



Creating an Optimal
Environment for Quality
Healthcare for Individuals,
Families, and Communities

Million Hearts 2027: Aiming for Impact with a Focus on Health Equity

Breakout Session: B29

Advancing Health Equity

April 9, 2024

Disclaimer/Disclosure

The opinions expressed by the speaker do not necessarily reflect the opinions of the US Department of Health and Human Services, the Public Health Service, the Centers for Disease Control and Prevention, or the Center for Medicare and Medicaid Services.

All speakers have no conflicts to disclose.

AGENDA

- Million Hearts 2027 Aiming for Impact: Focus on Health Equity
 - Laurence S. Sperling, MD, FACC, FAHA, FACP, MASPC
- Facilitating Equitable Use of Self-Measured Blood Pressure Monitoring and Cardiac Rehabilitation
 - Haley Stolp, MPH
- Reducing Hypertension-Related Maternal Health Disparities
 - Taylor Streeter, MPH
- Q&A and Open Discussion



CMS 2024
Quality
Conference
Resilient and Ready Together

Creating an Optimal
Environment for Quality
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Families, and Communities



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Disparities, Health Inequities, and Social Determinants of Health (SDOH)

- **Disparities** – differences in health and healthcare utilization
- **Health inequities** – unfair/unjust differences due to the social conditions in which people are born, grow, live, and work
 - Systemic racism, discrimination
 - Unfair policies and practices
- **SDOH** – non-medical factors that influence a person's health
 - SDOH at CDC – <https://www.cdc.gov/about/sdoh/index.html>

Million Hearts[®] 2027 Priorities (1)

Building Healthy Communities

Decrease **Tobacco Use**

Decrease **Physical Inactivity**

Decrease **Particle Pollution Exposure**

Optimizing Care

Improve Appropriate **A**spirin or **A**nticoagulant Use

Improve **B**lood Pressure Control

Improve **C**holesterol Management

Improve **S**moking Cessation

Increase Use of **Cardiac Rehabilitation**

Focusing On Health Equity

Pregnant and
Postpartum
Women with
Hypertension

People from
Racial/Ethnic
Minority Groups

People with
Behavioral Health
Issues Who Use
Tobacco

People with
Lower Incomes

People Who Live in
Rural Areas or
Other 'Access
Deserts'

SECONDARY AND TERTIARY PREVENTION

CVD
MIs
Stroke
PVD
Heart Failure

PRIMARY PREVENTION

Risk Factors
Hypertension
Dyslipidemia
Diabetes
Metabolic Syndrome

PRIMORDIAL PREVENTION

Health Behaviors

Physical Activity Environmental Pollution
Smoking Diet
Body Weight Fetal and Infant Health

HEALTH EQUITY

Social Determinants of Health

Healthcare Access & Quality Neighborhood & Built Environment
Education Access & Quality Economic Stability
Social & Community Context



Priority Foci For Event Prevention

Underlined terms are being addressed particularly in people with CVD or its risk factors

CVD – cardiovascular disease; MIs – myocardial infarction (i.e., heart attack); PVD – peripheral vascular disease

Adapted from: Hong KN, Fuster V, et al. J Am Coll Cardiol. 2017 Oct 24;70(17):2171-2185.
[About Social Determinants of Health \(SDOH\) \(cdc.gov\)](http://www.cdc.gov)

Million Hearts 2027:
Getting to Goal

1 Million

heart attacks and strokes
prevented in **5 years**

Million
Hearts®
2027

Achieve 20%
improvement

Recognize
≥80%
performance
on the ABCS

**Maintain current
levels** despite negative
forces of COVID-19,
obesity, diabetes

**Change the
health equity
landscape**

Focusing on Health Equity (1 of 2)

Pregnant and Postpartum Women With Hypertension	People from Racial/Ethnic Minority Groups	People with Behavioral Health Issues Who Use Tobacco
Approaches to close coverage gaps	SMBP and/or HMM in trusted spaces	Integration of tobacco cessation treatment into mental health, substance use care
Approaches to close gaps in transition of care	Approaches to close coverage gaps	Smoke-free behavioral health facilities
Aspirin use to prevent preeclampsia	Tailored protocols to increase med intensification / med adherence	Approaches to close coverage gaps
	Enhanced sodium reduction	
	Policies prohibiting sale of flavored tobacco products	

SMBP = self-measured blood pressure monitoring; HMM = hypertension medication management

Focusing on Health Equity (2 of 2)

People with Lower Incomes	People who Live in Rural Areas and Other 'Access Deserts'
Approaches to close coverage gaps	Availability of robust virtual and remote models of cardiac rehabilitation delivery
SMBP device loaner programs	Optimal use of SMBP and related telehealth services
Inclusion of evidence-based strategies in value-based care delivery	Expanded scopes of practice for NPs, PAs, PharmDs, and CHWs

SMBP = self-measured blood pressure monitoring; NP = nurse practitioner; PA = physician assistant; CHW = community health worker

Million Hearts Health Equity Implementation Grants

- **Huddle Up Moms (VA):** focused on Black and AI/AN pregnant and postpartum women with hypertension
- **Midvale Community Building Community (UT):** focused on low-income patients with hypertension or patients who use tobacco
- **St. James Healthcare (MT):** focused on addressing care desserts for rural heart failure patients
- **UCONN Health Maternal-Fetal Medicine (CT):** focused on Black pregnant and postpartum women with hypertension
- **University of Pittsburgh Pharmacist Care Network (PA):** focused on low-income/racial and ethnic minority patients with hypertension
- **West Virginia University School of Pharmacy (WV):** focused on rural patients with heart failure

NACDD = National Association of Chronic Disease Directors

AI/AN = American Indian/Alaskan Native

VA = Virginia; UT = Utah; MT = Montana, CT= Connecticut; PA = Pennsylvania; WV = West Virginia

National Association of Community Health Centers Preventing Heart Attacks and Strokes Project

- From July 2021 – July 2023, the blood pressure control among African American patients with hypertension increased by **13.2 percent**, bringing **3,186 African American patients** to control and reducing the average systolic blood pressure by **5.1 mm Hg**
 - Focus on treatment intensification, shortening follow-up times, standardized treatment protocols, SMBP
- Launched ‘Hypertension Medication Management in Trusted Spaces’ project with three health centers
 - Real-world translation of Los Angeles Blood Pressure Barbershop Study

SMBP = self-measured blood pressure monitoring

IMPROVING BLOOD PRESSURE CONTROL FOR AFRICAN AMERICANS ROADMAP

INSTRUCTIONS

PURPOSE: This **Improving Blood Pressure Control for African Americans Roadmap** is a tool to help organizations achieve ≥80% blood pressure control for their African American – and all – patients with hypertension.

OVERVIEW: This tool organizes groups of interventions and activities to help organizations develop a deliberate strategy or approach to their hypertension management efforts. Interventions are outlined across three categories: **Core, Elective, and Capstone**. Each category has a list of **current activities** and **planned activities** to help organizations identify and achieve their blood pressure control goals. Organizations can start by focusing on core evidence-based strategies that provide a strong foundation for success. Once in place, organizations can build on their **core strategies** by implementing additional interventions and activities in the **electives** category and, when ready, in the **capstone** category.

STEP-BY-STEP INSTRUCTIONS FOR EACH HEALTH CENTER:

- 1 Determine your organization's current blood pressure control performance rate for African American's with hypertension.
- 2 Identify the **BP control rate range** in which your organization's current performance rate falls across the **Core, Elective, and Capstone** categories. Review which set of intervention strategies and activities are aligned with your performance range.
- 3 **For selecting Current Activities:**
 - Identify and select the strategies your organization has in place or has completed.
- 4 **For selecting Planned Activities:**
 - Prioritize implementing the intervention strategies and activities that correspond to your current performance range.
 - Use your selected **Current Activities** as a reference to guide your selection of **Planned Activities**.
 - Create a plan to implement interventions/activities selected in the **Planned Activities** category to continue improving blood pressure control for African Americans.

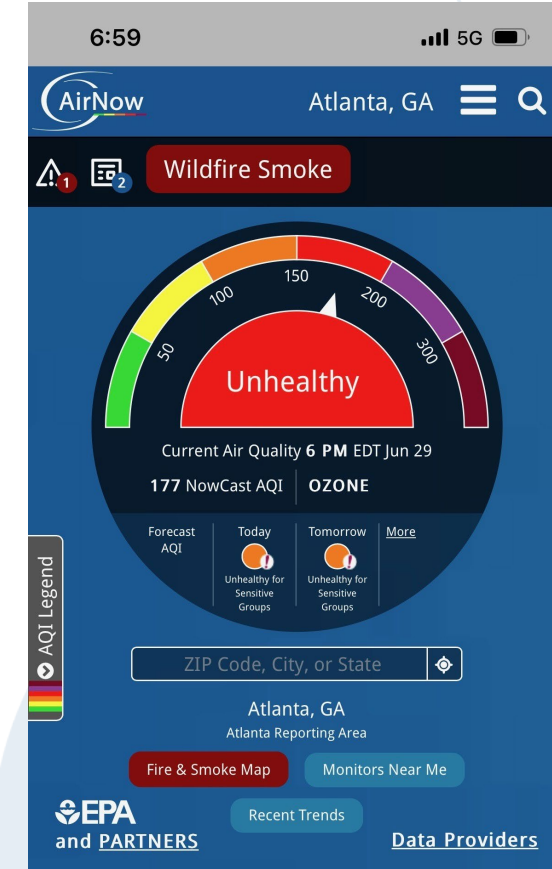
NOTE: This tool is not designed to be used linearly. Consider planning for activities across all categories even if your performance is in a more advanced category.
- 5 Add the **health center name** into the text box provided below **or** go to **File>Save As** to change the file name to include the health center name.
- 6 Repeat these steps for each participating health center.

