

FY2025 Continuum of Care Goal

Hypertension Management Toolkit



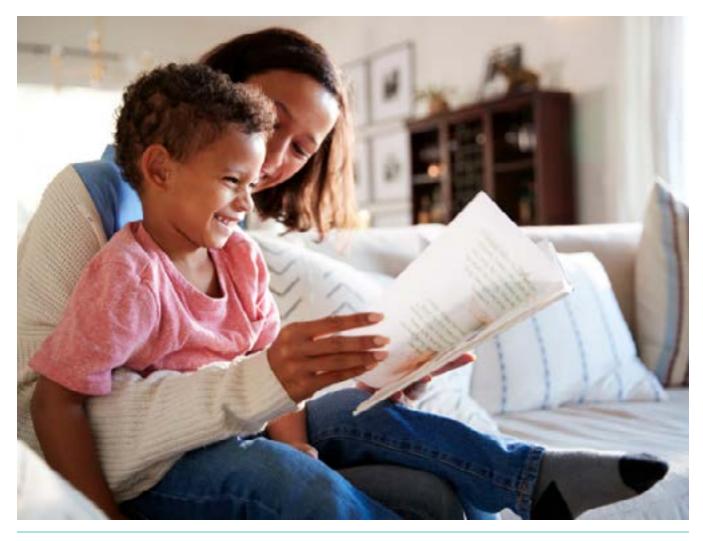
Table of Contents

Introduction	3
Measure Definition	4
How to Use the Hypertension Management Toolkit	6
Key Strategies for Success	7
Gap Analysis Guide	8
Gap Analysis Action Plan	11
Hypertension Management Champion Role Description	12
Frequently Asked Questions	13
Contacts	17
References	18

Introduction

Background

Nearly half of adults in the United States have hypertension, a dangerous condition that increases risk for heart disease and stroke; contributing to about 1000 deaths per day. Improving management of hypertension demonstrates CommonSpirit's commitment to "Advance a coordinated, systematic, and customizable approach to serving those with acute, chronic and complex conditions," one of the five transformational strategies for our organization. We believe alignment and collaboration amongst providers across the continuum of care in adopting best practices to manage hypertension will enable us to achieve the best care for our patients.



Introduction 3

Measure Definition

Hypertension (High Blood Pressure) Management

Objective

Decrease the risks of heart attack, stroke and death for hypertensive patients by effectively managing their high blood pressure.

Rationale

Hypertension, or high blood pressure, is a very common and dangerous condition that increases risk for heart disease and stroke, two of the leading causes of death in the United States (CDC, 2019). Nearly half of adults in the United States (47%, or 116 million) have hypertension and only about 1 in 4 (24%) have their condition under control. High blood pressure costs the United States about \$131 billion each year, averaged over 12 years from 2003 to 2014. (Kirkland EB et al., 2018).

Uncontrolled high blood pressure is common; however, certain groups of people are more likely to have control over their high blood pressure than others. Among those recommended to take blood pressure medication, blood pressure control is higher among non-Hispanic white adults (32%) than in non-Hispanic black adults (25%), non-Hispanic Asian adults (19%), or Hispanic adults (25%). (CDC, 2021).

Metric

Percentage of patients 18 - 85 years of age who had an active problem or diagnosis of hypertension and whose blood pressure was adequately controlled (< 140/<90 mmHg) during the measurement period (Higher is better)

Numerator

Patients whose most recent blood pressure during the measurement period is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg)

Denominator

Patients 18 - 85 years of age who had a diagnosis or active problem of essential hypertension and an encounter during the measurement period

Inclusion/Exclusion Criteria

Inclusion Criteria

- Patients with an ambulatory encounter during the measurement period that meet 1 out of the 2 criteria listed below:
 - · Have hypertension active on their problem list during the measurement period
 - · Have a diagnosis of hypertension on a posted encounter during the measurement period
- Ambulatory patients seen by a provider employed or contracted within clinics that are affiliated with CommonSpirit Health that utilizes a CommonSpirit Health instance of Cerner, Epic, Allscripts or eClinicalWorks electronic medical record system.

