POLICY STATEMENT:

It is the policy of Texas Tech University Health Sciences Center (TTUHSC) Ambulatory Clinics to provide guidance on use and maintenance of central IV lines.

SCOPE:

This policy applies to all TTUHSC ambulatory clinic operations conducted through its Schools of Medicine and School of Nursing that treat patients who have central IV lines.

PROCEDURE:

1. General:
   a. **Who Can Perform** – Unless otherwise stated in this policy, procedures outlined herein may only be performed by licensed/trained healthcare providers under the supervision of a Provider.
   b. **Defined Term** – A Provider is defined as a Physician, Nurse Practitioner or Physician Assistant.

2. **Capping a Catheter Port Procedure**:
   a. Use only luer lock male adapters.
   b. Use aseptic technique.
   c. Prime adapter with heparinized solution 100 units per cc prior to change.
   d. Clamp off catheter tubing using clamp and change adapters.
   e. Unclamp catheter.
   f. Tape connection.

3. **Central Line IV Site Care**:
   a. **Site Inspection** – Document site inspection on the progress note.
   b. **Site Care** – Performed as Directed by Provider.
      1) Use CVP dressing kit.
      2) Use aseptic technique.
      3) Put on mask.
      4) Remove old dressing and discard appropriately.
      5) Put on sterile gloves.
6) Open all swab sticks.

7) Using an alcohol swab stick, clean dressing in a circular motion starting at the catheter insertion site and moving outward (If using acetone alcohol solution, do not touch the plastic catheter).

8) Repeat with the swabs until the entire patient area has been cleaned.

9) Repeat with prepping procedure with the povidone-iodine swab sticks.

10) Prep with the povidone-iodine for a minimum of one (1) minute.

11) Allow povidone-iodine to dry.

4. **Discontinuing Central Lines Procedure:**

   a. Have sterile 4 x 4’s, suture removal set, steril gloves, adhesive tape, Vaseline gauze (optional) available.

   b. Place head of bed 30 degrees or less.

   c. Loosen tape completely and remove dressing from catheter.

   d. Wash hands thoroughly.

   e. Put on sterile gloves.

   f. Prepare dressing by placing sterile Vaseline gauze in the center of sterile 4 x 4’s or open 4 x 4’s and have ready.

   g. Using sterile removal set, cut and remove any sutures holding catheter in place taking care not to pull, push or cut catheter.

   h. If condition allows, have patient take in deep breath and hold it during withdrawal, then return to normal breathing.

   i. While withdrawing the catheter with one hand, place sterile dressing over the skin entry site with the other hand.

   j. Apply pressure for 3-5 minutes or until bleeding stops.

   k. Cover the wound completely with an occlusive dressing or adhesive tape.

   l. Advise patient to keep dressing in place for 24 hours.

   m. Document procedure and patient tolerance on progress note.

   n. After removal, catheter should be inspected for integrity of the catheter.

   o. Post-removal x-ray may be considered.

5. **Obtaining Blood Samples from Central Line**

   a. **Equipment.**

   1) Syringes:

      a) Adult – (2) 10 cc syringes for blood samples and for aspiration.

      b) Pediatric – 5 cc syringes for pediatric patients.

   2) Labeled lab tubes – include patient name, date and time drawn.

   3) Alcohol swab/betadine swab.
4) Sterile injection cap – luer lock cap.

5) Standardized Heparin Flus/or Saline Syringe.

b. **Procedure** – Validate correct patient using two patient identifiers: ask patient or legal guardian the patient’s name and date of birth and compare to the patient’s medical record.
   
   1) Wash hands and put on mask preferably with eye shield.
   
   2) Stop IV infusions.
   
   3) Put on gloves.
   
   4) Cleanse connection site of catheter.
   
   5) Connect empty syringe and aspirate
      
      a) Adults – at least 5-10 cc’s
      
      b) Pediatric – 5 cc
      
      c) Repositioning the patient may be necessary in order to facilitate good blood return.
      
      d) Discard syringe in sharps container.
      
   6) Connect specimen syringe to the end port.
   
   7) Using empty syringe, aspirate gently.
   
   8) Draw up volume of blood needed for the test.
   
   9) Place specimen in appropriate lab tube.
   
   10) Attach flush syringe and flush using solution and technique appropriate to the type of central line accessed.
   
   11) If continuous IV fluids are ordered, use normal saline instead of heparin to clear line.
   
   12) Label the specimen container in the presence of the patient or his/her legal guardian.

   c. **Recording** – Record on progress note any pertinent observations and amount of heparinized solution utilized.

**CERTIFICATION:**

This policy was approved by the Deans for the Schools of Medicine and Nursing June 2011.