Manual Blood Pressure Measurement Checklist

1. Place participant’s arm at a 90 degree angle.

2. Measure from the acromion to olecranon with a tape measure, and mark the half-way point.

3. Straighten arm and measure the mid-arm circumference where you marked.

4. Use the mid-arm circumference to choose the appropriate BP cuff.

5. Find the brachial artery so you know where you want to center the bladder- mark it.

6. Fold the cuff in half and place the mid-point of the bladder above the brachial artery (ignoring the cuff markings for this). Then secure the cuff so that it is snug (able to place up to 2 fingers between cuff and skin) and the bottom of the cuff is 2-3 cm above the antecubital fossa.

7. Make sure the patient is properly positioned and is not using a cell phone, has an empty bladder and is at rest.
   a. Back should be supported, feet should be uncrossed and supported, arm should be resting with middle of BP cuff at heart level.

8. Set a timer for 5 minutes for the patient to rest prior to BP measurement.

9. Determine pulse obliteration pressure
   a) Palpate the radial artery and inflate until you can no longer feel the radial artery (pump and feel, pump and feel, pump and feel etc...). Deflate the cuff.

10. Calculate the Peak Inflation Level (pulse obliteration pressure + 20-30 mmHg) – this is the level to which you will inflate the sphygmomanometer.

11. Place the stethoscope bell over brachial artery, between the lower end of the BP cuff and the antecubital fossa, using very light pressure.

12. Inflate sphygmomanometer to the peak inflation level.

13. Deflate by 2mm Hg per second. Continue auscultating until you are 10mmHg below the last Korotkoff sound (K5).

14. Measure and record K1 (onset of two consecutive taps; systolic BP) and K5 (sounds disappear; diastolic BP). If tapping occurs to 0mmHg, then use K4 (sounds become muffled) as diastolic.

15. Ensure the cuff is completely deflated and patient remains at rest.

16. Raise patient’s arm passively for 15 seconds, then lower arm for 15 seconds.

17. Repeat steps 11-16 to take 2 more BP measurements, making sure to record the BP after each measurement.