HEALTH CENTER NAME _____

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Million Hearts® Climate Change and Cardiovascular Disease Collaborative

- National forum in partnership with the HHS Office of Climate Change and Health Equity (OCCHE), CDC NCEH, and EPA
- Objectives
 - Learn about cardiovascular health threats that climate change and air pollution present
 - Review evidence-based interventions to address those threats
 - Access relevant solutions and tools



<https://millionhearts.hhs.gov/about-million-hearts/building-communities/climate-change-ccc.html>

NCEH = National Center for Environmental Health; EPA = Environmental Protection Agency

Million Hearts Strategies: Aligned with CMS priorities

- 6 Pillars of CMS
 - Advance health equity; expand access to care; engage partners and communities; support innovative strategies; responsible steward of public funds
- Formulate, advise, and support core clinical quality measures
- Inform performance measures and evidence-based strategies through value-based insurance design (V-BID)
- Surveillance of healthcare service utilization
- Work to remove financial and administrative barriers to high impact clinical interventions; support coverage of CVD preventive services

Million Hearts: CDC-CMS Partnership in Action

- Joint Launch of Million Hearts in 2012
- Completed CMMI Million Hearts Risk Reduction Model
- Alignment of Cardiovascular CQM's
- Exchanging data assets (e.g. reports on cardiac rehabilitation uptake among Medicare beneficiaries)
- Collaboration of efforts in the field
- Equipping QIN-QIOs with quality improvement tools
- Ongoing Collaboration among Leaders

Live to the Beat

VISION

A future where more people:

- Understand their personal risk for heart disease and stroke
- Believe in their power to change it
- Take steps to protect their heart health (and the health of their family).

PURPOSE

Fuel the Million Hearts® initiative toward its goal of preventing 1 million heart attacks, strokes and cardiovascular events.

FOCUS

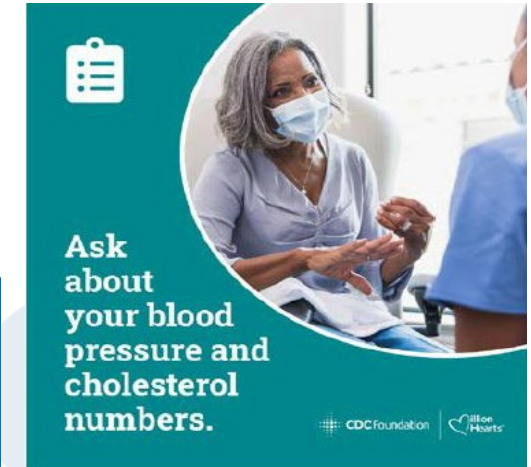
Primary prevention campaign to prevent heart disease and strokes among Black adults ages 35-54.

<https://www.livetothebeat.org/>



Heart-Healthy Steps Campaign

- **Aim:** to encourage adults 55 and older to take small steps to live big
- **Focus:** 6 Heart-Healthy Steps
 1. Manage Your Risk Factors
 2. Work With Health Care Professionals
 3. Eat healthy
 4. Get active
 5. Lower stress
 6. Quit smoking
- **Assets:** Tips for Getting Motivated, Short Educational videos, “Change of Heart” Stories



Million Hearts[®] Resources and Tools

- Quality Improvement Change Packages – hypertension control, tobacco cessation, cardiac rehabilitation
- Action Guides– hypertension control; self-measured blood pressure monitoring (SMBP); tobacco cessation; medication adherence
- Protocols – hypertension treatment; tobacco cessation; cholesterol management
- Messages and Resources – undiagnosed hypertension, medication adherence, health information technology (IT), SMBP, particle pollution, physical activity, tobacco use, cholesterol management, blood pressure control, hypertensive disorders of pregnancy
- Clinical Quality Measures – alignment
- Consumer Resources and Tools



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Facilitating Equitable Use of Self-Measured Blood Pressure Monitoring and Cardiac Rehabilitation

Haley Stolp, MPH

Health Scientist

Million Hearts[®]

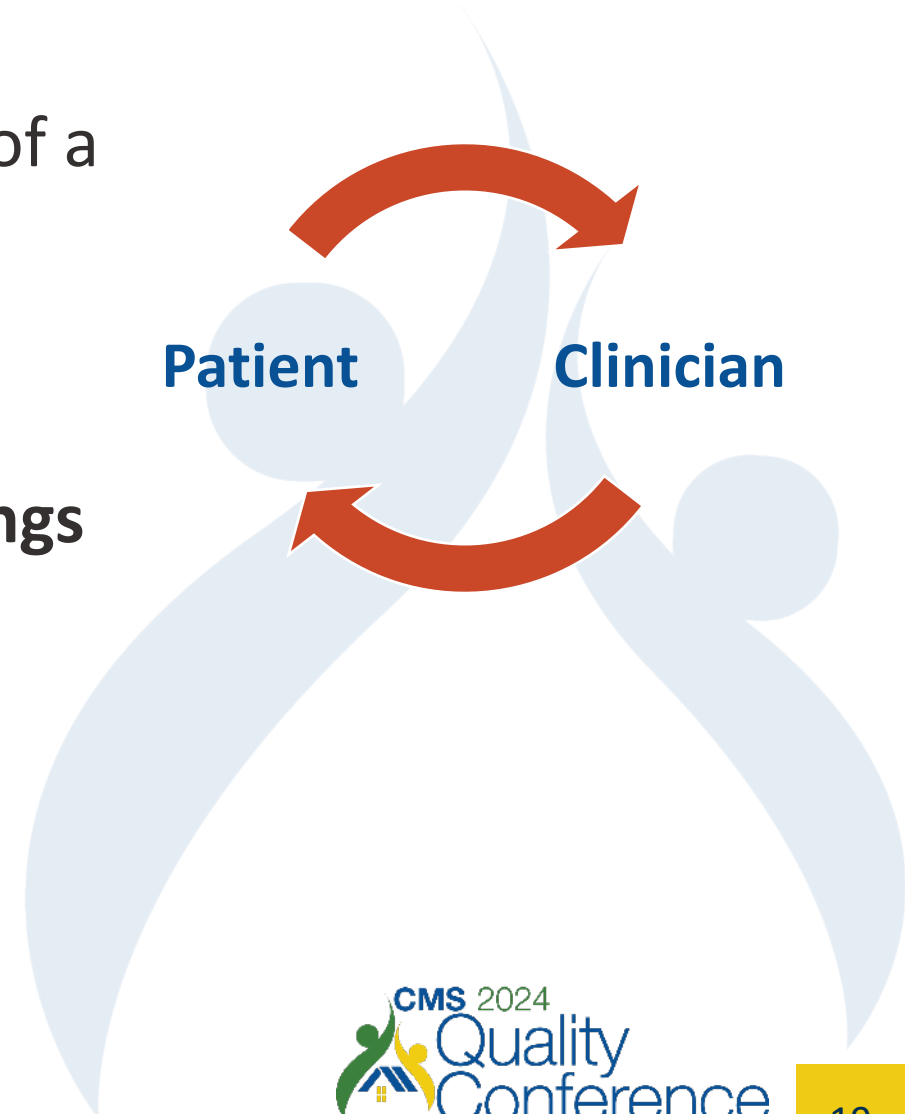
Division for Heart Disease and Stroke Prevention

Centers for Disease Control and Prevention



Self-Measured Blood Pressure Monitoring (SMBP) with Clinical Support

- The measurement of BP by an individual outside of a clinic setting including at home – with a validated automatic upper arm device
- AKA “home blood pressure monitoring”
- **Better predictor of CVD risk than office BP readings**
- SMBP is **NOT** – “Remote Physiologic Monitoring”
- SMBP is used for diagnosis and/or until control is achieved



Hypertension Control Change Package, Second Edition

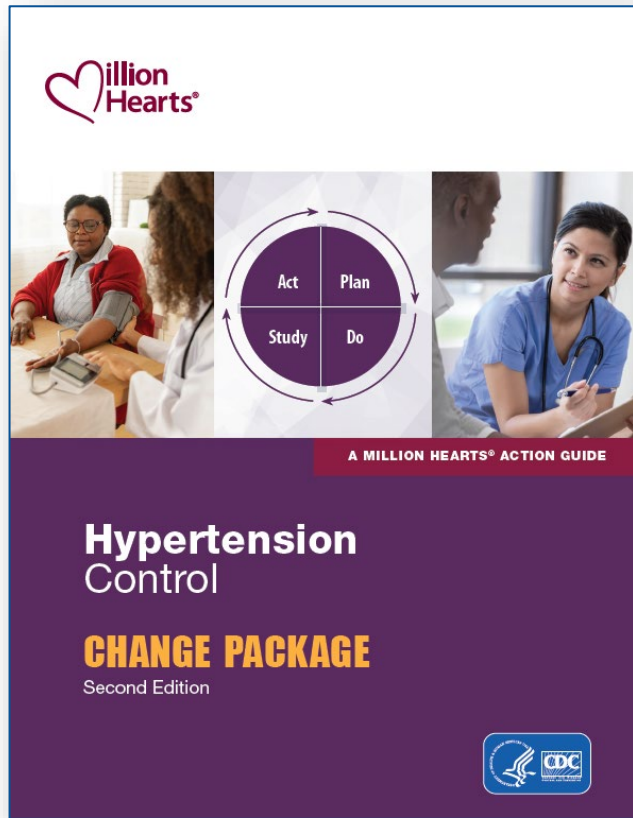
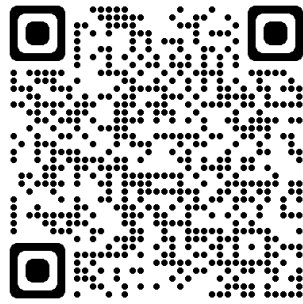


