What you need to know about self-measured blood pressure monitoring

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Staff News Writer

Having patients measure their own blood pressure at home can improve diagnosis of hypertension, and for those patients who have it, can help get their hypertension under control. Learn the facts about self-measured blood pressure (SMBP) monitoring, including how you can start an SMBP program in your practice.

Target: BP™, which is a national initiative co-led by the American Heart Association (AHA) and the AMA, offers a self-measured blood pressure monitoring program to improve diagnosis and treatment of hypertension. The program delivers measurable benefits for patients, but requires dedication to the process for it to be effective—including proper communication with patients and a system for managing and interpreting their self-measured blood pressure.

In addition to direct access to trained field support specialists, a data platform and a suite of evidence-based tools and resources offered by the AMA and the AHA, Target: BP offers annual, recurring recognition for all participating sites that achieve hypertension control rates of 70 percent or higher among their adult patient population year over year. In 2018, nearly 800 organizations have been recognized for their efforts focusing on blood pressure control within the populations they serve.

What is self-measured blood pressure monitoring? Sometimes called “home blood pressure monitoring,” this patient self-measurement occurs outside of a clinical setting. SMBP enables physicians to better diagnose and manage hypertension while also helping patients take an active role in the process. Research shows that this process can improve adherence and health outcomes for patients with hypertension.

Why self-measure their blood pressure at home? Randomized-controlled trials have shown that self-measured blood pressure predicts cardiovascular morbidity and mortality better than office BP measurements. Using SMBP to guide you in diagnosing and treating hypertension likely will produce better outcomes than using office blood pressure readings alone.

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Self-measurements also provide more BP readings over a longer period of time, which better represents what a patient’s true blood pressure is.

By having more reliable blood pressure readings to work with, you are less likely to misdiagnose a patient as having sustained hypertension when they really have isolated office blood pressure elevations—known as “white coat hypertension.”

This concept also applies to assessing the blood pressure control of a patient with hypertension. Having more accurate and reliable readings allow physicians to assess whether a patient’s anti-hypertensive treatment is sufficiently controlling their BP. If it is not controlled, a physician can act more rapidly, being confident that the multiple readings taken over the course of several days are more reliable than a few measurements taken during a single office visit.

**How do my patients get a home blood pressure monitor?** Your patients can buy a monitor at their local drug store. Many public and private health insurance plans don’t cover the cost of self-monitoring devices, unfortunately. Prices for a typical high-quality device can range from $50 to $150. Another option is to purchase monitors for your practice and loan them out to patients.

**How can I help my patients determine which monitor to buy?** Most of the methods of monitoring patients’ blood pressure that are shown to improve patient outcomes use automated (oscillometric) devices. With this type, the patient wraps a cuff around his or her arm and presses a button to get a digital BP reading. When recommending an automated device, tell the patient to make sure the device is validated, meant for the upper arm, easy to use and the data is shareable.

**How should my patient use a home blood pressure monitor?** Have your patient use this infographic to get in an appropriate position before they take the reading. Your patient should take two readings at one- to two-minute intervals, both in the morning and evening for seven consecutive days. This will provide four measurements a day, 28 for a week, which is ideal. Make sure the patient knows to record each measurement.

Offer additional support when using this process, such as a one-time training session when you or someone on your staff can watch the patient obtain his or her blood pressure measurement. This way you make sure the patient understands how to do so correctly.

**How do I use the data from my patient’s measurements?** When you receive the patient’s measurements, calculate the average value of all the systolic and diastolic blood pressures. Use this single average to determine whether your patient has hypertension or your patient’s blood pressure is controlled. Research shows that this process improves blood pressure control when physicians provide personalized support and advice based on the patient’s data. Learn more about collecting and using the patients’ BP data.

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Do I need to give the patient any warnings? Make sure your patient knows what to do if he or she has a measurement that is outside your pre-determined acceptable range, or if they experience any symptoms with a high or low BP measurement. This could mean seeking emergency treatment, if appropriate.

How to take action. Use the Target: BP’s guide to implementing SMBP to begin engaging your patients in taking their blood pressure at home. These recommendations will help you prepare for a successful SMBP program.