What are PICC and midline catheters used for?
- Any medication given over several days, weeks, or months.
- Long-term intravenous nutrition.
- Any patient with poor veins needing long-term access.
- Patients who need frequent blood draws.

What is a PICC?
A PICC catheter is an intravenous catheter inserted into a large vein in the inside of your elbow. This catheter extends into the large vein that returns blood to your heart. A PICC catheter may remain in place for as long as you need therapy. Some patients have kept them for up to a year.

What is a midline catheter?
A midline catheter is an intravenous catheter like a PICC, but a midline is much shorter. It extends to a point just below the level of the shoulder.
Follow the Aseptic Technique

If not cared for well, the catheter can allow germs to enter your body, causing serious infection. It is key to keep your hands and work surfaces clean when you handle your medications, catheter, and IV tubing. The procedure you will use to clean your hands and work surfaces are known as aseptic technique. Aseptic technique means to disinfect or clean each part involved and to avoid touching sterile surfaces with your hands. Keep this in mind every time you do your therapy.

Wash Your Hands

Your hands carry germs. Scrub your hands very well before you begin your infusion.

1. Use anti-bacterial soap and warm running water to wash your hands.
2. Be sure to wash well under your fingernails and between fingers.
3. Dry your hands well with a clean paper towel.
4. Use a paper towel to turn off the faucet.

Prepare Your Workspace

Your work area should be away from family activity, small children, and pets. The bathroom should not be used as a workspace because it is full of germs. A sturdy and washable surface makes the best work area. Your workspace should be free of drafts. Close all windows and doors, and turn off fans before you begin to clean your workspace.

1. Clear your workspace of objects and papers.
2. Wash area with soap and water, or wipe off with disinfectant or alcohol.
3. Place a new clean paper towel on your workplace. Change the paper towel every day.

Inspect Your PICC Line Daily

You will need to follow these steps to monitor and maintain your catheter. These steps will help you detect any early symptoms of infection or phlebitis. If found early, the problems can likely be resolved.

1. Wash your hands.
2. Observe the area under the clear dressing for any redness, swelling, drainage, or moisture.
3. Gently feel for any swelling, tenderness, or a “cording,” starting at the exit site and continuing up your arm, into the armpit area. You should not experience pain as you feel your arm.
4. If you develop any of the above symptoms, call ______________ right away for instructions.

5. Observe the dressing over the catheter. It should be intact, without moisture underneath. You may need to reinforce the edges with tape.

6. The catheter and dressing should not get wet. When showering, wrap your arm with plastic wrap around the entire dressing area and secure with tape. Dry thoroughly after showering. (Tub bathing is not recommended unless you are able to keep your arm from being submerged.)

7. Your dressing will be changed once per week unless you develop a problem before that. Never remove the dressing yourself as this may inadvertently pull your catheter out or introduce bacteria.

8. Your dressing will be changed by ________________

Flush Your PICC or Midline Every ____________

Prepare Your Flushes

1. Wash your hands.

2. Prepare your workspace.

3. Gather your supplies:
   a) Pre-filled normal saline syringe (one for each lumen being flushed)
   b) Pre-filled heparin syringe (if needed)
   c) Alcohol pads
   d) Gloves

4. Prepare your syringes.
   a) Peel open syringe package and remove clear protective cover.
   b) Remove protective cap and hold syringe upright. Push plunger on syringe to remove any air from the syringe. Recap syringe.
   c) Place on clean workspace.
   d) Repeat above steps for each flush needed for your infusion.

- Use syringe one time only.
- If you touch the end of the syringe, or drop a cap on the floor, throw it away and start over.
Flush Your PICC Line

1. Put gloves on.
2. Before flushing, clean Clave cap at end of catheter with alcohol. Use friction and clean for one minute.
3. Attach normal saline syringe by screwing it on to Clave cap in a clockwise direction. Open any clamps, if present on PICC.
4. Flush each lumen with 10cc of normal saline.
   - If you meet resistance, do not force. This could damage the catheter.
   - If you have any pain with flushing, do not continue.
   - If you notice any leakage anywhere on your catheter or under the dressing, stop flushing.
   - Call ________________________________ if any of the above problems occur.
5. If your catheter has clamps, close clamps before removing syringe.
6. Finally, if heparin is required, flush your catheter with heparin. This will keep your catheter from clotting off between infusions. Follow the same steps as for flushing with saline.
   Amount of heparin: ________________________
**Change Your Clave Cap Every Week**

1. Wash your hands.
2. Put on gloves.
3. Prepare your workspace.
4. Gather your supplies:
   a) New Clave cap
   b) Alcohol wipe
   c) Clean gloves
5. Wash your hands.
   a) Put on gloves.
   b) If clamps are present on the PICC, close clamps prior to disconnecting Clave cap.
   c) Screw off old Clave (counterclockwise). Discard old Clave.
   d) Continue to hold end of catheter. Clean threads on outside of open PICC hub with alcohol wipe using friction for one minute. **Do not** attempt to cleanse the inside of the open catheter. **Do not let catheter end touch anything but the alcohol wipe.**
   e) Screw off protective cap of new Clave.
   f) Screw new Clave onto end of catheter until snug (clockwise). Do not over-tighten.
   g) Remove gloves and wash hands.

