



Partnering with Patients to Improve Blood Pressure through Self-Monitoring

June 24, 2020

Welcome



This webinar will be recorded.

Welcome



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Featured Presenters



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Heart Disease, Stroke, and Diabetes Prevention



PARTNERING WITH PATIENTS TO IMPROVE BLOOD PRESSURE



Washington
Association for
Community Health
Community Health Centers
Advancing Quality Care for All



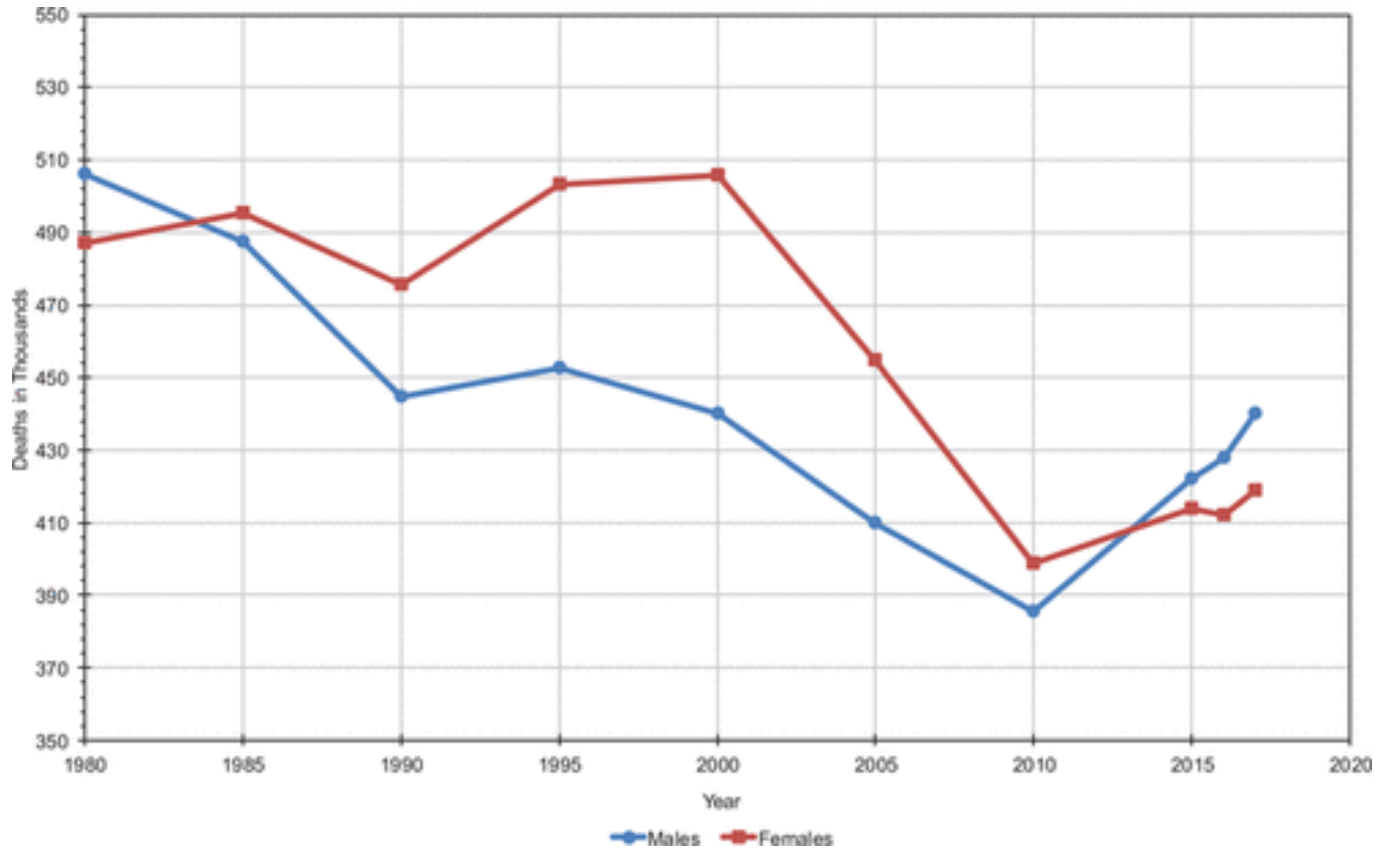
American
Heart
Association.

