Million Hearts® 2022

Opportunities in Rural Communities

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Division for Heart Disease and Stroke Prevention

Centers for Disease Control and Prevention

Disclaimer

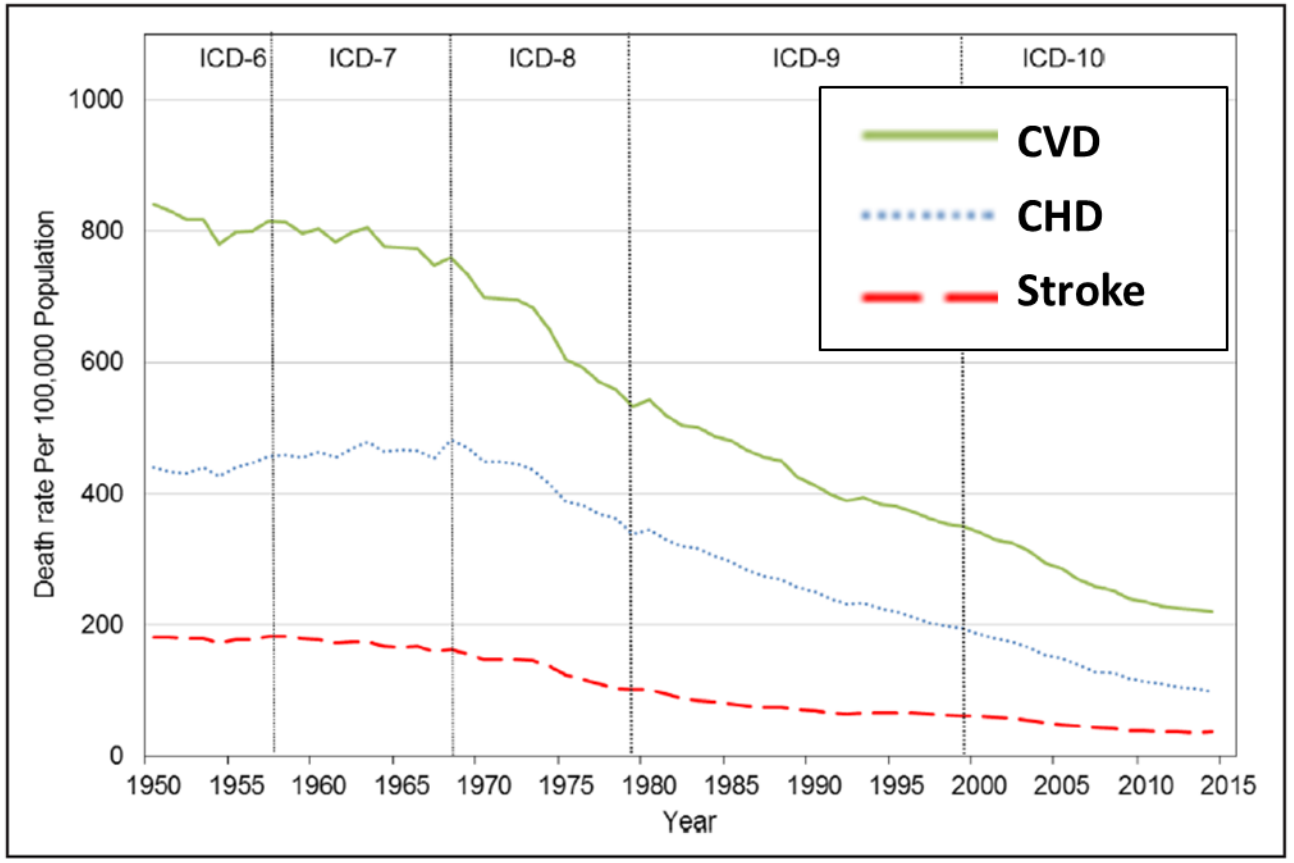
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention

Heart Disease and Stroke Burden

- More than **1.5 million** people in the U.S. suffer from heart attacks and strokes per year[1]
- More than **800,000** deaths per year from cardiovascular disease (CVD)[1]
- CVD costs the U.S. **hundreds of billions** of dollars per year[1]
- CVD is the greatest contributor to racial disparities in life expectancy[2]
  - Considerable disparity among younger black adults living in rural compared to metro areas[3]

1. Benjamin EJ et al. Heart Disease and Stroke Statistics-2017 Update: A Report From the American Heart Association. Circulation 2017;135(10):e146–603.
2. Kochanek KD, Arias E, Anderson RN. How did cause of death contribute to racial differences in life expectancy in the United States in 2010? NCHS data brief, no 125. Hyattsville, MD: National Center for Health Statistics. 2013
3. Ritchey MD et al. US trends in premature heart disease mortality over the past 50 years: Where do we go from here? Trends in Cardiovascular Medicine. 2019; pii: S1050-1738(19)30134-3.

Heart Disease and Stroke Trends 1950-2015



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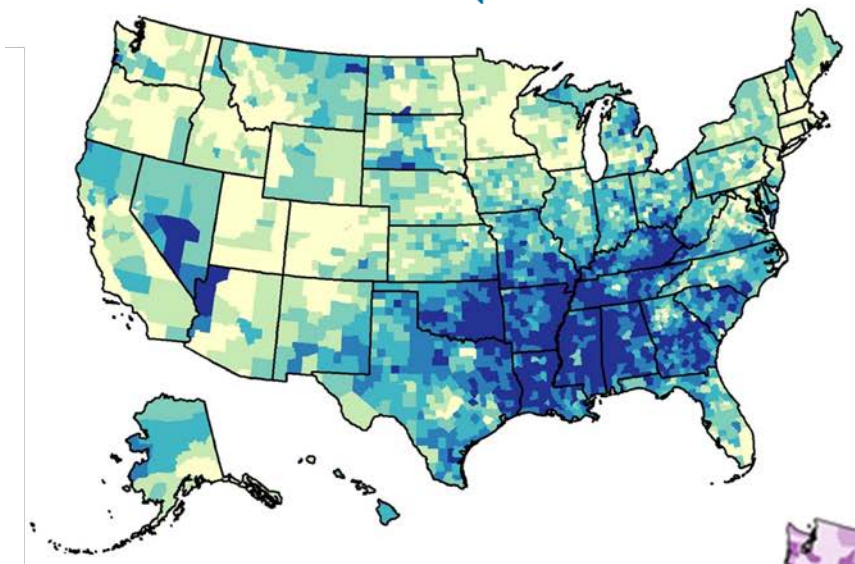
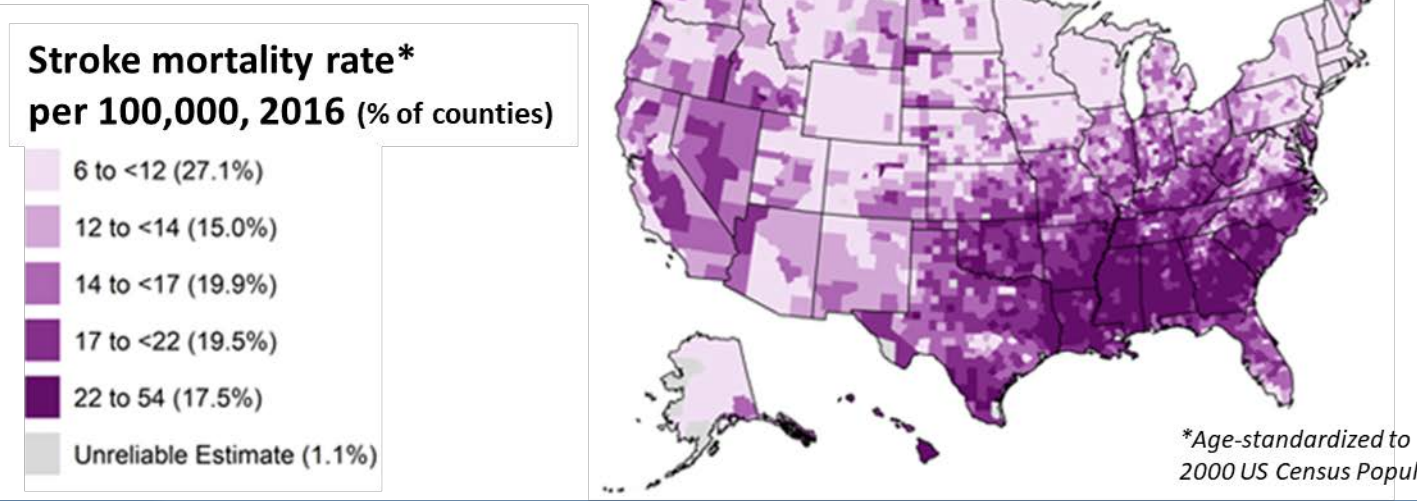
Mensah GA, Wei GS, Sorlie PD, et al. Decline in Cardiovascular Mortality – Possible Causes and Implications. Circulation Research. 2017;120:366-380.

