

Cardiac Medications

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Clinical Supervisors

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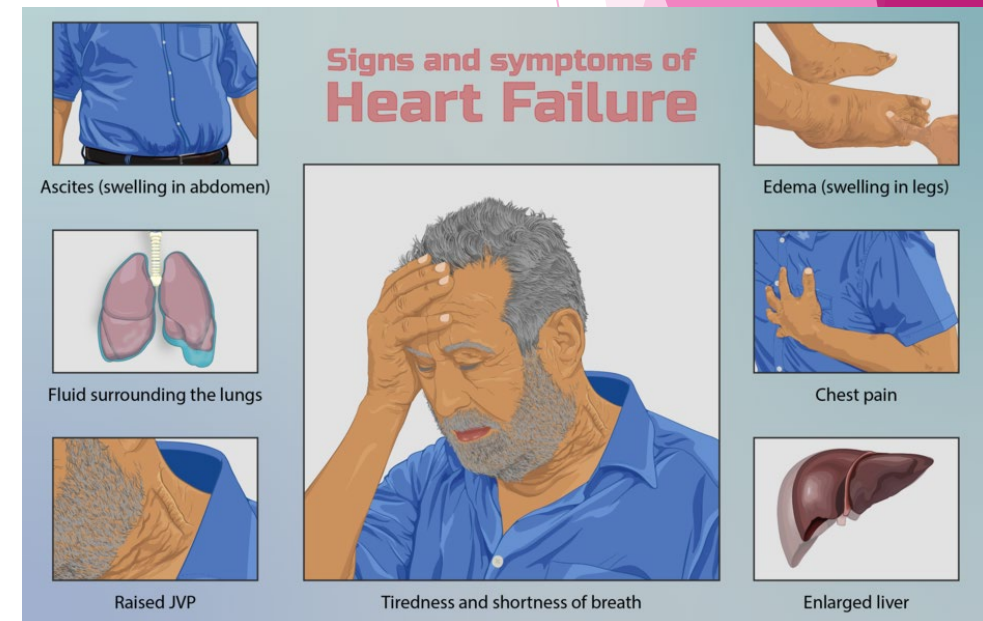


HEART FAILURE

Heart failure occurs when the heart can't pump enough blood through the body. There are many causes of heart failure. These include coronary artery disease, high blood pressure, abnormal heart valves, heart attack and irregular heart rhythms. Diabetes and lung disorders can also cause heart failure.

The most common symptoms of heart failure are:

- ▶ shortness of breath (dyspnea)
 - ▶ fatigue
 - ▶ weight gain
- ▶ swelling in arms and legs (edema)
 - ▶ loss of appetite
 - ▶ a persistent cough
 - ▶ increased heart rate



COMMON IONOTROPIC MEDS

- ▶ Milrinone - [Milrinone Info Sheet](#)
- ▶ Dobutamine - [Dobutamine Info Sheet](#)
- ▶ Dopamine - [Dopamine Info Sheet](#)

What is an Inotropic Med?

Inotropes work to enlarge the vessels and help the heart contract harder.

Both of these actions help more blood to be pumped from the heart into the body.

Inotrope therapy is used for heart failure.



EMERGENCY PLAN

Emergency Preparedness Checklist



Federal Emergency
Management Agency



American
Red Cross

Discuss with patient when to call 911/seek emergency care.

Get emergency medical help if you have any of these signs

- ▶ Chest pain
- ▶ Feeling like you might pass out
- ▶ Difficulty breathing
- ▶ Swelling of your face, lips, tongue, or throat
- ▶ Bronchospasm (wheezing, chest tightness, trouble breathing)
- ▶ Confusion, uneven heart rate, extreme thirst, increased urination, leg discomfort, muscle weakness or limp feeling

MEDICATION STORAGE, PUMPS, BATTERIES

Educate patient how and where to store and handle medication

- ▶ These medications are typically stored in the fridge.
- ▶ Check label to be sure of proper storage

Most patients are given two pumps in the home

- ▶ 1 for primary use
- ▶ 1 for backup

Make sure each pump is **CLEARLY** marked

- ▶ (ie: Primary Pump/Back Up Pump)

Remind patient and caregivers to always keep batteries on hand

- ▶ Batteries are supplied by pharmacy)