Objectives

By the end of this presentation, you will be able to:

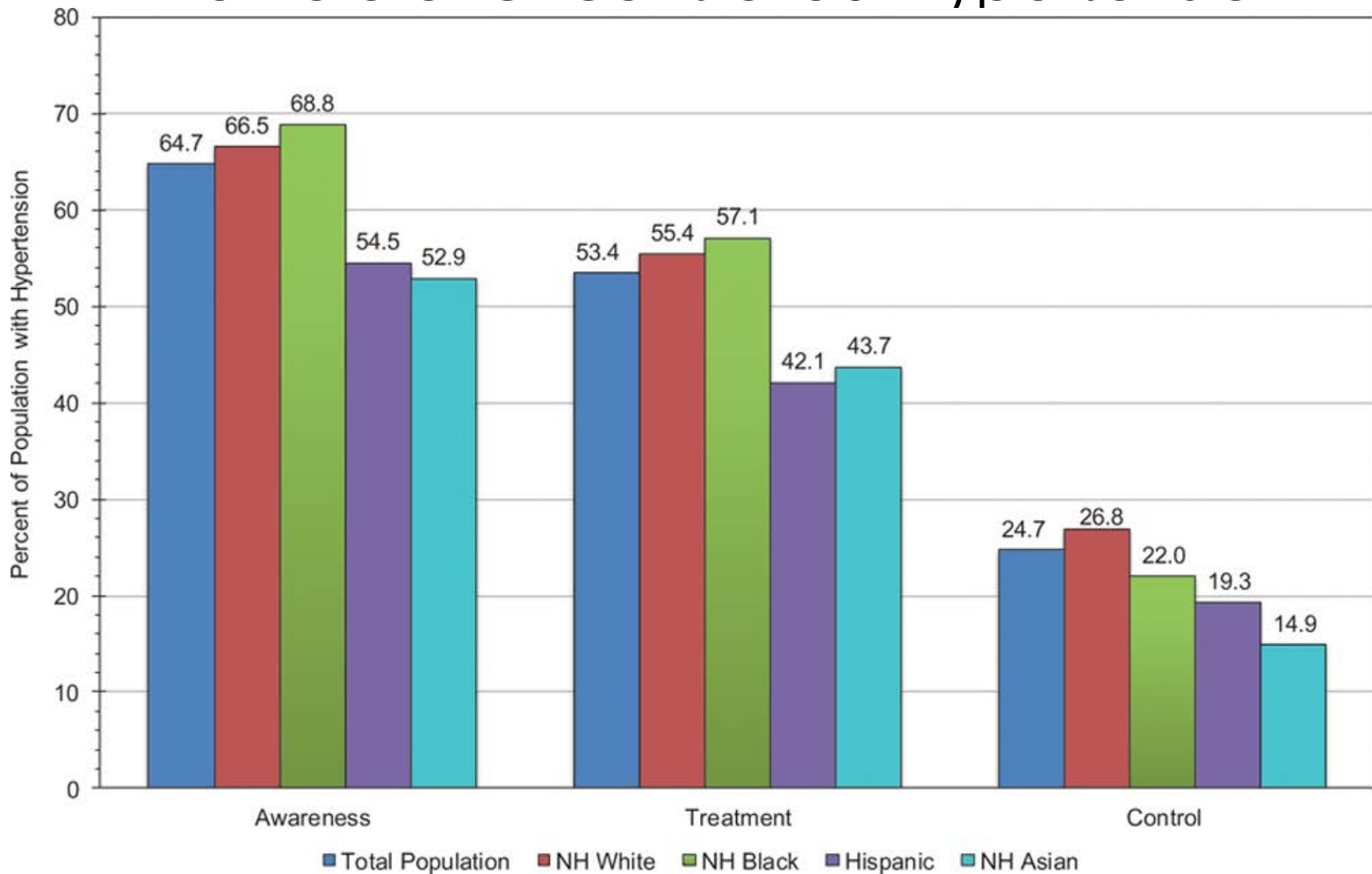
- Describe the benefits of implementing a self-monitoring program
- Discuss examples of self-monitoring support at FQHCs
- Identify the first steps and policies needed to implement a self-monitoring program at your health center
- Learn about resources to support the use of team-based care to implement, run, and monitor a self-monitoring program

