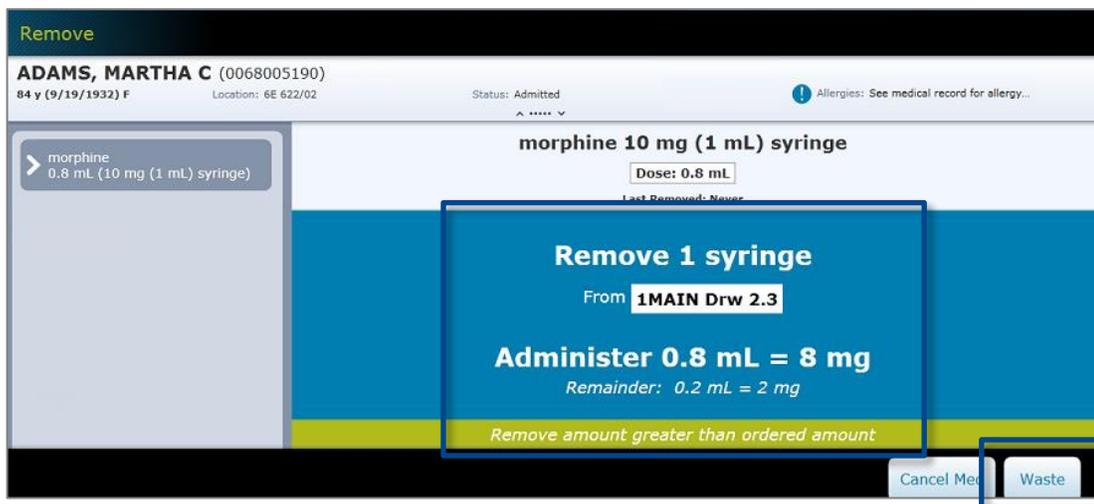
Cancel Med Cancel All **Accept**

BD Pyxis™ MedStation™ ES

Document medication waste at the time of removal

You are required by law to waste and document all unused portions of any controlled medication. Depending on your facility's policies and procedures, you may be prompted to waste a medication at the time of removal.

1. Perform the steps to remove medication from a device.
2. The drawer will open. Enter the beginning count, if required, then select **Accept**.
3. The system calculates the amount to waste based on the removal amount and dose.



4. On the Remove screen, select **Waste**.

Note: Your facility may configure the device to allow you to choose to document waste at the time of removal or at a later time. In that case, select either **Waste Now** or **Waste Later** to proceed (see image below). See the **Resolving Undocumented Waste** job aid for how to document waste at a later time.



5. In order to proceed, **you must close the storage location as prompted on the screen** (CUBIE lid and/or drawer or door).
6. The witness is prompted to enter his/her credentials.
7. With the witness present, place the medication waste in the appropriate location.

Waste Workflow Override/Range Dose/Non-Profiled

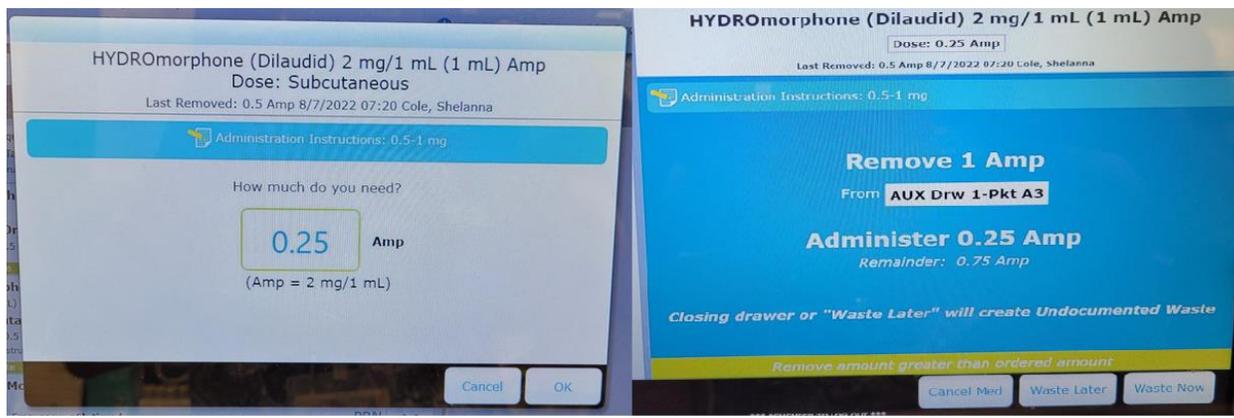
Pyxis will prompt users to **specify the amount** of narcotic/controlled drug that **will be ADMINISTERED** in the following situations:

1. **Override** is used
2. **Range dose** is ordered
3. **Non-profiled** station is used (NRQEH, ONCPCH)

If this is a medication you're titrating to effect, enter the amount you plan to give initially. If you waste less than Pyxis is expecting (e.g. if the patient needed more than you initially intended to give), Pyxis will ask you why.

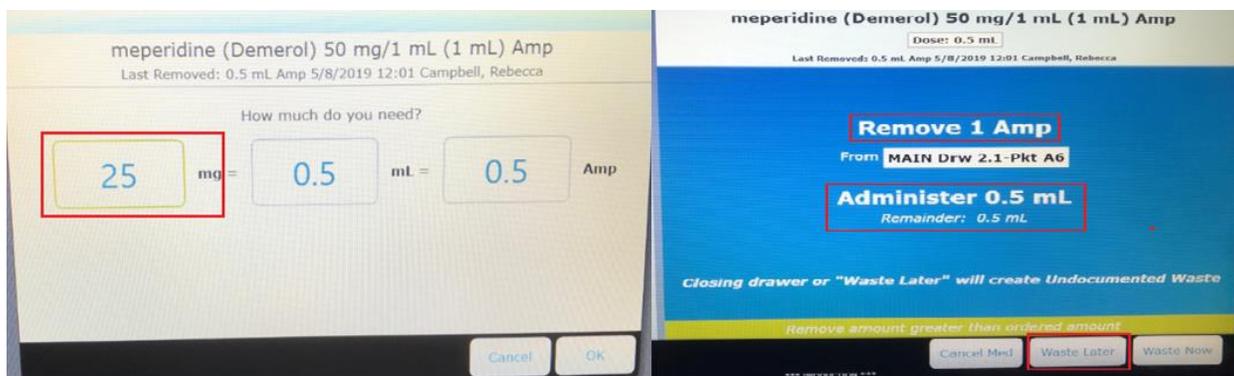
Example: Range Dose

- Pyxis can not predict what dose will be required in a Range dose and therefore it asks the user to provide this information.
- The user will be prompted to enter the amount of drug to be ADMINISTERED
- Pyxis will then calculate how many units should be removed (# of amps, vials, tabs, etc), the amount needed to administer the dose, and how much waste it expects to be left over.



Example: Override/Non-Profiled

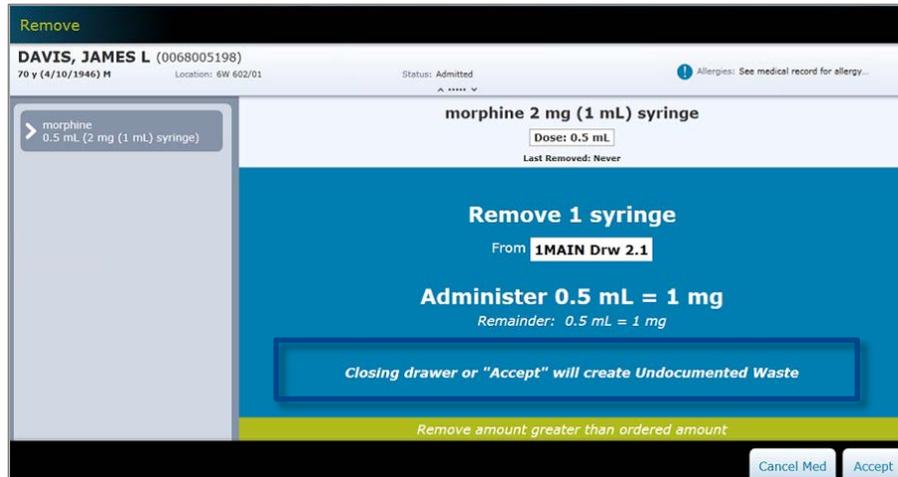
- Override/Non-profiled removes are not attached to an order so Pyxis can not calculate the required dose.
- The Remove amount defaults to one unit (e.g. one amp, one vial, one tab, etc). The user must update this to the amount that will be ADMINISTERED.
- Pyxis will then calculate how many units should be removed (# of amps, vials, tabs, etc), the amount needed to administer the dose, and how much waste it expects to be left over.



