Wake Forest™ Baptist Medical Center	**Venipuncture Procedure** **OP-306-12**	**Dept:**	**Outpatient Phlebotomy 324306**
		Effective Date:	**February, 2011**
		Revised Date:	**February, 2019**
		Contact:	**Rinard Howard**
Name & Title: Greg Pomper, MD Medical Director		**Date:**	
Signature:			

1) General Procedure Statement:

a. **Purpose:** The collection of a properly identified and skillfully collected blood sample is an essential step for quality lab results.

b. **Responsible Department/Scope:**
   1.Procedure owner/Implementer: Outpatient Phlebotomy
   2.Procedure prepared by: Rinard Howard, MHA PBT – ACSP
   3.Who performs procedure: Outpatient Phlebotomy staff

2) Venipuncture Procedure:

1. **Prepare specimen labels and paper requisitions.** Each request for a blood specimen must be verified to identify all paperwork and supplies associated with the patient. The patient should confirm their name and date of birth.

2. **Identify the patient.** A two-way match should be made using the current Laboratory Information System (LIS) and the specimen labels. Only latex free supplies are used.

3. **Assemble Supplies.**
   A. Collection tubes
   B. Tourniquet
   C. 70% alcohol gauze
   D. Dry gauze pads
   E. Exam gloves
   F. Adhesive bandage or medical tape
   G. Select the system for venipuncture:
      a. Evacuated System
         i. Evacuated system one use needle
         ii. The single use tube holder
         iii. Evacuated tubes
      b. Plastic Syringe

        i. Single use syringes
        ii. Single use needles
        iii. Evacuated tubes

4. **Reassure the patient.** The phlebotomist gains the patient's confidence and assures the patient that although the venipuncture will be slightly uncomfortable, it will be short in duration. Never tell a patient that the venipuncture will not hurt.
5. **Prepare the patient.** The arm should be straight, firmly supported and rotated to expose the antecubital area.
6. **Select a site.** The larger and fuller medial cubital and cephalic veins are used most frequently used. Veins in the hand or back of the wrist may also be used. The use of the basilic vein should be the last option. Veins on the palm side of the wrist should not be used.
7. **Apply new tourniquet.** Place the middle of the tourniquet on the back of the arm and secure. The tourniquet should be tight enough to restrict blood flow but not make the patient unnecessarily uncomfortable.
8. **Ask the patient to close their hand but not to pump their fist.**
9. **Clean the venipuncture site.** Clean with 70% alcohol in a circular motion from center to periphery.
10. **Perform venipuncture.**
    A. Evacuated tube method
        a. Thread the needle into the tube holder and remove cap
        b. Grasp patient's arm firmly
        c. Pull skin taut by pulling down with the thumb
        d. Access the vein through the skin with the needle bevel up
        e. Continue to hold the tube holder with one hand while inserting and changing the evacuated tubes Allow tube to fill until the vacuum no longer draws blood from the vein.
        f. Mix additive tube by gently inverting them 5 to 10 times.
    B. Syringe Method
        a. Attach the needle to the syringe and exercise the plunger.
        b. Grasp patient's arm firmly
        c. Pull skin taut by pulling down with the thumb
        d. Access the vein through the skin with the needle bevel up
        e. Gently pull the plunger back to fill the syringe.

11. **Release the tourniquet.**
12. **Ask the patient to open hand**
13. **Place gauze on the venipuncture site.**
14. **Remove the needle.** Apply gentle pressure to the gauze as the needle exits the point of entry.
15. **Maintain pressure until bleeding stops**
16. **Bandage the site.**
17. **Activate the protective sheath on the needle**
18. **Discard the needle and holder in an appropriate sharps container.**
19. **Label the tubes in the presence of the patient.**

20. **Deliver samples.**

Notes for Procedure

Before receiving the next patient in booth, remove and/or dispose of used blood collection supplies. For example, dispose of alcohol wrapper, excess gauze, and used tourniquet.

1. All needles are disposed in biohazard sharps containers.
2. The safety devices on these needles are designed to reduce the likelihood of needle injury but accidents may still happen. Report all needle injuries to you supervisor immediately.
3. Phlebotomists should be aware of any discomfort of the patient. If a patient faints, seizes or is otherwise injured call 6-9111 and report the **Code 44** *(Patients not seeing the doctor)* **Rapid Response** *(For patients seeing the doctor that day*). Remain with the patient until assistance arrives.
4. The order of draw is the same for syringe or vacutainer.
5. The SST Gel tube is an additive tube and should be drawn after the blue.
6. Specimen requirements are specific for the tube type as required by the testing department. The next page contains a chart of the tube types and their additives.
7. Wipe down the phlebotomy chair if it is visibly soiled between patients

Vacutainer Collection Devices with Engineered Safety Controls

The laboratory will use clinically effective needle devices that incorporate engineering controls to prevent needle stick injuries.