Cardiovascular Death Rates are Rising



Deaths attributable to cardiovascular disease (CVD), United States, 1980 to 2017. Salim S. Virani. *Circulation. Heart Disease and Stroke Statistics—2020 Update: A Report From the American Heart Association, Volume: 141, Issue: 9, Pages: e139-e596, DOI: (10.1161/CIR.0000000000000757)*

The Role of Uncontrolled Hypertension



Extent of awareness, treatment, and control of HBP by race/ethnicity, United States (NHANES, 2013–2016). Salim S. Virani. *Circulation. Heart Disease and Stroke Statistics—2020 Update: A Report From the American Heart Association*, Volume: 141, Issue: 9, Pages: e139-e596, DOI: (10.1161/CIR.0000000000000757)

Why we collaborate on this work

Centers for Disease Control and Prevention, Division of Heart Disease and Stroke Prevention

Mission: To provide public health leadership to improve cardiovascular health for all, reduce the burden, and eliminate disparities associated with heart disease and stroke.

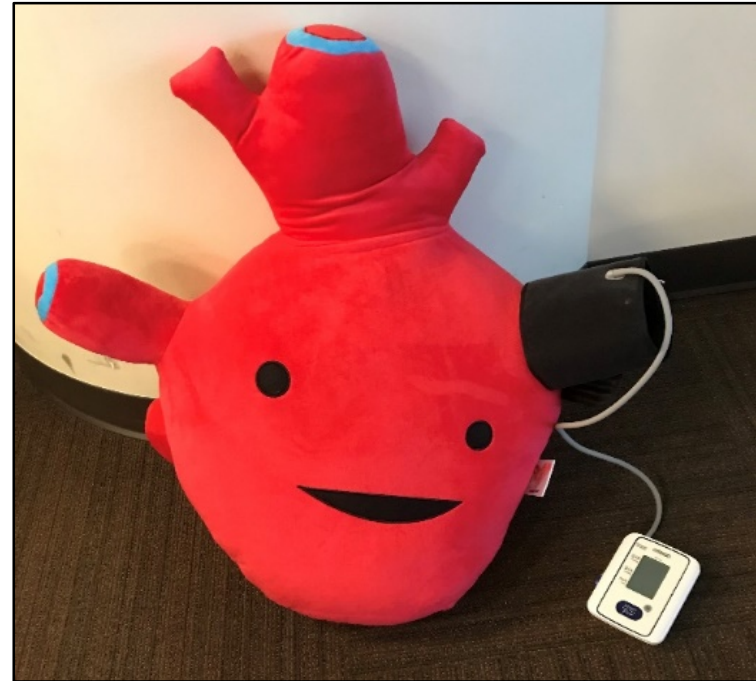
American Heart Association: Oldest and largest voluntary organization in the U.S. dedicated to fighting heart disease and stroke

Mission: To be a relentless force for a world of longer, healthier lives.

Why Blood Pressure Self-Monitoring?

CDC, American Heart Association, AMA, American Society of Hypertension all recommend patient self-monitoring of BP

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



*Photo: Heart Health Mascot "Hearty"
Source: NYC Department of Health and Mental Hygiene*

American Heart Association

Utilizing Target BP Resources to Create a Clinical System Change

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American Heart Association Community Impact Team



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TARGET BP

- What is Target BP?
- Research, Tools and Resources

TARGET:BP™ |  American Heart Association.  AMA



How Does The Program Work?

1

After the participant registers, local AHA staff will work with the organization to:

2

Customize a Plan using the MAP Framework

3

Measure Improvement & Report Result

4

Strive for Recognition ultimately at 70% or higher

Overview of MAP Framework Training



MEASURE blood pressure accurately, every time.

Accurate measurement and recording of BP is essential to categorize level of BP, ascertain BP-related CVD risk, and guide management of high BP.

Measure Accurately



ACT rapidly to address high blood pressure readings.

Take rapid action and follow treatment protocols to bring BP under control.

Act Rapidly



PARTNER with patients, families, and communities to promote self-management and monitor progress.

Improve adherence to treatment and lifestyle changes through collaborative communication and follow-up visits.

Partner With Patients

MEASURE ACCURATELY

- Patient Set-Up
- Measurement Equipment
- Automated Office Blood Pressure Machine (AOBP)



7 SIMPLE TIPS TO GET AN ACCURATE BLOOD PRESSURE READING

The common positioning errors can result in inaccurate blood pressure measurement. Figures shown are estimates of how improper positioning can potentially impact blood pressure readings.