Measure Definition 4

Exclusion Criteria

Coded or documented evidence within the ambulatory electronic health record of the following:

- · Patients with evidence of end stage renal disease (ESRD) before or during the measurement period
- Dialysis before or during the measurement period
- Renal Transplant before or during the measurement period.
- · Chronic Kidney Disease Stage 5 (CKD) before or during the measurement period
- · Pregnancy during the measurement period
- Deceased during the measurement period
- · Hospice or palliative care status during the measurement period
- Attributed primary care provider not affiliated with CommonSpirit Health

National Contact: Debra Rockman, RN, MBA, CPHQ, CPHRM, System VP Ambulatory Quality

Kelly Bitonio, BSN, MHA, NEA-BC, CPHQ, System Director Ambulatory Quality

Physician Champion: Dr. Gary Greensweig, CPE Physician Enterprise

Data Source: CommonSpirit instance of Cerner, Epic, eClinical Works or Allscripts electronic health record systems

Measure Definition

How to Use the Hypertension Management Toolkit

Improving hypertension management will require an expanded effort and improved focus from ambulatory leaders, providers and clinic staff across CommonSpirit Health.

This toolkit has been developed to support implementation of evidenced-based, best practices to address challenges in hypertension management within the clinic setting.

Clinic leadership is asked to share this resource and deploy referenced tools to advance efforts in hypertension care, with a focus on the following areas for improvement:

- 1. Establish hypertension improvement as a practice priority
- 2. Ensure a process exists to support accurate blood pressure measurement
- 3. Support patients in self-management of hypertension
- 4. Optimize hypertension management practices

Hypertension Improvement Resources

Staff & Provider Resources

- 1. CommonSpirit Health Accurate BP Measurement education module
- 2. Techniques to Achieve Accurate Blood Pressure Measurements video
- 3. What it Means to be a Hypertension Management Champion video
- 4. BP Measurement Staff Competency Validation tool
- 5. Improving Medication Adherence Among Patients with Hypertension
- 6. Resources to Support Virtual Visits
- 7. CommonSpirit Hypertension Management Protocol & Treatment Guide
- 8. Culture Clues™ tip sheets
- 9. AHA Resources
 - Target: BP Measure Accurately Pre-Assessment infographic
 - Target: BP Technique Quick Check audit tool
 - · Self-Measured BP Patient Training infographic
 - Steps for Accurate BP Measurement infographic
 - Classification of BP Table

Patient Education Resources

- 1. AHA Resources (including Spanish versions)
- 2. CHI and Dignity Branded Patient Self Measurement Resources (including Spanish, Hmong, Punjabi, and Arabic translations)
 - · Home BP Tracker
 - Self-Measurement Instructions
- 3. Your Guide to Lowering BP
- 4. On the Move to Better Heart Health for African Americans

Key Strategies for Success

1 Establish Hypertension Improvement as a Practice Priority

Designate a Hypertension Management Champion: A designated clinician or other member of the healthcare team (in dyad partnership with a clinician) oversees hypertension improvement activities within one or multiple clinics

2 Improve Blood Pressure Measurement Processes

- Establish a process to evaluate environment and equipment availability at least annually for accurate blood pressure measurement
- Establish a process to train and evaluate direct care staff on accurate BP measurement and recording at time of hire and at least annually

3 Support Patients in Self-Management of Hypertension

- Assess food insecurity, housing insecurity/homelessness, financial barriers, and social capital/social community support to inform treatment decisions, with referral to appropriate local community resources
- Elicit cultural information that can influence patient engagement strategies
- Assure disease-specific information is provided in the patient's preferred language and sensitive to individual culture and literacy levels
- Establish a process to train and evaluate patients on self-measured blood pressure technique
- · Establish a process to support hypertension patients in adopting healthy lifestyle changes
- Establish a process for supporting patients in medication adherence

