



Screening, Measurement and Self-Management of Blood Pressure

March 2022

Implementation of Quality Improvement Initiatives
to Improve Diabetes and Hypertension



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Purpose of Module

This module contains a high-level overview of evidence-based information related to cardiovascular health and blood pressure (BP) management. It is designed to promote and supplement your current quality improvement efforts.

Sections are highlighted by the “3 As” – **Awareness, Assessment and Action** – and include many tools and resources that may also be located on the [Quality Insights website](#).

Please Note: Guidelines and recommendations referenced in this module are to be used along with physician/clinician judgment, treatment, and based on individual patient’s unique needs and circumstances.



The Pressure is Off: Partner with Quality Insights

[Quality Insights](#) is dedicated to assisting your health care team in achieving optimal BP management. Through our partnership with the Pennsylvania Department of Health, we offer a wide variety of services designed to help you improve and reach your quality improvement goals focused on hypertension, cholesterol, diabetes, and prediabetes management.

A few key services Quality Insights is ready to offer include:

- 1) **Technical Assistance:** Quality Insights’ Practice Transformation Specialists are available to support your clinical quality improvement goals and improve value-based care in your practice setting.
- 2) **Get Recognized for Your Achievements:** Are you making great progress in BP control in your practice with National Quality Forum (NQF) #0018 reporting above 70 percent and/or 80 percent? If so, allow Quality Insights to help you apply for national recognition through the [Target:BP™](#) and [Million Hearts® Hypertension Control Champion](#) program(s).
- 3) **Home BP Monitor Loaner Program:** Through this NO-COST initiative, practices will be supplied with up to five automated home BP monitors that can be loaned to patients. This is a great program for patients who do not currently own or cannot afford to purchase a BP monitor, are newly diagnosed with hypertension, or are experiencing a change in BP medication. Find more information about this opportunity on [page 19](#).

Quality Improvement Solutions for You and Your Patients

The services above represent just a small sample of ways Quality Insights can support your practice. Discover all the ways the team at Quality Insights can help you and your patients make BP control the goal by reviewing this [SMBP Workflow Modification Guide](#) or by contacting [Ashley Biscardi](#) at **1.800.642.8686, ext. 137** to learn more.





Awareness: Blood Pressure Matters

High BP is a contributing factor to major health conditions including heart attack, heart failure, stroke, kidney failure, and many others.

The following [figure](#) highlights the number of adults aged 18 years and older in the United States who have hypertension. This figure applies criteria from the [2017 American College of Cardiology \(ACC\)/American Heart Association \(AHA\) guideline](#) to [National Health and Nutrition Examination Survey](#) (NHANES) 2013 to 2016 data.

The figure also shows the number of:

- People with hypertension who are recommended to use either lifestyle modifications only or lifestyle modifications with prescription medication to manage their BP.
- People with hypertension who do not have their BP controlled below 130/80 mm Hg.
- People who are recommended to use prescription medication but are either untreated or are treated but whose hypertension is not under control.

Million Hearts® 2027

Check out the updated Million Hearts® webpage with details about the [new Million Hearts® 2027 framework](#), strategies, and populations of focus to build health equity.



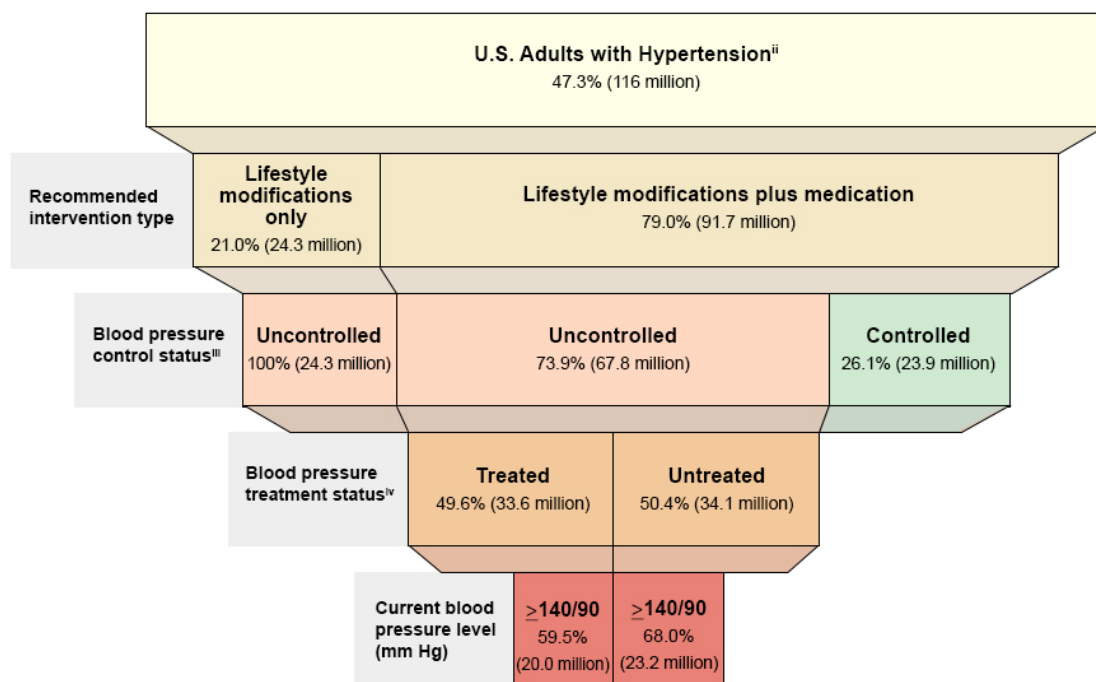
In 2019, [33.3 percent](#) of PA adults reported being told by a health professional that they have high BP. Hypertension is a major preventable risk factor for heart disease and stroke, which are the first and fifth leading causes of death in the U.S., respectively.