BD Pyxis™ MedStation™ ES Resolve Undocumented Waste

Your facility may require you to waste and document all unused portions of controlled medications. If you remove a medication amount greater than the dose amount and do not document the waste at the time of removal, you will need to resolve the Undocumented Waste at a later time.

If you did not 'Waste Now' when removing an ordered dose in an amount less than the total volume of the medication, you may have created Undocumented Waste.



1. When you return to the device to document the waste, the **You have undocumented waste** icon appears on the Home screen after you sign in. Select the icon to view a list of your patients with undocumented waste.



2. Select the patient from the list, then select **Waste**. You can also select the patient from the All Available Patients or My Patients screens.

Note: A blue banner below the patient name alerts you to undocumented waste.



3. Select the medication that requires resolution, then select **Waste**.
4. With the witness present, enter the amount of waste to document.

Note: You can enter anywhere from 0 to the expected waste amount. If the waste amount is less than the expected amount, you must enter a reason.

5. The witness is prompted to enter their credentials.
6. With the witness still present, place the medication waste in the appropriate location.

BD Pyxis™ MedStation™ ES

Return a medication

After you remove a medication, events may occur that cause you to not use the medication. You should return the item if the sealed packaging of the medication has not been opened. When returning medications, you can view up to the past seven days of remove transactions. Returning medications supports good medication management practices.

1. From the Home screen, select **All Available Patients** or **My Patients**.
2. Select the patient then select **Return**.
3. On the Meds to Return screen, select the medication to return.

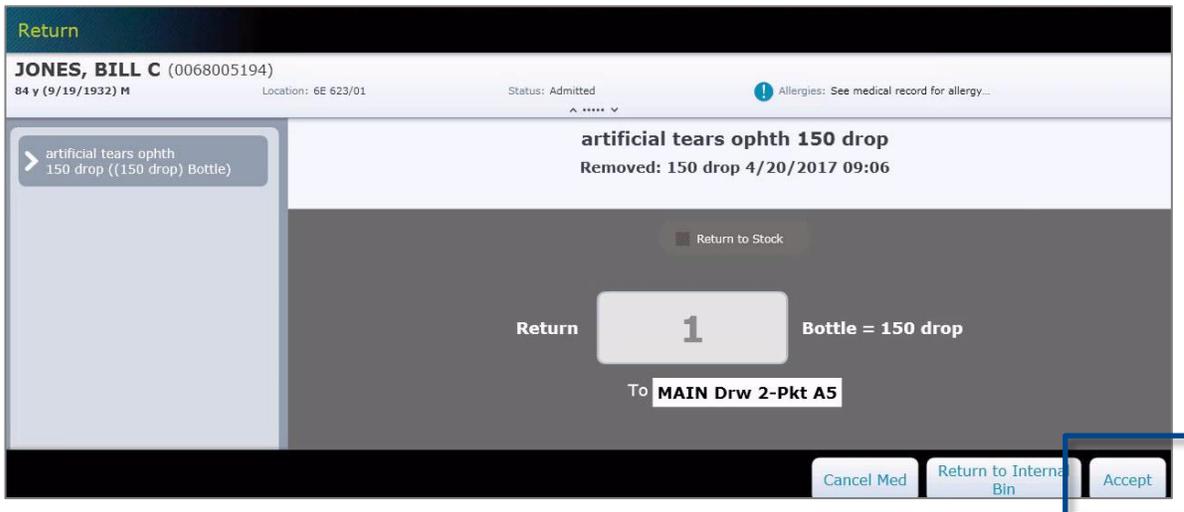
Note: The Meds to Return screen shows a list of removed medications from the previous 24 hours. If the medication is dimmed, it is not available for this process. Select the medication to access the tool tip, which gives the reason it cannot be returned.

4. The medication appears in the Selected Meds column. Select **Return**.
5. The system will instruct you where to return the medication. In this example, the medication needs to be returned to a pocket.

Note: If you are unable to access the return location identified by the system, you can return the medication to a secondary location as defined by the system administrator. Select the alternate location button at the bottom of the screen (the Return to **Internal Bin** button in the image below) and return the medication to the alternate location indicated by the system. You cannot return medications to single dose or multi-dose MiniDrawers.

6. After you place the medication in the return location, select **Accept** and/or secure the storage space.

Note: A witness may be required when returning controlled medications.



Return

JONES, BILL C (0068005194)
84 y (9/19/1932) M Location: 6E 623/01 Status: Admitted Allergies: See medical record for allergy...

artificial tears ophth
150 drop ((150 drop) Bottle)

artificial tears ophth 150 drop
Removed: 150 drop 4/20/2017 09:06

Return to Stock

Return 1 Bottle = 150 drop

To MAIN Drw 2-Pkt A5

Cancel Med Return to Internal Bin Accept

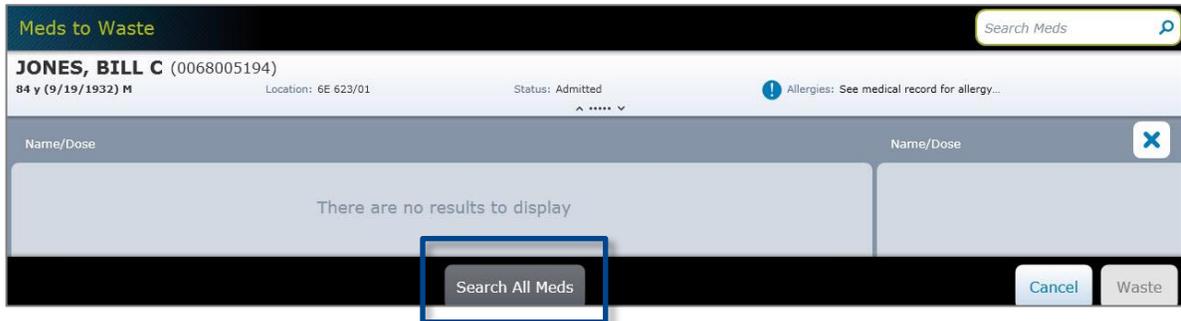
BD Pyxis™ MedStation™ ES

Waste or return a medication using Search All Meds

The Search All Meds feature allows you to return or document waste for a medication even when there is no prior remove transaction associated with the medication. Search and select from a list of active formulary items you have security group permission to remove. You may need to use Search All Meds for the following reasons:

- You need to document waste or return a medication that was not initially removed from the device.
- A host conversion to a new PIS inactivates an old transaction.
- The item is not stored in the device.

1. Select the patient. Select **Waste** or **Return**, depending on which type of transaction you are performing.
2. Select **Search All Meds**.

