

First-of-its-kind clinical guide explains uses and limitations of public blood pressure kiosks

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High blood pressure affects one in three adults in the United States, and blood pressure measurement is the first step toward accurate diagnosis and management of the disease. The Food and Drug Administration acknowledges shortcomings of many public blood pressure kiosks (i.e., those found in pharmacies and supermarkets) and recommends the public seek doctors' advice when using blood pressure kiosks. However, there has been no published guide to which doctors can confidently refer for answers until now, with the publication of a first-of-its-kind clinical guide addressing use and validity of public blood pressure kiosks, entitled "Public Use Blood Pressure Kiosks: A Guide for Clinicians."

"In the United States alone, more than one million [blood pressure readings](#) are taken with public blood pressure kiosks every day. The goal of this new guide is to provide clinicians the information they need to confidently advise patients on the benefits and limitations of public blood pressure kiosks," says co-author Domenic A. Sica, MD, Professor of Medicine and Pharmacology, Chairman, Clinical Pharmacology and Hypertension, Virginia Commonwealth University Health System.

The guide focuses on the clinical implications of public kiosk [blood pressure measurement](#) and provides information for physicians, nurse practitioners, and pharmacists relating to kiosk accuracy, the size of the cuff integral to the kiosk and the uses for out-of-office blood pressure values.

- **Validation Testing** - The United States has a voluntary standard for validating any non-invasive sphygmomanometer ([blood pressure monitor](#)) from the American National Standards Institute/Association for the Advancement of Medical Instrumentation/International Standards Organization (ANSI/AAMI/ISO) requirements. The new clinical guide helps healthcare professionals identify which kiosks have been validated by this or other means; validation helps ensure consistent, reliable blood pressure measurement.
- **Blood Pressure Cuff Size** - All clinical guidelines recommend the width of the blood pressure cuff be at least 40% of the circumference of the patient's arm. At a medical facility, healthcare professionals select the appropriate cuff size for each patient. The majority of public blood pressure kiosks have a single-sized cuff, which is too small for almost half the U.S. population.

Blood pressure readings performed with a cuff that is too small will give elevated blood pressure values; an oversized cuff will produce a lower reading. If the blood pressure measurement obtained is "falsely" high, medication dosing may be increased, risking therapeutic overshoot. Conversely, if the measurement is "falsely" low, a healthcare provider may decrease medication to the detriment of the patient.

The guide's authors report that public kiosk blood pressure values can be of use in the diagnosis and treatment of patients, but that clinicians should be cautious of accepting the accuracy of public [blood pressure](#) kiosks unless they can ascertain that the kiosk has been properly validated and the cuff-size used is appropriate for the individual patient.

More information: The full clinical guide can be accessed at [www.ash-us.org/documents/files ... se-BP-Kiosks-\(3\).pdf](http://www.ash-us.org/documents/files...se-BP-Kiosks-(3).pdf)

Provided by American Society of Hypertension

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