- People who have a BP at or above 140/90 mm Hg, also known as stage two hypertension, and are particularly in need of lowering their BP.

Estimated Hypertension Prevalence, Treatment, and Control Among U.S. Adultsⁱ

Applying the Criteria From the American College of Cardiology and American Heart Association's (ACC/AHA) 2017 Hypertension Clinical Practice Guideline—NHANES 2015–2018



Data Source: National Center for Health Statistics, Centers for Disease Control and Prevention. National Health and Nutrition Examination Survey (NHANES), 2015–2018. Definitions: ACC/AHA criteria adapted from Ritchey MD, Gillespie C, Wozniak G, et al. Potential need for expanded pharmacologic treatment and lifestyle modification services under the 2017 ACC/AHA Hypertension Guideline. *J Clin Hypertens*. 2018;20:1377–1391. <https://doi.org/10.1111/jch.13364>

ⁱ Among adults aged 18 years and older; estimates may not equal 100% due to rounding.

ⁱⁱ Blood pressure ≥ 130/80 mm Hg or currently using prescription medication to lower blood pressure.

ⁱⁱⁱ Controlled is defined as having a blood pressure <130/80 mm Hg.

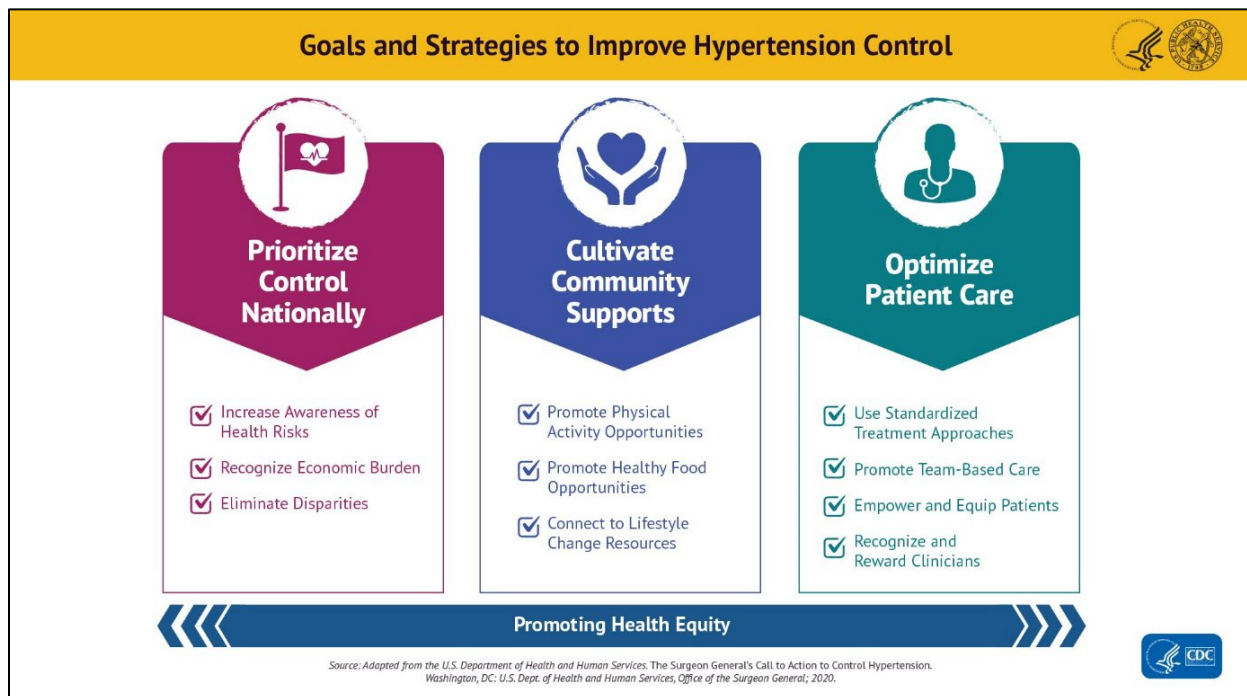
^{iv} Treatment status refers to current use of prescription medication to lower blood pressure.

Source: Centers for Disease Control and Prevention (CDC). *Hypertension Cascade: Hypertension Prevalence, Treatment and Control Estimates Among U.S. Adults Aged 18 Years and Older Applying the Criteria From the American College of Cardiology and American Heart Association's 2017 Hypertension Guideline—NHANES 2015–2018*. Atlanta, GA: US Department of Health and Human Services; 2021.

The Surgeon General's Call to Action to Control Hypertension (Call to Action)

[*The Surgeon General's Call to Action to Control Hypertension \(Call to Action\)*](#), released October 2020, seeks to avert the negative health effects of hypertension by identifying evidence-based interventions that can be implemented, adapted, and expanded in diverse settings across the United States.

The *Call to Action* outlines three goals to improve hypertension control across the United States, and each goal is supported by strategies to achieve success.