Steps for Use of the BD Vacutainer Eclipse Blood Collection Needle

1. Holding both colored shields twist and remove the white shield.
2. Screw needle onto holder.
3. Rotate the hinged safety shield back toward the holder and away from the needle.
4. Twist and pull the needle shield straight off.
5. Verify the safety shield and the needle’s bevel are in the up position.
6. Perform the venipuncture.
7. Firmly lock the safety shield.

Steps for Use of the BD Vacutainer Safety-Lok Blood Collection Set

1. Peel apart the package and remove set.
2. Screw the needle into the holder.
3. Remove the needle sheath.
4. Perform the venipuncture holding the wings between the thumb and forefinger.
5. Collect blood samples.

6. Press the button to retract the needle into the safety shield.
7. Apply pressure with gauze and secure with tape.
8. Dispose of the collection set.

3) Procedure: Pediatric Blood Collection Considerations

The collection of blood specimens from children poses special challenges related to both size and specimen requirements. The following criteria are observed by phlebotomists regarding blood obtained for infants and children:

1. Heel sticks and finger sticks are performed at the physician's request for any test that with a suitable micro methodology. To verify micro volume requirements and availability the phlebotomist can confirm methods with the testing labs:
    a. Hematology 716-2610
    b. Chemistry 716-7066
    c. Microbiology 716-2658
    d. Referral Testing 716-2610
    e. Blood Bank 716-2618

2. Heel sticks may be attempted up to but not beyond age 6 months. After 6 months an infant's heel becomes too thick for adequate blood collection.
3. Venipunctures may be attempted by experienced phlebotomists on children of any age.
4. Uncooperative children where blood specimens cannot be obtained after 2 attempts will have their collections deferred to the medical team.
5. Physicians from outside accounts who refer children for blood collection should direct those patients to go to Comp Rehab, Pediatric Oncology Blood Collection or the 7th floor Brenner's Blood Collection.

PROCEDURES FOR BLOOD COLLECTION BY SKIN PUNCTURE

FINGER PUNCTURE:

1. Assemble the following supplies: gloves, sterile gauze pads (2x2), alcohol swabs, sterile lancets, micro collection tubes, bandages.
2. Identify the patient by comparing the requisition, the labels and the stated name and date of birth.
3. Choose a finger that is not cold, cyanotic, or swollen. If possible, the puncture should be at the tip of the fourth finger of the nondominant hand.
4. Gently massage the finger five or six times from base to tip to aid blood flow.
5. With an alcohol swab, cleanse the ball of the finger. Allow to air dry.
6. Remove the protective covering from the top of the lancet.

7. Hold the patient's finger firmly with one hand and activate the puncture button on the lancet. Choose a puncture site halfway between the center of the ball of the finger and it’s side
8. The cut should be made in a vertical line with the finger to produce a large, round drop of blood.
9. Wipe the first drop of blood away with a clean gauze (not for PT tests).
10. Gently squeeze the finger from base to tip to obtain the proper amount of blood for the tests requested.
11. At completion of specimen collection, apply pressure to the puncture site using dry gauze.
12. Place cap on microtainer and mix each additive tube by inversion 8-10 times immediately after collection.
13. Place the LIS taglet label around the top of the tube and raise the large label enough that the microtainer can lie between the label backing and the adhesive side of the label. Press the label back down onto the back with the microtainer in a secure pocket between the label and the backing.

HEEL PUNCTURE:

1. Assemble necessary equipment (see above for finger puncture) and have within easy reach.
2. Identify the patient by comparing the requisition, labels and the stated name and date of birth.
3. Firmly grasp the foot, exposing the heel with one hand, use the lancet to make a puncture with the other hand.
4. Wipe away the first drop of blood with dry gauze.
5. Gently massage the heel to obtain the desired blood flow and fill the containers to the proper levels. Use only gentle massage when obtaining blood. Excessive massaging dilutes the blood with tissue fluids and may also cause hemolysis. It is sufficient to massage with your thumb and forefinger.
6. At completion of specimen collection, apply pressure to the puncture site using dry gauze.
7. Place cap on microtainer and mix each additive tube by gentle inversion 8-10 times immediately after collection.
8. Label tubes as with finger sticks.

Do not use a heel that is excessively bruised. Have a doctor make the judgment when you are unsure about the condition of a foot.

RECOMMENDATIONS FOR HEEL PUNCTURES

1. Perform punctures on the most medial or most lateral portion of the plantar surface.
2. Puncture no deeper than 2.4 mm.
3. Do not perform punctures on the posterior curvature of the heel.
4. Do not puncture through previous sites which may be infected.

4) Related Procedures:

Outpatient Phlebotomy Specimen Collection

5) References: **N/A**

6) Attachments: **N/A**

7) Revised/Reviewed Dates and Signatures:

Reviewed/Revised Date: ______________________ By:____________________________________

(Medical Director/Designee)

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