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# Standardizing Best Practices of Orthostatic Vital Signs

Allison Bui RN, Colin Blackmon RN, Erian Brown RN, and Shaqueta Iwuji RN

## Clinical Issue/ Background to Problem

Discrepancy identified in practice vs policy for orthostatic vital signs measurements.

#### PICO Question

In pediatric patients requiring orthostatic vital signs, what is the best practice surrounding positions and time to increase consistency and accuracy in the measurements?

#### Methodology

- Current state assessment survey: ED and CRT direct patient-care staff in February 2023 n=94 (74 RN, 3 paramedics, 17 PCT/ PCT-S)
- Synthesize literature best practices regarding positions and timing of measurements
- Review EPIC charting system flowsheet and summary view for opportunities

### Literature Review

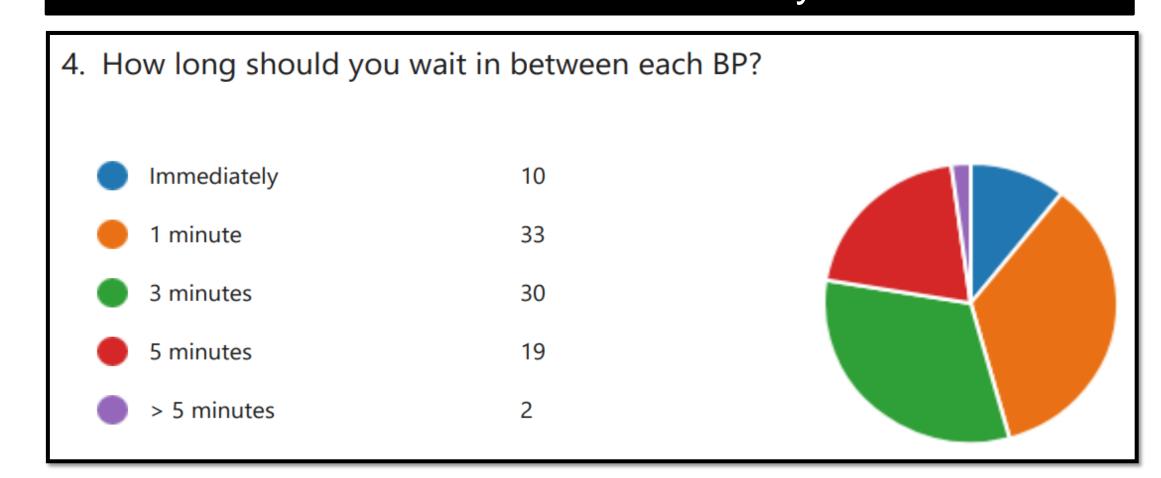
- Recommended to perform only supine to standing position (Elsevier, 2022).
- Have the patient lay supine for 5 minutes before beginning to allow a baseline evaluation (Elsevier, 2022).
- Measure vital signs after one minute and three minutes once standing to gauge compensation (Elsevier, 2022).
- Pediatric HR is an early indication of circulatory compensation, hence the importance to evaluate it in orthostatic vital signs (Naccarato et al., 2012).

# **EPIC Flowsheet View**

	1300	1301
Patient Activity		
Activity		
Temperature		
Temp		
Temp Source		
F≣Temp Interventions		
Heart Rate		
Pulse	80	105
Respiratory Rate		
Resp		
Blood Pressure		
BP	119/79	120/80
MAP (mmHg)		
BP Location		
BP Cuff Size		
BP Cuff Size Changed, Why?		
BP Patient Position	Supine	Standing
Blood Pressure Method		

#### EPIC Systems, 2022

## **Current Practice Survey**



Orthostatic Vitals Current State Assessment Survey

#### Conclusions

We identified a wide variability in orthostatic vital sign practice, with inconsistency in charting methods leading to incongruent measurements for providers and bedside staff to interpret. Standardizing practice can be achieved by clarifying the policy, providing education to staff, and including a universal charting location for the data.

#### Recommendations

- Policy revision
- Education
  - Link policy to order
  - CBT and flyers to spread awareness
- EPIC Charting Methods
  - Clinical Informatics Committee involvement
  - Orthostatic Vital Signs Group
  - Summary view to access data (providers)

### Policy Change

We recommend the policy revisions to include laying supine for 5 minutes before starting the measurements. Once the BP and HR are taken, have the patient stand for 1 minute then take the BP and HR again. Keep the patient in a standing position and take the BP and HR once again after 3 minutes. Location of documentation should be included, as well as the parameters to notify providers and when to terminate the measurements.



BP = Blood Pressure

CBT = Computer Based Training

References: See QR code

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