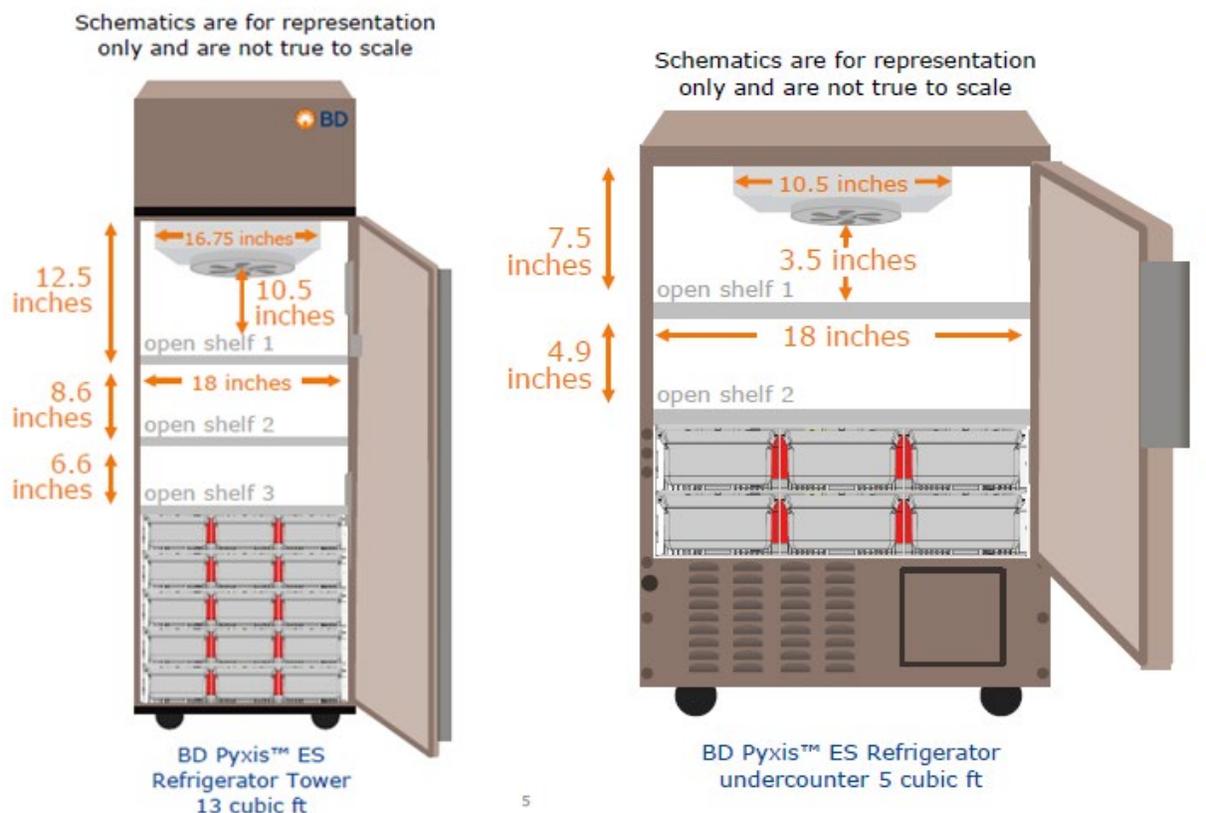


3. Enter the name of the medication in the search box, then select the medication from the list.
4. Select **Waste** or **Return** (the appropriate button will appear depending on the transaction you initially selected).
5. Enter the amount to be wasted or returned, then select **Accept**.

Note: A witness may be required to enter credentials in order to complete this transaction.

Pyxis Fridges

- 5 cubic ft fridges have 2 open “matrix” style shelves and 6 secure bins
- 13 cubic ft fridge has 3 open “matrix” style shelves and 15 secure bins



5

Insulin Pens

- Most insulin pens are now stocked in ED and will not be sent patient specific.
- Regular insulin remains in vials but should be for single patient use only.

Refrigerated Antidotes

- The fridge antidote kit has been permanently disassembled and the individual items (Digifab, insulin and octreotide) are now stored in the Trauma pyxis fridge.

Dexamethasone Liquid

- Dexamethasone 1 mg/mL liquid PEI (40 mL) has been loaded in Fast Track, RTU and Trauma.
- The return functionality has been turned on for this product, please refer to sheets posted on all Pyxis devices for further instructions.

Reconstituted Liquid Antibiotics

- Reconstituted antibiotics **that require refrigeration** will be stored in the FT fridge under “reconstituted antibiotic”.
- The following medications (once reconstituted) will be labeled with date of reconstitution by nursing and remain out of Pyxis at room temperature: **Amoxicillin, Azithromycin and Clarithromycin.**
- Nursing staff are to check the cupboard and the “reconstituted antibiotic” medication first before removing new bottles.

Vancomycin Injection used Orally

- The vial is stable for 24 hours at room temperature. Please ask nursing **not** to return to the fridge.

Patient-Specific Fridge Item

- There is a bin pended to the Observation fridge for a patient’s own item that requires refrigeration. The patient-specific bin is only for **medications** that patients bring in from home. The medication must be labelled with a patient identifier label.

Fridge Alarms

- Fridges are set to 4°C and will alarm on the unit when they go outside 2-8°C.

BD Pyxis™ MedStation™ ES

Remove a medication in Profile mode with Medication Label module

The Medication Label module consists of hardware and software to support printing a patient dose-specific label upon item removal. Formulary items are configured to print by pharmacy and can print for each removal or only on fractional use removal. This feature is only available for facilities that have BD Pyxis™ ES System version 1.4 or above and have contracted for the Medication Label module.



BD Pyxis MedStation ES with Medication Label module

1. From the Home screen, select **My Patients**.
2. On the Patient Summary screen:
 - a. Select the patient, then select **Remove**, or
 - b. Select a blue dot in the time, PRN, or All Orders column.

Note: An orange bar indicates that the patient has past due medication. A light blue dot indicates that the order is past due, but still available to be removed as due now. This does not apply to future orders, which will fall under their time window. Stat Orders that are currently due are flagged with a visual indicator (not pictured). Future Stat Orders are not flagged.



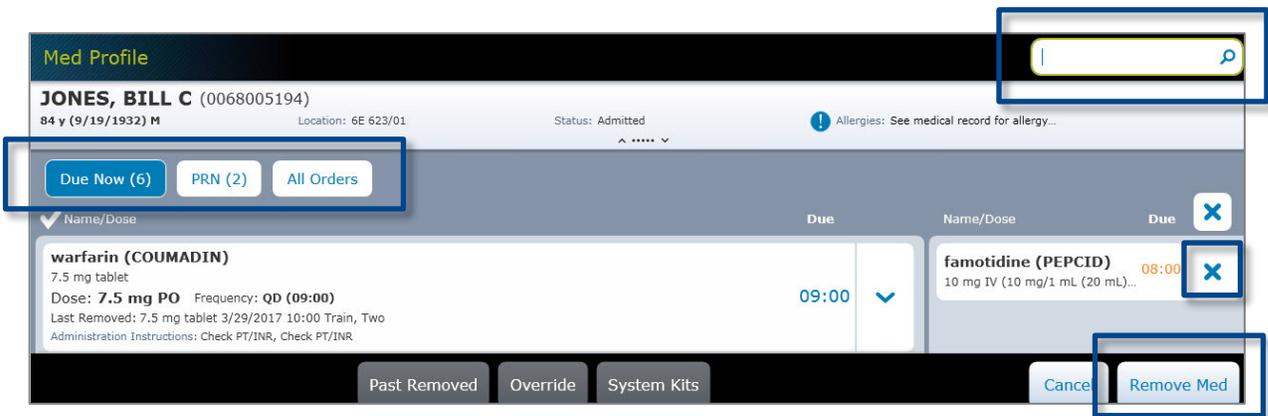
Patient Summary				Today				PRN	All Orders
Name	Visit ID	Location		11:00	12:00	13:00	14:00		
ALRIGHT, JESSICA C 84 y (9/19/1932) F	0068005191	6W 668/02	✓	●				●	●
BROWN, ALYSSA M 84 y (9/19/1932) F	0068005195	6E 620/01	✓			●		●	●
CONNER, JULIE B 84 y (9/19/1932) F	0068005197	6W 668/02	✓	●		●		●	●
JONES, BILL C 84 y (9/19/1932) M	0068005194	6E 623/01	✓				●	●	●
PATTERSON, ANGELA M 84 y (9/19/1932) F	0068002196	6E 624/02	✓				●	●	●

Remove Past Removed Waste Return Override All Available Patients Edit Patient List

3. On the Med Profile screen, select the medication you wish to remove or begin typing the first three characters of the medication in the search box to filter the list (see image on next page).

Note: The Med Profile screen contains valuable information about the ordered medication. The time at which the medication is due appears in the Due column and medications that are due now appear in blue. **Priority: STAT** appears under the name of Stat ordered medications that have not yet been removed and disappears after the medication has been removed for the first time (not pictured). This field does not appear for routine priority medications. You can use the Due Now, PRN and All Orders buttons to filter orders for the selected patient. The Med Profile screen may default to show all or due now orders depending on your facility's settings.

- The medication is moved to the Selected Meds column. If you decide against removing an item, select the **X** next to the medication.
- Select **Remove Med** when you are finished adding medications and continue the removal process.



The screenshot shows the 'Med Profile' interface for patient JONES, BILL C. It includes a search bar at the top right, filter buttons for 'Due Now (6)', 'PRN (2)', and 'All Orders', and a table of medications. The table has columns for Name/Dose, Due, Name/Dose, and Due. Two medications are listed: warfarin (COUMADIN) and famotidine (PEPCID). The 'Remove Med' button at the bottom right is highlighted with a red box.