4 Optimize HTN Management Practices

- Establish a clinic workflow to flag hypertension patients and schedule follow-up visits (according to evidence- based guidelines) at encounter closing
- Provider adoption of evidenced-based guidelines in hypertension management
- · Adopt best practices to support management of hypertension via telehealth

Key Strategies for Success

Gap Analysis Guide

Key Concept	Improvement Strategy	Available Resources
Designated Hypertension Management Champion	A designated provider or other member of the healthcare team (partnered with a provider) oversees hypertension improvement activities within one or multiple clinics The Initiative Champion collaborates with providers and clinic managers to facilitate completion of this gap analysis of current hypertension management practices within assigned clinic(s) and • Facilitates clinic approach to support adherence to hypertension management improvement strategies to address gap analysis findings. (For example, establish an improvement team or work group to focus on these efforts.) • Mentors providers, clinic staff, improvement teams to effectively apply improvement methods and tools • Facilitates process for periodic review, monitoring and sharing of performance outcome data reports with providers and staff • Celebrates key milestone achievements	CommonSpirit Health Hypertension Management Champion Role Description Hypertension Management Champion Role Video
Ensure Process Exists to Support Accurate Blood Pressure Measurement	 A process exists to evaluate environment and equipment availability for accurate blood pressure measurement Environmental and equipment audit has been conducted in all areas in which blood pressure measurement occurs and includes evaluation of the following elements: Area is quiet and not accessible to traffic 4 cuff sizes available per room/patient (Small, Medium, Large, Extra Large) Properly validated, calibrated BP measurement devices are in good working condition If wall mounted, sphygmomanometer is optimally placed, preventing staff & equipment from excessive bending or stretching Patient chair/seating surface is standard 17 inches in height and provides for back support Patient chair/seating surface is accessible on both sides for obtaining measurement in either the patient's right or left arm Support surface to allow patient to rest arm at heart level is available Process exists to train and evaluate direct care staff on accurate BP measurement and recording An education program is provided to direct care staff and addresses importance of blood pressure control for hypertension and adherence to proper BP measurement technique A process exists to validate competency of direct care staff on accurate BP measurement and documentation and includes the following elements: Assessment of equipment availability Patient preparation and positioning Appropriate cuff size selection and placement 	Blood Pressure Measurement Environment of Care Evaluation form Lists of approved monitors: https://www.validatebp.org Staff education program CSH Performing Accurate BP Measurement Competency validation tool BP Measurement Staff Competency Validation Tool AHA Steps for Accurate BP Measurement (Staff education poster) AHA Toolkit Poster Measure Up, Measure Down Quarterly Blood Pressure Audit Tool Technique Quick Check Audit

