Steps for Priming Transducer Tubing

- Remove transducer tubing from package and verify all connections are secure.
- Label IV bag with patient name, initials of preparer, expiration date and time (7 days from hang time).
- Remove air from the IV bag/tubing:
  1. Invert IV bag and spike with transducer tubing system.
  2. Keep the drip chamber upright to allow air to rise.
  3. Open the roller clamp
  4. While the bag is inverted, gently squeeze the bag while pulling on the flush tab to express air from bag and drip chamber. Continue until the drip chamber is ½ full. DO NOT completely fill the drip chamber with fluid.
  5. Return bag to upright position and place into pressure bag but DO NOT inflate. Pressure bag may be hung on an IV pole at this point if appropriate.
  6. Pull on the flush tab, and remove all remaining air from system (including all stopcocks).
  7. Replace all vented caps with nonvented caps.
  8. Inflate pressure bag to 300 mmHg and pull the flush tab and verify all air bubbles have been removed.

Steps for Leveling and Zeroing the Transducer

- Attach transducer to bedside monitor cable and activate the pressure module, use the ABP label.
- Position transducer stopcock at patient’s 4th intercostal space and mid-chest line and mark reference point on patient’s chest using clear dressing and marker.
- Remove the dead-end cap from the transducer stopcock, keep cap sterile.
- Open the stopcock above the transducer to air (OFF to the patient).
- Press the ZERO function on the pressure module on the monitor and verify a zero value is displayed in the monitor.
- After zeroing, turn the stopcock OFF to air and ON to the patient.
- Replace the dead-end cap.
- If not already connected, connect the transducer tubing system to the catheter.
- Aspirate the line to assure no residual bubbles remain as well as confirming patency of the catheter.
- Flush the system of any residual blood.
- Perform a square wave test by pulling the flush tab while evaluating the arterial wave form.
- Compare cuff blood pressure to arterial catheter pressure.
Frequency of Interventions

☐ Compare cuff blood pressure to arterial catheter pressures at least every shift and PRN for correlation
☐ Evaluate and document pressure waveform strip with concurrent ECG every shift and PRN.
☐ Every 4 hours:
  Validate that the pressure bag is at 300mmHg
  Assure that the IV bag is not empty
  Replace IV bag if it is empty and less than 7 days old.
☐ Square wave test will be done each shift and when accuracy of readings/waveforms are in question
☐ Transducer tubing is changed every 7 days.
☐ Transducer re-zeroing:
  Each shift
  When arterial catheter is disconnected from cable
  When cable is disconnected from monitor
  When there are questions about accuracy of readings / waveforms
  When re-leveling transducer with change in patient position

Obtaining a Blood sample with Closed Blood Draw System

☐ Wash hands. Don barrier gloves.
☐ Prepare blood drawing equipment. Attach blunt cannula to one of the following vacutainer with luer adaptor vacutainer with venojet a syringe.
☐ Smoothly and evenly pull back on the reservoir plunger until the plunger stops and the reservoir has reached its capacity.
☐ Once the clearing sample has been drawn, close the stopcock off to the reservoir by turning the in line stopcock perpendicular to the tubing.
☐ Vigorously scrub the hub of the sample port with alcohol for a minimum of 15 seconds.
☐ Insert the access device into the sample port, obtain the required specimens and remove the access device.
☐ Open the stopcock to the reservoir by turning the stopcock 90 degrees so that it is parallel, or open, to the tubing.
☐ Smoothly and evenly push down on the plunger until the reservoir has snapped into the closed position and all the fluid has been re-infused into the patient.
☐ Flush the line until it is clear.
☐ Upon completion dispose of contaminated supplies. Vacutainer holder can be reused if not contaminated.
☐ Label samples at the bedside and send to the laboratory.