- The storage space opens and the location is displayed on the screen. If you are removing an item from a secure drawer in the BD Pyxis™ ES Refrigerator, the open drawer will light up.
- You may be prompted to count the medication in the storage space. Confirm or enter the count on the screen, then select **Accept**.

Note: For MiniDrawers, leaving the count field blank during a blind count will register a quantity of zero.

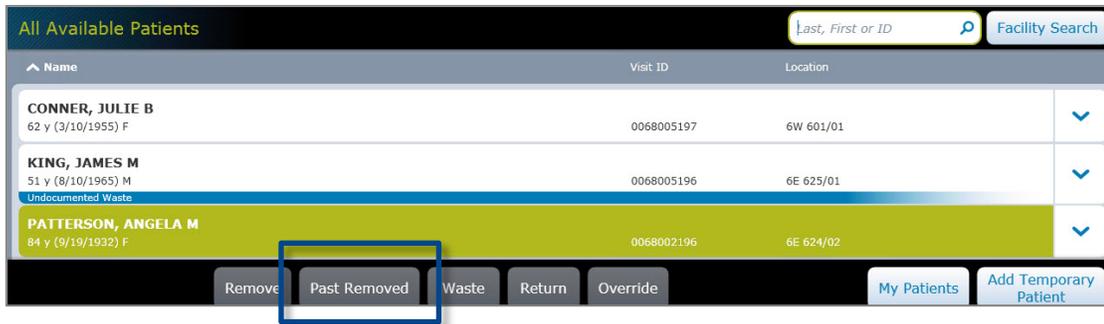
- Remove the medication as directed on the screen.

Note: Depending on your facility's configuration, you may be prompted to remove a dose amount or a dispense amount. If you remove a medication amount greater than the dose amount, you may need to document the waste. Medications configured to allow for removal of a dispense amount will not track undocumented waste. Also depending on your facility's configuration, you may or may not be prompted to waste during the remove transaction. You may also be given the option of wasting now or wasting later. If you do not document the waste during the remove transaction, you will need to resolve the Undocumented Waste at a later time. See the **Document Medication Waste at the Time of Removal** and **Resolving Undocumented Waste** job aids for more information.

- Select **Accept** and/or secure the storage space.
- The Medication Label module will print a sticker label for each dispensed medication that has been configured to print a label upon removal.

There may be instances when a medication label needs to be reprinted (for example, the label is damaged upon attempting to affix to the medication/syringe). Follow these steps to reprint the label:

1. From the My Patients or All Available Patients screens, select the patient, then select **Past Removed**.



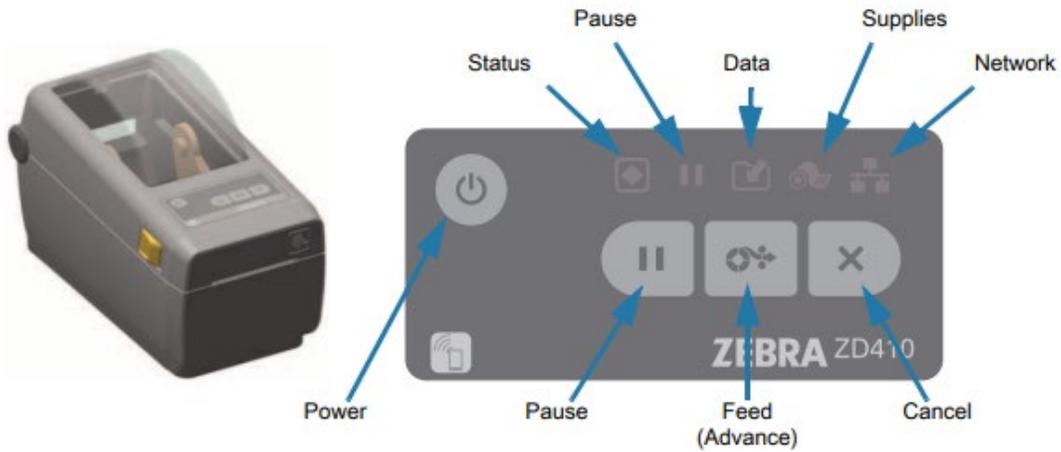
2. On the Past Removed screen, select the medication, then select **Print Label**.



3. The Medication Label module will print the label to affix to the medication.

Troubleshooting Icons on Pyxis Label Printers

BD SUPPORT: 1-800-727-6102



Icon	Meaning	Information on Use
	Power Button: On/Off	<ul style="list-style-type: none"> - Use to initiate low-power sleep and wake states - Sleep Mode – pressing and releasing the power button once will cause the printer to enter or exit sleep mode. The Status button will indicate sleep mode by slowly changing between on and off. No other icons will be lit during this mode. - Hold the Power button 4-9 seconds to turn off
	Status Indicator: Demonstrates operational status	<p>Green: Ready for print and data activity</p> <p>Fading In/Out Green: Slowly changing between on and off: Sleep Mode</p> <p>Amber: Printhead failure (check paper installed correctly) or power fault (check attachment of cords)</p> <p>Red: Media detection error, head of printer open, cut error, connection error</p>
	Pause Indicator: Labels in the queue can be cancelled when the Pause indicator is on using the cancel button	<p>Amber: Print, feed and other label routines are suspended until pause state is removed by pressing the pause button</p>
	Cancel Button: Cancels print jobs	<ul style="list-style-type: none"> - Only functional when printer is in the pause state - Pressing and holding button for two seconds: cancels printing of all pending labels in 24-hour increments (if printer off for two days, user will complete this step twice to clear the printer's queue).

	Pause Button: Pauses printing actions	Amber: Paused state <ul style="list-style-type: none"> - Places printer into a “pause” state (will complete printing a label before it pauses) - Press the pause button while in pause state to return printer to normal operation
	Data Indicator: Status of data transfer activity	Green: Data communication operation not finished, but not actively being transferred Blinking Green: Data communications in process <ul style="list-style-type: none"> - Off: Data not being transferred
	Network Indicator: Network activity and status	Red: LAN or Wi-Fi fault occurs (Health PEI devices connected by <u>USB</u> not Wifi)
	Supplies Indicator: Label status	Red: Issue with labels (check proper installment/roll empty)
	FEED (Advance) Button: Advance a label	

How to Check Pyxis Label Printers

1. Status indicator  should always be **solid green**.
2. If the status indicator icon is slowly fading **in and out green**, press the power button once to turn off the printer's sleep mode.
 - a. Once off sleep mode, printer may demonstrate an **amber pause**  icon.
 - b. If so, press the pause button once to resume printing labels previously held in queue **OR**
 - c. Cancel all previous print jobs by:
 - 1) *Pressing and holding cancel button for two seconds followed by;
 - 2) Pressing pause button to remove paused state from printer

*This cancellation will only apply to print jobs in the queue in 24hr increments. If printer is not on for three days, user will have to complete these two steps 3 times.

Pyxis label printers have been installed and will automatically print labels for IV/injectables, puffers, creams and more.

To print a label for a previously removed medication:

- All Available patients
- Select Patient
- Select Past Removed tab
- Select drug that you want label to print for
- Select Print Label (bottom center of screen)

Always ensure the Status indicator is green. If status indicator is fading in-and-out green, the printer is in a sleep mode and will awaken once user removes a medication requiring a label or prints off a label for a previously removed medication. Users can also press the power button once to awaken the printer out of the sleep state.



If the printer is not working properly, have you:

- Checked the two cords on the back to confirm they haven't loosened?
- Checked the USB connection into the Main?
- Checked that the paper isn't empty or jammed?

Please inform your nurse educators if there are labels printing out for products that you do not need, or if there are medications you have removed that a label did not print for and you would like one!

Nursing Staff

- The nurse who discovers the discrepancy **is responsible for starting the resolution process**
- Do not wait for other involved staff to return to resolve discrepancies
- Discrepancies may be resolved after medication administration to avoid delay in patient care
- Use Pyxis discrepancy algorithms to properly resolve discrepancies
- Notify manager/delegate if unable to resolve discrepancy by end of shift
- Enter incident reports on unresolved discrepancies
-  Check Pyxis at end-of-shift for discrepancy icon – if present, review transactions and notify the staff member(s) involved (if not present, notify management).
- Ensure weekly narcotic and controlled drug count is performed using the inventory function

Nurse Manager/Delegate

It is the **nurse manager's** responsibility to make sure all discrepancies are properly investigated and reported.

