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# Home BP monitoring is essential

**I** believe that the most important recommendation from the American Heart Association in recent years is to confirm office blood pressure (BP) readings with repeated home BP measurements, for both diagnosis and management of hypertension. Office BPs are notoriously inaccurate, because it is exceedingly difficult to measure BP properly in a busy office setting. Even when measured correctly, the office BP does not accurately reflect a person's BP throughout the day, which is the best predictor of cardiovascular damage from hypertension.

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Among the problems with relying on office BP readings:

We would treat many people for hypertension who are not hypertensive, because 15% to 30% of those with elevated office BP readings have

“white-coat” hypertension, which does not require medication.<sup>1</sup> White-coat hypertension can only be diagnosed with home BP readings or 24-hour ambulatory BP monitoring.

We would miss the diagnosis of hypertension in patients with “masked” hypertension—that is, people who have normal BP in the office but elevated ambulatory BP. It is estimated that 12% of US adults have masked hypertension.<sup>2</sup>

We would overtreat some patients who have hypertension and undertreat others, since office BP measurements can *underestimate* BP by an average of 24/14 mm Hg and *overestimate* BP by an average of 33/23 mm Hg.<sup>3</sup>

In this issue of *JFP*, Spaulding and colleagues<sup>4</sup> provide an extensive summary of the research that supports the recommendation for home BP measurements. Here are 3 key takeaways:

1. Use an automated BP monitor to measure BP in the office. Automated BP monitors that take repeated BPs over the course of about 5 minutes and average the results provide a much better estimate of 24-hour BP. It is worth the extra time and may be the only basis for making decisions about medications if a patient is unwilling or unable to take home BP readings.
2. Provide training to patients who are willing to monitor their BP at home. Explain how to take their BP properly and instruct them to record at least 12 readings over the course of 3 days prior to office visits.
3. Recommend patients use a validated BP monitor that uses the brachial artery for measurement, not the wrist (visit [www.stridebp.org/bp-monitors](http://www.stridebp.org/bp-monitors) and choose “Home”).

**JFP**

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