Table 2. Equipping Care Teams (continued)		
Change Concept	Change Idea	Tools and Resources
Establish a Self-Measured BP (SMBP) Monitoring Program	Develop a home BP monitor loaner program	<ul style="list-style-type: none"> • Target: BP — SMBP Loaner Device Agreement • Open Door Family Medical Centers — Blood Pressure Monitor Loan Agreement (English and Spanish) • Target: BP — Inventory Management • Target: BP — SMBP Patient Training Checklist – Loaner Device • NACHC — Self-Measured Blood Pressure Monitoring Implementation Guide for Health Care Delivery Organizations: Appendix Y: SMBP Loaner Program Policy & Procedure – Cleaning and Care of Home BP Monitors, Whitney M. Young, Jr. Health Center • AMA — Cleaning and disinfection procedure
	Train patients on BP monitor use, proper preparation and positioning	<p>Support Patients in HTN Self-Management During Their Routine Daily Activities (i.e., outside of the clinical encounter)</p> <p>Provide patient supports for SMBP monitoring</p>
Establish a Self-Measured BP (SMBP) Monitoring Program	Develop a process for handling patient-generated BP readings	<ul style="list-style-type: none"> • AMA — In-office BP Average Calculator • Target: BP — SMBP Average Calculator

Table 4. Individual Patient Supports (continued)		
Change Concept	Change Idea	Tools and Resources
Establish a Self-Measured BP (SMBP) Monitoring Program	Train patients on BP monitor use, proper preparation and positioning	<ul style="list-style-type: none"> • Target: BP — SMBP Infographic: How to measure your blood pressure at home • Target: BP — 7 Day Recording Sheet SMBP • Washington State Department of Health — How to Check Your Blood Pressure – English • Spanish; Chinese, Russian, and Vietnamese also available • NYC DOHMH — Blood Pressure Tracking Card & Action Plan • New West Physicians — Home BP EMR Entry • Target: BP — SMBP Using a Wrist Cuff to Measure Blood Pressure (Not recommended for most patients)
	Develop a process for handling patient-generated BP readings	<ul style="list-style-type: none"> • AMA — In-office BP Average Calculator • Target: BP — SMBP Average Calculator

SMBP Health Equity Issues: Implementation

- Highlights high-level barriers and offers the following potential solutions:
 - Ample supply of validated measurement devices
 - Improved coverage and reimbursement
 - Creative strategies to overcome barriers of trust, time, and distance
 - Simplified, standards-based, and interoperable health IT solutions
 - Ready access to high-speed broadband
 - Accessible technical assistance to overcome the digital divide

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Author manuscript
Am J Hypertens. Author manuscript; available in PMC 2023 March 30.

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Am J Hypertens. 2022 March 08; 35(3): 244–255. doi:10.1093/ajh/hpab170.

How Do We Jump-Start Self-measured Blood Pressure Monitoring in the United States? Addressing Barriers Beyond the Published Literature

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Abstract

Hypertension is highly prevalent in the United States, and many persons with hypertension do not have controlled blood pressure. Self-measured blood pressure monitoring (SMBP), when combined with clinical support, is an evidence-based strategy for lowering blood pressure and improving control in persons with hypertension. For years, there has been support for widespread implementation of SMBP by national organizations and the federal government, and SMBP was highlighted as a primary intervention in the 2020 *Surgeon General's Call to Action to Control Hypertension*, yet optimal SMBP use remains low. There are well-known patient and clinician barriers to optimal SMBP documented in the literature. We explore additional high-level barriers that have been encountered, as broad policy and systems-level changes have been attempted, and offer potential solutions. Collective efforts could modernize data transfer and processing, improve broadband access, expand device coverage and increase affordability, integrate SMBP into routine care and reimbursement practices, and strengthen patient engagement, trust, and access.

Keywords

barriers; blood pressure; cardiovascular disease; health information technology; hypertension; prevention; self-measured blood pressure monitoring

We have a hypertension problem in the United States. It affects all races and ethnicities, age groups, sexes, and presents throughout the country. Using the ACC/AHA 2017 blood pressure guideline defining hypertension as a blood pressure > 130/80 mm Hg.

Correspondence: Hilary K. Wall (hwall@cdc.gov).

DISCLOSURE
The authors declared no conflict of interest.

SUPPLEMENTARY MATERIAL
Supplementary data are available at *American Journal of Hypertension* online.

Clinically Validated Devices

Filter by Populations Served

All Populations Served

Adolescents

Elderly

General Adult

Medical conditions

Pediatrics

Pregnant

Filter by Prices

\$

\$\$

\$\$\$

\$\$\$\$

\$\$\$\$\$

Not Available

Filter by Cuff Types

All Cuff Types

Adult

Extra-Large

Large

Small Adult

US BLOOD PRESSURE
VALIDATED
DEVICE LISTING

Devices Validation Submit a Device Contact Us Share

Blood Pressure Devices

The ultimate judgment regarding whether a BP measurement device meets the requisite VDL Criteria rests with the Independent Review Committee and is not in any way determined or influenced by the AMA.

The AMA does not receive funding from any device manufacturer or other third party in relation to the development of the VDL Criteria or VDL process.*

Filter × Search...

Filter Favorite Devices 78 devices Filter Sort by Print

Filter by Brands

- All Brands
- A&D Medical
- Avita
- BodyTrace
- CareSimple
- Dario
- Equate

Filter by Connectivity

- All Connectivity

Device Name	Price
Homedics 700 Series Upper Arm Blood	\$\$
Homedics 900 Series Upper Arm Blood	\$\$\$
Homedics 500 Series Arm Blood Pressure	\$

SMBP Coverage Insights: Medicaid

April 2023 (based on data available 3/15/23)



Self-measured blood pressure (SMBP) is an evidence-based strategy that can improve blood pressure control for individuals with hypertension. SMBP is most effective when an individual has access to a validated blood pressure device for home use coupled with ongoing clinical support. Refer to the US Blood Pressure Validated Device Listing (VDL™) for a list of validated devices.

The chart below shows the status of coverage by state for 1) SMBP clinical services and 2) automated blood pressure devices and standalone cuff. It is intended to highlight which states offer provider reimbursement to perform SMBP services and allow Medicaid patients to obtain an automated blood pressure device.

CPT® and HCPCS Code Descriptions

99473	SMBP using a device validated for home use
99474	Separate self-measurement of blood pressure by provider, communication with patient
A4670	Automated blood pressure device
A4663	Blood pressure cuff only

Summary	99473	99474	A4670	A4663
Total states with coverage	21	18	38	33
Total states with coverage and covered amount data available	21	18	33	22
Average covered amount	\$10.22	\$1249	\$63.08	\$22.70

	SMBP Service Codes				BP Device Codes							
	Provider Reimbursement				Durable Medical Equipment (DME) Fee Schedule							
	99473		99474		Source	A4670		A4663		Source		
	Covered	Amount Covered	Covered	Amount covered		Covered	Amount Covered	Prior Authorization Required	Covered	Amount covered	Prior Authorization Required	
Alabama					⊗							⊗
Alaska					⊗	●	\$110.00		●	Varies		⊗
Arizona	●	\$11.65	●	\$15.65	⊗	●	Varies		●	Varies		⊗
Arkansas					⊗	●	\$8.22					⊗
California					⊗	●	Varies		●	Varies		⊗
Colorado	●	\$9.76	●	\$12.51	⊗	●	\$73.90	○	●	\$21.92	○	⊗
Connecticut					⊗	●	\$65.00		●	\$28.53		⊗
Delaware	●	\$17.12	●	\$23.23	⊗	●	\$50.04		●	\$19.47		⊗
D.C.					⊗	●	\$103.93		●	\$19.95		⊗
Florida					⊗							⊗

Medicaid program administrators are encouraged to contact iho-info@ama-assn.org with any updates or corrections to the information contained in this table.

Additional pricing or medical review required for states where reimbursement is "VARIES".

