

## **ASSESSMENT OF ACCURATE BLOOD PRESSURE CUFF SIZING IN THE PERIANESTHESIA SETTING**

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As obesity has more than doubled in the last twenty years, patients' size and shape are drastically changing. Using the AHA blood pressure cuff sizing standards makes it difficult to obtain accurate blood pressure readings for some patients, specifically those with conical shaped arms. Published data on alternative locations to obtain accurate blood pressure measurements is divided.

The objective of this project was to determine the frequency of wrong sized cuff placement in our clinical setting, which informed the need to create a tool to educate bedside nurses on the process of obtaining the most accurate blood pressure measurements and alternative locations for cuff placement.

In a data collection project conducted in both a preoperative and postoperative setting, 171 patients were conveniently selected by local practice council (LPC) members. It was identified that 40.2 % of patients measured in the post anesthesia care unit (N = 92) were undercuffed. Forty-seven of these undercuffings resulted from providers using the "long" cuff instead of increasing to the next cuff size. The "long" cuff creates the illusion that it can be used on larger upper arm circumferences despite having the same bladder size as the standard adult cuff.

Practitioners need education on correct blood pressure cuff measurement and placement. The "long cuffs" need to be removed from our clinical setting. In order to accurately measure blood pressures in obese patients, there is a need for AHA to reassess current recommendations regarding blood pressure cuffs on patients with conical shaped and/or short upper arms.