Managers are expected to review daily discrepancy reports to ensure:

- **No unresolved discrepancies**
- **Reasons for resolved discrepancies depict transaction history**
- **The same users aren't regularly showing up on the report**

- Initiate investigation by using Pyxis discrepancy algorithms
- Report unresolved discrepancies to the narcotics technician
- Complete incident reports on all unresolved discrepancies
- Ensure narcotic and controlled drug count is performed weekly by nursing staff as per Health PEI's *ADC Policy*

Pyxis Discrepancies: Roles and Responsibilities

Nurse Educator/Clinical Leader

- Educate new and existing staff on Pyxis use, discrepancies and functions with provided material
- Identify any educational or compliance issues
- Consult with the Pharmacy Technology Team as necessary for support

Pharmacy Technician

- Obtain unused, non-standard stock within 72 hours of last dose
- The narcotic technician who discovers the discrepancy is responsible for starting the resolution process
- Notify both Unit Manager and Pharmacy Technician Supervisor if unable to resolve discrepancy after reviewing the discrepancy transactions report

Pharmacy Technician Supervisor/Delegate

- Investigate unresolved discrepancies sent by nurse manager/delegate
- When missing items cannot be found after further investigation, Pharmacy supervisor will consult with Operations Manager. A report must be submitted within 10 days to the Office of Controlled Substances with copies to Quality & Risk and the Director of Pharmacy Services

Pyxis Discrepancies – Typos/Miscount

User enters blind count incorrectly
ex. typo, miscounted cubic contents.



User receives immediate notification of discrepancy and **must** start the resolution process. Pyxis inventory has now been updated to the quantity the user entered. User will require a witness to sign three separate times throughout the resolution process.



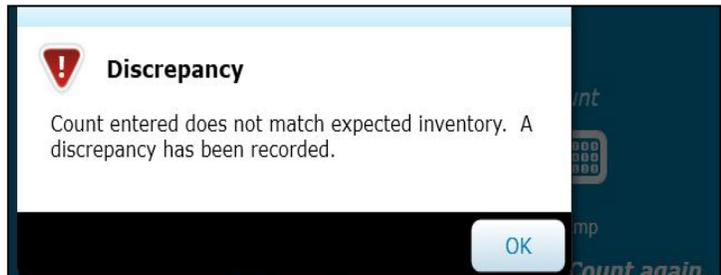
User must now perform an inventory count to tell Pyxis the correct count. The "Count" tab is found when the user selects the Discrepancy tab on the bottom of the main screen and opens the discrepancy they have created. **Completing the count will create a second discrepancy.**



The user now resolves both the initial discrepancy and the discrepancy created by correcting the inventory count. The user resolves the discrepancies by selecting the appropriate reasons from list and commenting details of resolution process.

Example: *Writer accidentally typed inventory count as 4 when 5 tabs present in cubic.*

- NOTES**
- Any time a user performs a count, Pyxis inventory is automatically updated.
 - Even if a user selects "Cancel", the Pyxis still updates the inventory as the quantity the user entered.



Remove [1 tablet]	50	49	0	Oct 03, 2019 12:07:58
User Name: Train, One (Train1)				Patient Name: FERNANDEZ, DEREK, O (9943001234)
Verify inventory	49	50	+1	Oct 30, 2019 11:11:32
User Name: Train, One (Train1)				
Remove [1 tablet]	50	49	0	Oct 30, 2019 11:12:30
User Name: Train, One (Train1)				Patient Name: ALRIGHT, JESSICA, C (9943006391)
Verify inventory	49	50	+1	Nov 04, 2019 08:09:45
User Name: Train, One (Train1)				

Buttons: Cancel, Notes, **Count**, Print, Resolve

***User miscounted pocket contents**

OVER - Overage of liquid med due to inaccuracy of measurements or spillage

OVER - User with prior access withdrew less than expected amount

UNDER - Loss of liquid med due to inaccuracy of container or spillage

More Info

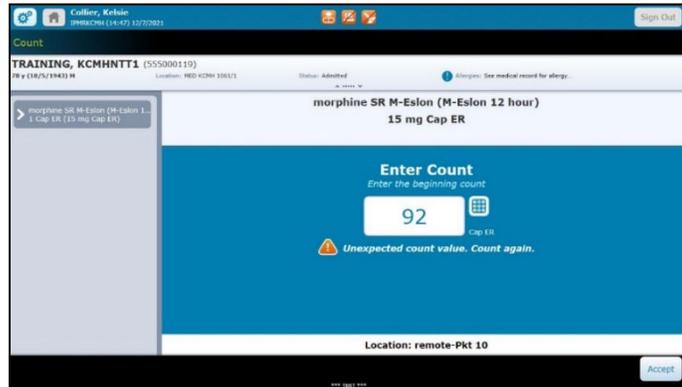
NOTE: After further Pharmacy investigation, medications that cannot be accounted for after 10 days must be reported to the Office of Controlled Drugs and Substances and copied to Risk Management.

Pyxis Discrepancies – Incorrect Inventory Count

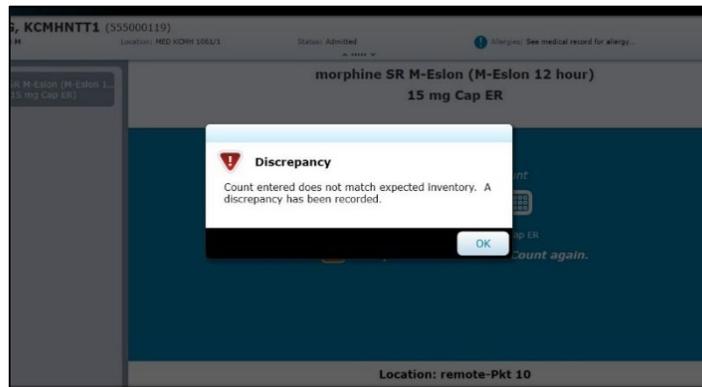
NOTES

- Any time a user performs a count, Pyxis **Inventory** is automatically updated.
- Even if a user presses “**Cancel**”, the Pyxis still updates the inventory as the quantity the user entered.

User enters correct physical count, but Pyxis inventory count does not match.



User who receives notification of discrepancy **must** then start the resolution process.



Open the Discrepancies tab on the bottom of the main screen and review previous medication transactions.

Transaction	Beginning (Cap ER)	Ending (Cap ER)	Discrepancy (Cap ER)	Time
Verify inventory - Cancelled User Name: Collier, Kelsie (Spallier)	103	103	0	Jul 26, 2021 13:06:00
Verify inventory User Name: Collier, Kelsie (Spallier)	93	93	0	Dec 07, 2021 14:45:38
Remove [2 Cap ER] User Name: Collier, Kelsie (Spallier)	93	91	0	Dec 07, 2021 14:46:41
Verify inventory User Name: Collier, Kelsie (Spallier)	91	92	-11	Dec 07, 2021 14:46:55
Remove [1 Cap ER] User Name: Collier, Kelsie (Spallier)	92	91	0	Dec 07, 2021 14:49:43

Did the previous user:

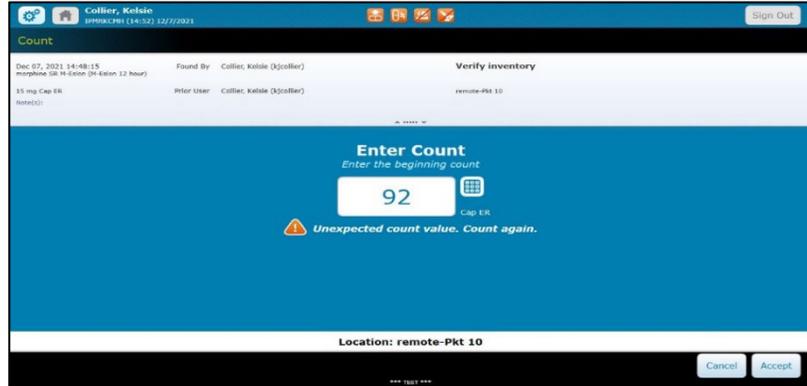
- Resolve a previous discrepancy and forgot to correct the inventory count? See **Example 1**.
- Remove more or less than ordered, or unknown? See **Example 2**.

Pyxis Discrepancies – Incorrect Inventory Count

Example 1: Previous user miscounted the inventory, resolved their discrepancy but did not correct the inventory count?