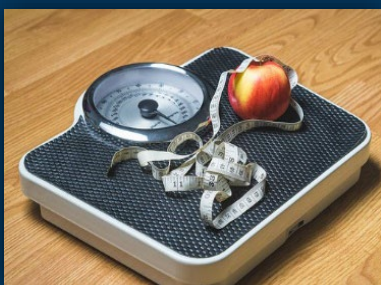


Source: [The Surgeon General's Call to Action to Control Hypertension \(Call to Action\)](#)

Learn more about the *Call to Action* by accessing:

- [CDC Prevent and Manage High Blood Pressure website](#)
- [CDC Call to Action Partner Toolkit](#)
- [U.S. Department of Health and Human Services Office of the Surgeon General website](#)
- [The Surgeon General's Call to Action to Control Hypertension: Healthcare Professionals Strategy](#)
- [The Surgeon General's Call to Action to Control Hypertension: Health Care Practices, Health Centers and Health Systems Strategy](#)

NEW RELEASE: Preventing and Treating High Blood Pressure is about More than Just Numbers



A February 17, 2022 [Health and Well-Being](#) feature from Paul Reed, MD, Director, Office of Disease Prevention and Health Promotion, emphasizes that preventing, identifying, and treating hypertension should be about much more than just measuring BP and prescribing medicine. Instead, addressing high BP should be an exemplar of comprehensive, person-centered care — promoting greater overall health, well-being, and personal resilience. [Read more at health.gov.](#)

2022: Growing National Campaigns Support Blood Pressure Control

In addition to the Million Hearts® campaign and Target:BP™, a growing number of national campaigns are collectively raising awareness around the importance of BP control. Below are a sample of initiatives offering valuable tools and resources for health care providers and patients.

Blood Pressure Control Initiatives
NEW (2022): Live to the Beat - Led by the CDC Foundation and the Million Hearts® initiative, this brand new campaign aims to promote smart and heart healthy steps to improve the cardiovascular health of Black and African Americans.
NEW (2022): Know Your Numbers - This new campaign, launched by the National Forum for Heart Disease and Stroke Prevention, provides multiple videos and social media resources emphasizing the importance of patients knowing their BP, blood sugar, and cholesterol values to help in the prevention and treatment of heart disease.
NEW (2021): Heart Healthy Steps - Led by the CDC Foundation and the Million Hearts® initiative, this website is designed to support a heart healthy lifestyle for adults 55 and over.
HHS Office on Women's Health Self-Measured Blood Pressure Partnership Program - Quality Insights, a new partner in this program, is now working as part of this national network of 30 public and private organizations to amplify and increase knowledge about hypertension and cardiovascular disease, expand access to SMBP resources, and more. Access SMBP resources here .
National Institute of Health: The Heart Truth® - Focuses on making sure women know about their risk for heart disease. Find high BP education resources here.
Release the Pressure Campaign - This coalition of national health care professional organizations and heart health experts share a goal of partnering with Black women to support their heart health. Visit their patient-facing website for BP resources .
ManageYour BP.org or BajeSuPresion.org - This high BP control campaign is led by the American Medical Association (AMA), AHA, and the Ad Council. A toolkit is available with PSAs, social media content, and other patient-facing resources for promoting BP control.

A Practical Solution: Self-Measured Blood Pressure (SMBP) Monitoring

Given the toll that hypertension plays in our nation and the impact COVID-19 has had on the decreased frequency of in-person check-ups, there is a compelling role for increased support for the use of home monitoring.

A [2020 article](#) featured in *Hypertension* highlights that many BP guideline groups around the globe have recommended out-of-office BP measurements to confirm a diagnosis of hypertension.

SMBP plus additional [clinical support](#) (i.e., educational classes, one-on-one counseling, and telephonic/web-based support) helps people with hypertension lower their BP, aids in ensuring that patients are diagnosed more accurately, and improves access and quality of care.



Self-Measured Blood Pressure Monitoring (SMBP) is defined as the regular measurement of blood pressure by a patient at home or elsewhere outside the clinic setting using a personal home measurement device.

Evidence in SMBP

Strong scientific evidence over many years supports the benefits of SMBP. New evidence has been released over recent years, including:

- A [Grade A Final Recommendation Statement](#) was issued by the U.S. Preventive Services Task Force (USPSTF) on April 27, 2021, recommending screening for hypertension in adults 18 years or older with office BP measurement (OBPM). The USPSTF recommends obtaining BP measurements outside of the clinical setting for diagnostic confirmation before starting treatment.
- In 2021, the Public Health Informatics Institute (PHII) and CDC conducted a national assessment of health information technology supporting SMBP monitoring. The report, [Self-Measured Blood Pressure Monitoring: Key Findings from a National Health Information Technology Landscape Analysis](#), identifies gaps and barriers for widespread adoption of SMBP and makes recommendations for reducing them.
- A 2020 [Joint Policy Statement](#) from the American Heart Association (AHA) and American Medical Association (AMA) emphasizes the established clinical benefits and potential cost-effectiveness of SMBP over office BP. Read the [AMA's 6 Key Takeaways for physicians and health professionals](#).
- A 2020 [Journal of Community Health](#) paper reviewing a 2016-2018 CDC-funded project of the National Association of Community Health Centers (NACHC), the YMCA of the USA and Association of State and Territorial Health Officials (ASTHO) to increase the use of SMBP through coordinated action of health department leaders, community organizations and clinical providers. Nine health centers in Kentucky, Missouri and New York developed and implemented collaborative SMBP approaches that led to 1,421 patients with uncontrolled hypertension receiving a recommendation or referral to SMBP. [Associated SMBP implementation methods, toolkits, and resources can be accessed here](#).
- Million Hearts® released a second edition of its [Hypertension Control Change Package](#) in 2020, featuring tested tools and resources that have enabled Hypertension Control Champions to

reach high levels of BP control with patients. SMBP-focused content is included as an important aspect of hypertension control.



SMBP Best-Practices Video

Watch the three-minute video, [Collaborative Care Models for Improving Hypertension Control through SMBP Monitoring](#), to learn about best practices used in nine health centers to improve use of SMBP.

Assessment: Targets, Tools and Your Care Team

Monitoring Blood Pressure in Adults

The [Centers for Disease Control and Prevention \(CDC\)](#) acknowledges guidelines used to diagnose high BP may differ from health care professional to health care professional:

- According to the [2004 Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure](#), some health care professionals diagnose patients with high BP if their BP is consistently 140/90 mm Hg or higher.
- According to the [ACC/AHA 2017 Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults](#), other health care professionals diagnose patients with high BP if their BP is consistently 130/80 mm Hg or higher.