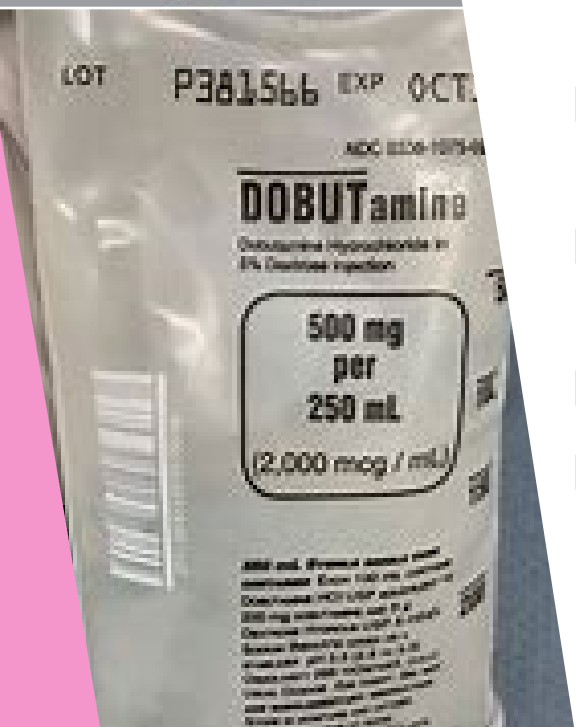


TEACHING POINTS

- ▶ The same topics as care for CVCs. See Start of Care (SOC) teach.

[hmc-resources.com/visit-types-start-of-care-\(soc\)-teach](https://hmc-resources.com/visit-types-start-of-care-(soc)-teach)

- ▶ Instruct patient to use second pump if first pump is not working and to reach out to pharmacy about the non-working pump. Be CERTAIN that the pump settings are correct before changing pumps.
- ▶ Teach patient how to change bag, how to reset the volume on the pump and how to troubleshoot pump alarms.
- ▶ If patient has double lumen, instruct patient to flush the non-cardiac lumen q 24hrs as ordered by pharmacy.
- ▶ Instruct the patient to never allow the bag to "run dry".
- ▶ Instruct patient to seek medical attention immediately if there is any disruption to the infusion



BAG CHANGES

Generally required every 48 hours - 7 days (verify on the order).

Needs to be changed before or just as the bag is emptying to avoid any disruption in the drip. Instruct the patient to never allow the bag to "run dry"

Teach patient how to change the bag - even if the plan is that nurse will be changing weekly with dressing changes. Emergencies happen and patient needs to know how to change so the bag doesn't run dry.

LABS and FLUSHING

Since these are cardiac meds, they CAN NOT be flushed as that would give patient a bolus of the medication.

If patient has a double lumen PICC line, one lumen will be dedicated for the infusion

- ▶ DO NOT draw labs from this lumen
- ▶ DO NOT flush this line
- ▶ Use the second lumen to draw the ordered labs.
- ▶ STOP the infusion, draw labs from the second lumen and then restart the infusion

If patient has a single lumen PICC

- ▶ DO NOT draw labs from the line and DO NOT flush the line.
- ▶ Labs to be drawn peripherally.

MicroClave to be changed weekly

- ▶ Place new MicroClave on end of tubing and prime the MicroClave with the pump
- ▶ Remove old MicroClave and attach new MicroClave to lumen and start the pump.
- ▶ DO NOT flush the line with NS.

Patient will be seen weekly (Q7 days) for CVC dressing change and lab draws.

CURLIN STEP BY STEP GUIDE

Gather Supplies

- Medication with Pre-primed Curlin Infusion Administration Set (tubing) - Medication(s) should always be infused at room temperature. If the medication requires refrigeration, remove it from the refrigerator 1-2 hours prior to administration.
 - Alcohol Pads
 - Pump
- Batteries - Change batteries in pump daily.
 - Pump bag

Preparing and Infusing Medication

1. After gathering the supplies above, prepare a clean, flat surface and wash hands.
2. Check the medication to ensure: proper pt name, dose, rate, exp date.
3. Remove current Curlin Pump and Milrinone medication bag from pump bag.
 4. Push Run/Pause button on the current pump.
 5. Push On/Off button to turn current pump off.
 6. Re-Clamp the clamp on the IV line.
7. Remove empty Milrinone medication bag and batteries from pump.