Heart Disease and Stroke Mortality Among US Adults Aged 35–64

Ritchey MD et al. *Trends Cardiovasc Med*. 2019;pii:S1050-1738(19)30134-3.
Hall EW et al. *Stroke*. 2019;50(12):3355-3359





*Age-standardized to the 2000 US Census Population

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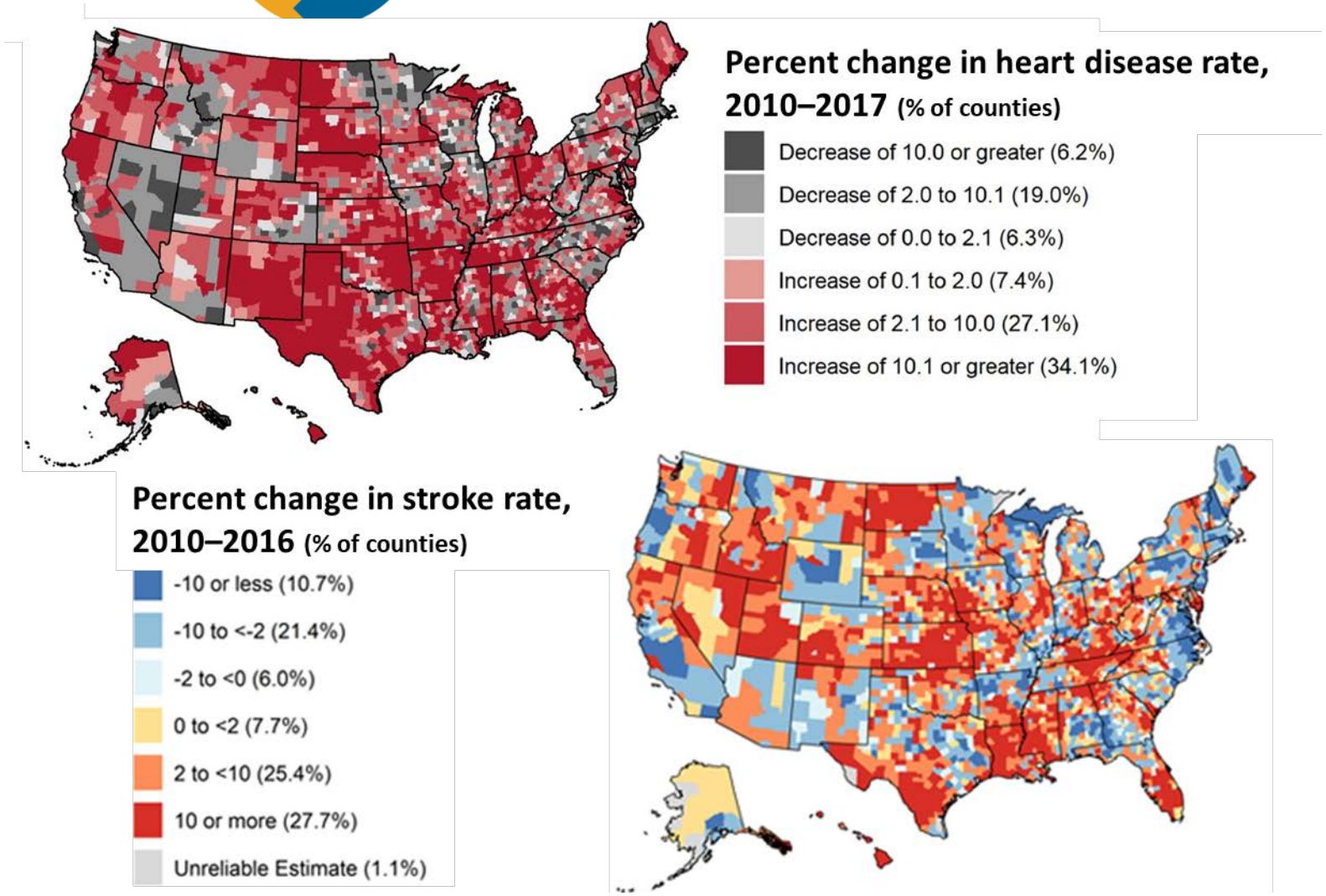
Alarming Mortality Rate Changes Among Adults Aged 35–64