Blood Pressure Levels			
The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003 Guideline) ²		The American College of Cardiology/American Heart Association Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults (2017 Guideline) ¹	
Normal	systolic: less than 120 mm Hg diastolic: less than 80 mm Hg	Normal	systolic: less than 120 mm Hg diastolic: less than 80 mm Hg
At Risk (prehypertension)	systolic: 120–139 mm Hg diastolic: 80–89 mm Hg	Elevated	systolic: 120–129 mm Hg diastolic: less than 80 mm Hg
High Blood Pressure (hypertension)	systolic: 140 mm Hg or higher diastolic: 90 mm Hg or higher	High blood pressure (hypertension)	systolic: 130 mm Hg or higher diastolic: 80 mm Hg or higher

Source: <https://www.cdc.gov/bloodpressure/about.htm>

Making a Difference through Accurate Measurement

Accurate measurement of BP is essential both to estimating cardiovascular disease (CVD) risk and guiding management of high BP. Avoiding common errors can lead to correct diagnoses and speed time to treatment, improving BP control rates. The following sample of resources from the [Target:BP™ M.A.P. \(Measure Accurately, Act Rapidly, Partner with Patients\) BP Improvement Program](#) outline practical approaches to improving BP control for your patients through accurate measurement.



- [BP Positioning Challenge](#): Can you identify common positioning errors? Encourage your staff to take the challenge as a quick means to brush up on proper BP measurement technique.
- [Measure Accurately Pre-Assessment](#): Use this resource to help your health care organization identify areas of opportunity to more accurately measure BP in the clinical setting.
- [Steps to Accurately Measure Blood Pressure](#): Provides clinicians with information on how to correctly take an in-office BP measurement.
- [Technique Quick Check](#): Resource for determining if clinicians take BP measurements the right way and the same way every time.
- [CME Course: Measuring Blood Pressure Accurately](#)

For Providers and Patients: Accurate BP Measurement Education Resources

As important as it is to ensure accurate BP readings in the clinical setting, the same is true for patients who are collecting measurements at home. Click the links below to access important educational resources to guide your patients participating in SMBP:

Organization	SMBP Patient Resource	Summary
American Medical Association	7-Step SMBP Quick Guide	This guide is a reference for clinicians to help train patients to perform SMBP monitoring. Training videos, SMBP CPT® coding information, infographics, and a SMBP recording log are included.
	Self-Measured Blood Pressure Cuff Selection	Identify steps to determine the appropriate upper arm cuff size.
Quality Insights	Tips for Taking Your Own Blood Pressure Readings	Printable guide to help patients ensure they are getting the most accurate reading at home.
	Blood Pressure Tracker	Printable tracking sheet that includes brief instructions for patient use.

	Hypertension Smartphone Apps	Provides a sample listing of apps available to help patients track their BP readings.
	Bluetooth & You: Maximizing the Benefits of Blood Pressure Self-Monitoring	Explore how seamless, interoperable communication between patient and clinician can support SMBP.
Organization	SMBP Patient Resource	Summary
Target:BP™	What is SMBP?	Overview for patients to understand what SMBP is and why it is important.
	SMBP Training Video	Available in English and Spanish, this educational video help train care teams and patients on how to properly self-measure BP.
	SMBP Infographic: How to Measure Your Blood Pressure at Home	Steps to perform SMBP monitoring correctly which includes separation, positioning and measurement. This document is available to download in English, Spanish and Vietnamese.
	Using a Wrist Cuff to Measure Blood Pressure	Describes correct and incorrect forearm position for wrist BP measurement.

Team-Based Care for Improved Blood Pressure Outcomes

New Resource

Unify your team around high blood pressure and cardiovascular disease prevention by reviewing Quality Insights [Care Team Interventions to Implement American Heart Association CVD Primary Prevention Guidelines](#).



Team-based care is an approach to achieving BP control where care is provided by a team of health professionals, including primary care providers, pharmacists, nurses, dietitians, or other health workers, rather than by a single doctor. Team members work together to help patients manage their medication, increase healthy behaviors, and follow their BP control plan.

The Community Preventive Services Task Force (CPSTF) recommends BP. A systematic review of evidence shows team-based care increases the proportion of patients with controlled BP and reduces systolic and diastolic BP. A separate review of economic evidence indicates team-based care is also cost-effective. These findings (2020) update and replace the 2012 CPSTF recommendation for team-based care.

For more information on ways you can strengthen your care team to provide optimal quality of patient care for BP management, review:

- CDC's [Promoting Team-Based Care to Improve High Blood Pressure Control](#) website

- [The Primary Care Team Guide](#): Developed by staff at the MacColl Center for Health Care Innovation, offers practical advice, resources, and models to help leaders and staff engaged in or considering practice transformation build more effective care teams and deploy them to optimize patient care.
- Quality Insights 2021 White Paper: [Team Up for Quality Care: The Role of Primary Care Teams in Prevention of Cardiovascular Disease](#)
- Success Story: Pennsylvania-based [Million Hearts® Hypertension Control Champions](#)

Pharmacy Support Services

Pharmacists play a crucial role in reducing the risk for heart disease and stroke in the United States.

Pharmacists and care teams alike can use these resources and tools to help improve patient care.