Gap Analysis Guide

Key Concept	Improvement Strategy	Available Resources	
	 BP measurement procedure Required repeat BP measurement for first visits and elevated readings Recording of SBP and DBP readings within discreet fields per EMR (not within narrative note) Provide patient the BP readings verbally and in writing Notification of provider for repeat BP levels greater than 140/90 Staff training and competency validation occurs at time of hire and annually 		
in Self- Management of Hypertension Paint	Assess food insecurity, housing insecurity/homelessness, financial barriers, and social capital/social community support to inform treatment decisions, with referral to appropriate local community resources Patient interview, engagement, or evaluation process elicits cultural information that can influence intervention strategies Providers and clinic staff are aware and have access to resources to facilitate understanding of patient-specific cultural values, beliefs, and practices The assessment process addresses the following: What cultural, religious, spiritual, or lifestyle beliefs may impact the kind of health care patient wants to receive Preference of participants in medical decision-making Preference of communication: written, pictures How recommended care plan fits into patient's lifestyle and beliefs Hypertension education is provided in patient's preferred language and sensitive to individual culture and literacy levels If English is the patient's second language, or the patient is deaf/hard of hearing or has vision impairment, providers and staff utilize an interpreter or translation services in all care discussions. Family members are not relied on to translate health information. Process exists to train and evaluate patients and family members on selfmeasured blood pressure technique Patient training program/process includes the following: Rationale for home blood pressure monitoring How to select a home pressure monitor	Resources to Support Culturally Appropriate Care Culture Clues™ tip sheets For clinicians (designed to increase awareness about concepts and preferences of patients from the diverse cultures) On the Move to Better Heart Health for African Americans A culturally appropriate educational booklet for African Americans on heart healthy living. In an easy-to-read format BP Self Measurement Resources (available in Spanish, Punjabi, Hmong, and Arabic translations) Home BP Tracker BP Measure Trifold Your Heart is in Your Hands flyer with links to videos (email version) Self-measured BP Technique flyer CommonSpirit Blood Pressure Funding Toolkit	
	 How to properly use a home blood pressure monitor: timing, preparation, positioning, multiple readings Blood pressure readings and what they mean Recording results Criteria for seeking medical treatment Staff and clinicians have been educated and expectations communicated regarding use of available tools and training programs for patient self-monitoring Process is in place for checking the accuracy of the patients' home monitors and the patient ability to take an accurate blood pressure at home Patients are provided with a blood pressure tracking tool If available, home device provided for patients unable to afford one (for funding support, refer to the CommonSpirit Home Device Funding Request Toolkit) 		

Gap Analysis Guide

Key Concept	Improvement Strategy	Available Resources	
	Process exists to support hypertension patients in adopting healthy lifestyle changes Patients with hypertension are provided information to support lifestyle changes to reduce BP. Resources provided address the following: Weight loss for patients who are overweight or obese Heart-healthy diet (such as DASH) Sodium restriction Potassium supplementation (preferably in dietary modification) Increased physical activity with structured exercise program Limitation of alcohol to 1 (women) or 2 (men) standard drinks per day Smoking cessation Staff and clinicians have been educated and expectations communicated regarding use of available tools to support patient lifestyle changes A list of community resources that could support patients in the control of their blood pressure, is maintained and may include: Weight loss programs Places to walk and gyms Specialists such as nutritionists Social service needs such as transportation, meals, and assisting patient with accessing community resources Process exists for supporting patient in medication concordance (that they understand) and adherence (that they take drugs as directed) Patients with hypertension are provided information about: Consequences and potential side effects of medication and drug interactions Tips to support adherence, i.e. Integrate pill-taking into routine activities of daily living with support tools such as reminders and pillboxes packaging and other aids, refill process Staff and clinicians have been educated and expectations communicated regarding use of available tools to support medication adherence	Your Guide to Lowering Blood Pressure (comprehensive patient education guide) Your Guide to Lowering BP AHA HTN Patient Education Resources Links In English and Spanish	
Optimize HTN Management	Clinic workflow supports process to flag hypertension patients and schedule follow-up visits (according to evidence-based guidelines) at encounter closing A process exists to support provider adoption of evidence-based guidelines in hypertension management Processes are in place to support management of hypertension via telehealth	CommonSpirit Health Discharge Workflow for HTN Improvement (Clinic workflow flyer) CommonSpirit Hypertension Management Protocol CommonSpirit HTN Remote Patient Monitoring Toolkit	

Sources: 1) Hypertension Guideline Toolkit for Healthcare Providers, American Heart Association; 2017. 2) Centers for Disease Control and Prevention. Hypertension Control Change Package for Clinicians. Atlanta, GA: Centers for Disease Control and Prevention, US Dept. of Health and Human Services; 2015.