Range for SMBP device coverage: **\$8.22 (AR) to \$159.44 (NH)**

Million Hearts[®] SMBP Forum

- Quarterly webinar to facilitate the exchange of SMBP best practices, solutions, tools, and resources
- SMBP Forum Registration Page:
<https://bit.ly/SMBPForumRegistration>
- Past SMBP Forum recordings/materials:
<https://nachc.atlassian.net/wiki/spaces/SMBP/overview>



Patient SMBP Stories



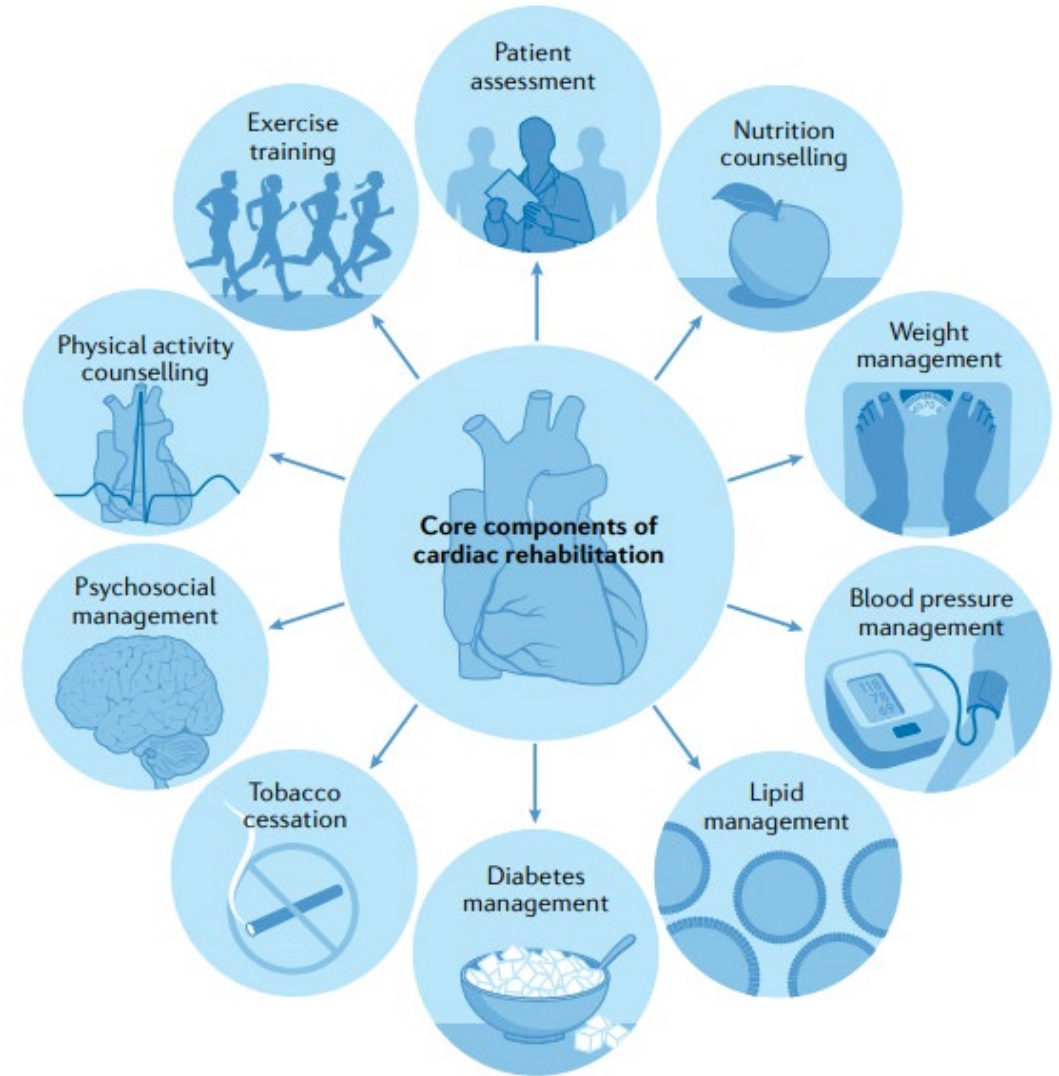
Taking Control of My Blood Pressure: D'Angelo's Story
<https://www.youtube.com/watch?v=VNQQ8ranUZo>



Taking Control of My Blood Pressure: Natalia's Story
<https://www.youtube.com/watch?v=malq4KnCESY>

Cardiac Rehabilitation (CR)

- Comprehensive, medically-supervised, secondary cardiovascular disease prevention program
- Typically, a dose of CR includes 36 sessions over 12 weeks in an outpatient hospital setting
- Staffed by a multidisciplinary team of health professionals
- Facilitates peer-to-peer sharing and social support



CR Recommendations in Clinical Practice Guidelines

(with the highest level of strength and quality of evidence)

Patient Population	Recommendation Level
Patients with acute coronary syndromes	Class 1A for CR
Patients who have had a myocardial infarction	Class 1A for CR
Patients who have undergone coronary artery revascularization surgery	Class 1A for CR
Patients with stage C heart failure	Class 1A for exercise training Class 2A for CR
Patients with peripheral artery disease	Class 1A for supervised exercise therapy

Amsterdam EA, et al. *J Am Coll Cardiol*. 2014;64(24):e139-e228.

O'Gara PT, et al. *Circulation*. 2013;127(4):e362-e425.

Lawton, JS, et al. *Circulation*. 2022;79(2):e21-e129

Heidenreich PA, et al. *Circulation*. 2022;145(18):e895-e1032.

Gerhard-Herman MD, et al. *Circulation*. 2017;135(12):e686-e725.

What are the benefits of CR?

- **May reduce:**
 - ▲ Death from **all** causes by **13%**
 - ▲ All-cause hospitalizations by **42%** and HF-specific hospitalizations by **41%**
 - ▲ Risk of heart attacks by **28%**
 - ▲ Time to return to work
- **Improves:** physical health, mental health, care for older adults – medication review, monitoring physical activity, statin therapy for patients with cardiovascular disease, diabetes care – blood sugar controlled, care coordination
- **More is Better (strong dose response)**

Taylor RS, et al. *Nat Rev Cardiol*.2022;19:180-194.

Prabhu NV, et al. *Cardiol Res Pract*.2020;2020:1236968.

Blumenthal JA, et al. *Circulation*.2016;133(14):1341-50.

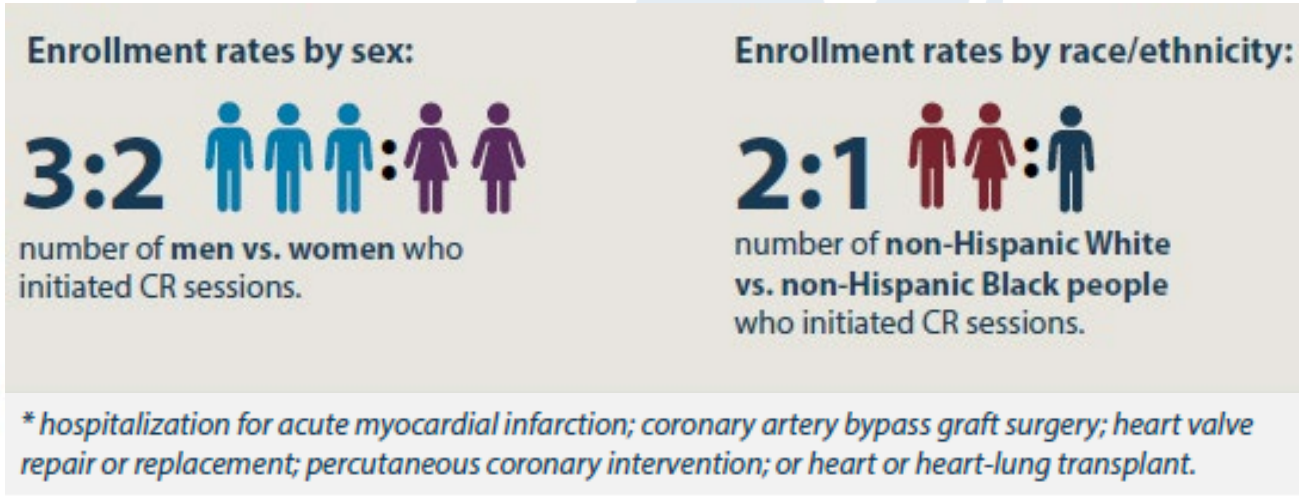
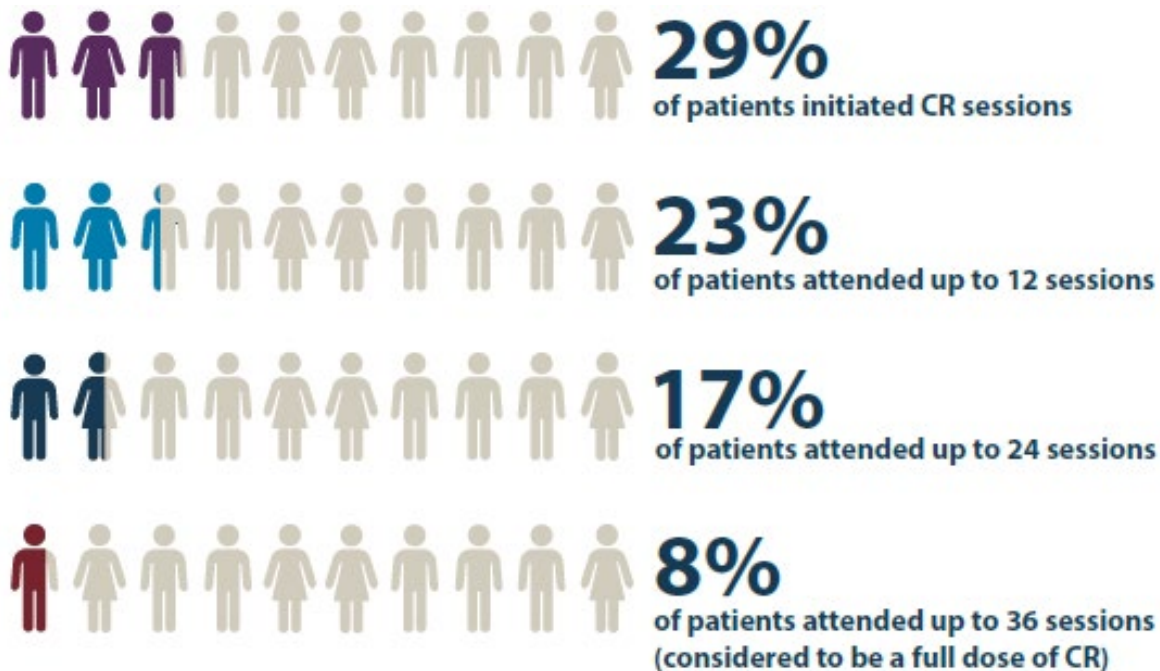
AACVPR Guidelines for CR Programs, 6th Edition.2021.

