PURPOSE:

- To provide an aseptic technique for accessing central vascular ports and to provide continuity of all nursing staff members in performing and teaching this procedure.

POLICY:

- All nurses will perform and teach aseptic techniques per procedure.
- Implantable central vascular ports will be maintained as ordered; when orders do not indicate, implantable central vascular ports will be maintained as follows:
  - Dressing and needle change at least every 7 days when device is in use, or
  - Access, flush, and de-access performed every 4-6 weeks when device is not in use.

PROCEDURE - ACCESS:

- Perform hand hygiene by washing hands with soap and water or with alcohol-based hand rub (sanitizer).
- **Preparation**: If local anesthetic is desired, apply anesthetic cream as ordered and in accordance with manufacturer's instructions for application (typically ½ - 1 hour prior to accessing) and cover with transparent dressing.
  - Physician order is required for the use of an anesthetic.
- Check patient ID and verify patient information. Check and review MD order.
- Prior to access procedure, follow discontinue procedure if applicable.
- Supplies required:
  - Huber needle with attached extension set and clamp
  - Sterile central catheter dressing kit with chlorhexidine applicator or povidone-iodine swab sticks
  - 0.9% sodium chloride pre-filled syringe (10ml)
  - Heparin pre-filled syringe (5ml of 100 units/ml) in a 10ml syringe
    - 10 units/ml for patient <2 y.o. (2ml of 10 units/ml)

- Needleless connector (cap)
- Alcohol Swabs
- Sharps container
- Biopatch (if needed)
- Non-sterile gloves

- Explain procedure and purpose to patient and caregiver.
- Inspect vascular access device (VAD) site for signs and symptoms of infection, irritation, or other problems
- Follow appropriate standard precautions.
- Don clean gloves. Gather necessary equipment and supplies. (**Note:** If dressing kit has sterile normal saline attached to the outside of the kit, remember to open and drop within the sterile field prior to procedure.)
- Position patient so port is easily palpated. Ask patient to wear a mask or turn head away from site.
- Palpate and access implanted port to determine location.
- Prepare NS syringe (10ml).
- Place cap on end of Huber needle.
- Attach NS syringe to cap. Prime line with NS, leave syringe of NS attached.
- Remove clean gloves. Perform hand hygiene by washing hands with soap and water or with alcohol-based hand rub (sanitizer).
- Don sterile gloves.
- Cleanse port site with ChloraPrep™ solution in a circular motion beginning at center of port; continue cleansing until port diameter has been reached. Allow to air dry or dry according to manufacturer’s recommendation.
- Remove protective cover from Huber needle.
- Initiate Huber needle into port by stabilizing the port with thumb and forefinger of non-dominant hand and grasping Huber needle hub of gripper device with dominant hand and insert into center of port until needle touches bottom of the reservoir.

- Aspirate for blood return to confirm patency. If there is no blood return, contact a Clinical Supervisor to discuss next steps.
- Once blood return obtained, flush with attached 10ml NS. If you are unable to flush, the needle may not be in proper placement. Reattempt access.
- If heparin is ordered: Cleanse needleless connector with alcohol. Allow to air dry. Flush with heparin as ordered.
- Observe site for resistance, swelling, discomfort, to patient. If any of these symptoms should occur, pull needle back slightly and flush.
- Clamp extension set.
- Remove syringe from Huber needle.
- Place Biopatch over insertion site.
- Cover site with transparent dressing and write date & time when accessed on dressing.
- The transparent dressing is to be changed at least every 7 days or prn with the change in port needle unless otherwise indicated by the MD order.
- If signs or symptoms of infection are present, no blood return is noted, or unable to access after 2 attempts, notify a Clinical Supervisor and document.
- Document procedure and patient's response to procedure in the clinical note.

PROCEDURE – DE-ACCESS:

- Perform hand hygiene by washing hands with soap and water or with alcohol-based hand rub (sanitizer).
- Check patient ID and verify patient information. Check and review MD order.
- Supplies required:
  - 0.9% sodium chloride pre-filled syringe (10ml)
  - Heparin pre-filled syringe (5ml of 100 units/ml) in a 10ml syringe
    - (2ml of 10 units/ml) for patient <2 y.o.

  - Alcohol swabs
  - Non-sterile gloves
  - Sharps container
  - 2x2 gauze sponge
  - Band-Aid (if needed)

- Explain procedure to patient and family as applicable.
- If continuous infusion has been running, turn off pump, clamp tubing and disconnect from needleless valve or cap.
- Vigorously scrub the hub with an alcohol swab in circular motion and allow to air dry or dry according to manufacturer's recommendation.
- Flush port vigorously with 10 ml normal saline followed by 5 ml heparin. For pediatric patients, (<2 y.o.), flush with 5 ml NS, then 5 ml heparin (10 units/ml) or per MD order.
- Remove transparent dressing.
- Assess site for complications; record as needed.
- Remove existing Huber needle as follows (if applicable):
  - Stabilize the port with thumb and finger of non-dominant hand.
  - Grasp needle hub with dominant hand and withdraw using a straight upward motion. Activate safety device. Discard in Sharps container.
- Apply gentle pressure with sterile 2x2 gauze sponge if needed for bleeding.
  - For patient with blood disorders, monitor for bleeding
- Apply Band-Aid, if needed.
- Remove gloves. Perform hand hygiene.
- Document time, date, and initials for removal of needle.
- Document procedure and patient's response to procedure in the clinical note.