Ritchey MD et al. *Trends Cardiovasc Med*. 2019;pii:S1050-1738(19)30134-3.
Hall EW et al. *Stroke*. 2019;50(12):3355-3359



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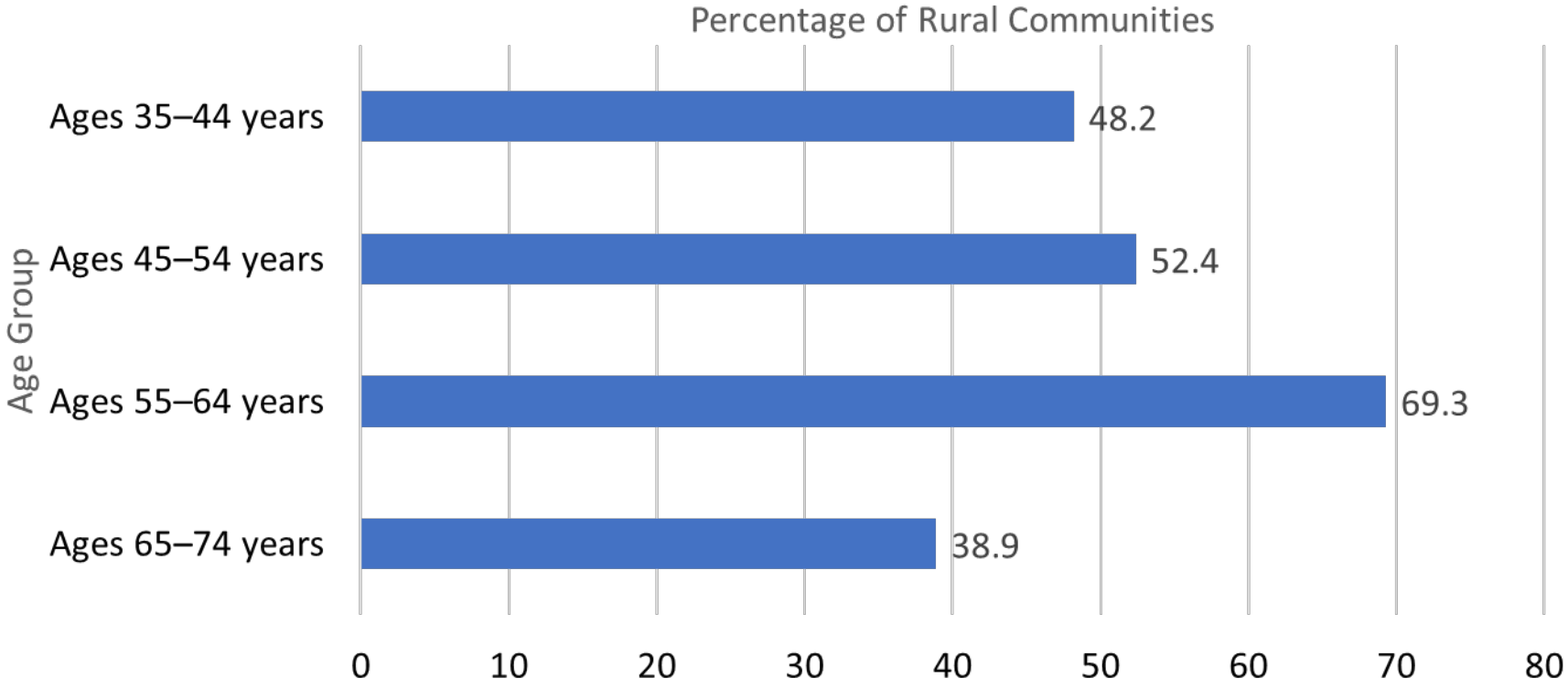
Percentage of Rural Counties Experiencing Increased Heart Disease Mortality by Age Group, 2010–2015