7. Disconnect IV tubing from IV line.
8. Scrub the hub of the needleless connector on the line for 15 seconds with an alcohol pad. Allow to air dry.
9. Open top of Curlin Pump and install new bag and tubing set. Close door
10. Remove cap from the end of the administration set (tubing) on pump and attach primed tubing to IV line by pushing and twisting to the right.
11. Unclamp the clamp on the IV line.
12. Push On/off button to turn pump on.
13. Start the pump referencing the order.
14. Place pump and Milrinone medication bag into pump bag.
15. Dispose of all supplies - including tubing, empty medication bag and used batteries - in regular garbage.

Questions, Concerns or Problems: If any questions, concerns or problems arise related to medication administration, or the IV line contact the agency by tagging [@TeamHelp-CareCoordination\(Best Tag\)](#) on your **patient care and scheduling channel** while you are in the home.

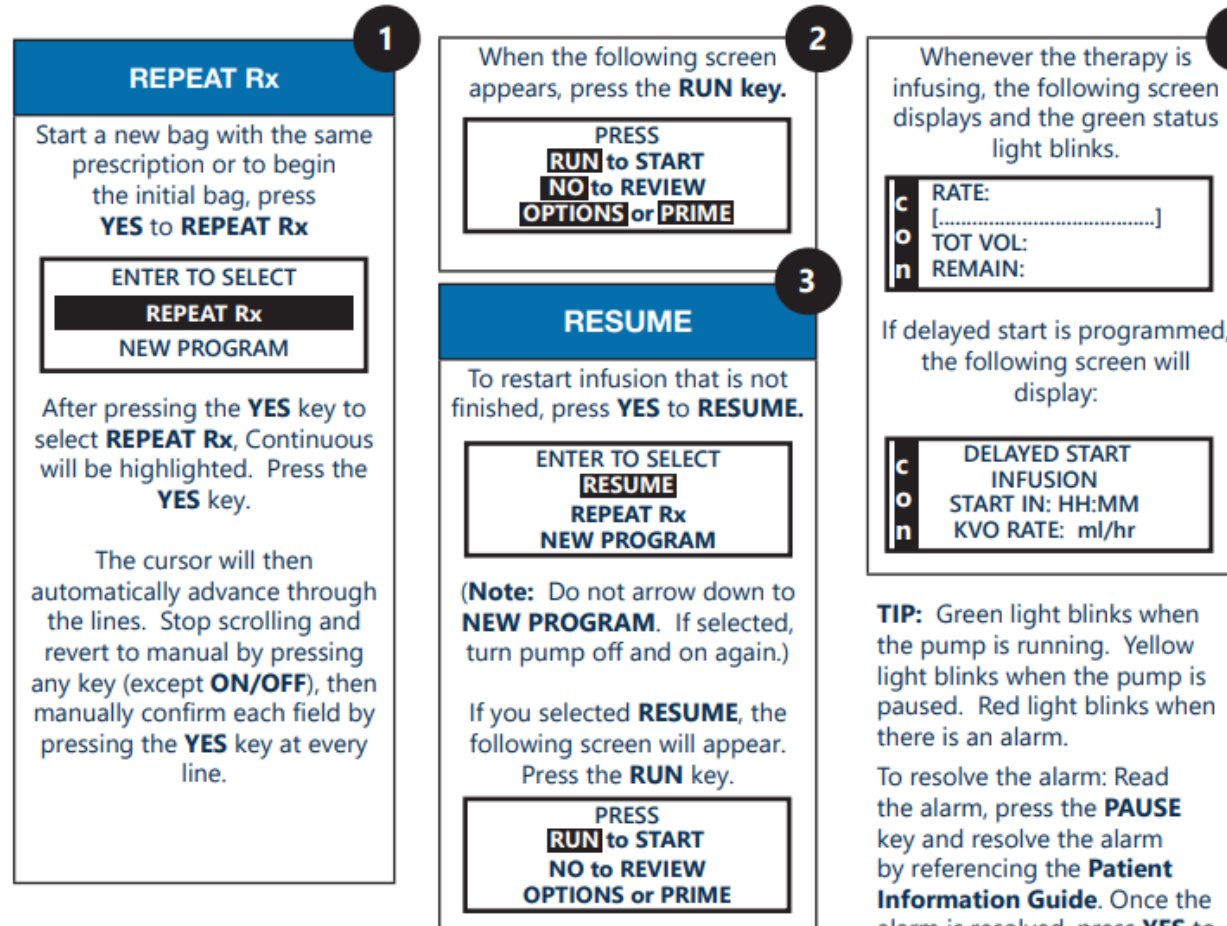
Curlin Step By Step Guide

1. Turn the pump on by pressing the ON/OFF key.
2. The pump will run through a series of self tests. One of the screens will display a bar that represents the power left in the batteries. (Replace batteries with Duracell ProCell C-cell batteries when 1/3 or less of the bar remains).
3. Highlight **PROGRAM** using the up or down arrow keys. Press the **YES** key. Pressing the YES key selects and confirms the highlighted line.