Shah ND, et al. *Am J Med*.2009;122(10):961e7-13.

Colberg SR, et al. *Diabetes Care*.2016;39(11):2065-2079.

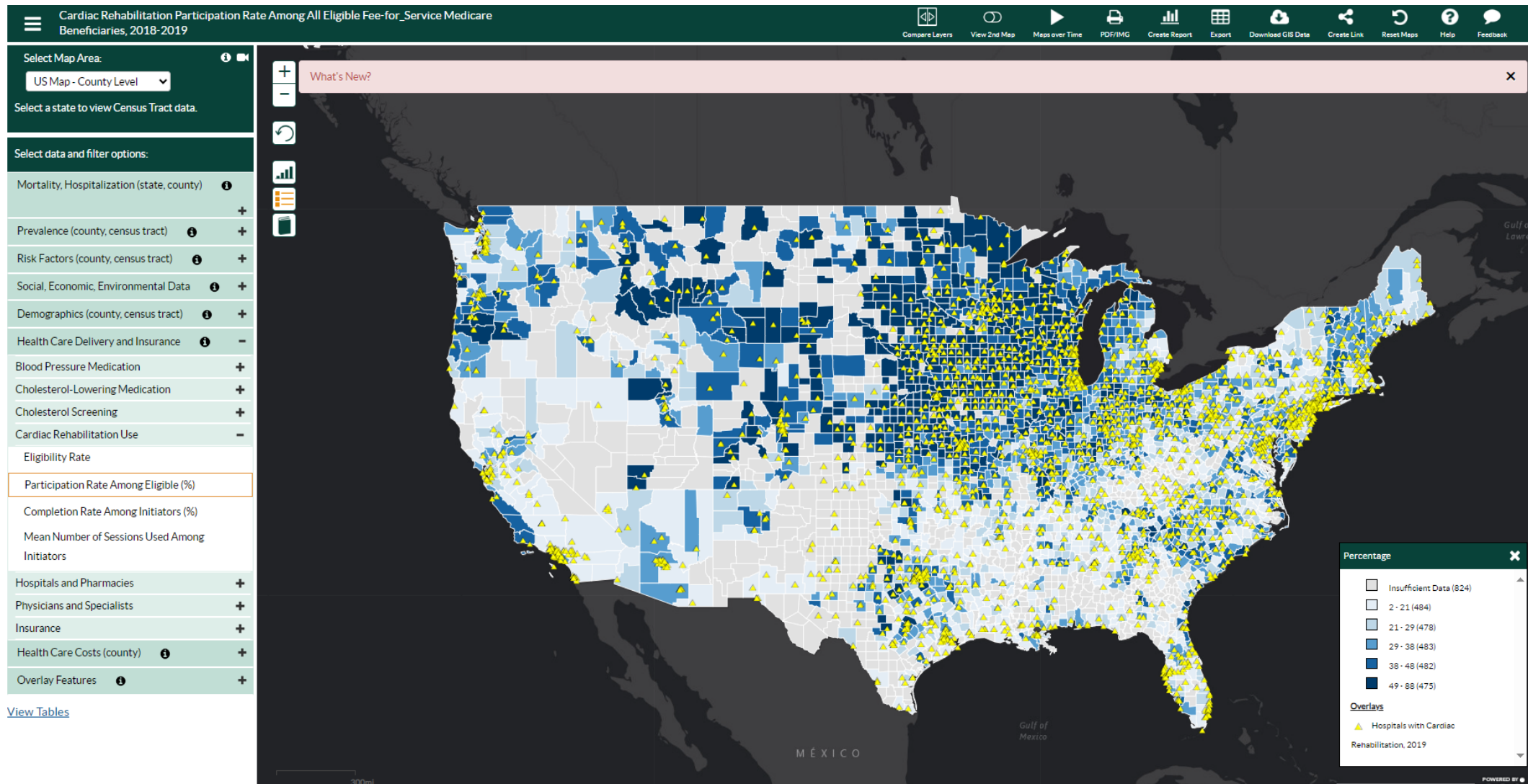
Image: Funahashi T, et al. *NEJM Catalyst*. 2019 and ©Massachusetts Medical Society.

Cardiac Rehabilitation Enrollment, Engagement, and Completion Among Medicare Beneficiaries Aged 65 and Over who had a primary qualifying event* in 2017:



Keteyian SJ, Jackson SL, Chang A, et al. Tracking Cardiac Rehabilitation Utilization in Medicare Beneficiaries: 2017 Update. *J Cardiopulm Rehabil Prev.* 2022;42(4):235-245.

Cardiac Rehabilitation Participation Rate Among All Eligible Fee-for-Service Medicare Beneficiaries, 2018-2019



Centers for Disease Control and Prevention. Interactive Atlas of Heart Disease and Stroke. Available at <https://www.cdc.gov/dhdsp/maps/atlas/>. Accessed Sep 21, 2023.

Cardiac Rehabilitation Health Equity Issues: Implementation

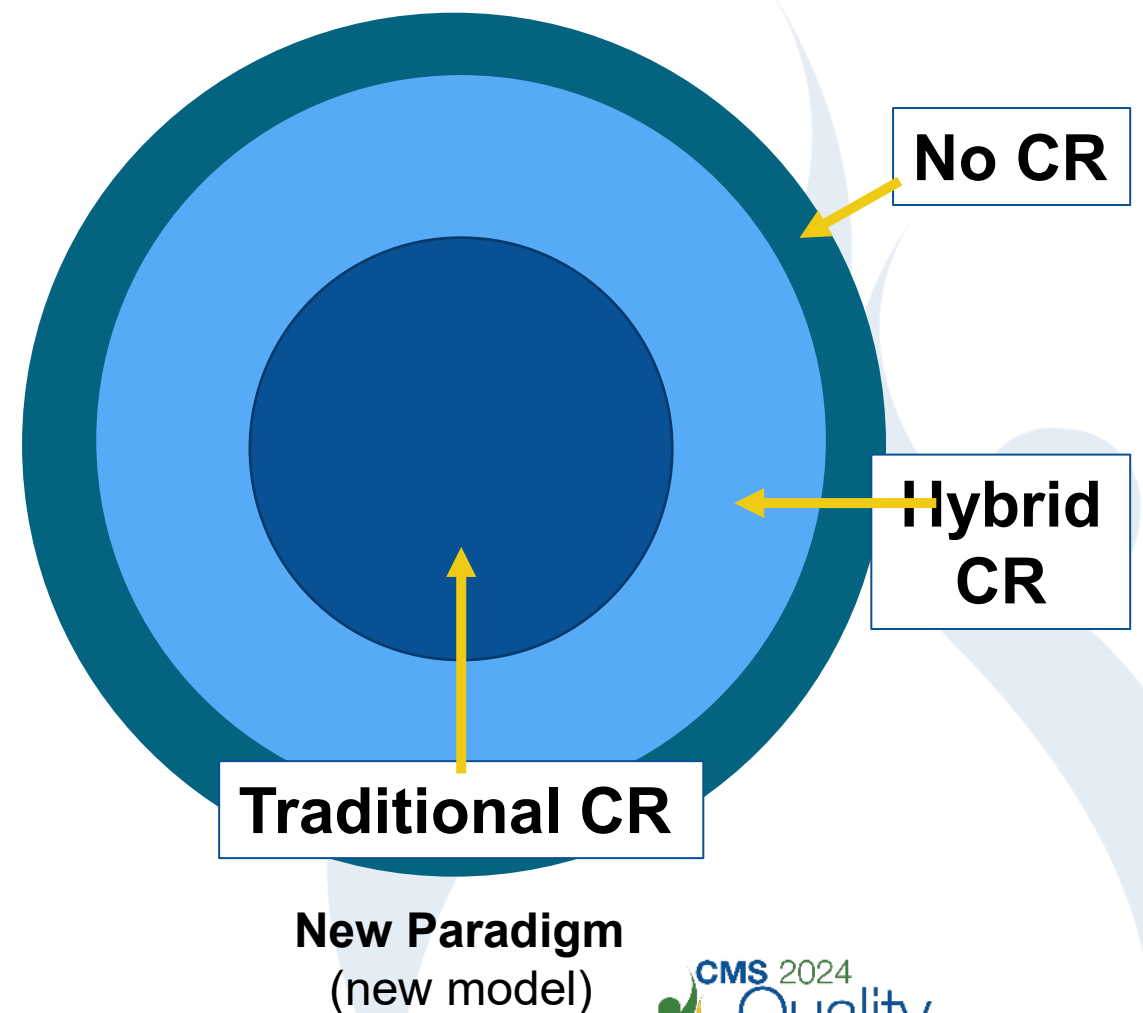
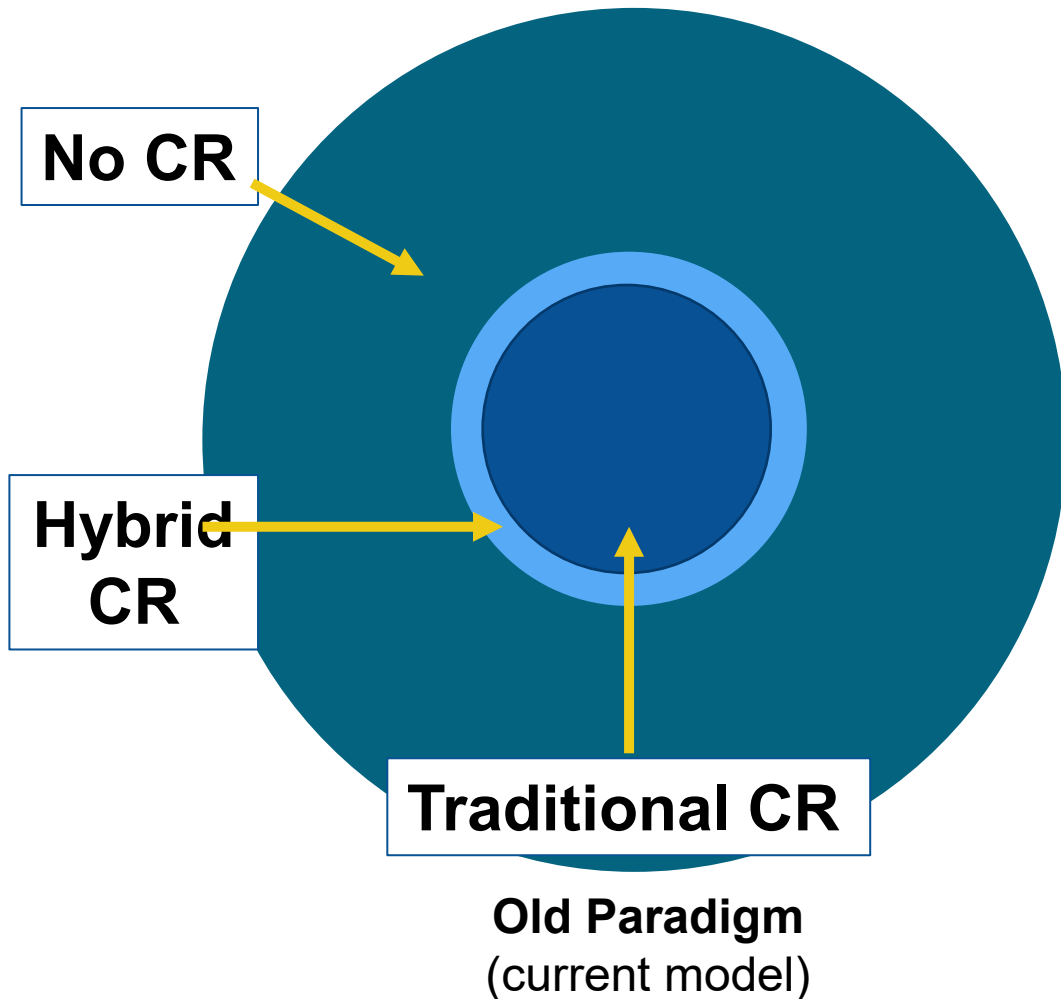