Sources:

1. Pickering, et al. Recommendations for Blood Pressure Measurement in Humans and Experimental Animals Part 1: Blood Pressure Measurement in Humans. *Circulation*. 2005;111:697-716.
2. Handler J. The importance of accurate blood pressure measurement. *The Permanente Journal*/Summer 2009;Volume 13 No. 3 51

This 7 simple tips to get an accurate blood pressure reading was adapted with permission of the American Medical Association and The Johns Hopkins University. The original copyrighted content can be found at <https://www.ama-assn.org/ama-photo-hopkins-blood-pressure-resources>.

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Partnering with Patients and Community

- Supportive Communication with Patients
- Building Trust with Patients
- Promoting Blood Pressure Self-Monitoring
- Building relationships with local community partners.
- Create a patient-centered Self-Measurement Blood Pressure (SMBP) BP Cuff Lending Library Program

ICHS

- FQHC Clinic
- International District, Holly Park, Bellevue and Shoreline
 - * Presence in diverse neighborhoods
- 50 different languages available
- AHA Target BP, Check Change Control Cholesterol and Know your Diabetes by Heart program.

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 American Heart Association.
Check. Change. Control.®

Know **Diabetes** by **Heart**™





Clinical System Change

Linh Lam Van

Clinic Support Supervisor at the International District Medical and Dental Clinic



Measuring Blood Pressure Guide

- Assess how your health care organization currently measures BP
- Build your health care organization's knowledge in BP measurement
- Train your care team on evidence-based BP measurement techniques

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Measure accurately Quick start guide

Measuring blood pressure (BP) accurately in the clinical setting is critical to improving BP control. Here are some steps you can take to help incorporate evidence-based BP measurement techniques into your practice.

1. Assess how your health care organization currently measures BP

It is important to understand how you and your health care team currently measure BP in order to identify ways to improve. Use the following tools to help establish a baseline:



Quick BP measurement quiz



Measure accurately pre-assessment



Technique quick check

2. Build your health care organization's knowledge in BP measurement

- Watch the [measure accurately webinar](#) and receive CME or CE
- Host a journal club discussion on the [AHA Scientific Statement on BP Measurement](#)
- Watch the [AHA Scientific Statement on BP Measurement webinar](#) and receive CME or CE

3. Train your care team on evidence-based BP measurement techniques

Use the following tools to help train care team members on how to measure BP more accurately in the clinical setting:



BP positioning challenge



Steps to accurately measure BP



Technique quick check
Tip: conduct monthly audit



BP measurement infographic
Tip: place in every exam room

To receive the latest BP measurement information from Target: BP, sign up for the [newsletter](#).

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Technique quick-check

Evidence-based measurement technique requires training and skill building, but a few common problems related to patient preparation and positioning often account for unreliable readings.^{1,2}

Use this tool to verify everyone in your practice or health center obtains blood pressure readings the right way and the same way every time. Complete four observations for each team member (e.g., medical assistant, nursing staff and physicians) who regularly takes blood pressure measurements, using one sheet for each person. Repeat on a quarterly or monthly basis or as needed.

General information													
Site name:		Date:											
Observer name(s):		Observation location (clinic, unit, etc.):											
		Patient #1			Patient #2			Patient #3			Patient #4		
Device used	Yes	No	Comments	Yes	No	Comments	Yes	No	Comments	Yes	No	Comments	
1. Used a manual device	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
2. Used an automated device	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
Additional notes on availability, accessibility, quality and/or use patterns of blood pressure measurement devices in the practice (optional):													
Patient preparation and positioning													
4. Patient in the correct position —	Yes	No	If no, why not?	Yes	No	If no, why not?	Yes	No	If no, why not?	Yes	No	If no, why not?	
1.1. Seated with back supported	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
1.2. Feet flat on the floor or footstool	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
1.3. Legs uncrossed	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
1.4. Arm bare	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
1.5. Arm supported	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
1.6. Arm at heart level	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
2. Cuff used as correct size*	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
*If this is a confirmatory measurement (that is, a repeat measurement), then also check the following —													
3. Was the patient asked to empty his/her bladder prior to the repeat measurement?	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
4. Did the patient rest quietly for at least 5 minutes (no talking or reading) before the repeat measurement?	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
5. Were at least three more measurements obtained?	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
Additional notes on issues related to patient preparation, positioning and cooperation with use of technique (optional):													

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Measure accurately Pre-assessment

Instructions: Check all the boxes that apply to your practice.