Note: Program mode may or may not be enabled.

ENTER to Select
PROGRAM
LIBRARY

Note: If instructed to use a medication in the Protocol Library, select **LIBRARY**. Select **REPEAT Rx** then press the **YES** key. The next screen may look like one of the following:



CADD STEP by STEP

[Cadd Bag Change Video](#)

- ▶ Wash Hands
- ▶ Gather Supplies
- ▶ Turn Pump off and open door to change batteries
- ▶ Obtain Tubing cassette and medication bag
- ▶ Attach extension set to tubing, and place in pump.
- ▶ Turn on the infusion pump
- ▶ Press and hold the power switch to turn the pump on.



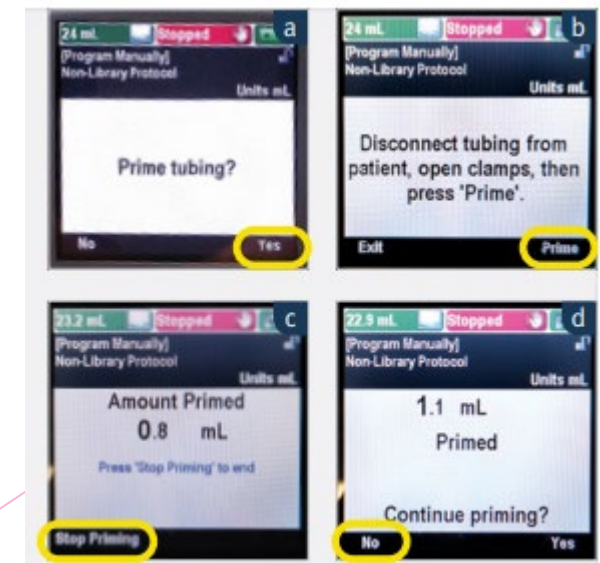
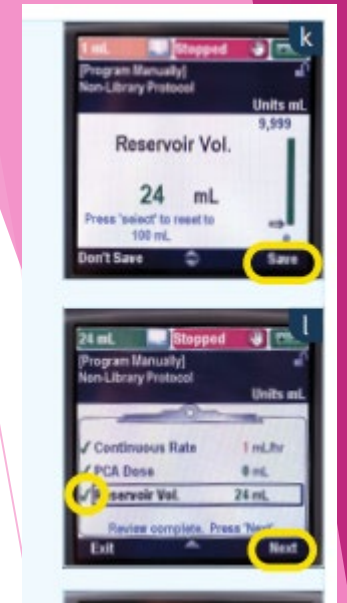
CADD - Attach Cassette

- ▶ Attach the CADD medication cassette to the infusion pump
- ▶ Remove the blue clip from the top of the cassette. Check that the tubing is clamped.
- ▶ Open the cassette latch
- ▶ Insert the cassette hooks into the hinge pins on the underside of the pump. Place the pump upright on a firm, flat surface, and then press down on the latch side of the pump until the cassette firmly clicks into place
- ▶ Lift the cassette latch into the closed position. You should be able to move the latch into the closed position with minimal to no resistance
- ▶ Verify the cassette is attached correctly. The top of the cassette should line up evenly with the bottom of the pump and be securely attached. A message will appear in the status bar to confirm proper attachment.



