

**WAIVER REQUEST**

Date: \_\_\_\_\_

Facility: \_\_\_\_\_

Facility contact person: \_\_\_\_\_

This facility, \_\_\_\_\_, submits to the State of Connecticut Department of Health, a request for waiver of the Public Health code, Chapter 4, Sec.19-13-D8u Sub-group(C) number (3) which states ***“Only a physician may initiate and terminate central vein access.”***

This facility has been providing intravenous therapy services as defined within said protocol since (date) \_\_\_\_\_.

However, this facility now requests to amend said protocol to allow for the ***insertion and removal of a PICC (peripherally inserted central catheter)*** within the facility by a qualified registered nurse. A qualified registered nurse is defined as a registered nurse possessing substantial knowledge and experience in infusion therapy. The qualified registered nurse has specialized education and can demonstrate competency in PICC line placement. Documented education shall include a theoretical and clinical component, initial validation and annual revalidation of PICC insertion.

This waiver addresses an area of clinical parameters of nursing practice that is current and regulated by professional standards of care.

The benefits of this proposed procedure are as follows:

**1. Therapeutic**

The procedure would be done at the resident’s bedside allowing the resident to remain within the facility, and prevent unnecessary disruption to their care.

A qualified registered nurse would be able to insert and remove the catheter in a timely manner avoiding delay by waiting for a physician or transfer to an outside facility.

The prompt removal of a resident’s PICC catheter once therapy is completed reduces the potential for complications associated with venous access devices.

**2. Cost-effective**

Under the current Prospective Payment System for Medicare, the facility incurs the cost of sending the resident to an outside agency for this procedure that places a financial burden on the facility. The expense of transferring a resident as well as the cost of a hospital / clinic visit for an uncomplicated PICC catheter insertion and removal can be substantial.

**3. Standards of Practice**

PICC catheter insertion and removal is a standard nursing practice procedure addressed in the Revised Intravenous ***Nursing Standards of Practice***, November/December 2000, Standard 111: *Peripherally Inserted Central Line*, s37-s45, and s51

This facility offers the following assurances to the Commissioner during the time the waiver would be in effect:

- The facility is following the letter and spirit of the Public Health Code and has attached a protocol amendment that should gain the State's endorsement.
- This facility has access to licensed qualified registered nurses as previously defined. These nurses will be available to the facility to perform the clinical procedure as described in this waiver request.
- This facility will perform ongoing evaluation of complications and outcomes related to this specialized procedure to insure the safety and health of its residents.

This facility has prepared and submits the following documents (attached) for consideration in the approval process:

1. Excerpts from current professional standards of care with supporting literature that addresses the policies and practice directed to the purpose of this waiver.
2. Policies and procedures for PICC catheter insertion and removal.

This waiver, and the ultimate approval of the protocol amendment, would produce no hardship to the facility, staff and residents. In essence, it will enable this facility to provide safe and effective care for those residents who require PICC insertion and removal.

Checklist for PICC Insertion Request

Sample

- Complete *Physician's Order Form for PICC Insertion*
- Complete *PICC Consent Form*: Obtain resident / conservator's consent for procedure (telephone consent also requires witness signature)
- Evaluate resident:
  - Free of contractures
  - Cooperative resident
  - Evaluate room location for sterile procedure/cohort
- Notify the Pharmacy:
  - Fax MD order to Pharmacy
  - Obtain PICC insertion supplies and pre-meds from the Pharmacy
  - Pharmacy to arrange PICC insertion RN
  - Date / time PICC insertion RN scheduled for: \_\_\_\_\_
- Upon date / time confirmation of RN, call radiology to schedule chest x-ray for catheter tip confirmation.
  - Date/time chest x-ray scheduled for: \_\_\_\_\_
- After confirmation of catheter tip placement in the Superior Vena Cava (SVC) by the written / faxed chest x-ray report, complete VAD tracking form and fax as noted on form.