- CR not available or integrated into cardiovascular care
- No clear, consistent signal to patients and family members
- No automated electronic referral processes with an “opt out” option
- Patient-level barriers to participate
 - Logistics of attending
 - Cost-sharing
 - Competing responsibilities
 - Cultural and language barriers

Ghisi GL, et al. *Clin Cardiol.* 2013;36(6):323-335.

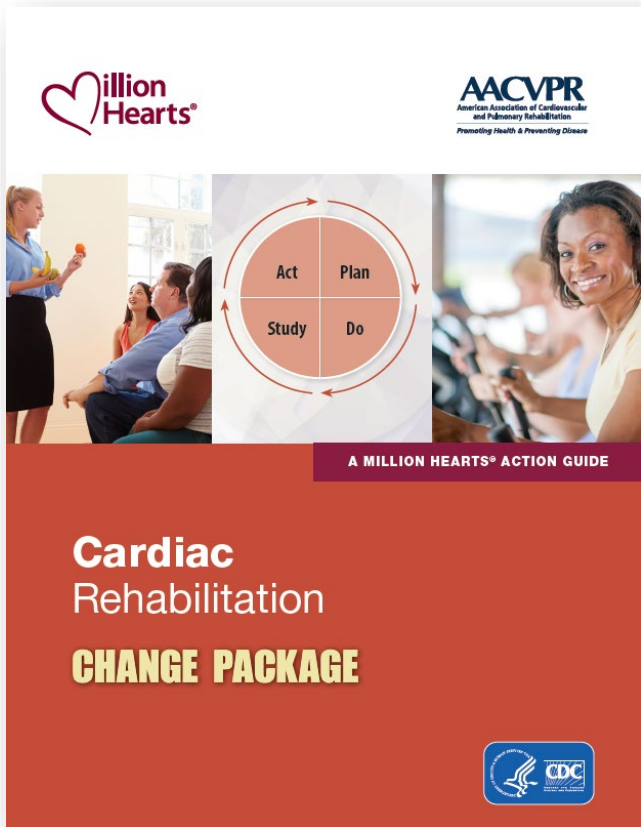
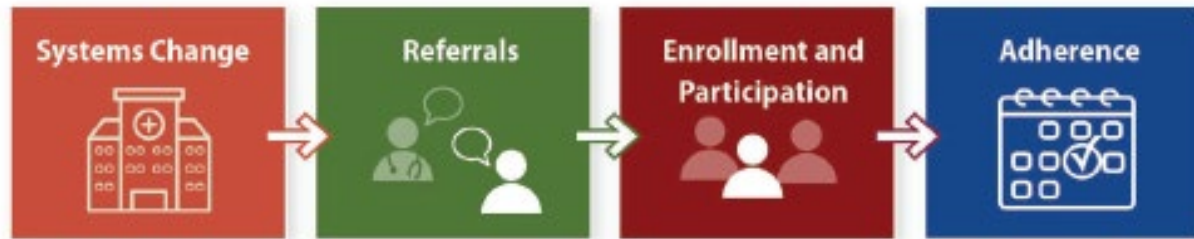
Ades PA, et al. *Mayo Clin Proc.* 2017;92(2):234-242.

New Paradigm to Optimize Use of Cardiac Rehabilitation



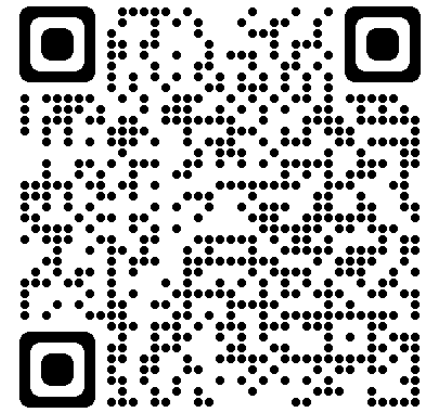
Million Hearts®/American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) Cardiac Rehabilitation Change Package (CRCP)

Figure 1. Cardiac Rehabilitation Change Package Focus Areas



What's new (in 2023):

- Making the business case for CR
- CR program staffing models
- More tools for implementing automatic referrals with care coordination (from AHRQ's TAKEheart)
- Strategies to build equity in CR enrollment
- New tools for hybrid CR programs
- And More!



University of California, San Francisco - Cardiac Rehabilitation Model Matrix

	Center	Hybrid	Home	Notes
Risk				
Low or Mod, HF+ICD, Dep+Rx	✓	✓	✓	
High	✓	⚠	⛔	Can consider Hybrid after improvement with Center
Transportation/Work				
Lives < 1 hr drive	✓	✓	✓	
Lives > 1 hr drive, transport issues, work conflicts	⛔	✓	✓	If not appropriate for Hybrid or Home, refer locally
Home/Community Exercise				
Challenging	✓	⛔	⛔	
Feasible	✓	✓	✓	
Phone/Video				
Challenging	✓	⚠	⛔	
Feasible	✓	✓	✓	
Co-pay				
Can afford co-pay	✓	✓	✓	
Difficulty with co-pay	⛔	✓	✓	

CRCP, 2nd Ed. Quick Reference

Adherence

Identify Populations At Risk for Low Engagement

Know the characteristics that are predictive of attendance and dropout to identify patients at particular risk to offer extra support

Address Patient Barriers

Address the patient's social needs related to CR participation

Offer transportation support

Offer gender-tailored CR sessions

Assist patients with high out-of-pocket costs or economic burden

Establish a philanthropic fund to partly underwrite CR costs for patients with high co-payments or without insurance

Improve Patient Engagement

Incorporate motivational and financial incentives for meeting goals for session attendance

Automate reminders and communication for CR sessions

Connect enrolled patients with a CR graduate patient ambassador or "sponsor"



Cardiac Rehabilitation Collaborative (CRC)

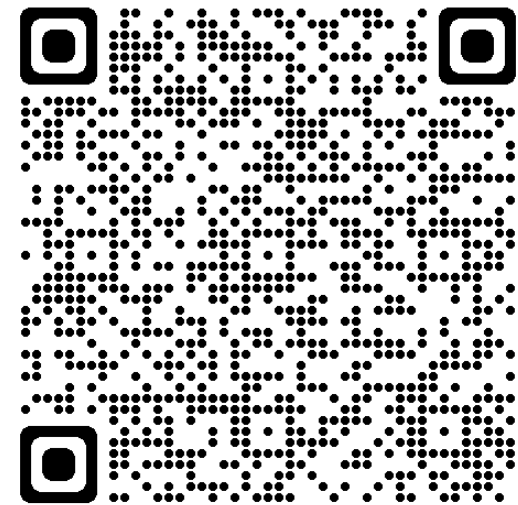
- Quarterly forums to share information, ask questions, assess progress
- >700 professionals and patients from >250 organizations
- Shared 'working action plan' of objectives and strategies

Quarter 2 CRC Meeting:

May 23, 2024 (1:00 PM – 2:30 PM ET)