1. What blood pressure (BP) measurement devices are used?



Manual (portable aneroid)



Manual (mounted aneroid)



Semi-automated



Automated

- Manual devices (portable aneroid)
 Calibrated* at least every six months

- Manual devices (mounted aneroid)
 Calibrated* every six months

- Semi-automated devices (automated device that takes only one reading and requires the observer** to be in the room with patient during measurement)
 Device validated for clinical accuracy
 Calibrated* annually

- Automated office BP (AOBP) devices: Automated device that can be programmed to take multiple measurements without the observer** in the room
 Device validated for clinical accuracy
 Calibrated* annually

- Multiple adult cuff sizes (small, regular, large, extra large) are available for each device

2. If multiple devices are used, what device is used for the initial BP measurement?

- Manual (portable aneroid) or mounted aneroid
 Semi-automated
 AOBP

Managing the TBP BP Cuff Lending Library

The BP cuffs will be prioritized by:

- Hypertension patients diagnosed and do not have access to home BP cuff
- Patients with medication to achieve better BP control
- At least one elevated BP in clinic and no previous hypertension history
- Work with dental clinics in the future
- Workflows established with the cuff library



Workflows with the BP Cuff Library

Day 1: MA educates patient on program, shows video, checks out BP cuff

Day 7: Patient returns for a follow up with RN; if BP is still not at goal at that time, RN will communicate this to the patient's PCP and either the medications will be adjusted and the patient will return in 1 week to see PCP or if patient was suspected to have white coat HTN, then patient will either be scheduled with PCP within one week or if home blood pressures are within normal limits then, patient will be given a diagnosis of white coat HTN.

Blood Pressure Categories



BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

Clinical System Change Impact



- Four ICHS clinic locations
- Each location has 10 blood pressure cuffs
- Monthly goal for each clinic is at least 30 patients involved
- Pilot = 1 provider, 1 MA, 1 RN
 - February pilot – 6 patients
 - May and June – 20-25 patients/month
- In the coming months, hope for 30+ patients per clinic



Blood Pressure Cuff Lending Library Outcomes

- ICHS is currently transitioning to a new EHR system
- From 2018 data, 27% of our population was diagnosed with hypertension and 70% had it at control . (ICHS received gold award for 2018 Target BP program)



- Increase the number of well-controlled blood pressure
- Translate patient education videos in spoken language for library



血壓測量說明

美國心臟協會建議的血壓水準

類別	收縮壓 (mmHg)	舒張壓 (mmHg)
理想	< 120	< 80
正常	120 - 129	80 - 89
高血壓前期	130 - 139	80 - 89
高血壓 1 期	140 - 159	90 - 99
高血壓 2 期	≥ 160	≥ 90

血壓測量操作指南

美國心臟協會建議的血壓水準

類別	收縮壓 (mmHg)	舒張壓 (mmHg)
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高血壓 2 期	≥ 160	≥ 90

ब्लड प्रेशर मापने की विधि

अमेरिकन हार्ट एसोसिएशन की सिफारिश की गई ब्लड प्रेशर के स्तर

श्रेणी	सिकुंन प्रेशर (mmHg)	डायोलिक प्रेशर (mmHg)
आदर्श	< 120	< 80
सामान्य	120 - 129	80 - 89
उच्च रक्तचाप पूर्ववर्ती	130 - 139	80 - 89
उच्च रक्तचाप 1 단계	140 - 159	90 - 99
उच्च रक्तचाप 2 단계	≥ 160	≥ 90

血壓測量操作指南

美國心臟協會建議的血壓水準

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高血壓 1 期	140 - 159	90 - 99
高血壓 2 期	≥ 160	≥ 90