**Checklist completed by:** \_\_\_\_\_

**Date completed:** \_\_\_\_\_



*Sample*

**PERIPHERALLY INSERTED CENTRAL CATHETER (PICC LINE)  
INSERTION CONSENT FORM**

PATIENT'S NAME \_\_\_\_\_ DATE \_\_\_\_\_

I, \_\_\_\_\_ (patient or patient authorized representative) understand that the physician has prescribed a course of intravenous therapy, and that a PICC Line has been ordered to facilitate this therapy. I am authorizing this catheter to be inserted by a Registered Nurses who has advanced education and training in this insertion procedure. The procedure will involve the insertion of the P:ICC Line into one of the large veins in my arm, with the catheter tip advanced to the central vein above the heart. The benefits with use of the type of catheter are lower infection rates, relatively easy insertion and no need for multiple IV sites during the prescribed therapy.

I acknowledge that there are potential risks associated with the insertion for the PICC Line. Insertion related complications are those that occur during the insertion procedure of immediately after, including but not limited to malpositioning, bleeding from the catheter exit site, tendon or nerve damage, chest pain/respiratory distress, cardiac arrhythmia. Post insertion complications may occur at any time during the life of the catheter, including but not limited to phlebitis, cellulites, catheter sepsis, thrombosis/thrombophlebitis, air embolism, pulmonary embolism, catheter tip migration, stuck catheter, redness or swelling at the venipuncture site, soreness or swelling of the arm where the catheter is.

PICC education materials were reviewed with me and I have had the opportunity to ask questions to my satisfaction. I understand there may be other available options to access my veins including a short IV catheter, or various surgically placed central lines, which can be discussed with my doctor if I desire.

My signature below indicates that I understand the benefits and risks associated with this procedure and consent to this procedure being performed.

\_\_\_\_\_  
Signature of Patient (or patient authorized representative) \_\_\_\_\_ Date

\_\_\_\_\_  
Printed Name of above Signature \_\_\_\_\_ Date

\_\_\_\_\_  
Signature of Witness \_\_\_\_\_ Date

\_\_\_\_\_  
Printed Name of Witness \_\_\_\_\_ Date

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I have spoken with \_\_\_\_\_ (Name), the \_\_\_\_\_ (relationship) of \_\_\_\_\_, and have explained the general purpose, benefits, and risks of inserting a PICC line as outlined above. This person authorizes the placement of the PICC Catheter to be performed here at this facility, and has encouraged to ask questions pertaining to this procedure.

\_\_\_\_\_  
Signature of Physician \_\_\_\_\_ Date

## WHAT CARE WILL I NEED?

The nurses/clinicians at your facility will care for your PICC Line. The PICC will need to be flushed with solutions according to your facility's protocol usually one to two times a day to prevent blockage. The dressing (clear cover and/or gauze) will also need to be changed once a week or more.

## WHAT CAN GO WRONG?

### Bleeding

Many patients experience minor bleeding around the entry site just after the PICC has been put in, this is expected and usually stops after a few hours. More precautions are taken if you have problems with the clotting mechanisms in your blood. Please inform the PICC clinician if you have a history of any abnormal bleeding.

### Phlebitis

Although a PICC is a very thin tube, it can sometimes irritate the inside of the vein wall in your arm. This occurs most commonly during the first week after insertion. Some preventative measures you can take are: avoid heavy lifting (nothing over 5-10 lbs), avoid excessive repetitive exercise with the PICC arm. If you develop pain or redness at the PICC arm, notify your facility nurse or clinician. Phlebitis can often be resolved with rest and elevation of the arm, and warm compress applications.

### Infection

Precautions are taken to reduce the risk of infection from the procedure used when the line is placed to the protocols used for care of the PICC. The signs of an infection can involve unusual drainage at the insertion site of the PICC, a fever, or a change in behavior. The physician is notified if infection is suspected. Often blood tests are ordered. An infection may be treated with antibiotics, but sometimes the physician will order removal of the PICC.