<https://millionhearts.hhs.gov/about-million-hearts/optimizing-care/cardiac-rehabilitation-CRC.html>

Send questions or updates to MillionHeartsCRC@cdc.gov




Testimonials from CR Participants



“As women we really need to talk about what’s going on with our bodies. The women in my **cardiac rehab program** talk. We let each other know how we’re doing. And it’s very good to know **you’re not alone.**”

Janna
Coronary Artery Bypass Graft Surgery Patient
Cardiac Rehabilitation Graduate

 **#CRSavesLives**

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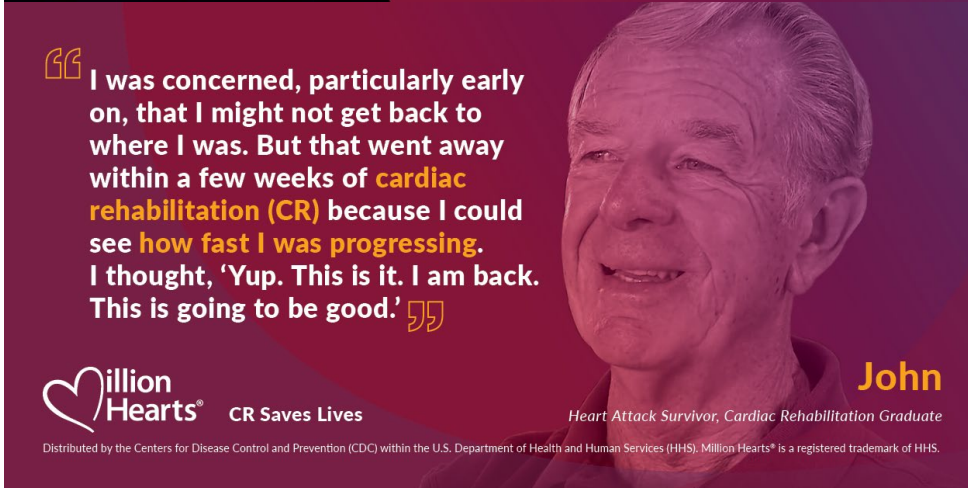


“**Cardiac rehabilitation (CR) saved my life in many ways.** The nurses and exercise physiologists gave me the confidence that my heart would heal. Since then, I have earned a doctorate, gotten married, and have a new lease on life.”

Lyn | Heart Disease Survivor and Thriver
Cardiac Rehabilitation Graduate


 **#CRSavesLives**

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“I was concerned, particularly early on, that I might not get back to where I was. But that went away within a few weeks of **cardiac rehabilitation (CR)** because I could see **how fast I was progressing.** I thought, ‘Yup. This is it. I am back. This is going to be good.’”

John
Heart Attack Survivor, Cardiac Rehabilitation Graduate

 **CR Saves Lives**

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“You have a team that really wants to know how you are, what you ate, and what medications you’re taking . . . If they didn’t care so much, I would not be here today. **Cardiac rehabilitation (CR) saved my life.**”

Patricia | Living with Stable Angina
Cardiac Rehabilitation Graduate

 **#CRSavesLives**

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Thank you

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CR: MillionHeartsCRC@cdc.gov



Creating an Optimal
Environment for Quality
Healthcare for Individuals,
Families, and Communities

Reducing Hypertension-Related Maternal Health Disparities

Taylor E. Streeter, MPH
Health Scientist, ASRT Inc.
Million Hearts[®]

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



Million Hearts[®] 2027 Priorities (2)

Building Healthy Communities

Decrease **Tobacco Use**

Decrease **Physical Inactivity**

Decrease **Particle Pollution Exposure**

Optimizing Care

Improve Appropriate **A**spirin or **A**nticoagulant Use

Improve **B**lood Pressure Control

Improve **C**holesterol Management

Improve **S**moking Cessation

Increase Use of **Cardiac Rehabilitation**

Focusing On Health Equity

Pregnant and Postpartum Women with Hypertension

People from Racial/Ethnic Minority Groups

People with Behavioral Health Issues Who Use Tobacco

People with Lower Incomes

People Who Live in Rural Areas or Other 'Access Deserts'

Maternal Health Disparities



Prevalence of Cardiovascular Risk Factors in Pregnant Women with Live Births, 1989-2018

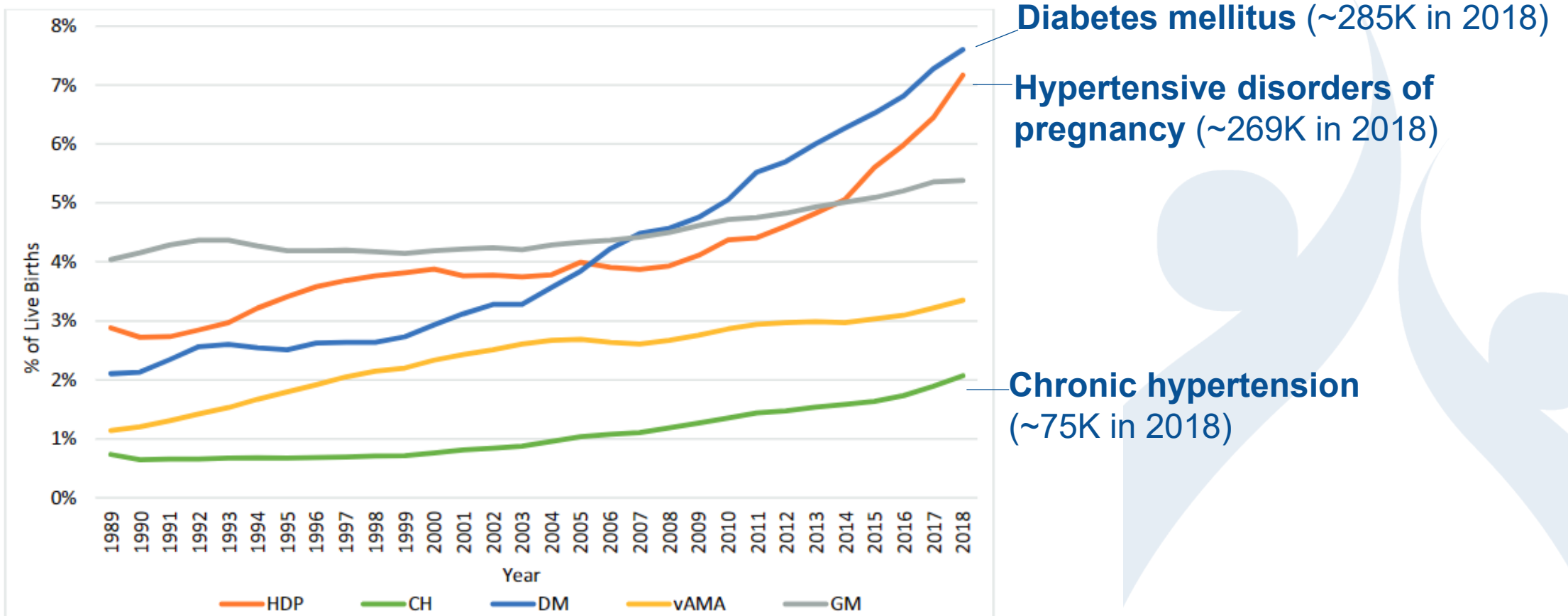
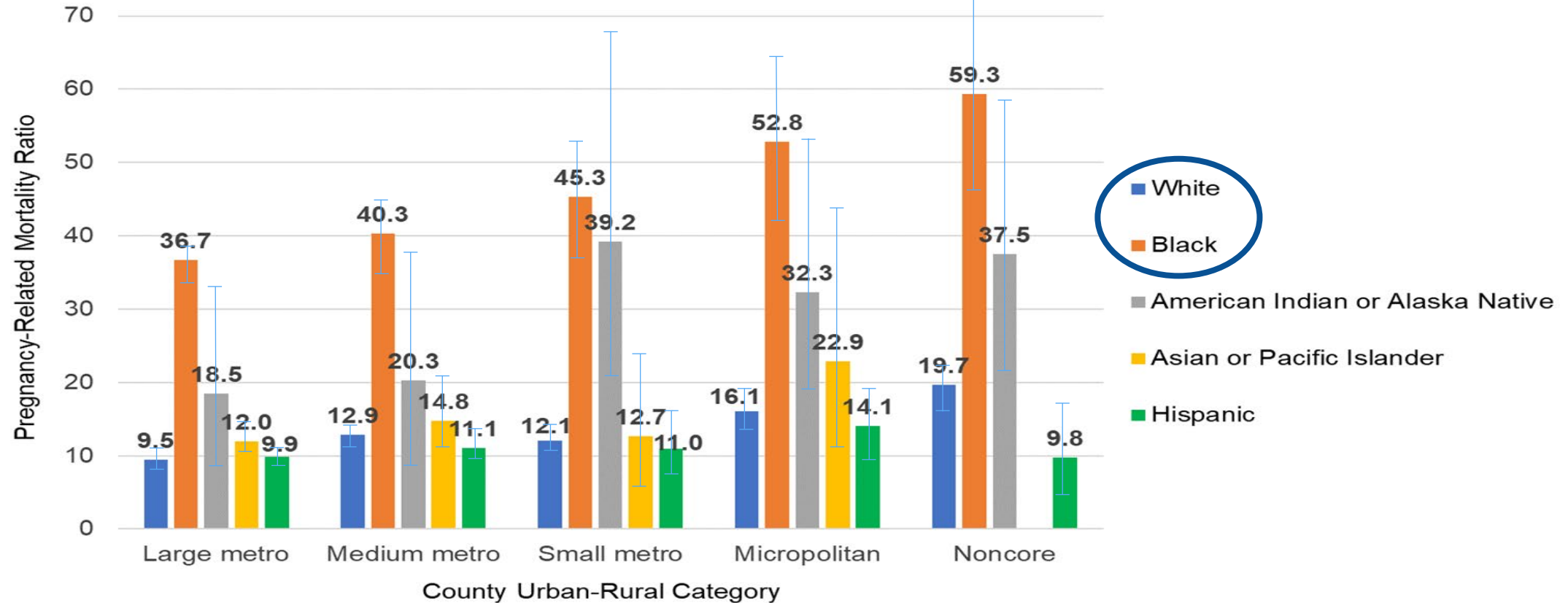


Fig. 1. Trends in the Prevalence of the Pregnancy Risk Factors/Complications: 1989–2018. The figure presents the annual proportions of live births attributed to US women with hypertensive disorders of pregnancy (HDP), chronic hypertension (CH), diabetes mellitus (DM), very advanced maternal age (vAMA), and grand multiparity (GM).