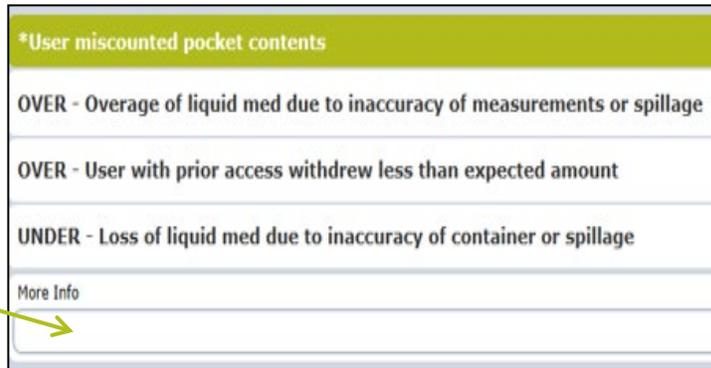
User must perform an inventory count to confirm the current count is correct.

User will require a witness to sign during the inventory count and to resolve the discrepancy created from same.

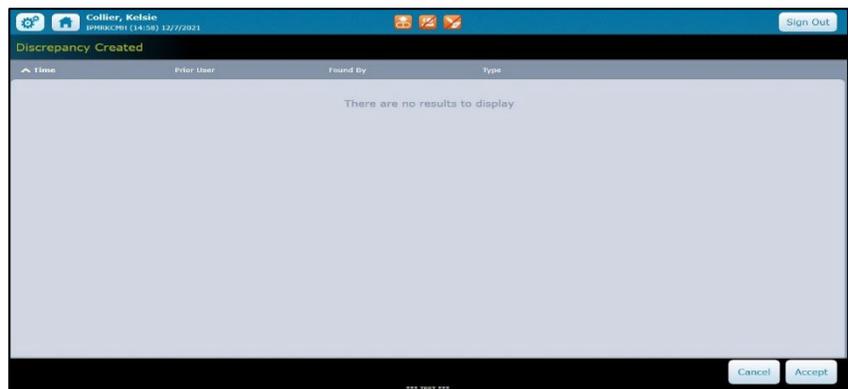


User and witness now resolve the discrepancy by selecting the appropriate reason from list and commenting details of resolution process.

Example: *Previous user resolved discrepancy related to their miscount, but did not correct the inventory count.*



Check discrepancies tab to confirm no other discrepancies related to event are present.

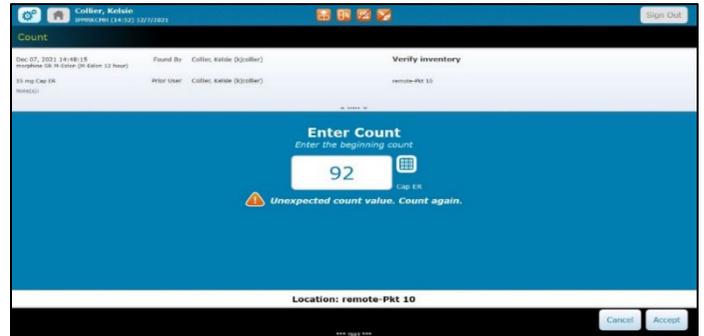


Pyxis Discrepancies – Incorrect Inventory Count

Example 2: Did previous user remove more or less than ordered, or unknown?

User must perform an inventory count to confirm the current count is correct.

User will require a witness to sign during the inventory count and to resolve the discrepancy created from same.



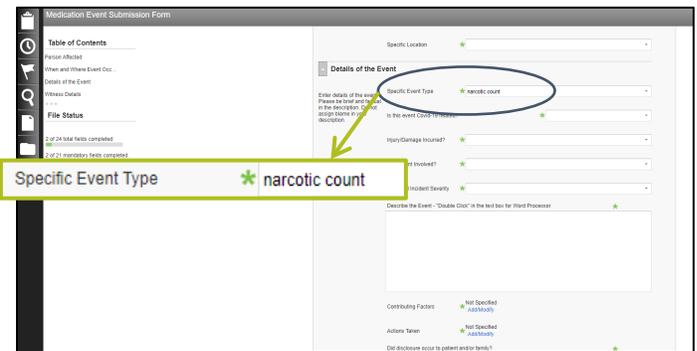
User must check the patient's MAR to investigate how much of medication was administered by previous user and/or check amount administered with the previous user if required.

If user can identify the reason for the discrepancy, user can resolve the discrepancy by selecting the appropriate reason from list and commenting details of investigation.

Example: *Order was for two tabs, previous user only removed one. Same was verified on the patient's paper chart.*

*User miscounted packet contents
OVER - Overage of liquid med due to inaccuracy of measurements or spillage
OVER - User with prior access withdrew less than expected amount
UNDER - Loss of liquid med due to inaccuracy of container or spillage
More Info
<input type="text"/>

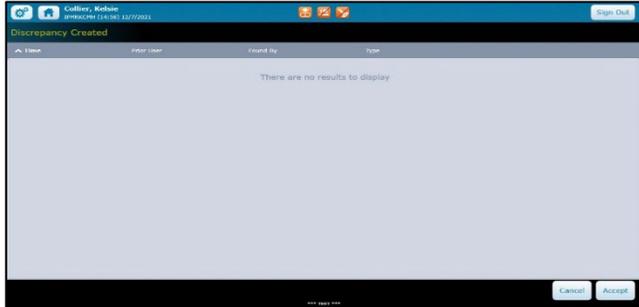
If user is unable to identify reason for discrepancy, user must report inconclusive findings to nurse manager or delegate in charge, and record a narcotic count incident in PSMS. This event type is also suitable for benzodiazepine discrepancies.



Pyxis Discrepancies – Incorrect Inventory Count



Check discrepancies tab to confirm that no other discrepancies related to this event are present.



Nurse manager or delegate now must investigate the discrepancy by reviewing Pyxis transactions, the patient's MAR, paper chart, etc.

If unable to resolve, nurse manager or delegate collaborates with pharmacy professional to further investigate. Refer to the *Pyxis Discrepancies Roles and Responsibilities* for guidance.

NOTE: After further Pharmacy investigation, medications that cannot be accounted for after 10 days must be reported to the Office of Controlled Drugs and Substances, and copied to Risk Management.

BD Pyxis™ MedStation™ ES

Generate reports

The BD Pyxis™ MedStation™ ES provides reporting tools that capture data from each transaction completed at a device. Refill reports generated at the device can be used to compile a list of medications requiring refill in the event that the network is down. Consult with your manager to determine the reports utilized by your facility. Specific permissions are required for access.

Reports commonly run at the device:

- **Inventory:** Display inventory sorted by medication, medication class, or drawer.
- **Events:** View all medication transactions at the device for the reporting period. These reports are often used to research discrepancies.

Reports typically generated by pharmacy personnel at the device:

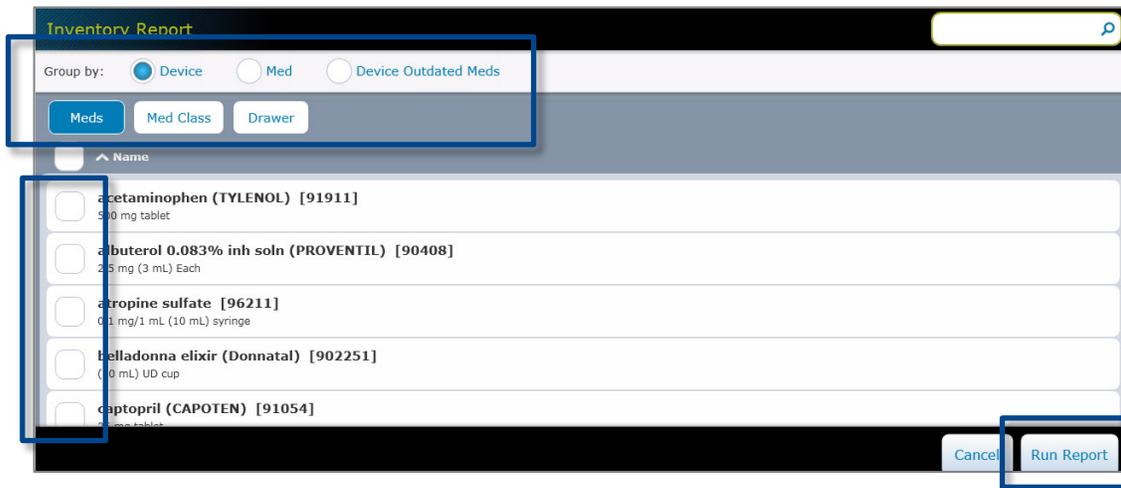
- **Refill Pick:** Lists the total quantity of each medication that needs to be picked for refill for the entire facility.
- **Refill Delivery:** Identify the number of medications and locations where medications need to be delivered.