- The [Pennsylvania Pharmacists Association](#) offers an array of resources promoting and advancing Medication Therapy Management (MTM) in pharmacies statewide. Specifically, the Pennsylvania Pharmacists Care Network (PPCN) is committed to working collaboratively with health care providers. Learn more about potential partnership opportunities and services by visiting the [PPCN website](#) and [downloading this flyer](#).
- [Pharmacists' Patient Care Process Approach Guide](#): This CDC implementation guide (2021) is for public health practitioners and health care professionals to help engage pharmacists in hypertension management through the Pharmacists' Patient Care Process. The guide includes key examples from the Michigan Medicine Hypertension Pharmacists' Program that health care teams can replicate in their own programs.
- [Best Practices Guide for Cardiovascular Disease Prevention Programs](#): This CDC guide (2017) and accompanying website describes and summarizes scientific evidence behind eight effective strategies for lowering high BP and cholesterol levels, including collaborative practice agreements between pharmacists and health care providers and MTM.

Bringing it All Together: Hypertension Diagnosis and Management Webinar Series

In a comprehensive four-part webinar hosted by the Utah Million Hearts® Coalition in 2021, Dr. Barry Stults, from the University of Utah Health, provides a clinically-focused training on the burden of hypertension and goes into detail on proper BP measurement and management, including office and home monitoring, team-based care, and pharmacy interventions. The presentation incorporates evidence-based best practices and is based on recent peer-reviewed hypertension literature. [Watch the Utah Million Hearts® webinar series today.](#)



Improving Medication Adherence

Improving medication adherence is an important way to increase quality and reduce cost. As a medical provider, you no doubt realize the challenges surrounding medication adherence; however, improving this area is an important way to increase quality and reduce cost.

One evidence-based way to address this barrier is collaborating with pharmacists as extended members of your team to provide MTM.



The following resources are available to assist you in improving medication adherence in your practice setting:

- [Medication Adherence Practice Module](#) and [Workflow Modification Guide](#): Released February 2022, these materials are loaded with relevant information for navigating adherence barriers. We invite you to share this tool with all of your providers and clinical staff.
- [Medication Adherence Estimator®](#): This quick and simple tool is a patient-centered resource designed to help you gauge a patients' likelihood of adhering to newly prescribed oral medication for certain chronic, asymptomatic conditions.
- [Free Apps to Help You Better Manage Your Medicines](#): Download a selection of useful apps your patients can download as a resource to help them track and monitor their medications.

Action: Implement Blood Pressure Control Programs at Your Practice

Evidence-Based Lifestyle Change Strategies and Programs

Living a healthy lifestyle, comprised of eating a nutrient-dense diet and the inclusion of regular physical activity, is a focal point of the [American College of Cardiology \(ACC\) and American Heart Association \(AHA\) 2017 Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults](#). Lifestyle changes that have been shown to be effective include weight loss, healthy diet, reduced intake of dietary sodium, enhanced intake of dietary potassium, physical activity, and moderation in alcohol intake.

The AHA recommends the following resources as options for patients who are ready to engage in lifestyle improvement activities:

- The [DASH Eating Plan](#) (Dietary Approaches to Stop Hypertension) is a flexible and balanced eating plan that helps create a heart-healthy eating style for life.
 - Visit the National Heart, Lung, and Blood Institute (NHLBI) website for additional [heart-healthy cooking resources](#) for a wide range of ages and ethnicities.
 - **NEW from Quality Insights:** [DASH Your Way to Lower Blood Pressure](#)

- Sodium reduction clinician and patient resources from AHA, AMA, and the Office of Disease Prevention and Health Promotion:
 - [Why Should I Limit Sodium?](#)
 - [How too Much Sodium Affects Heart Health](#)
 - [Cut Down on Sodium](#)
- [AHA Life's Simple 7](#): Easy-to-follow instructions on how to manage BP, control cholesterol, reduce blood sugar, get active, eat better, lose weight, and stop smoking.
- [Smoking Cessation Program](#): Listing of national quit lines, online resources and medicines to help patients quit smoking.
- [“Answers by Heart” Blood Pressure Fact Sheets and Multilingual Resources](#), including:
 - [African Americans and High Blood Pressure](#)
 - [High Blood Pressure and Stroke](#)
 - [How Can I Reduce High Blood Pressure?](#) (available in [Spanish](#))
 - [Consequences of HBP Infographic](#) (available in [Spanish](#) and [Traditional Chinese](#))
 - [Lifestyle Chart: What Can I Do to Improve My Blood Pressure?](#) (available in [Spanish](#) and [Traditional Chinese](#))

Sodium Reduction

When salt intake is reduced, blood pressure begins falling within weeks, on average.



Find out more about sodium reduction benefits, challenges, and strategies in the CDC's (2021) [Key Messages on Sodium and Sodium Reduction](#).

The CDC recommends the following evidence-based lifestyle change programs as appropriate choices for referral of adults with high BP:

- [Weight Watchers \(WW®\)](#)
- [Supplemental Nutrition and Assistance Program Education \(SNAP-Ed\)](#)
- [Expanded Food and Nutrition and Assistance Program Education \(EFNEP\)](#)
- [Taking Off Pounds Sensibly \(TOPS\)](#)
- [YMCA Blood Pressure Self-Monitoring Program](#): Please contact your local YMCA to see if this program is available in your region
- [Curves Complete](#): In-club and at-home memberships are now available



Take Control of Hypertension with Lifestyle Change Programs in PA

Quality Insights has developed an at-a-glance guide to highlight benefits of CDC-approved lifestyle change programs available in Pennsylvania. [Download this useful resource here.](#)

SMBP Implementation: Interactive Resource Library

The following evidence-based resources provide guidance for health care sites who are considering launching an SMBP program or expanding their current processes. We invite you to visit the organization website for a complete listing of their available tools and resources.