CADD - Pump Reset Reservoir Volume

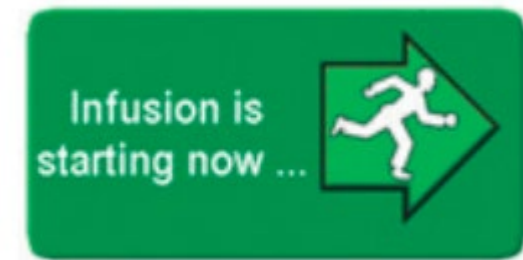
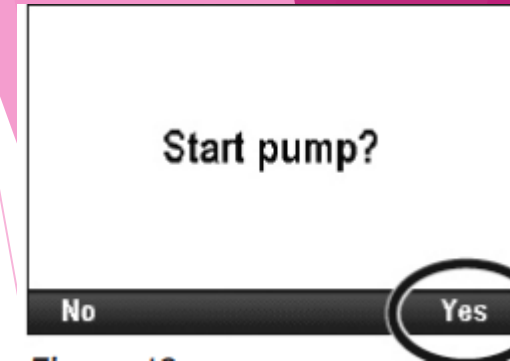
1. **Reset reservoir volume to _____mL?** appears after cassette is attached. Reservoir volume is the amount of fluid in a new bag of medication that is preprogrammed in your pump.
2. Press **Yes** for a new bag/cassette. **Saving** will appear briefly as it resets the reservoir volume.
3. Once you have reset the Reservoir Volume, the **Prime tubing?** screen will appear.
4. Press **Yes** to prime the tubing or **No** if your tubing has been pre-primed.
5. When **Disconnect Tubing** appears, make sure you are not connected to the IV catheter. Check to make sure all the clamps are open. Press **Prime**.
6. Do not remove the cap from the end of the administration tubing. The medication will be able to flow out around it.
7. Stop priming once the medication reaches the end of the tubing. If the medication is not at the end of the tubing when priming stops, press **Continue priming**. If the medication is dripping, press **Stop priming**



START/STOP CADD PUMP

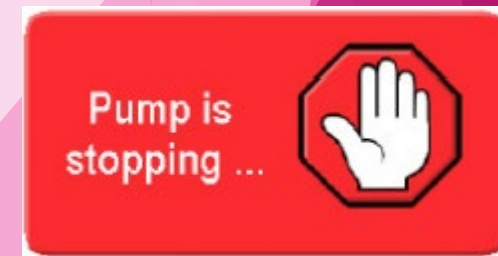
Start the pump

1. Press the **STOP/START** key to start the pump.
2. When **Start Pump?** appears, press **Yes**.
3. The pump will start. The **Stopped** message in the status bar will change to **Running** and **Infusion is starting now** will appear briefly.
 - **Note:** If a previous infusion was stopped before it was fully delivered, this message will appear: **Infusion was interrupted before completion. Finish interrupted infusion or start from beginning with new bag.**
 - In this case, select **New Bag** to reset the reservoir volume and reset the infusion profile. Or select **Finish** to resume the infusion from the point when it was last running. (This applies only to Taper and Step modes.)



Stop the pump

1. Press the **Stop/Start** key to stop the pump.
2. When **Stop Pump?** appears, press the key under **Yes**.
3. The pump will stop. The **Running** message in the status bar will change to **Stopped** and **Pump is stopping** will appear briefly.
 - Note: Screen displays **Reservoir Volume** is zero. **Pump stopped.**
 - -Press key under **Silence**
 - -Press key under **Acknowledge**
4. Press the power button. When the **Power Down?** message appears, press the key under **Yes**. The pump will turn off.
 - Note: If hooking up a new medication/ cassette, repeat these steps. Start at the beginning of these instructions.



DUKE CURLIN FORM

When seeing a patient for Duke Home Infusion that is on a cardiac medication - this form is **REQUIRED!**

Please download and complete this form with **EVERY** visit for Duke Cardiac Patients

*this form is also used for any Duke patients on continuous infusions via the Curlin Pump



