Technique quick-check

Problem statement:

Measuring blood pressure accurately every time requires that staff consistently use proper technique.

Excellent measurement technique requires training and skill building, but a few common problems related to patient preparation and positioning often account for unreliable readings.[1, 2]

Common problems that account for inaccurate blood pressure measurement

When patient has...	*BP can change by this much…*[3, 4]
Cuff over clothing	10–40 mm Hg
Full bladder	10–15 mm Hg
Conversation or is talking	10–15 mm Hg
Unsupported arm	10 mm Hg
Unsupported back	5–10 mm Hg
Unsupported feet	5–10 mm Hg
Crossed legs	2–8 mm Hg

Using the "Technique quick-check" tool:

You can use this tool to **verify** that everyone in your practice or health center obtains blood pressure readings the right way and the same way every time. **Complete** four observations for each team member (e.g., medical assistant, nursing staff and physicians) who regularly takes blood pressure measurements, using one sheet for each person. **Repeat** on a quarterly or monthly basis, as needed.

Note: The "Technique quick-check" tool is not designed to assess individual competence. Instead, it will help detect systemic issues that may be resulting in the routine use of improper technique. Specific issues such as correct inflation pressure should be addressed through regular training.

1. Williams JS, Brown SM, Conlin PR. Blood-Pressure Measurement. *N. Engl. J. Med*. 2009;360(5):e6.
2. Ogedegbe G, Pickering T. Principles and techniques of blood pressure measurement. *Cardiol Clin*. 2010 Nov;28(4):571-86.
3. Pickering TG, Hall JE, Appel LJ, et al. Recommendations for blood pressure measurement in humans and experimental animals: part 1: blood pressure measurement in humans: a statement for professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. *Circulation*. Feb 8 2005;111(5):697-716.
4. O'Brien E, Asmar R, Beilin L, et al. European Society of Hypertension recommendations for conventional, ambulatory and home blood pressure measurement. *J Hypertens* 2003; 21: 821-848.

IHO: BP **Measure accurately.** **A**ct rapidly. **P**artner with patients, families and communities.

Technique quick-check

General information												
Site name:				**Date:**								
Observer name(s):				**Observation location (clinic, unit, etc.):**								
	Patient #1			**Patient #2**			**Patient #3**			**Patient #4**		
Device used	**Yes**	**No**	**Comments**	**Yes**	**No**	**Comments**	**Yes**	**No**	**Comments**	**Yes**	**No**	**Comments**
1. Used a manual device	☐	☐		☐	☐		☐	☐		☐	☐	
2. Used an automated device	☐	☐		☐	☐		☐	☐		☐	☐	
Additional notes on availability, accessibility, quality and/or use patterns of blood pressure measurement devices in the practice (optional):												
Patient preparation and positioning	**Yes**	**No**	**If no, why not?**	**Yes**	**No**	**If no, why not?**	**Yes**	**No**	**If no, why not?**	**Yes**	**No**	**If no, why not?**
1. Patient in the correct position …												
1.1. Seated with back supported	☐	☐		☐	☐		☐	☐		☐	☐	
1.2. Feet flat on the floor or footstool	☐	☐		☐	☐		☐	☐		☐	☐	
1.3. Legs uncrossed	☐	☐		☐	☐		☐	☐		☐	☐	
1.4. Arm bare	☐	☐		☐	☐		☐	☐		☐	☐	
1.5. Arm supported	☐	☐		☐	☐		☐	☐		☐	☐	
1.6. Arm at heart level	☐	☐		☐	☐		☐	☐		☐	☐	
2. Cuff used is correct size*	☐	☐		☐	☐		☐	☐		☐	☐	
If this is a confirmatory measurement (that is, a repeat measurement), then also check the following…												
3. Was the patient asked to empty his/her bladder prior to the repeat measurements?	☐	☐		☐	☐		☐	☐		☐	☐	
4. Did the patient rest quietly for at least five minutes (no speaking or texting) before the repeat measurement?	☐	☐		☐	☐		☐	☐		☐	☐	
5. Were at least three more measurements obtained?	☐	☐		☐	☐		☐	☐		☐	☐	
Additional notes on issues related to patient preparation, positioning and cooperation with use of technique (optional):												

* To help determine correct sizing, most cuffs have two white lines, like this |_____|, and a small tick mark on the other side of the cuff (the "artery arrow") that should fall within the two white marks once the cuff is wrapped. Other clues might be if the cuff has to be wrapped more than once around the arm (too large), or if it has to be pulled tight to make the Velcro strips match up (too small).

15:0265 5/15:JT