Organization	SMBP Implementation Resource	Summary
American Medical Association	U.S. Blood Pressure Validated Device Listing (VDL™)	Website offers a listing of BP measurement devices that have been validated for clinical accuracy as determined through an independent review process.
	SMBP CPT® Coding	Outlines useful coding information, including information related to the Public Health Emergency (PHE).
Colorado Department of Public Health & Environment	Making an Economic Case for SMBP Tool	This two-page guide developed overviews SMBP program implementation and reimbursement for health care professionals.
Million Hearts®	Self-Measured Blood Pressure Monitoring: Action Steps for Clinicians	The purpose of this guide is to facilitate the implementation of SMBP plus clinical support in four key areas: Preparing care teams to support SMBP, selecting and incorporating clinical support systems, empowering patients, and encouraging health insurance coverage for SMBP plus additional clinical support.
	Hypertension Control Change Package (HCCP), 2nd Edition	The HCCP presents a listing of process improvements that outpatient clinical settings can implement as they seek optimal hypertension control. It is composed of change concepts, change ideas, and evidence- or practice based-tools and resources.

Organization	SMBP Implementation Resource	Summary
National Association of Community Health Centers (NACHC) and Million Hearts®	SMBP Implementation Toolkit	Released by NACHC and Million Hearts® in 2020, this toolkit is comprised of worksheets that will help you determine your goals and priority populations, design a protocol, assign tasks, and align your patient training approach to your practice environment.
	Choosing a Home Blood Pressure Monitor for Your Practice: At-A-Glance Comparison	Chart provides an overview of how various BP monitors compare in terms of features and data/technology.
	Improving Blood Pressure Control for African Americans Roadmap: Quality Improvement Tool	Focuses on the most impactful, evidence-based interventions to improve hypertension outcomes and reduce disparities.
Quality Insights	Steps for Launching a Self-Measured Blood Pressure Monitoring Program in Your Practice	Learn how you can partner with Quality Insights to receive no-cost assistance in developing and implementing a SMBP program in your practice.
	CME Webinar: Improving Patient Outcomes with Self-Measured Blood Pressure Monitoring (SMBP)	This 60-minute, CME-eligible webinar provides an evidence-based review of SMBP, including an interview with a practice who has successfully implemented a SMBP program.
	Pennsylvania: Insurance Coverage Options for Blood Pressure Monitors	Two-page guide highlighting BP unit coverage across various insurances.
Target:BP™	Implement SMBP	Ready to launch a SMBP in your practice? Find step-by-step guidance and recommendations to help you launch a successful program.

Remote Patient Monitoring

The CPSTF recommends several [telehealth interventions](#) for reducing chronic disease risk factors in patients and managing chronic disease conditions, including mHealth and [Remote Patient Monitoring \(RPM\)](#). These conditions include:

- Recently diagnosed cardiovascular disease
- High BP
- CVD, diabetes, HIV infection, end-stage renal disease, asthma, or obesity

The CPSTF found that the use of telehealth interventions can improve:

- **Medication adherence** (i.e. as outpatient follow-up and self-management goals)
- **Clinical outcomes** (i.e. BP control)
- **Dietary outcomes** (i.e. eating more fruits and vegetables and reducing sodium intake)

A January 2022 Healthcare Information and Management Systems Society (HIMSS) article, [Digital Connected Care: Self-Measured Blood Pressure to Manage Hypertension](#), agrees that opportunities exist to link SMBP, RPM, and well-designed analytics software to the specific needs of the patient and the primary care team using SMBP to manage hypertension. Implementation of RPM that is clinically focused and easy to use is a key component in the transition from reliance on office BP measurements to managing hypertension with SMBP.

Many nationally recognized health care organizations have developed toolkits and resources for practices who are implementing RPM. A few of these tools include:

- [AMA Remote Patient Monitoring Implementation Playbook](#): Step through the processes of planning and implementing RPM at your practice with this interactive guide.
- [Mid-Atlantic Telehealth Resource Center: Remote Patient Monitoring Toolkit](#): Designed to help many different audiences quickly understand RPM and define the responsibilities of each role. Offers a variety of engaging videos to explain processes for each role.
- [Federally Qualified Health Center \(FQHC\): Remote Patient Monitoring Toolkit](#): This document is designed to help FQHCs determine which RPM processes will work best for their individual setting. It provides guidance on key areas for consideration when preparing for implementation.
- [NACHC Value Transformation Framework: Community Health Center Requirements for Remote Physiologic Monitoring \(RPM\) & Self-Measured Blood Pressure \(SMBP\)](#): This guide outlines important requirements and coding information for use of RPM in Community Health Center settings.

Remote Patient Monitoring (RPM):

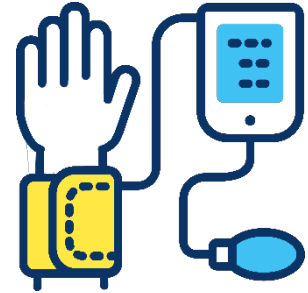
[RPM](#) is the use of electronic devices to record a patient's health data for a provider to receive and evaluate at a later time. For example, a patient can use RPM to measure their blood pressure regularly and send this information to their provider.



- [2022 CMS Reimbursement Updates for RPM Healthcare Solutions](#): This Clear Arch Health white paper outlines five Current Procedural Terminology (CPT®) codes specific to reimbursement standards for remote patient monitoring from the 2022 CMS Physician Fee Schedule (PFS).

Quality Insights' Home Blood Pressure Monitor Program

Interested in implementing an SMBP program, but concerned about having adequate resources and assistance? Quality Insights offers a **FREE** Home BP Monitor Loaner Program and training.



Benefits include:

- Participating practices are supplied with up to five automated home BP monitors that can be loaned to patients to monitor their BP at home.
- Loaner monitors are ideal for patients that do not currently own a BP monitor or for those lacking the resources to immediately purchase a device. It may also be useful when a patient is newly diagnosed with hypertension or when a patient experiences a change in BP medication.
- Patients and providers are able to track and monitor pre-hypertensive patients, patients with uncontrolled hypertension, hypertensive drugs and patients with recent or past histories of hypertensive crises.
- Training for your staff on how-to educate patients for SMBP and the loaner program.

