Patient Home Blood Pressure Monitoring: The Provider’s Guide

Home blood pressure monitoring is a valuable addition to the management of hypertension, supported by the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC-7), and the American Heart Association and the American Society of Hypertension.

- Home blood pressure monitoring is especially useful for patients with poorly controlled hypertension.
- Home blood pressure monitoring can be used to titrate medications and improve control.
- Home readings may be an equal or better predictor of cardiovascular risk and of target organ damage than office readings.
- Home blood pressure monitoring can enable and motivate patient participation in managing a condition that is often asymptomatic.

CRITERIA FOR PATIENT PARTICIPATION

- Patients starting high blood pressure treatment to determine its effectiveness are eligible to participate.
- Patients requiring closer monitoring, rather than intermittent office visits, are eligible to participate.
- Adult’s age 18 years and older with hypertension and uncontrolled blood pressure who have had two or more readings at 140/90 mm Hg or greater during an office visit are eligible to participate.
- Pregnant women are **NOT** eligible to participate.
- Patients with a disability that precludes use of a home blood pressure monitor similar to cardiac arrhythmias and CKD are **NOT** eligible to participate.

**People with atrial fibrillation or other arrhythmias may not be good candidates for home monitoring. Why? Oscillometric-method monitoring devices recommended for use at home may not be able to give accurate measurements for people with these conditions. While home blood pressure monitoring can be done by most patients, it may be contraindicated for those with certain conditions: cardiac arrhythmias, and certain physical and mental disabilities.**

INTEGRATE HOME BLOOD PRESSURE MONITORING INTO YOUR PRACTICE

- Create office systems to easily integrate home blood pressure monitoring into your practice.
- Identify a support staff member who can teach patients how to use monitors, validate devices, and review action plans and blood pressure logs.
- Develop a protocol to address frequency of office visits, handle inquiries from patients about home monitor concerns, etc.
- Consider organizing hypertension support groups for your patients.
- Use peer educators or community health workers to teach patients how to measure blood pressure at home.
**Prescribe home blood pressure monitoring frequency**

Blood pressure measurements should be taken every day 2-3 times in the morning and 2-3 times in the evening. Patients will record home blood pressure readings via home blood pressure monitor passport or other mechanisms.

**Provide guidance on selecting a cuff**

- Recommend an appropriate sized cuff. Standard cuff size fits 9-17 inches in circumference. X-large cuff size fits 16.5-23.6 inches in circumference. (Standard adult cuffs are too small for about a third of patients.)
- Measure middle of left upper arm, unless medically contraindicated. Show patient how to properly use validated automated device.
- Check for accuracy about every 6 months (or per monitor instructions) and/or if faulty readings are suspected.

**Teach patients proper techniques**

- Rest 5 minutes before taking your blood pressure.
- Don’t smoke or drink caffeinated beverages for at least 30 minutes before.
- Take your blood pressure before (not after) you eat.
- Sit comfortably with your back supported and both feet on the floor (don’t cross your legs).
- Elevate your arm to heart level on a table or a desk.
- Use the proper-sized cuff. It should fit smoothly and snugly around your arm. There should be enough room to slip a fingertip under the cuff.
- Ideally, take 3 measurements at one sitting and record the average.

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**This chart reflects blood pressure categories defined by the American Heart Association**

<table>
<thead>
<tr>
<th>Blood Pressure Category</th>
<th>Systolic mm Hg (upper #)</th>
<th>Diastolic mm Hg (lower #)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>less than 120</td>
<td>and</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120 – 139</td>
<td>or</td>
</tr>
<tr>
<td>High Blood Pressure (Hypertension) Stage 1</td>
<td>140 – 159</td>
<td>or</td>
</tr>
<tr>
<td>High Blood Pressure (Hypertension) Stage 2</td>
<td>160 or higher</td>
<td>or</td>
</tr>
<tr>
<td>Hypertensive Crisis (Emergency care needed)</td>
<td>Higher than 180</td>
<td>or</td>
</tr>
</tbody>
</table>

* If a patient’s reading reaches hypertensive crisis category, it is recommended that they seek emergency medical care immediately.

- Make sure your patients know how to respond to an emergency. Ensure that patients know to call 911 immediately if they have signs or symptoms of a heart attack or stroke.
- Advise patients what to do in case of an exceptionally high or low reading.