### Blockage of the PICC

Most PICCs are designed to easily allow blood

samples, but sometimes blood cannot be withdrawn. The problem can usually be solved by instilling a de-clotting agent into the PICC Line. This procedure usually requires a trip to the hospital as an outpatient. If the PICC cannot be unblocked, a new PICC may be exchanged for the old blocked PICC. A PICC exchange procedure does not require a new needle stick.

### Vein thrombosis or blood clots

A PICC Line or any intravenous catheter is a foreign object within the blood stream. There is a potential for formation of a thrombus (blood clot) around the area of the PICC. If your physician suspects you may be at higher risk for a blood clot, anticoagulation pills may be ordered as a preventative measure. Maintaining adequate hydration, drinking water, or IV fluids is also helpful.

### Damaged or broken Line

It is very important to prevent the PICC from getting damaged. Breakage of a PICC Line is an uncommon event, if it occurs it will be removed by a specially trained registered nurse or advanced practitioner. Occasionally it is possible to repair a PICC using equipment provided by the PICC manufacturer.

In the very unlikely event that a PICC breaks internally, the nurse/clinicians at your facility are trained to care for you and will transfer you to the hospital for removal of the catheter by a physician.

## FURTHER INFORMATION

If you have any questions about PICC Lines please ask your nurse/clinician or your physician.

# ABOUT PICC LINE CATHETERS

Information for  
Patients and  
Family/  
Caregivers

This Informational Brochure has been provided by the Connecticut Chapter  
INS LTCF PICC Committee 2004

# PICC LINE INFORMATION

Your doctor has ordered a PICC Line insertion. This brochure is designed to give you information on the PICC Line, what to expect –from the insertion procedure, use, care, and potential complications.

## WHAT IS A PICC LINE?

PICC stands for "Peripherally Inserted Central Catheter". A PICC is one type of central venous catheter. It is a long intravenous catheter; a soft flexible thin tube (commonly made out of silicone or polyurethane) that is inserted by specially trained registered nurse or advance practitioner (physician, physician's assistant, or nurse practitioner). The PICC is inserted into a vein in your arm (the arm is considered a peripheral location on the body) and threaded up into the large "central" vein (superior vena cava) that is located just above your heart. It is used for giving fluids or medications into your bloodstream.

There are other types of central catheters which are inserted surgically in the chest or neck area. Your physician can discuss these alternative options to PICC Line placement with you.

A PICC works on the same principle as a traditional short intravenous catheter. Short intravenous catheters are commonly placed in the arms and require changing approximately every three days. PICCs are used for moderate term to long term intravenous therapies. A PICC Line can stay in place for up to a year if needed. The tip of the PICC sits in the largest vein in the body, the superior vena cava. This location of the catheter tip helps to prevent complications. The superior vena cava is the largest vein in the body and the blood flow is much faster allowing for better dilution of the medications entering your blood stream.

A PICC allows your clinician to give you repeated or continuous intravenous doses without having to do repeated needle sticks. Also, blood samples can usually be taken from the PICC, avoiding extra needle sticks and discomfort.

Some PICCs have just one line or "lumen" while others have two - a bit like a road tunnel with two lanes. This allows the clinician to give more than one drug at once or to draw blood from one lumen and instill intravenous medication or fluids through the other lumen. The clinician inserting the PICC line will provide information on the type of PICC Line used. This information will be given to your facility caregivers and available to you.

## HOW IS THE PICC INSERTED?

The PICC Line is inserted by a specially trained registered nurse or advanced practitioner at the bedside. You can eat and drink normally beforehand.

Allow approximately one to two hours for the entire insertion procedure. The actual catheter insertion only takes a few minutes, but a lot of the time involves preparation. PICCs are inserted using sterile technique which requires set up of sterile fields, preparing the catheter, and cleansing of the skin. "Pre" medications (medications to take prior to the insertion procedure) may be ordered by your physician if needed (anti anxiety and/or numbing agents). There is a slight variation in methods used to insert a PICC Line. In general, a needle is used to obtain access to the arm vein. This needle is about as painful as having a routine blood test. The needle stays in for a few seconds, then is removed and the PICC tip is then threaded up through a introducer cannula (small short approximately two to three inch tube) into the central vein (superior vena cava). The threading of the catheter within the arm and chest vein is not painful and is usually not felt by the patient.