Some program materials include a [Home Blood Pressure Monitor Loaner Program Procedure, Instructions for Practices](#), and a [Patient Agreement template](#) for patients to sign.

If your practice is interested in participating in the program, e-mail [Ashley Biscardi](#) or call **1.800.642.8686, ext. 137**.

Self-Measured Blood Pressure Monitoring: Workflow Modifications Your Practice Can Implement to Help Patients Improve Hypertension Management

Providers and practices who are actively engaged in the Pennsylvania Department of Health's [Improving the Health of Americans Through Prevention and Management of Diabetes and Heart Disease and Stroke](#) program have the benefit of scheduling a no-cost Workflow Assessment (WFA) with a local Quality Insights Practice Transformation Specialists (PTS). WFAs are completed annually and designed to initiate a future state of processes that will move the needle on clinical quality improvement activities.

The following list includes workflow adjustments that can be implemented to help your patients better manage their hypertension (HTN) by utilizing self-measurement of blood pressure (SMBP). We encourage you to partner with your Quality Insights PTS to discuss scheduling a WFA and implementing at least ONE of the recommendations listed below. If you are not currently working with a PTS and would like assistance, [email Ashley Biscardi](#) or call **1.800.642.8686, Ext. 137**.

Electronic Health Record (EHR) Actions

	Create and execute an EHR report of patients with blood pressure (BP) readings of $\geq 140/90$, but with no diagnosis of HTN. Partner with Quality Insights to schedule BP follow-up appointments with identified patients. Ensure diagnosis of HTN is added to the medical record, home BP monitoring is validated and/or discussed, and patient is enrolled in a Home BP Monitor Loaner Program as appropriate.
	Execute an EHR report of patients with BP readings of $\geq 140/90$, but with no diagnosis of HTN. Perform outreach utilizing phone calls, text messaging, and/or patient portal to schedule follow-up appointment for a BP check. Consider Quality Insights' Home BP Monitor Loaner Program.
	Report quarterly and annually National Quality Forum (NQF) #0018 measure. Utilize NQF #0018 denominator to determine number of patients with HTN.
	Partner with Quality Insights to review ability to report NQF #0018 at race and ethnicity level.
	Review dashboards within EHR to identify opportunities for HTN and high cholesterol management in subsets of patients. Determine EHR capabilities for identification and reporting on priority populations (underserved) and disparities.
	Partner with Quality Insights to identify patient lifestyle change program referrals by querying relevant EHR fields and community-based programs and resources. Educate all members of the care team on referral programs including the providers who are key in patients accepting the recommendations. Explore EHR capabilities to add clinical decision support (CDS) alerts or prompts for eligible patients.

	Review and implement the Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences) PRAPARE tool EHR template. If already utilizing PRAPARE, document current workflow and utilization of information gathered in the tool.
	Evaluate and report use of social determinants of health (SDOH) ICD-10 codes.
	Partner with Quality Insights to mitigate barriers related to use of SDOH identification tools and ICD-10 coding.
	Implement process for documenting all referrals (including BP and lifestyle change programs) in structured data fields or via non-EHR tracking method for monitoring of feedback and participation.

Protocol & Workflow Actions

	Review practice protocols with focus on disparate populations for sharing and discussing BP control and cholesterol management among clinicians and providers.
	Review/develop a HTN office protocol (include evaluation of patients with HTN and elevated low-density lipoprotein cholesterol (LDL-C) >100mg/dl) that promotes current guidelines, SMBP, medication adherence, healthy diet, physical activity, and promotion of community lifestyle change programs.
	Implement annual staff training to review appropriate procedures for obtaining an accurate BP (see page 10 of the SMBP Practice Module).

Practice & Clinical Solutions

Using the [Screening, Measurement and Self-Management of Blood Pressure Practice Module](#) as a guide:

	Partner with Quality Insights to submit an application for Target:BP™ (NQF 0018 > 70%*) and/or Million Hearts® Hypertension Control Champion (NQF > 80%*; anticipated to be available in 2022) Recognition Programs.
	Utilize and share SMBP instructional videos with patients (i.e. waiting room, patient portal, email, text messaging).
	Implement a home BP monitor loaner program or participate in Quality Insights' Home BP Monitor Program. Identify 1) a staff member who can act as a program champion, and 2) roles for other members of the team. See pages 15-16 of Quality Insights SMBP Module for implementation resources.
	If participating in the Quality Insights' Home BP Monitor Loaner Program, identify specific dates/times for follow-up and obtaining both patient and provider assessments.
	Utilize apps, Bluetooth, and patient portals to improve SMBP results reporting by patients to clinicians.
	Review capability and use of telehealth for the management of HTN and high cholesterol.
	Identify and refer eligible patients to CDC-approved lifestyle change programs , including, but not limited to: Weight Watchers (WW), Supplemental Nutrition Assistance Program Education (SNAP-Ed)

	programs, Expanded Food and Nutrition Education Programs (EFNEP), TOPS, YMCA and Curves Complete.
	Establish a closed-loop referral process with CDC-approved lifestyle change program. Partner with Quality Insights in a referral letter, portal message, or text campaign for referrals to TOPS, Curves, YMCAs, or other PA DOH/CDC-approved programs.
	Participate in an in-person or virtual presentation to learn more about WW, TOPS, and/or YMCA lifestyle change programs.

* Represents BP control rates at or above 70 percent or 80 percent within the populations served.