Helms Home Care
Phone: (704) 802-9625
Fax: (888) 502-5390

SKILLED NURSING: CURLIN ADMINISTRATION

| PATIENT NAME: | DOB: | VISIT DATE: |
|---|------|---------------------|
| Curlin Pump Serial Number: _____ (Pump in use) | | |
| Curlin Pump Serial Number: _____ (Backup Pump, not in use) | | |
| BAG HANGING: | | |
| Medication Name: _____ | | |
| Concentration: _____ | | |
| Basal Rate upon arrival: _____ | | |
| Volume Remaining (Check Bag & Pump): _____ | | |
| Expiration Date: _____ | | |
| Date of Last Bag Change: _____ | | |
| If dose is <u>CHANGING</u> or you are <u>HANGING A NEW BAG</u> : <input type="checkbox"/> N/A | | |
| Stop Time: _____ | | |
| Amount Wasted (Estimate in mL): _____ | | |
| NEW BAG: | | |
| Start Time: _____ | | |
| Medication Name: _____ | | |
| Concentration: _____ | | |
| Basal Rate: _____ | | |
| Volume Remaining (Check Bag and Pump): _____ | | |
| Expiration Date: _____ | | |
| Backup Bags in home (Qty): _____ | | |
| Expiration Dates for Backup Bags: _____ | | |
| Medication Profile Updated: <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Pharmacy Contacted for Supply Needs: <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Pharmacy Contact: _____ | | |
| Date/Time: _____ | | |
| 17 | | |
| RN PRINTED NAME: _____ | | RN SIGNATURE: _____ |

VIDEOS for IONOTROPIC MEDICATION INFUSIONS

[Milrinone Infusion](#)

[Curlin Pump](#)

[Curlin Pump Video on Milrinone](#)

[Administration Guide: Curlin Pump](#)

[Curlin Step by Step](#)

[CADD Solis Pump](#)

[Bag change on Cadd Solis Pump](#)

[CADD Solis Pump: Changing a bag - YouTube](#)

Communication via Teams

When responding to messages in Teams:

- ❖ Be sure to **ALWAYS** tag with **EVERY** message
- ❖ **BEST PRACTICE** is to **ALWAYS** tag **@TeamHelp-CareCoordination(Best Tag)**
- ❖ **YES**, use this tag for everything - more people see this tag and your message is more likely to be seen and answered in a timelier manner. If clinical, lab team, visit note, HR, Payroll needs to be brought into the conversation, they will be tagged.

Chats

- ▶ Chats are one on one conversations
- ▶ **DO NOT use for call outs, for relaying patient information, for urgent help** - instead put this information on your patient care and scheduling channel and tag **@TeamHelp-CareCoordination(Best Tag)**
- ▶ In Chat **DO NOT TAG** **@TeamHelp-CareCoordination(Best Tag)**

AFTER HOURS

- ▶ When assistance is needed after 5 pm during the week, on any holiday or weekend.

Submit a ticket using this link.

[After-Hours-Form](#)

- ▶ This will ensure your message is seen and addressed quickly
 - ▶ ***Do NOT call the Pharmacy or Provider.***
- ▶ If patient offers to call MD/Pharmacy, please let agency know.
 - ▶ Do NOT take verbal orders in the field.

SUPPLIES


SUPPLY REQUEST FORMS

Use [Pharmacy Supply Request](#) Forms ONLY for specialty patients

- (e.g., IVIg, Biologics, and other specialty medications).

Do NOT use these forms for acute therapies such as:


- Antibiotics
- TPN
- Hydration
- CVC care
- Inotrope Meds

 For these cases, ensure the client is informed of their supply needs so they can place their refill order when the pharmacy calls.

- **Contact a Care Coordinator** if there are emergency or special supply needs (e.g., IV 3000).



LAB SUPPLIES

Except for pharmacies sending Lab-in-a-Box, lab-related supplies should be requested as a [refill](#) to your RN Car Kit. 

Standard SUPPLIES in the home setting

Some supplies commonly used in hospitals are **not standard** in the home care setting. It's important to manage patient expectations with clarity and confidence.

Examples of non-standard home supplies:

- Alcohol-impregnated caps (e.g., Curoc Caps)
- Infection prevention discs (e.g., BioPatches)
- Elastic netting (e.g., Surgilast)

⊘ Please do NOT instruct patients to request these items from their pharmacy.

☑ If you believe an item was omitted in error, reach out to the Agency for clarification.

ALCOHOL-IMPREGNATED CAPS (CUROS CAPS)

- 💡 These are **not required** for proper line care in the home setting.
- Most pharmacies **do not provide them** unless the patient is at increased risk of infection.
 - **Standard practice remains:** scrub the hub with an alcohol swab and allow it to dry.

If a patient asks about these caps:

- Reassure them that they are an **optional hospital-based measure**, not a requirement for safe care at home.
- If they do have them, remind them: **each cap is single-use** and should be discarded after removal.
- If a patient insists on having, they can order online from a provider such as Amazon.