Once the PICC is in place - the area around the insert site of the PICC catheter on your arm

will be covered with a sterile gauze and a transparent (clear) dressing and a chest x-ray will be done to check the position of the PICC line tip in the chest. Once the position has been checked and approved by a radiologist, the PICC is ready to use. The nurses/clinicians at your facility will not use the PICC line until the approval to use the line is given by the radiologist.

## PROBLEMS WITH INSERTION

Again clinicians performing PICC insertions are specially trained in the procedure. Most PICC insertions go smoothly, but occasionally problems are encountered.

- Failure to access the vein, if this occurs a second attempt may be made to access a different vein.
- Inability to thread (advance the catheter tip) due to the condition or shape of the vein.
- At times the PICC is inserted smoothly. But the chest x-ray shows the tip is in the wrong position. A chest x-ray is **always** done to confirm correct placement
- Puncture of an artery or nerve. Rarely occurs.

*If a PICC insertion is unsuccessful your doctor may suggest an alternative central line surgically placed by a physician or advanced practitioner.*



## **PERIPHERALLY INSERTED CENTRAL CATHETER (PICC) INSERTION & REMOVAL**

### **POLICY**

A licensed registered nurse that is PICC insertion qualified may insert and remove a (peripherally inserted central line) PICC in a Long Term Care Facility. Qualified is defined as having documented completion of an educational program for PICC catheter insertion and removal, demonstrated clinical competency with initial and annual validation, proficiency in Infusion Therapy and having a solid understanding of central venous catheters. Peripherally inserted central catheters are inserted via a peripheral vein with the tip residing in the superior vena cava, and are placed for definitive therapeutic indications. A physician's order is required for PICC insertion. Tip verification is required via radiographic confirmation prior to initiation of therapy.

### **PROCEDURE FOR PICC INSERTION**

#### Patient Assessment and Education

1. Review physician's order and patient consent form for PICC insertion for completeness.
2. Verify patient's identity.
3. Review patient education for PICC insertion procedure.
4. Assess patient's vascular access /potential contraindications.
5. Place patient in supine position.

#### Prior to Procedure

1. Clear and clean workspace
2. WASH hands & use alcohol gel with friction until hands are dry.
3. Assemble equipment.

#### Insertion Site Preparation

1. Take anatomical measurements to determine effective length of catheter via the intended venous pathway.
  - Measure arm with measuring tape
  - For PICC placement in the superior vena cava, measure from the insertion site up arm to shoulder and across shoulder to mid-chest region
  - Continue from just right of sternal notch and down to third intercostal space.
2. Wash intended insertion site with soap and water and allow to dry.
3. Remove excess hair from intended insertion site with clippers or scissors (optional).
4. Fully extend the patient's arm and abduct arm in a 45 degree angle.
5. Don mask, gown, and gloves.

6. Use aseptic technique and observe Standard Precautions throughout PICC placement.
7. Apply local anesthetic to insertion site per MD order.
8. Disinfect insertion site

- Select a single-dose antiseptic solution packet to disinfect insertion site.

Recommended solutions include:

- 2% tincture of chlorhexidine
- 70% isopropol alcohol and 10% povidone-iodine
- 70% isopropol alcohol (use if patient is allergic to iodine)
- Tincture of iodine 2%

*Do NOT disinfect site with aqueous benzalkonium-like compounds or hexachlorophene.*

- Cleanse site using antiseptic solution:

Using friction, apply first antiseptic solution of alcohol in a circular motion.

- Begin at the center of insertion site and work to exterior edge
- Repeat two more times
- Allow antiseptic solution to air dry (i.e., do not blow or blot dry)

Using friction, apply second antiseptic solution of 10% povidone-iodine (or 2% tincture of iodine) in a circular motion.

