

Your Peripherally Inserted Central Catheter (PICC)

What is a PICC?

PICC stands for peripherally inserted central catheter. It is a small, flexible intravenous (IV) tube that is inserted into a vein in your upper arm. The PICC is approximately 15-24 inches long, but trimmed so the tip of the PICC rests inside a large vein close to your heart.

Why are PICC lines placed?

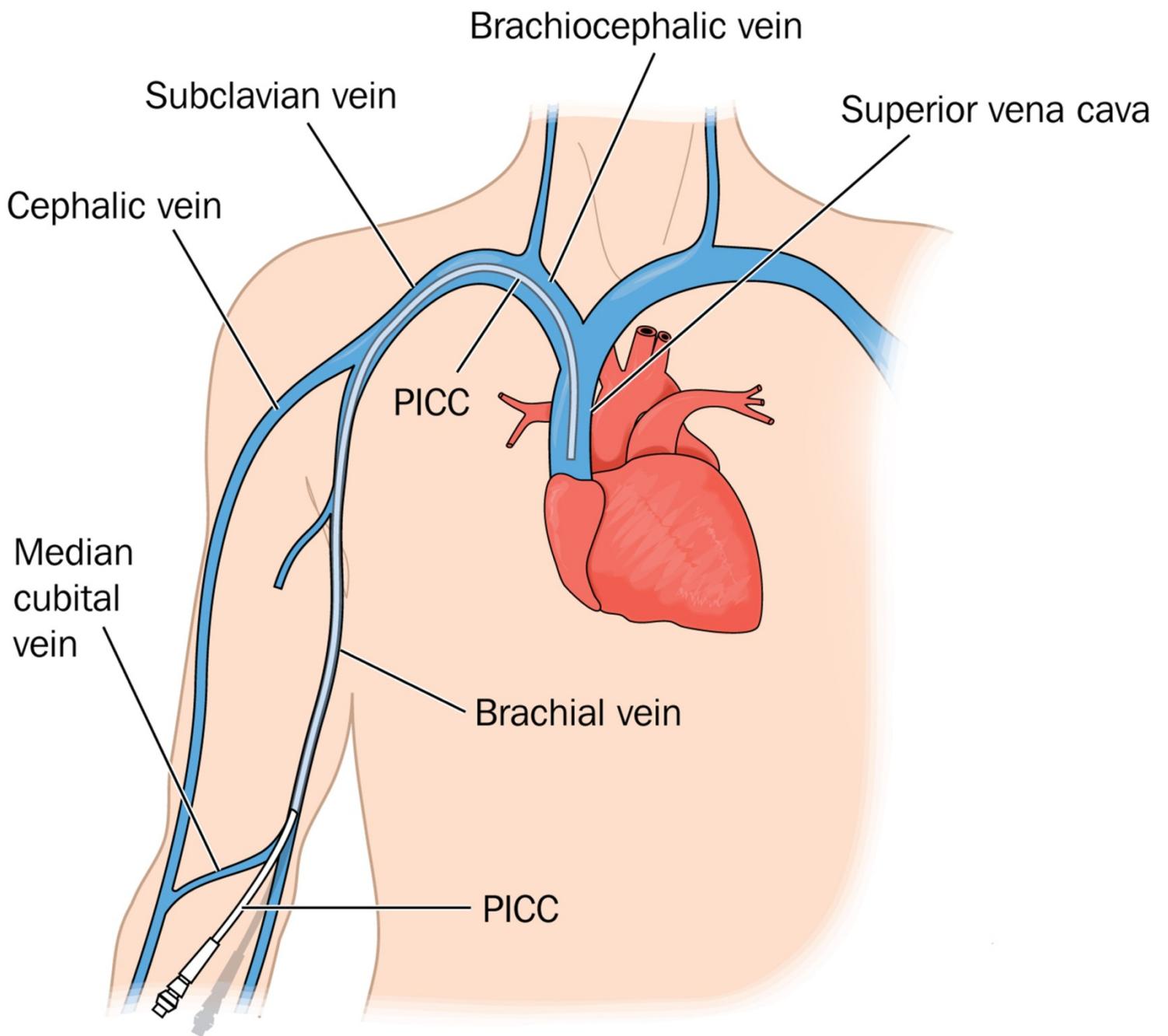
A PICC is used to give medications, fluids, blood products, chemotherapy, or nutrition through a vein. It may also be used for drawing blood. Unlike regular IV catheters, PICCs can stay in place for weeks or months and can thus meet long term intravenous requirements.