1. On the Home screen, select **Reports**.

Note: Depending upon your permissions, you may need to select **More**, then select **Reports**.

2. Select a report category.

3. Use the radio buttons, tabs, and check boxes to choose which information will be contained in the report. This example displays options for inventory reports. Select **Run Report**.



Inventory Report

Group by: Device Med Device Outdated Meds

Meds Med Class Drawer

^ Name

<input type="checkbox"/>	acetaminophen (TYLENOL) [91911] 500 mg tablet
<input type="checkbox"/>	albuterol 0.083% inh soln (PROVENTIL) [90408] 2.5 mg (3 mL) Each
<input type="checkbox"/>	atropine sulfate [96211] 0.1 mg/1 mL (10 mL) syringe
<input type="checkbox"/>	belladonna elixir (Donnatal) [902251] (10 mL) UD cup
<input type="checkbox"/>	lisinopril (CAPOTEN) [91054] 20 mg tablet

Cancel Run Report

4. Select **Print** to print the report or **Cancel** to return to the previous screen.

Note: If the device is connected to a network printer, you will be given the option of printing at the device or at the printer.

Health PEI Downtime Procedures

BD Pyxis™ MedStation™ ES

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Health PEI Downtime Procedures

BD Pyxis™ MedStation™ ES

General Information

For login, password, and issues with locked accounts call the ITSS service center at 3600.

For Pyxis™ account issues, (e.g. user not in Pyxis™ Directory, or unable to access device functions), contact your department manager or designate.

For software, or mechanical issues, contact **BD Service and Support: 1-800-727-6102**
www.carefusion.com/support.



Recovering a Failed Drawer/Cubie:

To recover, follow the steps below:

- 1) Select Recover Storage Space tab at the bottom of screen.
 - a) A list of failed cubies, drawers, and/or doors will appear (see page 9 for cubie layout).
 - b) Users must recover failed bins or cubies before recovering failed doors/drawers.
 - c) When recovering bins in the Pyxis fridges, push the bin in completely until the bins' blue light goes off then close the door.
- 2) To begin, select the failed space and press **Start**.
- 3) Follow instructions listed on the screen "Open door and clear any obstructions". Once complete, the screen will inform user if the storage space has been recovered or not. Continue steps 1-3 until the Recover Storage Space page displays no further failures.
- 4) If your attempt to recover storage space is unsuccessful, please contact Pharmacy. If outside of your location's Pharmacy hours, please select Fail Hardware option displayed on the bottom right corner. Once failed, the hardware will require BD support and the user must call the BD Service and Support number listed above.

Health PEI Downtime Procedures BD Pyxis™ MedStation™ ES

Reboot Instructions:

For various reasons BD service and support may suggest users reboot the device.

Follow the instructions below to restart/reboot the Pyxis™ device. If one method fails, proceed to the following method.

1. Press “More” at the bottom right of the touch screen. Choose “Maintenance” on the menu and then “Reboot Device.” It takes approximately 5 minutes for the device to reboot. Do not turn the power off during this time.
2. If the soft reboot does not fix the issue, perform a **hard reboot** by pressing the switch located on the back of the station (not generally recommended). Ensure that you give the station enough time to drain the internal backup battery. It is recommended to wait at least a full minute before turning the station back on.
3. Call BD Support using the number provided on the Service and Support card 24/7.



BiID (Fingerprint Identification Scanner) Downtime

If the BiID function experiences downtime, the system will force the users to log on with their CIS password. Call BD Support using the number provided on the Service and Support card 24/7.

Power Failure

Planned Electrical System Downtime:

If there is a planned **emergency** (red plug) power downtime, Pyxis™ devices that are attached to the emergency power system (red plug) are to be plugged into the regular power system (grey plug). When the emergency power system downtime is over, the machines should be plugged back into the emergency power system.

Unplanned Electrical System Downtime:

If there is an unplanned **regular** power downtime, any Pyxis™ devices that are attached to the emergency power system should continue to operate as per usual. If any units are not plugged into the emergency power system, they should be plugged into a red emergency power plug until the downtime is over.

Health PEI Downtime Procedures BD Pyxis™ MedStation™ ES

Interface, Server, CIS, or Network Downtime

CIS Interface Downtime/Delay:

If the interface with CIS is not available, or delayed, or if there is a CIS or Network downtime, the Pyxis™ will display alert indicators on the main home screen:

Symbol	Meaning
	<u>Interface Down</u> indicator appears on a device in profile mode when the system detects a problem with the orders interface.
	<u>Interface Delay</u> indicator appears on a device in profile mode when the system detects that the facility has a problem with the orders interface.
	<u>Interface Down – Patient Data</u> indicator appears on a device in profile mode when the system detects that the facility has a problem with the patient data.
	<u>Interface Delay – Patient Data</u> indicator appears on a device in profile mode when the system detects that the facility has a problem with the patient data.

Patient Lists and Medication Orders:

The list of patients and orders on Pyxis™ may not be updated until the interface is functioning again. Pyxis™ will continue to function as a stand-alone unit with the patients and orders as of the time that the CIS interface failed.

New Patients:

Patients can be manually added using “Add a temporary patient”

New Orders:

New medication orders can be removed using “Override”. If critical override is enabled on the device, all medications that users can access are available from the override function. Pyxis™ will automatically place itself on critical override after a maximum of 2 hours of interface disruption.

Health PEI Downtime Procedures

BD Pyxis™ MedStation™ ES

Enabling Critical Override:

Pharmacy professionals enable critical override prior to a planned downtime or in situations where the downtime is expected to be of significant length.

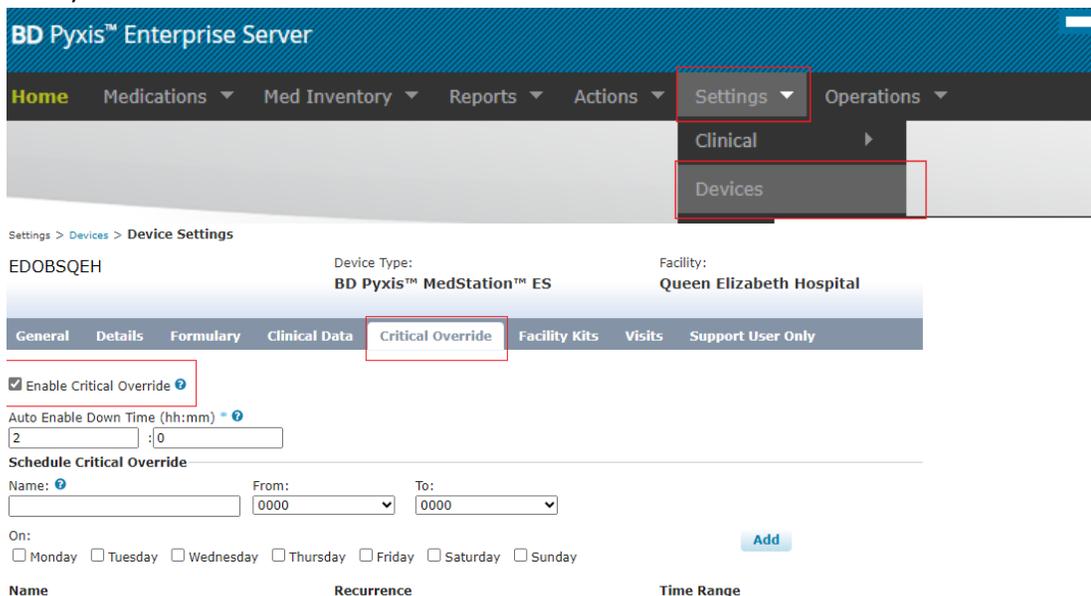
At the device:

- 1) From the Home screen, select **Device Settings**. Note: Depending upon your permissions, you may need to select More, then select Device Settings.
- 2) On the Device Settings screen, enable or disable the desired setting(s) by selecting the appropriate box.
- 3) Select Accept.



