

World Hypertension League Position on Public Use of Blood Pressure Kiosks

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From the Department of Medicine, University of Calgary, Calgary, AB, Canada;¹ World Hypertension League, Corvallis, MT;² Department of Clinical Sciences, Lund University, Malmö, Sweden;³ Beijing Hypertension League Institute, Beijing, China;⁴ and Department of Neurosciences, Medical University of South Carolina, Charleston, SC⁵

Recently, the American Society of Hypertension (ASH) developed and released the “Public Use of BP Kiosks: A Guide for Clinicians” ([http://www.ash-us.org/documents/files/2015/150422-DOCUMENT-Guide-Public-Use-BP-Kiosks-\(3\).pdf](http://www.ash-us.org/documents/files/2015/150422-DOCUMENT-Guide-Public-Use-BP-Kiosks-(3).pdf)). Blood pressure (BP) kiosks are “stations” where BP is automatically assessed by a device that is triggered by the individual who is getting their BP assessed. They are designed to operate without a healthcare professional present, are often located in pharmacies or other public or private settings to aid BP assessment, and may be accessed by large numbers of people.² In the ASH guide, “out-of-office” BP assessment is indicated to play an important role in hypertension diagnosis and management. This is especially true where health resources are scarce. The World Hypertension League (WHL) supports the ASH guide for these out-of-office kiosk readings.

Worldwide, about half of people with hypertension are unaware they have elevated BP, while in the United States 30% are not aware.^{1,3} Health literacy is also generally higher in the United States than many other areas of the world. Hence, the WHL has modified the ASH guide for a global audience.

To support the ASH guide, Alpert and colleagues¹ reviewed critical issues relating to accuracy and reliability of many BP kiosks. Based on the review, the ASH guide highlights the need for kiosk devices to pass American National Standards Institute/Association for the Advancement of Medical Instrumentation/International Standards. Internationally, other accuracy standards are often used and are acceptable, including the British Hypertension Society standard⁴ and the European Society of Hypertension International Protocol.⁵ Devices that have not been assessed or have not passed these accuracy standards should not be used. Unfortunately, many devices that are not publically documented to have passed accuracy standards or that are documented to have failed accuracy standards are still marketed.

Appropriate cuff size is another important factor relating to the accuracy of the reading highlighted by the ASH guide. Most BP kiosks have only one cuff size and this

can cause a falsely low reading if the cuff is too large or a falsely high reading if the cuff is too small. The ASH guide indicates a kiosk device marketed by PharmaSmart (Rochester, NY) that has passed accuracy standards and has an innovative technology that adapts the cuff size to that of the arm. In the absence of a correct cuff size or such technology, BP kiosk readings cannot be regarded as accurate and should not be supported.

The WHL also recommends that BP kiosks be located in an environment conducive to accurate readings and that there are appropriate resources to help inform people how to take a reading and understand the meaning of the reading. For accurate readings, the kiosks should be in a quiet, comfortable place. The device should be designed to have the person sitting with the arm supported at heart level with the feet on the floor. Adequate, easy-to-read instructions should inform the person of how to best perform the process for an accurate reading, including the impact of stress, pain, and smoking on a BP reading. In addition, information should be available to help interpret the BP reading. The individual being assessed should be provided their BP reading to take home or to their healthcare provider. Ideally, the BP kiosks should be in a location where the person can get advice from a pharmacist or other healthcare professional (eg, in-store pharmacy).

The WHL supports the ASH guide on BP kiosks and provides additional advice relevant for use in many areas of the world.

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