Patient Education Actions

	Share community resources with patients promoting CDC-approved programs (i.e. WW, Snap-Ed, EFNEP, TOPS, YMCA, and Curves Complete).
	Implement use of the Medication Adherence Estimator® and included Interpretation Guide to enhance medication adherence. Access Quality Insights 2022 Medication Adherence Practice Module for more information.
	Explore and promote the use of HTN apps to improve SMBP. See Keep Hypertension Under Control with these Smartphone Apps to get started.
	Provide patient education on how to take their own BP .
	Offer free annual validation of home BP machines with the medical office BP machine.



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Steps for Launching a Self-Measured Blood Pressure Monitoring Program in Your Practice

In the United States, it is estimated that only 1/3 of adults living with high blood pressure have their hypertension under control.¹ According to the 2021 Chronic Disease Burden Report, greater than four million Pennsylvanians were living with high blood pressure.² Over the last decade, multiple studies have proven the validity and efficacy of SMBP programs for the treatment of uncontrolled hypertension.¹ While the implementation of such a program at your practice may seem daunting, you do not have to do it alone.



Quality Insights offers NO-COST assistance in creating a SMBP Loaner Program within an office or organization. The Quality Insights team will work with your medical staff to implement workflow modifications and train staff members that can in turn educate patients on the loaner program.

Stages of Implementation

Steps	Role	Description
Step 1	Quality Insights	Provide FDA approved blood pressure devices to your site. We will assess, with your team, how many devices you will need and provide monitors for you to loan to your patients.
Step 2	Practice	Identify and train your instructors. Identify at least one team member as an instructor and provide training on patient education and the devices. We will also offer recommendations on methods to correctly take blood pressure including preparation, positioning, and measurement.
Step 3	Quality Insights	Set-up a monitor tracking system. Quality Insights will provide patient agreement forms, office procedures with sign in and out logs for devices and clinician and patient surveys to easily loan the devices and receive feedback on the process and benefits of the program.
Step 4	Practice	Review blood pressure results and if a patient was assessed for a suspected diagnosis of hypertension determine if they meet the criteria for having a diagnosis of hypertension.
Step 5	Practice	Enter the collected information into data fields in the electronic health record.
Step 6	Practice	Survey patients and providers. Surveys are required to be completed by each patient upon return of the blood pressure monitor. Provider surveys are to be completed annually.



Quality Insights is available to support your Self-Management Blood Pressure loaner program at **NO COST**. Please contact a Quality Insights Practice Transformation Specialist today or email Ashley Biscardi at abiscardi@qualityinsights.org.



Need Help Controlling Your Blood Pressure? Check Out These Centers for Disease Control and Prevention (CDC)-Recognized Resources



One in three American adults have high blood pressure. This is a major risk factor for stroke and heart disease, which are two of the leading causes of death in the U.S. Strong scientific evidence shows that self-measured blood pressure monitoring (SMBP) combined with clinical support and lifestyle changes assist individuals with hypertension lower their elevated blood pressure.

Coverage for home blood pressure monitors varies among the many health insurance carriers in Pennsylvania, but can be confirmed by your insurance company.

The programs below have been approved by the Centers for Disease Control and Prevention (CDC) to assist individuals create long-lasting lifestyle changes by reducing their risk associated with hypertension, and other chronic diseases.

YMCA Blood Pressure Self-Monitoring Program

Benefits of Program:

- Four-month program to help participants manage high blood pressure
- Identify and control triggers that raise blood pressure
- Coaching on proper blood pressure measurement and tracking
- Two consultations a month with a Healthy Heart Ambassador
- Monthly Nutrition Education Seminars

Visit <http://www.ymca.net/blood-pressure-self-monitoring> for the nearest YMCA Blood Pressure Self-Monitoring program.

Weight Watchers (WW®)

Benefits of Program:

- Variety of membership plans (digital, studio/workshop, and coaching)
- App and website to track food, physical activity, and weight loss
- Certified coaches for support building healthy behaviors and habits
- Rewards program, Wellness Wins, to celebrate weight loss milestones

Visit www.weightwatchers.com/us/find-a-meeting to find the nearest WW®.

Taking Off Pounds Sensibly (TOPS®)

Benefits of Program:

- Online and onsite membership plans
- *My Day One*, a guide to healthy living
- One-year subscription to *TOPS® News* magazine
- Healthy recipes, including a 28-day meal plan
- Weight tracker
- Wellness videos
- Self-care program

Visit www.tops.org to learn more and click "JOIN" or call 414-482-4620.

Curves®

Benefits of Program:

- In-club and at-home membership options
- 30-minute total body circuit workout
- Travel privileges and member portal
- Supportive community of women
- Specialty fitness classes
- Experienced and professional coach at every workout

Visit www.curves.com to learn more and find a Curves near you.

SNAP-Ed: Nutrition Education

Benefits of Program:

- Guidance on shopping for healthy food choices
- Can support SNAP participants by helping them learn how to make their SNAP dollars stretch and understand changes to their benefits
- Tools, resources, and recipes to maintain a healthy diet

Visit [PA SNAP-Ed](#) for additional information. Find a nutrition education program in your area by utilizing the [Pennsylvania Nutrition Education Network](#) (PA NEN) search tool.

Expanded Food and Nutrition Education Program (EFNEP)

Benefits of Program:

- Delivers research-based education in the home, the classroom, and in communities to help Pennsylvanians make better nutrition and health decisions.
- EFNEP Nutrition Education Programs cover topics from the importance of eating breakfast, to what foods are "good" foods and why, how to stretch food dollars, and how to cook with whatever food is on hand.
- Nutrition Education Programs classes are offered online and in a wide variety of community settings, including food shelves, WIC clinics, senior citizen centers, day care centers, shelters, migrant centers, summer camps, low income housing, and local grocery stores.

Visit the [PennState Extension website](#) for more information and to locate online and in-person education offerings near you.

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