Gap Analysis Guide 10

Gap Analysis Action Plan

Facility/Entity Name

Completed By Date Initiated

Key Concept/ Process	Action Plan	Responsible Person	Estimated Completion Date	Monitoring/Validation Process (How do you know it's happening)

Additional Comments:

Gap Analysis Action Plan

Hypertension Management Champion Role Description

Role Summary

In collaboration with the Physician Enterprise Division Quality Leader and market leadership, the Hypertension Management Champion is authorized to serve as a liaison and coordinate implementation of evidence-based practices and strategies to improve care for patients with hypertension within the clinic setting. This individual may be a clinician or another member of the healthcare team overseeing hypertension improvement activities within one or multiple clinics. Although highly recommended to be a clinician, this role may also be fulfilled by another member of the healthcare team if partnered with a supporting clinician.

Desired Skills

- 1. Knowledgeable and enthusiastic about hypertension management and secondary cardiovascular risk reduction with appropriate expertise and experience.
- 2. Good communication skills and able to work well with others.
- 3. Willing/able to invest time in necessary activities including conducting educational presentations to providers and clinic staff, sharing performance outcome data and promoting cardiovascular risk reduction concepts.

Functions and Duties as Hypertension Management Champion

- 1. Actively and enthusiastically promote hypertension management as a practice/clinic improvement priority.
- 2. Collaborate with providers and clinic managers to facilitate a gap analysis of current hypertension management practices within assigned clinic(s) and promote, advocate and implement an improvement plan using evidence-based strategies to address identified gaps.
- 3. Provide input and leadership for implementation, monitoring, and evaluation of deployed improvement strategies.
- 4. Work collaboratively with providers and clinic staff to leverage and optimally utilize clinic infrastructure to:
 - Facilitate clinic approach to support adherence to hypertension management improvement strategies as directed by the Physician Enterprise Division Quality Leadership group and gap analysis findings. (For example, oversee establishment of an improvement team or work group to focus on these efforts.)
 - Mentor providers, clinic staff, and improvement teams to effectively apply improvement methods and tools.
 - Facilitate the process for periodic review, monitoring and sharing of performance outcome data reports.
 - Celebrate key milestone achievements.

Frequently Asked Questions

- Q Why was the hypertension measure criteria selected as 140/90 when latest society recommendations cite the threshold for blood pressure (BP)-lowering medication as 130 mm Hg or higher systolic or diastolic of 80 mm Hg or higher for those patients with Clinical Atherosclerotic Cardiovascular Disease (ASCVD) or an estimated 10-year Cardiovascular Disease (CVD) risk of 10%?
- A While recognizing the importance of recommendations generated from the ACC 2017 Guideline for Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults, the Hypertension measure was selected based on its alignment with the Centers for Medicare & Medicaid Services Merit-based Incentive Payments (CMS MIPS) program's Controlling High Blood Pressure measure. Additionally, we recommend that the ACC guidelines for pharmacologic treatment of patients with Clinical ASCVD or an estimated 10-year CVD risk of 10% be followed. For patients without Clinical ASCVD or an estimated 10-year CVD risk of 10%, the ACC recommended the threshold for the use of BP-lowering medication remain at 140/90. This alignment allows CommonSpirit Health to focus improvement efforts on effective hypertension management, while enabling comparison and benchmarking of division and enterprise-wide performance against clinicians, groups and third-party intermediaries participating in the CMS MIPS program (approximately 1.2 million providers).

Q Why isn't my clinic's data included in the CommonSpirit Clinical Health Scorecard?

A The CommonSpirit Scorecard includes data elements abstracted from electronic health records of ambulatory patients seen by providers who are either employed or contracted within clinics that are affiliated with CommonSpirit Health and that utilize an owned instance of Cerner, Epic, eClinical Works or Allscripts EHR. Data from these entities have undergone a thorough validation process. By using this validated data we are able to produce an accurate, reliable snapshot of measure performance. While this year's measurement and data extraction processes will include only employed or contracted providers as above, our goal is to communicate and align efforts for controlling blood pressure across all of CommonSpirit Health.

Q What is the expectation for clinics that do not have data in the CommonSpirit Clinical Scorecard?