- Begin at the center of insertion site and work to exterior edge
- Repeat two more times
- Allow antiseptic solution to air dry (i.e., do not blow or blot dry)

If using 2% tincture of chlorhexidine, follow manufacturer's recommendation for use.

9. Drape arm with sterile towels or drapes to create a sterile field

DEVICE PLACEMENT: FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

#### Post-PICC Placement

1. Stabilize PICC with sterile adhesive skin closures/sterile tapes/manufacturing stabilizing device.
2. Dress vascular access site with sterile gauze and cover with sterile transparent dressing and mark with initials, date and time.
3. Secure connection junctions.
4. Discard expended equipment in appropriate receptacles.
5. Document in patient's medical record.
6. The LTC facility will obtain radiographic confirmation of the catheter tip residing in the superior vena cava prior to initiating therapy.
7. The LTC facility will follow facility policies & procedures for PICC catheter care & maintenance.

## **PROCEDURE FOR PICC REMOVAL**

### **Equipment:**

- Non-sterile gloves
- Central line dressing change tray with measuring tape
- Non-permeable protective pad
- Suture removal kit. (If sutures still in place)
- Ointment

### **Procedure:**

*(A moist warm pack applied to the patient's extremity for 10-15 minutes before removing catheter will often aid in ease of removal.)*

1. Explain procedure to patient. Place patient in dorsal recumbent position.
2. Wash hands. Don non-sterile gloves. Place protective pad under patient's arm.
3. Remove old dressing. Discard appropriately. Disinfect insertion site.
4. Clip and remove sutures if applicable.
5. Place arm at a 45-degree angle. Grasp catheter wings or hub and remove with a gentle pulling motion. Pull out approximately 2", release grip, reposition grip near catheter hub, pull another 2", reposition grip. Repeat until catheter has been removed. If resistance is felt, apply moist warm pack to extremity, reposition patient's arm and make another attempt. If still unable to remove, clamp catheter, apply a dressing and call physician.
6. Once catheter is out, apply gentle pressure at the insertion site with sterile, dry gauze until bleeding stops.
7. Cleanse site as needed.
8. Apply occlusive dressing to reduce risk of air embolism *(ointment to site, gauze and transparent dressing)*
9. Assess length and integrity of catheter and inspect the tip for smoothness. Measure and document catheter length.
10. Document procedure.

## ***Complication Management of PICC Removal***

### ***Nursing Actions***

#### **A. Resistance to removal**

1. Never pull against resistance.
2. If resistance is felt, apply moist warm pack to extremity, reposition patient's arm and make another attempt. If still unable to remove, clamp catheter, apply a dressing and call physician.

#### **B. Traumatic or Accidental Breakage or Removal**

1. Catheter embolus: A catheter fragment that has entirely broken off and can no longer be retrieved from outside the body.
  - a. Apply tourniquet high in the axilla of the cannulated arm. Ensure that the tourniquet is not too tight. The brachial and radial pulses must be easily palpable and the fingers must have good capillary refill.
  - b. Notify physician and prepare to transport resident to acute care facility for evaluation.
  - c. Stay with resident.
  - d. While tourniquet is in place, check radial pulse every 5 minutes to ensure arterial flow.

#### **C. Air Embolism**

1. Turn resident on left side in trendelenberg position.
2. Notify physician.
3. Administer oxygen as ordered.
4. Prepare to transport resident to acute care facility for evaluation and treatment.

***Complication Management of PICC Insertion***

***Nursing Actions***

Potential complications of PICC insertion are described in the patient's consent form. They include, but are not limited to malpositioning, bleeding from the catheter exit site, tendon or nerve damage, chest pain/respiratory distress and cardiac arrhythmias. If needed, Emergency Medical Services would be notified and the resident transported to the hospital for evaluation.

Post insertion complications and preventive measures are described in the facility intravenous policies and procedures manual. Nurses already assess and monitor for these complications for PICCs inserted in the hospital setting.