# Self-measured blood pressure

## Best practices

Instructions

2. Determine where opportunities for improvement exist.
3. Create plan to implement applicable recommendations.

## Office processes

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| Identify patients appropriate for self-measured blood pressure (SMBP) | • Confirm suspected hypertension diagnoses based on office BPs using SMBP before initiating treatment  
• Use SMBP to determine if current treatment is effective  
• Use SMBP to engage patients in management of their hypertension | • The 2017 ACC/AHA Guideline for prevention, detection, evaluation and management of high blood pressure in adults and the 2015 USPSTF Recommendations for Screening for high BP in adults both suggest the use of out-of-office BPs to confirm a suspected diagnosis of hypertension based on in-office BPs  
• SMBP can be used to diagnose different types of hypertension, including white coat, masked, and sustained to reduce the risk of over treatment or under treatment  
• Masked hypertension is when BPs are normal in the clinical setting but high outside of the clinical setting. This carries the same risks as someone with sustained hypertension  
• SMBP can improve patient engagement in self-care and may improve adherence to treatment |
| Train staff on SMBP | • Train staff on the benefits of SMBP and how it can be effectively used to diagnose and manage hypertension  
• Train staff on proper self-measurement techniques so they can effectively train patients to self-measure  
• Test staff skills using SMBP staff competency | • Staff must train patients to properly self-measure their BP so the provider has more confidence in the SMBP readings to make sound medical decisions  
• Use a training module for the staff so everyone has the same knowledge to train the patients with consistency |
| Train patients to accurately self-measure | • All patients performing self-measurement should be trained to do so properly | • Patients need to use proper technique when self-measuring their BP to ensure readings are accurate |
| Receive SMBP data from patients | • Before leaving the office, patients should know how and when to communicate their SMBP readings back to their care team  
• Options for communicating SMBP readings: patient portal, secure e-mail, fax, telephone, in-person or secure telehealth website | • Providers need to be able to receive SMBP readings from patients to determine if changes to care plan are needed  
• Patients should be instructed how to contact clinical staff if readings are out of their expected range, and what to do when readings require immediate medical attention (call doctor on call, dial 911, etc.) |
### Interpret and act on results
- Average all SMBP readings taken over seven days into a single systolic and single diastolic value
- Make changes to care plan based on results and inform patient
- Average of SMBP readings is more representative of a patient’s true BP and should be used to make medical decisions
- Changes to care plan should incorporate input from patient (shared decision-making) to keep them engaged in self-managing their BP

### Implement a device loaner program (Optional)
- Purchase an appropriate number of SMBP devices that can be loaned out to patients who do not have a diagnosis of hypertension or cannot afford to purchase their own device
- Patients who are ruled out for having a diagnosis of hypertension do not need to regularly self-measure their BP to warrant the purchase of a device
- Patients who are newly diagnosed with hypertension but cannot afford to purchase a device will benefit from SMBP if they are provided a loaner device

### Test SMBP devices for accuracy
- SMBP devices should be tested for accuracy in each patient (even if the device is validated)
- Accuracy testing should be performed after SMBP device purchase (before readings are used for clinical decision making) and annually thereafter
- Even if a device is validated, it may not be able to measure BP accurately in every patient (arrhythmia, vascular stiffness, etc.)

### Tools and resources

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| Have tools and resources available to support an SMBP protocol | Have resources that help patients:  
- Understand hypertension  
- Correctly prepare, position and self-measure  
- Choose clinically validated SMBP devices for purchase  
- Choose device with appropriate cuff size  
- Record their blood pressures  
Have resources that help staff:  
- Train patients to properly self-measure  
- Check SMBP devices for accuracy  
- Track loaner device inventory | Having resources available for patients and staff can help streamline SMBP and ensure it is performed properly |