☑ 咖啡因 - 請勿飲用咖啡或如能量飲料這類含有大量咖啡因的飲品

☑ 菸草或尼古丁 - 至少 30 分鐘勿吸菸或使用電子菸類產品

☑ 大餐 - 大餐或運動後請稍待片刻。

How to Measure Your Blood Pressure: Mandarin

PHÂN LOẠI HUYẾT AP	TÂM THƯỜNG (mmHg (đơn số đơn))	và	TÂM THƯỜNG (mmHg (đơn số đơn))
BÌNH THƯỜNG Tuyệt vời! Đây chính là mức huyết áp bình thường mà bạn cần có.	NHỎ HƠN 120	và	NHỎ HƠN 80
BÌNH THƯỜNG CAO Huyết áp đang lên hơi cao. Hãy bắt đầu những thay đổi và lối sống để ngăn huyết áp của bạn không trở thành huyết áp cao.	120 - 129	và	NHỎ HƠN 80
HUYẾT AP CAO (TĂNG HUYẾT AP) GIAI ĐOẠN 1 Huyết áp của bạn cao. Bạn cần gặp bác sĩ.	130 - 139	hoặc	80 - 89
HUYẾT AP CAO (TĂNG HUYẾT AP) GIAI ĐOẠN 2 Huyết áp của bạn rất cao. Hãy yêu cầu được chữa trị ngay.	140 HOẶC CAO HƠN	hoặc	90 HOẶC CAO HƠN
CON TĂNG HUYẾT AP (Chẩn đoán) Huyết áp của bạn cao > 160 mmHg nam. Hãy gọi 911 ngay.	CAO HƠN 160	và/hoặc	CAO HƠN 120

How to Measure Your Blood Pressure: Vietnamese

量度血壓時，保持
平靜放鬆的狀態。

How to Measure Your Blood Pressure: Cantonese

SMBP Translation Videos

https://www.youtube.com/watch?v=jEKKjpXqFwk&list=PLjPYfk187VSrFo-VM_3gAvK5SShCNaNc2



- How to Check Blood Pressure (Vietnamese) #29
- How to Check Blood Pressure (Cantonese) #30
- How to Check Blood Pressure (Mandarin) #31

BP Self-Monitoring Programs: Resources



A MILLION HEARTS® ACTION GUIDE

**Hypertension
Control**

CHANGE PACKAGE

Second Edition



TARGET:BP™



BP Improvement | Self-Measured BP | Best Practices | Events | Tools & Downloads | Recognition | Q

Nearly half of American adults have **high blood pressure** — many don't even know they have it.



<https://targetbp.org/>

<https://millionhearts.hhs.gov/>

SMBP Program: Where to Start

Hypertension Control Change Package — Quick Reference

Focus Areas



Key Foundations



- Make HTN control a practice priority
 - Identify a practice or health system champion, such as a quality improvement lead
 - Include at least 1 healthcare provider (MD/DO, NP, PA) and health care team at each office.
 - If multiple healthcare providers participate, designate a **healthcare provider champion** to learn about the program and help colleagues succeed.
- Develop HTN control policies and procedures
- Develop a flowchart/workflow for proactively tracking and managing patients with HTN
- Deploy HTN treatment protocols and algorithms

Equip Care Teams



- Assign care team roles for an SMBP monitoring program and adapt the workflow accordingly
- Make sure patients can access a monitor
 - Reach out to insurers, non-profits
 - Provide patients guidance on selecting a home BP monitor
 - Develop a home BP monitor loaner program
- Train patients on home BP monitor use and proper preparation and positioning
- Develop a process for handling patient-generated BP readings

Population Health Management



- Understand the burden of hypertension in your population
- Understand disparities in hypertension control
- Identify patients appropriate for SMBP
- Use clinician-managed protocols for medication adjustments and lifestyle recommendations
- Use practice data to drive improvement
 - Determine HTN control and related process metrics for the practice
 - Regularly provide a dashboard with BP goals, metrics, and performance

