Blood pressure cuff size accessibility for larger-bodied patients in physical therapy settings

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Arm sizes vary among Americans with 43% requiring large size blood pressure cuffs. Negative patient perception occurs when equipment does not accommodate their body size. Additionally, improperly sized blood pressure cuffs result in invalid measures. The aim of this study was to investigate the availability of blood pressure cuffs to accommodate larger-bodied patients in physical therapy settings. A secondary aim was to compare availability between outpatient and inpatient settings.

This was part of a larger descriptive study. An electronic survey was distributed to 406 Clinical Affiliates of Des Moines University's Physical Therapy Program to assess blood pressure cuff availability in various sizes (standard, large, thigh). Frequencies were calculated and reported in valid percent for each setting. Chi square analyses were performed comparing frequencies between outpatient and inpatient settings.

Ninety-five responses were received, 75 outpatient, 20 inpatient. Reported frequencies of available standard-size blood pressure cuff were 98.6% and 100% for outpatient and inpatient settings respectively. Frequencies of available large-size blood pressure cuffs were 83.8% and 100% for outpatient and inpatient physical therapy settings respectively. Reported available thigh-size blood pressure cuff were 14.1% and 31.6% for outpatient and inpatient physical therapy settings respectively. No significant difference was found between settings.

Outpatient settings did not consistently report availability of standard or large cuffs. Neither setting consistently reported availability of thigh cuffs. Appropriately sized blood pressure cuffs are required for valid measurement. Inappropriately sized equipment may compromise patient outcomes and elicit negative patient perceptions. Clinicians should advocate for all cuff sizes to be available.