A Joint Scientific Statement From the American Heart Association, American Society of Hypertension, and Preventive Cardiovascular Nurses Association

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Abstract—Home blood pressure monitoring (HBPM) overcomes many of the limitations of traditional office blood pressure (BP) measurement and is both cheaper and easier to perform than ambulatory BP monitoring. Monitors that use the oscillometric method are currently available that are accurate, reliable, easy to use, and relatively inexpensive. An increasing number of patients are using them regularly to check their BP at home, but although this has been endorsed by national and international guidelines, detailed recommendations for their use have been lacking. There is a rapidly growing literature showing that measurements taken by patients at home are often lower than readings taken in the office and closer to the average BP recorded by 24-hour ambulatory monitors, which is the BP that best predicts cardiovascular risk. Because of the larger numbers of readings that can be taken by HBPM than in the office and the elimination of the white-coat effect (the increase of BP during an office visit), home readings are more reproducible than office readings and show better correlations with measures of target organ damage. In addition, prospective studies that have used multiple home readings to express the true BP have found that home BP predicts risk better than office BP (Class IIa; Level of Evidence A). This call-to-action article makes the following recommendations: (1) It is recommended that HBPM should become a routine component of BP measurement in the majority of patients with known or suspected hypertension; (2) Patients should be advised to purchase oscillometric monitors that measure BP on the upper arm with an appropriate cuff size and that have been shown to be accurate according to standard international protocols. They should be shown how to use them by their healthcare providers; (3) Two to 3 readings should be taken while the subject is resting in the seated position, both in the morning and at night, over a period of 1 week. A total of ≥12 readings are recommended for making clinical decisions; (4) HBPM is indicated in patients with newly diagnosed or suspected hypertension, in whom it may distinguish between white-coat and sustained hypertension. If the results are equivocal, ambulatory BP monitoring may help to establish the diagnosis; (5) In patients with prehypertension, HBPM may be useful for detecting masked hypertension; (6) HBPM is recommended for evaluating the response to any type of antihypertensive treatment and may improve adherence; (7) The target HBPM goal for treatment is <135/85 mm Hg or <130/80 mm Hg in high-risk patients; (8) HBPM is useful in the elderly, in whom both BP variability and the white-coat effect are increased; (9) HBPM is of value in patients with diabetes, in whom tight BP control is of paramount importance; (10) Other populations in whom HBPM may be beneficial include pregnant women, children, and patients with kidney disease; and (11) HBPM has the potential to improve the quality of care while reducing costs and should be reimbursed. **(*Hypertension.* 2008;52:10-29.)**