



Engaging Patients in Self-Measured BLOOD PRESSURE MONITORING

What is Self-Measured Blood Pressure (SMBP)?

SMBP is a patient's measurement and monitoring of their blood pressure (BP) outside a clinical setting, usually at home, using a personal blood measurement device.

How does SMBP differ from Ambulatory Blood Pressure Monitoring (ABPM)?

- ABPM is a monitoring and evaluation method in which a patient wears a device that automatically measures their blood pressure at regular intervals over 24 hours. The device observes variations in their blood pressure levels outside of a clinical setting during daily activities, with a particular focus on comparing nighttime BP and 24-hour BP levels to readings taken in the clinical setting. ABPM is intended to help rule out “white-coat” and “masked” hypertension and guide clinical decision-making for antihypertensive medication treatment options.
- SMBP is recommended to be completed by the patient daily, at specific time frames, using a personal blood measurement device. Two SMBP readings should be taken one minute apart while seated and at rest to ensure accuracy. This should be done at once during the day and again at night. SMBP should be completed and documented at least twice a day for three days.



When should SMBP and ABPM be implemented?

- ABPM should be implemented by providers to diagnose and classify hypertension.
- SMBP is a great tool to help patients monitor and manage their blood pressure regularly in the comfort of their homes. SMBP is recommended every two to four weeks or at the provider's discretion to assess BP trends in patients that are undiagnosed with hypertension, are suspected of having “masked” hypertension, or are diagnosed with hypertension and have poor BP control.

Benefits of Engaging Patients in SMBP

SMBP minimizes the time, costs, and scheduling burden by removing the need for patients to travel to their provider's office to exchange information regarding their BP management, including BP readings, symptoms, medication use and health behaviors. This helps improve access to chronic disease management for vulnerable populations and reduces health disparities by minimizing barriers to care while encouraging ongoing communication and engagement between patients and their care team.

Five Tips for SMBP Implementation



Ensure patients have a validated, automated blood pressure monitor with adequately sized upper arm cuffs.



Educate patients on the activities they should and shouldn't engage in before and while taking their SMBP readings, how to properly position themselves during their readings, how long to rest in between their readings, what their readings mean, and how to document and share their readings with their health care team.



The clinical team should average all the systolic and diastolic BP measurements received from patient SMBP readings for the monitoring period, document them in the medical record, and use at least three days of measurements for clinical decision-making to determine the next steps in medical treatment initiation, continuation, or intensification options.



Engage in shared decision-making with patients and their care partners on hypertension diagnosis, treatment options, health goals, lifestyle/behavior change guidance, and how to access resources for ongoing hypertension management and SMBP support.



Have patients validate their SMBP device with an office device annually.

Activities that help effectively support SMBP interventions

- SMBP one-on-one counseling, web-based or telephonic support, educational classes, and demonstrations for patients on how to properly perform SMBP delivered by trained health care providers in clinical and community settings (doctors, pharmacists, nurse practitioners, physician assistants, and health educators). During the sessions, patients are provided with written and verbal information using culturally competent visual aids and media adapted to ensure health literacy.
- Means of enabling regular communication between patients and providers to facilitate sharing information on patient SMBP readings using electronic trackers, patient portals, smartphone applications, Web communications, interactive computer-based telephone feedback systems, secure patient websites and applications, or paper trackers.
- An established “feedback loop” between the health care team and patient where treatment support, lifestyle change guidance, and in-person or web-based training is customized to each patient's needs. Customization is based on individual tracking results, and links to online and local patient resource materials can be shared.

Grant and Funding Resources to Support Your SMBP Efforts

Grant and funding sources may be available to support your SMBP initiatives. Be sure to regularly check the following resources for updated opportunities:

- [Federal funding for government-funded programs and projects](#)
- [American Heart Association Funding Opportunities](#)

References:

AMA 7-Step SMBP Quick Guide: <https://www.ama-assn.org/system/files/2020-06/7-step-smbp-quick-guide.pdf>

Million Hearts Hypertension Control Change Package, 2nd edition: https://millionhearts.hhs.gov/files/HTN_Change_Package.pdf