A Although not all clinics are able to compare their measure performance within the CommonSpirit Scorecard, control of hypertension is a national initiative. All markets will be expected to monitor ongoing performance through use of locally produced or claims-based reporting systems, participate in national improvement activities, deploy recommended strategies and monitor effectiveness of improvement initiatives.

Q What is the source of the Hypertension measure data?

A The measurement data is aggregated from discrete fields within the electronic medical record as well as coded, or claims-based information.

Q What encounter types are included in the denominator data?

A Outpatient office visits (in-clinic and virtual) for primary care providers (PCPs) and in network specialists during the measurement period are included.

Q What patients are excluded from the Hypertension measure?

A Patients are excluded from the Hypertension measure cohort if there is coded evidence within the ambulatory electronic health record of the following:

- · Patients with evidence of end stage renal disease (ESRD) before or during the measurement period
- Dialysis before or during the measurement period
- Renal Transplant before or during the measurement period.
- · Chronic Kidney Disease Stage 5 (CKD) before or during the measurement period
- Pregnancy during the measurement period
- · Deceased during the measurement period
- · Hospice or palliative care status during the measurement period
- Attributed primary care provider not affiliated with CommonSpirit Health

Q Why isn't frailty included as one of the measure exclusions for Hypertension?

A The analytic team conducted an in-depth analysis related to application of frailty denominator exclusions and found no statistically significant impact on overall rates of blood pressure control (-.004%). Based on these findings, inclusion of frailty-related exclusion specifications has been deferred for FY2024.

Q What is considered the most recent blood pressure if multiple BPs are taken in the same visit?

A We follow the CMS requirements: If there are multiple blood pressure readings on the same day, use the lowest systolic and the lowest diastolic reading as the most recent blood pressure reading. Ranges and thresholds do not meet criteria for this measure. A distinct numeric result for both the systolic and diastolic BP reading is required for numerator compliance.

Q Since the most recent blood pressure is used for compliance, will the previously reported monthly data results change if the patient is seen in a more recent visit?

A No, the prior month's results will not change. The report represents patients with an active diagnosis of HTN (coded or on their problem list) who've had an office visit encounter and their corresponding BP seen within the specific measurement period. Any recent encounters or changes in the patient's BP levels will be reflected in the next report release.

Q Is this only a PCP measure or will BP recorded in a specialist visit satisfy the measure, if it is the most recent visit?

A The most recent BP reading in the EHR will be used to determine good control. If this reading is obtained for a patient assigned to an in-network primary care provider during an in-network, specialist office encounter, the BP measurement will be part of the data cohort.

Therefore, it is important to engage in network specialty providers and clinic staff to:

1. Re-check patient's BP after a 5 minute rest period if initial reading elevated (≥140/≥90)

- 2. Clinic staff to inform provider of out of range readings (≥140/≥90)
- 3. Schedule appointment with patient's PCP or affiliated PCP (if none designated) prior to departure
- 4. Educate patient on risks of HTN and importance of keeping scheduled PCP appointment

Q Are emergency or urgent care visits included?

A No, only in-clinic or virtual office visits are included.

Q Is this a cumulative report as the measurement period progresses? For example, do September results also include those HTN patients seen in July and August?

A Yes, the rate would be cumulative, showing "In Control/Out of Control" status for each patient landed in the denominator during the measurement period, and using the MOST RECENT BP result to determine numerator status. (Patients in prior months would be included, because it's cumulative, but each patient is only counted once.)

Q Will BP readings reported by patients during telehealth visits be included in the data cohort?

A Yes, patient reported BP readings are included in the data cohort as long as the measurement recorded is taken from a digital device. Contact your local informatics support team to verify the appropriate location to document patient reported BP readings.

Q What requirements must be met for BP readings captured during telehealth visits?