On the Server:

- 1) From the Home screen select **Settings**, then select **Devices** from the drop-down menu.
- 2) Place a check beside the desired device and select Edit.
- 3) Navigate to the Critical Override Tab and check the box next to Enable Critical Override.
- 4) Select Save.



Health PEI Downtime Procedures

BD Pyxis™ MedStation™ ES

Once the interface is working again, the device should be rebooted. Once the device has restarted, all alert indicators on the touch screen should be gone. Critical Override settings must be restored on the server when the downtime has been resolved.

Note: Depending on the length of the downtime there may be a delay with the patient information while the interface processes the queued messages. The temporary patients can then be reconciled with the real patients by a pharmacist during Pharmacy business hours.

Reports Server Downtime

If the Pyxis™ reports server is down, reports can be generated at the device and printed by the station printer on the thermal paper roll. Thermal paper is ordered by pharmacy. If the printer paper is empty perform a global search to find stock located in Pyxis. Do not throw out printer paper spool.

Report Categories that may be useful to nursing:

- **Inventory:** Display inventory sorted by medication, medication class, or drawer.
- **Events:** View all medication transactions at the device for the reporting period. These reports are often used to research discrepancies.

Reports Categories typically used by pharmacy personnel:

- **Refill Pick:** Lists the total quantity of each medication that needs to be picked for to refill the station.
- **Refill Delivery:** Identify the number of medications and locations where medications need to be delivered.

Running reports on the station

1. On the Home screen, select **Reports**.

Note: Depending upon your permissions, you may need to select **More**, then select **Reports**

2. Select a report category.

3. Use the radio buttons, tabs, and check boxes to choose which information will be contained in the report.

This example displays options for inventory reports. Select **Run Report**.



4. Select **Print** to print the report or **Cancel** to return to the previous screen.

Health PEI Downtime Procedures

BD Pyxis™ MedStation™ ES

Refrigerators

Alarms:



Table 1

Alarm	Description
Door Open	Door is open beyond user-specified duration
Main Power Failure	Power to the unit has been disrupted
Over Maximum Temperature Limit	Chamber temperature reading is above 8°C (or defined set point)
Below Minimum Temperature Limit	Chamber temperature reading is below 2°C (or defined set point)

Table 2

Alarm	Description
Low Battery Voltage	Backup battery voltage is low
Backup Battery Failure	Backup battery voltage is deficient
Communication Failure 3	Corrupt database
Compressor Probe Failure	Probe not functioning properly
Compressor High Temperature	Compressor temperature reading is above high temperature alarm setpoint
Control Probe Failure	Probe not functioning properly
Drive Space Low	SO card is approaching capacity
Drive Space Full	SO card is full
Inverter Communication Failure	Communication is lost between the i.C3 control board and the VCC inverter
Alarm	Description
Primary Temperature Probe Failure	Probe not functioning properly

- 1) User will press the mute button which will mute the alarm for 15 minutes.
- 2) Table 1: User will attempt to address issues listed (ensure door is properly closed, device is plugged in).
- 3) Table 2: Call BD Support using the number provided on the “Support” tab located on fridge screen or Service and Support 24/7 card found on main device.
- 4) If fridge continues to alarm after 15 minutes consult pharmacy regarding options listed below
 - a) Mute alarm for a further 15 minutes if the temperature is returning to normal.
 - b) Move products to a functioning refrigerator and call BD Support.

Users with “destock” privileges may use this function to remove medications from the Pyxis™ fridge. All other users refer to Emergency Medication Removal using Disaster Keys.

Health PEI Downtime Procedures BD Pyxis™ MedStation™ ES

Reboot Instructions for a Fridge-associated Issue:

1. If
2. Power off the BD Pyxis ES Refrigerator using the rocker switch then use the key to turn the battery off (base of fridge).
3. Shut the entire station down by using the rocker switch on the back of the main device and wait for it to fully power down (>30 seconds).
4. Power back on the BD Pyxis ES Refrigerator using the rocker switch then use the key to turn the battery on.
5. Wait for the BD Pyxis ES Refrigerator to fully turn on and display temperature.
6. Turn the entire station back on using the rocker switch on the back of the device and allow the application to fully load.
7. Proceed to recover the storage space failure related to the BD Pyxis ES Refrigerator.
8. The BD Pyxis ES Refrigerator should now be fully functional.

NOTE: If a message on the fridge displays power failure detected it is most likely due to the battery switch (key) or the power switch being in the wrong position.

Total Pyxis™ Failure

Contact **BD Service and Support: 1-800-727-6102**

Isolated Device Failure:

If one device is down, Nursing will locate and obtain medications from another device in close proximity. Use Global Search to find medications stocked in other devices. Nursing will contact Pharmacy (or Nursing Supervisor after hours) if medications are needed immediately and are not available in a nearby device. Medications obtained are to be stored in patient bins in a locked medication cart or cupboard until administered to patients.

Multiple or All Device Failure:

If multiple or all devices in an area are down, Pharmacy will dispense all doses of medication that cannot be obtained from another nearby station until such time that the failure is resolved. Controlled medications will be added to a locked narcotic drawer/cupboard, and inventory will be tracked on paper.

If downtime occurs after pharmacy hours Nursing Supervisor will contact on-call pharmacist.

Health PEI Downtime Procedures

BD Pyxis™ MedStation™ ES

Disaster Keys

If emergency access to medications within Pyxis™ is required, and the medications required cannot be obtained in any other way, the disaster keys will be used to unlock the device.

Disaster keys shall only be used after consultation with the on-call pharmacist.

Disaster keys are stored in the following locations:

- QEH & PCH: Night room
- KCMH, SH, WH, CHO: Pharmacy
- SMH:

Emergency Medication Removal:

1. Run inventory report for the station(s) in question. This may be completed by nursing at the device (page 8) or pharmacy staff on the server. This report is required to locate the medication(s) within the device (see cubie layout on page 10)
2. Turn off the device by switching the power switch (located on the right rear of the device) to the off position.
3. The user who unlocks the device will remain with it until it is locked again.
4. Record all medication removals on the Pyxis™ Downtime Medication Removal Log (see page 14)

Refrigerator (3 keys):

1. Use the disaster fridge key to unlock the fridge door.
 - a) 13 CF fridge: Lock is located on the left back corner.
 - b) 5 CF fridge: Lock is located behind the door located on the bottom right corner of the fridge.

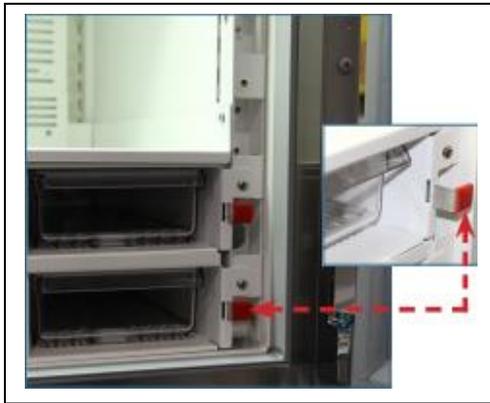


2. All medications in the matrix bins are now accessible.
3. To open secure bins, use the 2 Pyxis fridge keys to unlock the spring-locked cover located on the inside right of the fridge – once unlocked, the cover can be removed by lifting the cover upward and out.

Health PEI Downtime Procedures BD Pyxis™ MedStation™ ES



4. To access drugs in secure bins, pull the red tabs out and down to lock them into an “open” state.



5. Bins will now open and close freely.

Tower (2 keys):

1. Use the two disaster keys to unlock tower doors.
2. Locks are located on the top front of the tower.



Health PEI Downtime Procedures BD Pyxis™ MedStation™ ES

Note: Accessing medications inside a cubie using disaster keys requires cubies to be permanently broken. **This method should only be used in consultation with the pharmacy department after all other options are exhausted.**

Main and Auxiliary Drawer (2 keys):

1. Use the two disaster keys to remove the access panel from the back of the station.
2. Push the red release lever on the right side of the appropriate drawer and push the drawer out.
3. Repeat for each drawer that you need to access. Do not have more than one drawer open at a time.

Smart CUBIE Pockets:

Smart CUBIE pockets are designed to be tamper-evident. When a CUBIE pocket is forced open, and the black tab is snapped off, the pocket must be replaced.

1. Access the smart CUBIE drawer within the Pyxis device.
2. Forcibly open the smart CUBIE pocket by snapping the black tab off the top of the pocket.

Health PEI Downtime Procedures BD Pyxis™ MedStation™ ES

Cubie Layout