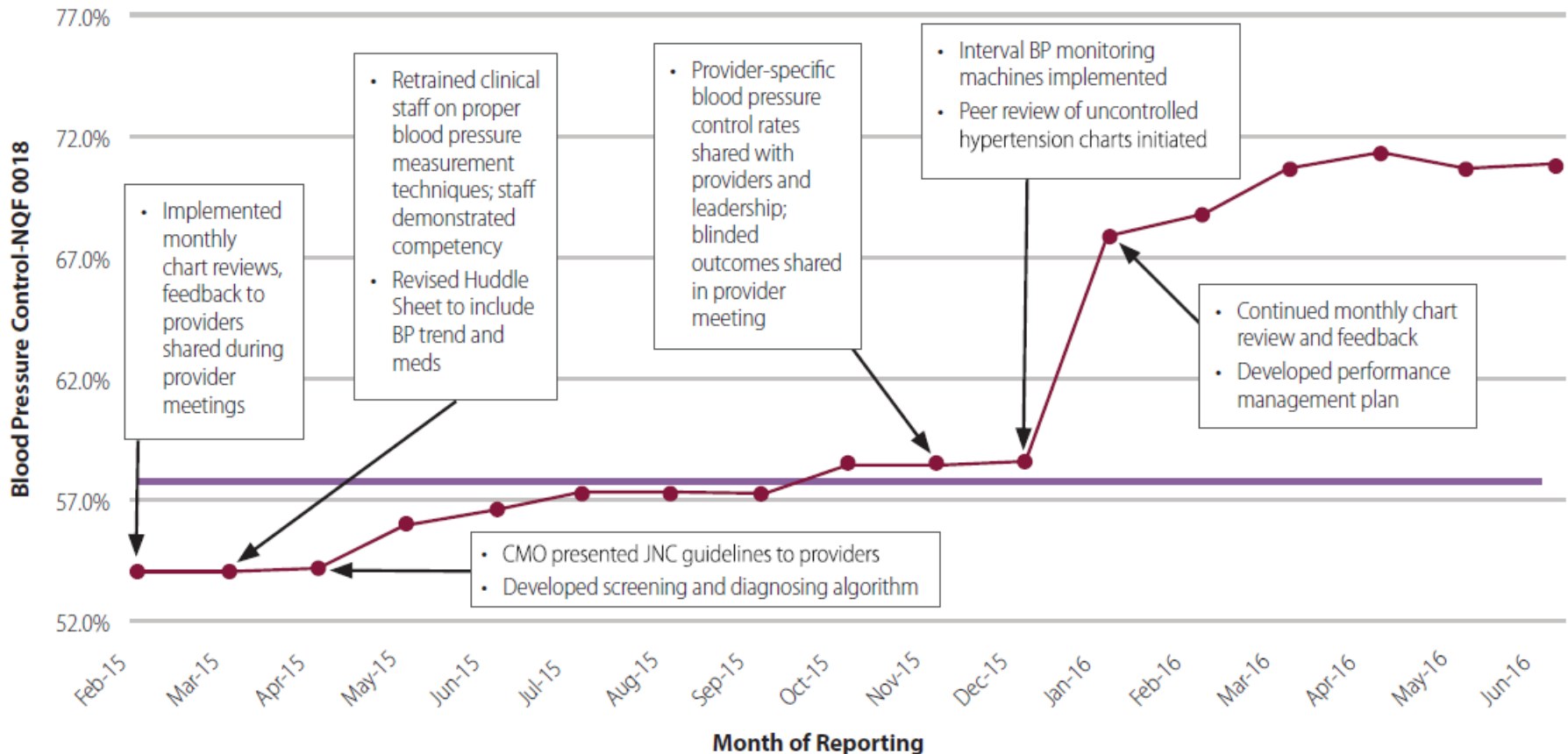
Individual Patient Supports



- Prepare Patients Before the Office Visit via Pre-Visit Patient Outreach
- Optimize Patient Intake to Support HTN Management (e.g., check-in, waiting, rooming)
- Optimize the Patient–Clinician Encounter (e.g., documentation, orders, education/engagement)
- Support Patients in HTN Self-Management During Their Routine Daily Activities (i.e., outside of the clinical encounter)
- Optimize the Encounter Closing (i.e., checkout)
- Follow Up to Monitor and Reinforce HTN Management Plans (i.e., after visits)