How is a PICC inserted?

The PICC will be inserted at your bedside or in a radiology department and should take about 30-60 minutes. The nurse or other practitioner will insert the PICC into a vein in your arm and thread it until the PICC tip is near your heart in the large vein called the superior vena cava. The PICC may be secured to your skin with steri-strips, tape, or a special securement device (e.g., GripLok). After the line is placed a chest x-ray may be done to confirm the PICC is in the right position.

What is a lumen?

The word lumen means the opening or the path inside the PICC. It is through this opening that you give medications or blood can be drawn. We also use this word to describe the ends of the PICC that are outside your body. You will notice that your PICC has 1, 2, or 3 lumens depending on your IV therapy needs.



How will I care for the catheter?

There are several things you will need to know in order to care for your PICC. Below are the steps you must take to prevent infection and ensure it will continue to work well for as long as you need it:

- Properly store, check and handle all supplies.
- Prepare a work area and clean your hands.
- Flush your catheter with heparin every day.
- Change your catheter dressing regularly.
- Change your caps weekly.

This booklet details these skills, then lists ways to protect your catheter and includes a table for troubleshooting problems that can happen. Your nurse will make sure you understand the procedures and provide time for you and your family to practice.

Storing Your Supplies

- Keep items away from children and pets.
- Store supplies in an area that is dry and free from dirt, dust, and clutter.
- Choose a place as close to your work area as possible.

Checking Your Supplies

Check your syringes and **do not use** if:

- leaks are present.
- the syringe is not full or appears half used
- fluid is cloudy or discolored.
- particles or specks appear in the fluid.
- it is past the expiration date.

Check all packaging and **do not use** if:

Care of the PICC

- seal is broken.
- package is torn.
- any part of the package is wet.

Selecting Your Work Area

Work on a table, laminate mat, counter top, or tray that can be cleaned with a household disinfectant or rubbing alcohol in an area:

- free from drafts, dirt, dust, and clutter.
- that has enough space and good lighting.
- that is near your supplies.

Do not work in the bathroom since most of the germs in your house are located there. Also, avoid working in your kitchen where you prepare food.

Preparing Your Work Area

1. Place a trash can next to your work area.
2. Clean your work surface or laminate mat with household disinfectant or rubbing alcohol. Let the area air dry.

Cleaning Your Hands

Although your hands may look and feel clean, it is always important to wash your hands in order to remove germs you can't see. Your hands should always be washed before any PICC care. You must wash your hands again if you touch anything that might be considered dirty.

There are two ways to properly clean your hands: washing with antibacterial soap or using an instant hand sanitizer (containing 60-90% ethyl alcohol). Do not use an instant hand sanitizer if your hands are visibly soiled or you have a *C. difficile* infection. Always wash hands with soap and water in these cases.

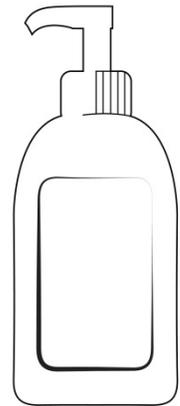
Washing Your Hands with Soap

1. Wet your hands and wrists under warm running water.
2. Apply soap and **scrub vigorously** for 15 seconds.
3. Work lather between fingers, under nails, over the palms and back of your hands.
4. Rinse your hands well. Make sure to keep your hands up so the dirty water runs toward your elbows.
5. Dry your hands with a clean paper or cloth towel.
6. Turn off the faucet with a clean towel.