Bornstein E, et al. Concerning trends in maternal risk factors in the United States: 1989-2018. EClinicalMedicine. 2020 Nov 20;29-30:100657.

Urban-Rural Differences in Pregnancy-Related Mortality in White and Black Women

Pregnancy-Related Mortality Ratio by County Urban-Rural Category, by Race/Ethnicity, 2011-2016



Merkt PT, et al. Urban-rural differences in pregnancy-related deaths, United States, 2011-2016. Am J Obstet Gynecol. 2021 Aug;225(2):183.e1-183.e16.

Strategies to Address Hypertension in Pregnancy

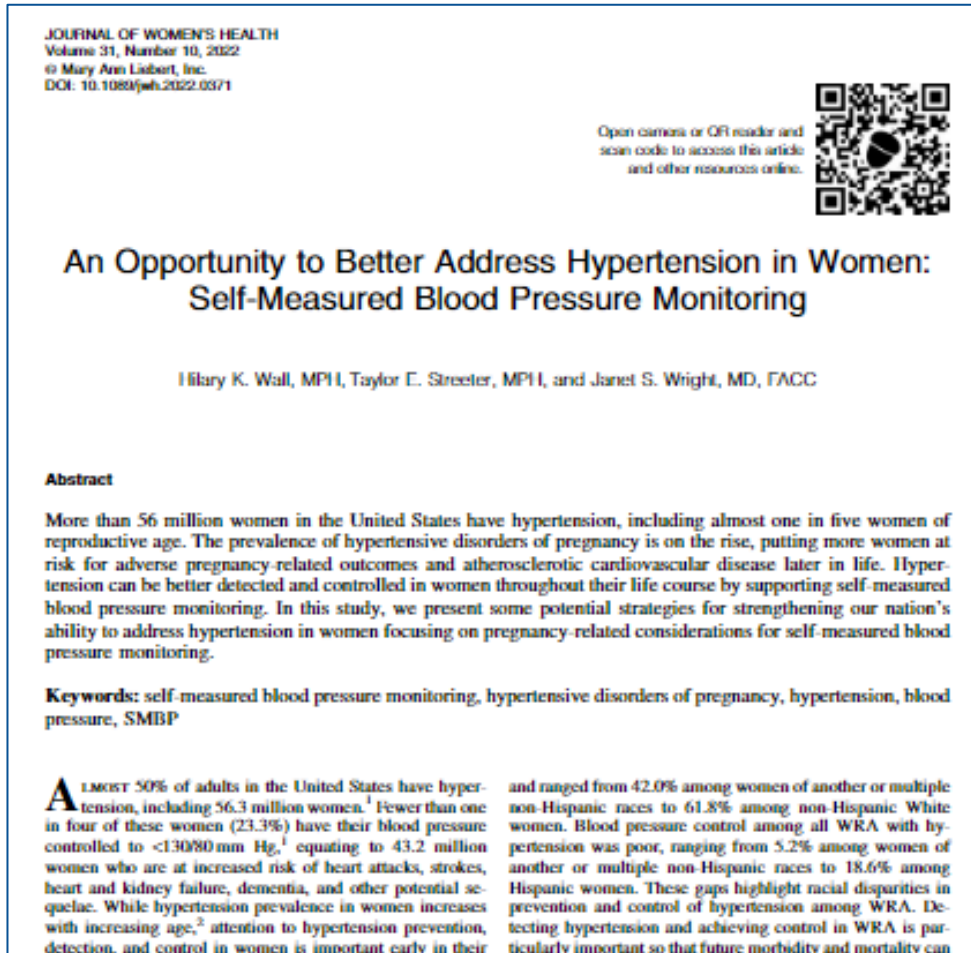
Focusing On Health Equity – Pregnant and Postpartum Women with Hypertension



- **Focusing on hypertensive disorders of pregnancy**
 - Champion **widespread SMBP use**
 - Close gaps in Medicaid coverage for SMBP devices, medications; extending coverage to 1-year postpartum
 - Support opportunities to close care gaps in transition of care between OB/GYN and primary care teams
 - Promote aspirin use to prevent preeclampsia

SMBP = self-measured blood pressure monitoring

An Opportunity to Better Address Hypertension in Women – SMBP



■ Explores:

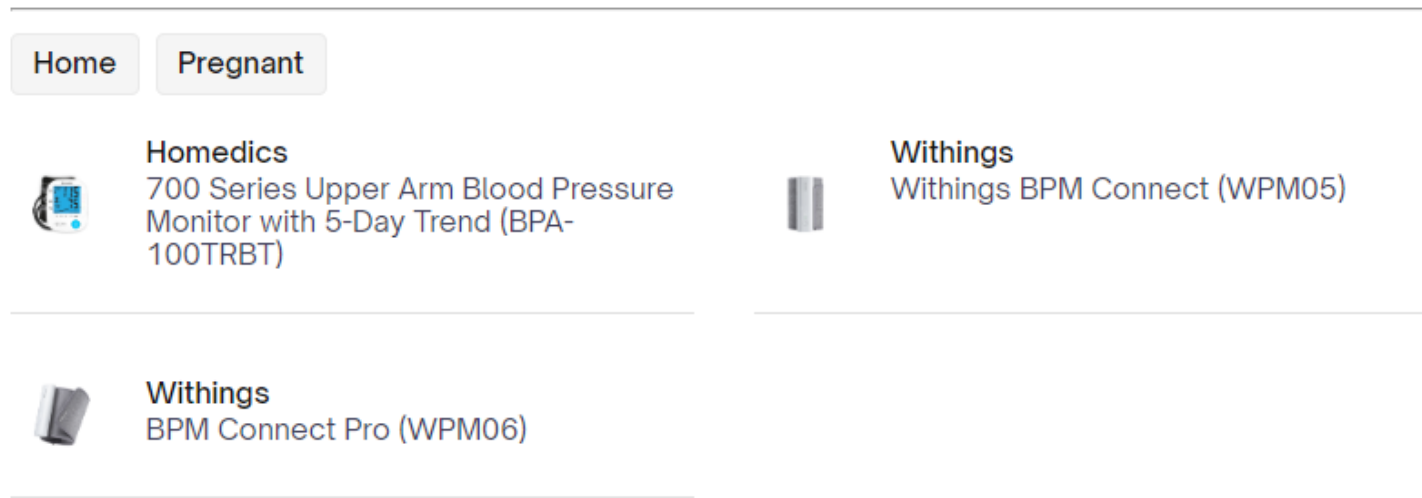
- The need for more SMBP devices specifically validated in pregnant populations
- Importance of properly sized blood pressure cuffs in pregnancy
- SMBP coverage and reimbursement
- Pregnant women with hypertension are hiding in plain sight
- Need to leverage clinical quality measures to drive BP improvements

Wall HK, et al. J Womens Health. 2022 Sep 26. doi: 10.1089/jwh.2022.0371.

SMBP = self-measured blood pressure monitoring

Validated Devices in Pregnant Persons

- U.S. Blood Pressure Validated Device Listing (VDL) - <https://www.validatebp.org/>



- Stride BP Validated Devices for Blood Pressure Measurement in Pregnancy/Preeclampsia - <https://www.stridebp.org/bp-monitors/37-pdfs/734-home?format=pdf&tmpl=component&box=pregnancy>



Resources



Million Hearts® SMBP Forum: SMBP for Pregnant and Postpartum Women

■ Expert panel and stakeholders in SMBP/maternal health discussed

- Current evidence-base that supports the use of SMBP to improve maternal health outcomes and prevent adverse events
- Current data gaps and challenges to widespread SMBP use
- Emerging solutions and best practices for using SMBP in pregnant and postpartum women with hypertension
- September 2023 SMBP Forum recording - <https://www.youtube.com/watch?v=UGC0DTWdpTw>
- December 2022 SMBP Forum recording - <https://www.youtube.com/watch?v=ZlZlq3lqV38>
- June 2020 SMBP Forum recording - <https://www.youtube.com/watch?v=o1v7QTERIXQ>

SMBP = self-measured blood pressure monitoring

Million Hearts® Hypertension in Pregnancy Change Package

- **Coming Soon!**
- Joint effort from Million Hearts and CDC, cobranded with national clinician organizations
- Target audience – **outpatient** clinicians who treat pregnant and postpartum populations (i.e., OBGYNs, family physicians, midwives, PCPs)
- Planned release – May 2024.

PCP = Primary care provider

Thank You!

Questions?

Taylor Streeter – oqo3@cdc.gov





Questions & Answers

Open Discussion

<https://millionhearts.hhs.gov/>
MillionHearts@cdc.gov