





Clinical Question: Are blood pressures obtained using automated oscillometric devices as accurate as auscultatory blood pressures in patients throughout the lifespan?

Problem: Accurate blood pressure (BP) measurements in the emergency department (ED) are critical, as inaccuracies may delay treatment of a serious condition and/or result in clinical decisions that under- or over-treat the patient's medical condition. Invasive BP measurement using arterial access is considered the "gold" standard to accurately and reliably determine the patient's BP. However, invasive blood pressure techniques are not usually available and are rarely performed in the management of the patient in the ED setting. Clinicians need to recognize the limitation and potential biases or various noninvasive BP measurement techniques in different patient populations and under different conditions to assure that the BP measurement technique used is appropriate and accurate. The CPG focuses on evidence-based practices regarding use of non-invasive, oscillometric BP measurement for patients across the lifespan in the emergency care setting.

Description of Decision Options / Interventions and the Level of Recommendation:		
Non-invasive Oscillometric Blood Pressure Measurement	Is appropriate for adult populations	A
	Is appropriate for patients with trauma and shock	A
	Is appropriate for children, including neonates	B
	Is appropriate for patients with comorbid conditions or other health conditions: <ul style="list-style-type: none"> Patients who are pregnant Patients with hypertension 	B
	<ul style="list-style-type: none"> Patients with atrial fibrillation 	C
Cuff Location	Appropriate alternative cuff sites for non-invasive oscillometric blood pressure measurement in adults includes: <ul style="list-style-type: none"> Forearm cuff site Wrist cuff site Thumb / finger site 	B
	Appropriate alternative cuff sites for non-invasive oscillometric blood pressure measurement in pediatric patients includes: <ul style="list-style-type: none"> Calf cuff site 	C
	It is appropriate in the adult patient, to measuring a non-invasive oscillometric blood pressure with the BP cuff on upper arm over a sleeve or on the upper bare arm with the sleeve rolled up above the cuff	B

Overview and Purpose of CPGs:	Clinical Practice Guidelines (CPGs) are evidence-based documents that facilitate the application of current evidence into everyday emergency nursing practice. CPGs contain recommendations based on a systematic review and critical analysis of the literature about a clinical question. CPGs are created following the rigorous process described in ENA's Guidelines for the Development of Clinical Practice Guidelines .	
	For more information on this topic, please go to U	
	The purpose of CPG's is to positively impact patient care in emergency nursing by bridging the gap between practice and currently available evidence.	
Key:		Level A (High) Recommendation: Based on consistent and good quality of evidence; has relevance and applicability to emergency nursing practice.
		Level B (Moderate) Recommendation: There are some minor inconsistencies in quality evidence; has relevance and applicability to emergency nursing practice.
		Level C (Weak) Recommendation: There is limited or low-quality patient-oriented evidence; has relevance and applicability to emergency nursing practice.
		Not Recommended: Based upon current evidence.
		I/E: Insufficient evidence upon which to make a recommendation.
		N/E: No evidence upon which to make a recommendation.