Using an Instant Hand Sanitizer

1. Place a dime-size amount of instant hand sanitizer in one hand.
2. Gently rub the gel into palms and backside of hands and between fingers.
3. Allow your hands to air dry



Handling Sterile Supplies

- Some of the supplies are sterile. Sterile means that all germs have been removed by a special cleaning process.
- Parts of supplies that must be kept sterile are protected with a cover.
- Never touch sterile parts with your hands or allow a sterile item to touch a non-sterile surface.

Flushing Your PICC

Your PICC lumen(s) must be flushed to prevent infection and keep blood from clotting within the lumen. Flush each lumen once a day with heparin if not in use.

Supply list:

- Prefilled heparin flush syringe (10 units/mL)
(one for each PICC lumen)
- Alcohol pads

Key Points

- The heparin syringes do not need to be refrigerated.
- If your PICC has more than one lumen, you must use one flush syringe for each lumen.
- **Do not** use force when flushing your catheter. If you cannot flush your catheter easily or feel resistance when flushing, call your clinician.
- Check your IV catheter cap to make sure it is on securely (always hold your catheter cap while connecting/disconnecting syringes to prevent accidental removal).
- Never reuse syringes

Follow these steps:

1. **Vigorously** scrub the end of the cap on your catheter with an alcohol pad for 15 seconds. Wait another 15 seconds to allow the alcohol to dry. Do not fan or blow on it.
2. Remove the prefilled heparin syringe from the package and hold upright.
3. **Do not** remove the cap from the end of the prefilled syringe. Press forward on the plunger to break the seal. Do not pull back on the plunger.
4. Gently tap the sides of the syringe so the bubbles rise to the top. Remove the cap and push the plunger to remove all the air.
5. Push and twist the heparin syringe into your IV catheter cap to the right until secure.

6. Unclamp your catheter.
7. Push the heparin flush into your PICC until 0.5 mls of solution remains. Clamp your PICC, remove the syringe and discard in your trash.

Repeat steps 1-6 to flush each lumen if your PICC has more than one lumen.

Changing the PICC Dressing

Supply list:

- PICC Dressing Kit
 - Sterile drape
 - Sterile gloves
 - Skin protectant pad
 - ChloroPrep®
 - Gauze sponge
- Grip-Lok®

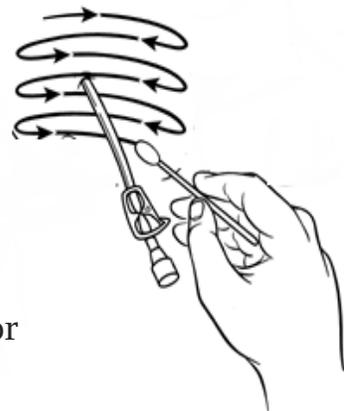
Key Points

- Clean the skin and change the dressing 3 times a week for gauze and tape dressing.
- Clean the skin and change the dressing every 7 days if you have a clear dressing.
- Change the dressing as soon as possible if it becomes dirty, wet or loose
- **Never** use scissors near the PICC.
- Do not pull, bend or kink the PICC.

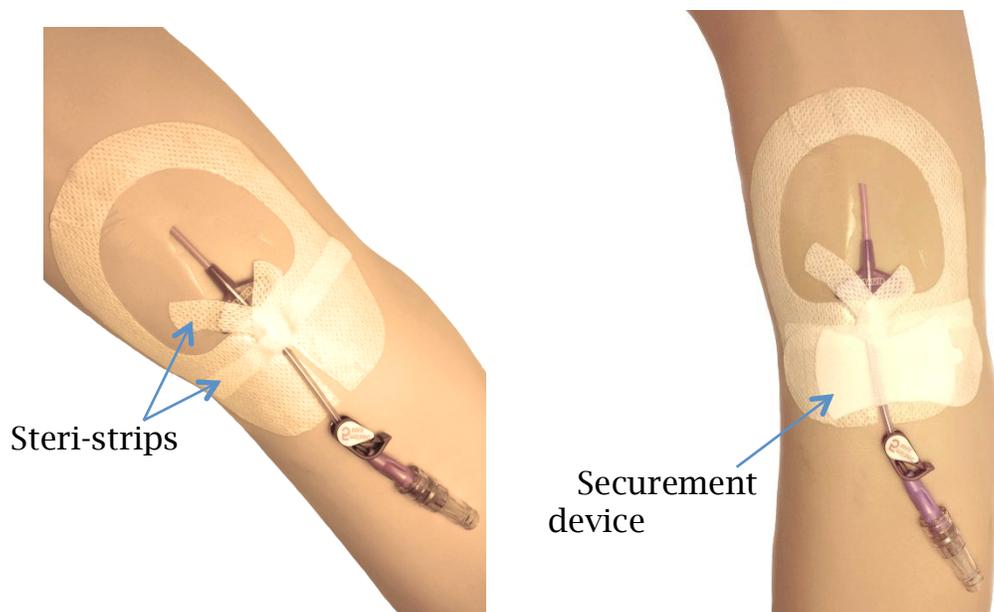
Follow these steps:

1. Place a trash can next to your work area.
2. Clean your work surface.
3. Wash your hands for 15 seconds or use an instant hand sanitizer.

4. Gather your supplies and place on your work area.
 - Open the dressing kit.
 - Remove the sterile drape.
 - Open the drape and place on your work surface.
 - Place contents of the kit on the sterile drape.
5. Carefully remove the old dressing:
 - Pull the dressing one corner at a time toward the catheter exit site.
 - After all the corners are loosened, hold the catheter down and pull the dressing up and off.
6. Throw the old dressing away.
7. **Do not** touch the PICC insertion site and the surrounding area while the dressing is off.
8. Look around the PICC site for swelling, redness, tenderness or drainage. These could be signs of an infection. If present, call your nurse or clinician after finishing the dressing change procedure.
9. Put on sterile gloves.
10. Remove the cleansing swabstick from the package.
11. Carefully clean the area around the PICC:
 - Use a back-and-forth motion for 30 seconds.
 - Completely clean at least 2 inches around the PICC exit site.
 - Allow the area to completely air-dry. Do not blot or wipe away.
 - Discard the swabstick.
 - Clean the area again with the remaining swabsticks, discarding after each use and allowing to air-dry.
12. Apply the skin prep to the area around the catheter insertion site, starting 1 inch away from the catheter working outward. Let dry until smooth and shiny. Always wait until the area is completely dry before proceeding to the next step.
13. Apply the dressing.



- Remove the protective backing from the dressing.
- Apply dressing over the exit site by placing the center of the transparent window over the catheter exit site.
- Slowly remove the frame on the dressing while smoothing down the dressing edges.
- Take one steri-strip from the frame of the dressing and crisscross or “butterfly” it around the catheter and attach it over the dressing.
- Place the other steri-strip over the butterfly to hold it in place.



14. Open the securement device ie Grip-lok® package.
15. Peel the paper backing from the Grip-lok® and place under the catheter on the split area of the PICC dressing.
16. Lift the top flap and remove the paper backing where it says “peel”.
17. Place catheter tubing on bottom adhesive strip.
18. Place top flap over the tubing so that the tubing is placed between adhesive strips and top flap is secured.

Changing the PICC Catheter Cap

Supply list:

- IV catheter cap
- Alcohol swabs

Key Point

- Change each cap every 7 days.

Follow these steps:

1. Clean work area.
2. Gather supplies.
3. Wash hands for 15 seconds or use instant hand sanitizer.
4. Open the sterile PICC cap package carefully and leave the cap in the package without touching it.
5. Clamp your PICC.
6. While holding the PICC lumen with an alcohol swab in one hand, vigorously clean the PICC/cap connection with a second alcohol swab for 15 seconds.
7. Carefully remove the old PICC cap and throw away. If you cannot get the cap off, try using rubber gloves or tape to get a better grip. **Do not** use pliers. Once the cap is off, be very careful not to touch the open end of the PICC.
8. Unscrew the protective covering from the new PICC cap making sure that you do not touch the protected area.
9. Screw on the new cap.



Repeat steps 4-9 to change each cap if your PICC has more than one lumen.

How will I protect the catheter?