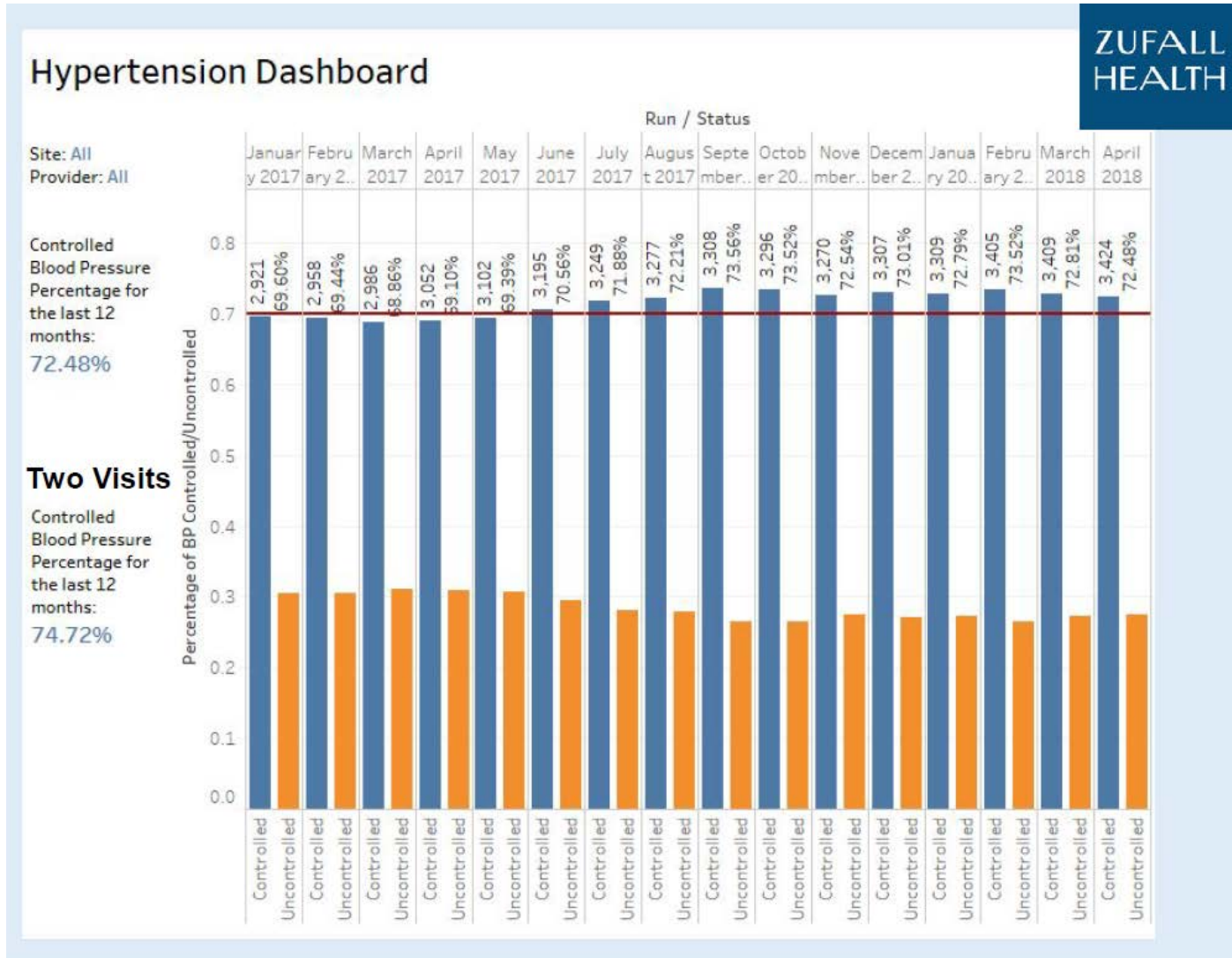
Run Chart Example

Blood Pressure Control, Grace Community Health Center, February 2015–June 2016



Centers for Disease Control and Prevention. *Hypertension Control Change Package* (2nd ed.). Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2020.

Dashboard Example



You are not alone

Department of Health can assist with:

- Planning/staging/spread
- Training
- Quality Improvement
- Identifying measures for tracking success
- Implementation
- Connections with partners for coding/billing, tools, other resources, questions, examples

Cardiovascular Connection – a resource for you

<https://waportal.org/partners/home/cardiovascularconnection/aboutus>

Our Team, another resource for you



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Diabetes Consultant

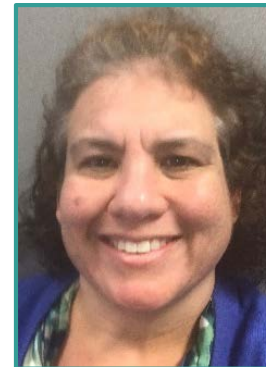
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@WADeptHealth

An Opportunity to Obtain Home BP Monitors

Health Care Authority has a limited number of home monitors for patients:

- Who have Medicaid or are uninsured
- Do not have access to a monitor
- Who will be able to use them for daily monitoring and can share results with their medical home

Participating clinics agree to:

- Provide information about which patients need them, and some basic demographic data about these patients
- Provide information on clinical improvements from use of the monitors

If interested, send requests to HCAMPOIBusOps@hca.wa.gov.



To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.

Thank You

Questions?

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**Washington
Association for
Community Health**
Community Health Centers
Advancing Quality Care for All