**Reminders:**
- Do not use pliers to remove Clave.
- Do not over-tighten when twisting on new Clave.
- Do not place anything onto end of Clave except syringe or IV tubing.
- Do not use needles with Clave caps.
Identifying Problems and Knowing What to Do

Problems that Need Attention Right Away:

1. Breakage or separation of catheter.
   a) **Signs:** Leakage of fluid when the catheter is flushed. Break may be visible. Blood may leak out.
   b) **What to do:** Fold the catheter in half upon itself above the break and tape it to your skin. Call your doctor or go to an emergency room. Your catheter will need to be repaired or replaced.
   c) **How to avoid:** Do not use needles or scissors around or near your catheter. Do not tug or pull on it. Do not over-twist the hub when changing the cap.

2. Infection.
   a) **Signs:** Fever (temperature greater than ______), chills, swelling or oozing at the insertion site.
   b) **What to do:** Call your doctor. You will probably need treatment.
   c) **How to avoid:** Wash your hands when handling your catheter. Wear a mask if you have a cold. Don’t be around people who are sick. Make sure the dressing is intact and kept dry.

3. Blocked (clotted) catheter.
   a) **Signs:** Unable to flush the catheter using normal pressure.
   b) **What to do:** **Do not** use extra pressure. Check to see if the tubing is kinked or bent under the dressing. If not, call your doctor. The catheter will need to be unplugged using a special medicine.

4. Severe pain.
   a) **Possible causes:** Your catheter may have slipped out of the vein or a blockage may be forming.
   b) **What to do:** Severe pain is never normal and should be reported to your doctor. He or she may advise you to stop using your catheter.
Problems that Need to Be Reported, But Do Not Usually Need Emergency Care:

1. **Swelling of neck or arm on side of catheter.**
   a) *Signs:* Swelling of the hand, arm, neck on the side of your body where you have your catheter.
   b) *What to do:* Call your doctor. He or she will need to see you soon.
   c) *How to avoid:* This may happen for no clear reason. Your doctor may treat you with medicine or remove the catheter.

2. **Movement of the catheter.**
   a) *Signs:* Catheter has moved in too far, or pulled out from original position.
   b) *What to do:* **Never push catheter back into your arm.** Call the Vascular Access Consulting Nurse or your doctor. You may need a chest X-ray to confirm proper placement.
   c) *How to avoid:* Protect catheter extensions from being caught in clothing. Keep arm very still when getting dressing changes.

3. **Blood under the bandage.**
   a) *Signs:* Oozing blood noticed under dressing.
   b) *What to do:* A small amount of blood is not unusual. Excessive bleeding is rare and will require a new dressing. Call your doctor or Vascular Access Consulting Nurse and apply pressure to the bleeding site until the dressing can be changed.
   c) *How to avoid:* Most excessive bleeding is caused by blood disorders. A small amount of bleeding is normal and can be minimized by limiting elbow and arm movement for the first six hours after the catheter is placed.

4. **Catheter arm aches.**
   a) *Possible causes:* General arm discomfort for the first one to two days after insertion is not uncommon. Pain that lingers and won’t subside may mean that your vein is not tolerating the PICC.
   b) *What to do:* Talk to your doctor or consult with a Vascular Access Consulting Nurse. Mild pain relievers or a heating pad usually relieve symptoms.
Questions?
Call 206-540-9288

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff members are also available to help at any time.

UWMC Vascular Access Program available on pager:
206-540-9288

Pager Hours:
Monday through Friday,
7 a.m. to 7 p.m.
Saturdays, 11 a.m. to 7 p.m.

For emergencies after hours, call your doctor.

How to Call the Vascular Access Specialist

There is a Vascular Access Specialist available Monday through Friday from 7 a.m. until 7 p.m. They are also available on Saturdays from 11 a.m. until 7 p.m. They can be reached via pager at 206-540-9288. They can answer your questions and offer tips on how to care for and maintain your catheter.

This patient guide is based on information provided by Providence Home Infusion.