- A The CommonSpirit HTN measure is aligned with the Centers for Medicare and Medicaid Services (CMS) quality measure specifications. Current CMS guidance allows BP readings taken by a remote monitoring device (i.e., home device or a device brought by a visiting nurse or caregiver) and conveyed by the patient to their clinician during a telehealth encounter to meet performance requirements. The following recommendations should be followed to assure capture of patient reported BP readings during telehealth visits:
 - Prepare patients scheduled for telehealth visits to have vital signs, including blood pressure
 readings, available to report during virtual encounters. Consider emailing the following link at time of
 scheduling: https://www.catholichealthinitiatives.org/videovisitresources
 - Document the actual date and time the BP measurement was taken as reported by the patient in the designated electronic medical record (EMR) field; contact your local informatics support team to verify the appropriate location
 - Readings taken with a manual blood pressure cuff and a stethoscope should be documented in a narrative note and not in discrete vital sign fields

Q Do blood pressure readings recorded on a patient's home BP log or sent through a patient portal meet CMS and CommonSpirit HTN measure requirements?

A BP readings documented at home using a digital device and conveyed to the provider via in office, telehealth or patient portal may be acceptable when transcribed in the discrete patient reported EHR fields with the actual date and time of the blood pressure measurement.

Contact your local informatics support team and keep a look out for status updates, tip sheets and workflow guidelines related to EMR build changes, if deemed necessary.

Q Are blood pressure readings recorded from an outside specialist office visit, i.e. Cardiologist acceptable?

A BP readings blood pressure readings performed by an outside clinician may be acceptable when transcribed into a designated EMR field with the actual date and time of the BP measurement.

Contact your local informatics support team to verify the appropriate workflow for documentation.

Q If a patient doesn't have a home blood pressure monitor, but recently had his/ her blood pressure taken at a local pharmacy, can we accept this reading during a telehealth visit?

A Yes. BP readings captured from the Pharmacy's digital device are acceptable if reported by the patient and transcribed into a designated EMR field with the actual date and time of the BP measurement. Contact your local informatics support team to verify the appropriate workflow for documentation.

Q A patient uses a manual cuff to measure BP and reports results during a telehealth visit. Will this method meet the measure requirements?

A No, the reading was not obtained in the provider's office or by remote monitoring device, and would not meet the quality measure requirements.

However, the reading should be documented in a narrative note or designated "patient reported" or "home-measured" EMR field; not in the discrete vital sign field.

Q Where can I find examples of hypertension medical record audit tools and other clinic resources?

A Examples of tools are available in the Staff and Provider Resource folder located under Hypertension Improvement Resources.

Q We have heard that the national team conducts virtual visits with clinic teams requiring assistance with performance or quality improvement support. Can we request a visit?

A Absolutely! Many clinics participating in focused virtual visits with national team members have demonstrated improvement in hypertension performance rates and report the visits as a positive experience for providers and staff. Reach out to Debra Rockman or Kelly Bitonio to discuss options.

Contacts

Debra Rockman RN, MBA, CPHQ, CPHRM

System VP, Ambulatory Quality Debra.Rockman@commonspirit.org

Kelly Bitonio, BSN, MHA, NEA-BC, CPHQ

System Director, Ambulatory Quality Kelly.Bitonio@commonspirit.org

Gary Greensweig, MD

System SVP, Chief Physician Executive Physician Enterprise Gary.Greesnweig@commonspirit.org

Contacts 17

References

- 1. Centers for Disease Control and Prevention, National Center for Health Statistics. About Multiple Cause of Death, 1999–2019. CDC WONDER Online Database website. Atlanta, GA: Centers for Disease Control and Prevention; 2019. Accessed February 1, 2021.
- 2. Centers for Disease Control and Prevention. 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 external icon. Atlanta, GA: U.S. Department of Health and Human Services; 2021. Accessed March 12, 2021.
- 3. Kirkland EB, Heincelman M, Bishu KG, et. al. Trends in healthcare expenditures among US adults with hypertension: national estimates, 2003-2014. J Am Heart Assoc. 2018;7:e008731.
- 4. CMS Quality ID #236, National Committee for Quality Assurance, November 2020, Version 5.0

References 18