You may participate in most normal activities including work, school and exercise. The following precautions will help prevent damage and infection:

- Avoid swimming, use of hot tubs or any activities that may get any part of your PICC wet.
- Keep the dressing and catheter clean and dry when you shower or bathe.
 - Cover the dressing and catheter with plastic and tape the edges of the plastic onto your skin.
 - If the dressing gets wet, change the dressing as soon as possible.
 - Never let the catheter ends get wet.
- Avoid golfing, bowling, weight lifting, archery or activities requiring vigorous or repetitive motion of the arm.
- Avoid any contact sports where the catheter might be pulled or grabbed.
- Limit any activity such as pulling, pushing, or lifting.
- Use caution when walking with crutches.

If you have any questions about activities while your PICC is in place, please contact your clinician.

Troubleshooting PICC Problems

Problem	Possible Cause	What to Do
Infection		
<ul style="list-style-type: none"> • Fever and/or chills • Redness, swelling, tenderness, and/or drainage at the exit site 	<ul style="list-style-type: none"> • Infection in or around the PICC or in your bloodstream 	<ul style="list-style-type: none"> • Call your clinician immediately. • If pus or drainage is present, note the color, odor, and amount. Give this information to your clinician.
PICC Damage		
<ul style="list-style-type: none"> • Break • Puncture 	<ul style="list-style-type: none"> • Repeated clamping, excessive pulling the PICC, or contact with a sharp object. • Rupture from attempt to flush a blocked PICC: higher risk when using small syringes 	<ul style="list-style-type: none"> • Clamp your PICC above the damaged area. This will prevent bleeding and keep air from entering the PICC. Call your clinician immediately.
Blocked PICC		
<ul style="list-style-type: none"> • Cannot flush • Cannot withdraw blood • Cannot infuse medication 	<ul style="list-style-type: none"> • PICC is clamped, kinked, curled, clotted, or positioned against the wall of your vein. 	<ul style="list-style-type: none"> • Visually check the PICC for kinks and make sure that the PICC is unclamped. • Move your arms, shoulders, and head to see if a change in position helps. • Try flushing the PICC again • If still unable to flush the PICC, call your clinician.
Movement of the PICC		
<ul style="list-style-type: none"> • Length of exposed line is increased. • New onset pain in the neck or shoulder. 	<ul style="list-style-type: none"> • Catheter is flexible and in rare cases may move out of position. 	<ul style="list-style-type: none"> • Call your clinician immediately.

PICC Comes out of body		
<ul style="list-style-type: none"> • PICC comes out of the body 	<ul style="list-style-type: none"> • Excessive pulling on PICC 	<ul style="list-style-type: none"> • Immediately apply pressure over the PICC site to stop any bleeding. • Call your clinician immediately.
Thrombosis		
<ul style="list-style-type: none"> • Arm with PICC line becomes swollen and cool to the touch. • Swollen veins in neck or chest. 	<ul style="list-style-type: none"> • Blood clot 	<ul style="list-style-type: none"> • Call your clinician immediately.
Skin Irritation		
<ul style="list-style-type: none"> • Redness • Tenderness • Blistering of the skin 	<ul style="list-style-type: none"> • Irritation from the dressing or tape. 	<ul style="list-style-type: none"> • Call your clinician <ul style="list-style-type: none"> ○ You may need to use another type of dressing or change the areas of the skin you are taping the PICC to.
Fluid Leakage or Blood Back-up		
<ul style="list-style-type: none"> • Fluid leakage from: <ul style="list-style-type: none"> ○ End of the PICC ○ Along the PICC • Blood seen in PICC 	<ul style="list-style-type: none"> • Connection between the PICC and cap is loose or disconnected. • PICC is damaged from a puncture or rupture. 	<ul style="list-style-type: none"> • Check PICC and cap connection. Be sure they are tight. • Flush PICC and observe exit site for signs of fluid leakage. Notify your clinician. • Check for PICC damage. If found, clamp the PICC above the damaged area and call your clinician immediately.

Resources and Phone Numbers

Contact: _____

Doctor/Clinician: _____

Clinic: _____

Home Infusion Provider: _____

Notes



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