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Vaughan AS, Ritchey MD, Hannan J, Kramer MR, Casper M. Widespread recent increases in county-level heart disease mortality across age groups. Ann Epidemiol. 2017 Dec;27(12):796-800.

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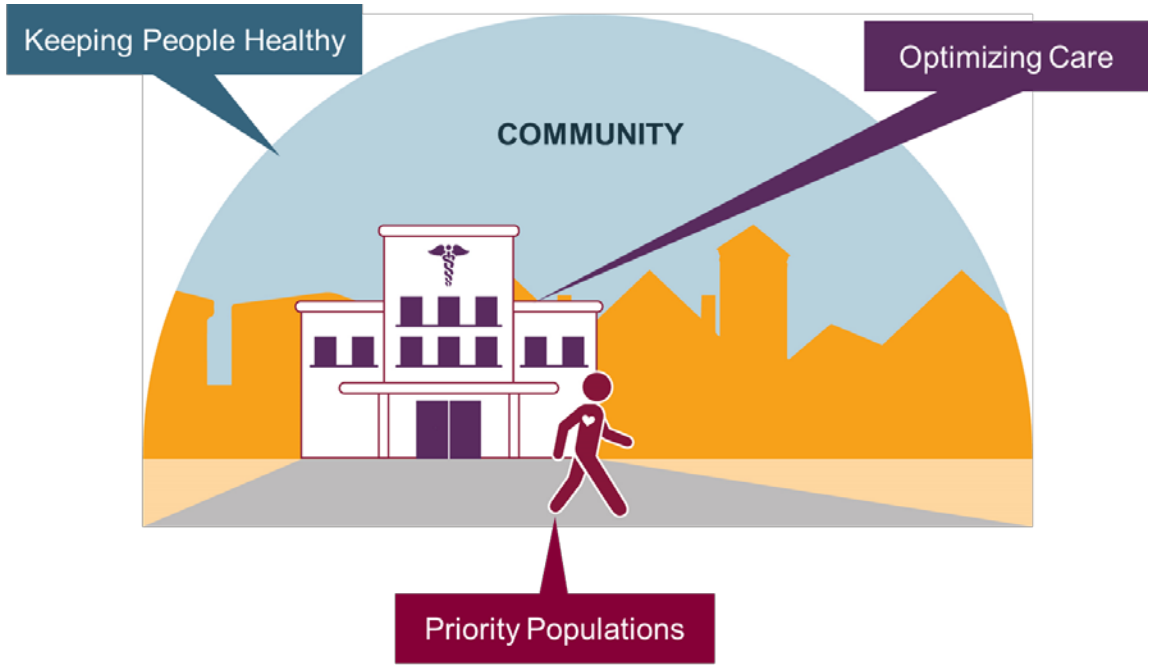
- National initiative co-led by Centers for Disease Control and Prevention (CDC) and Centers for Medicare & Medicaid Services (CMS)

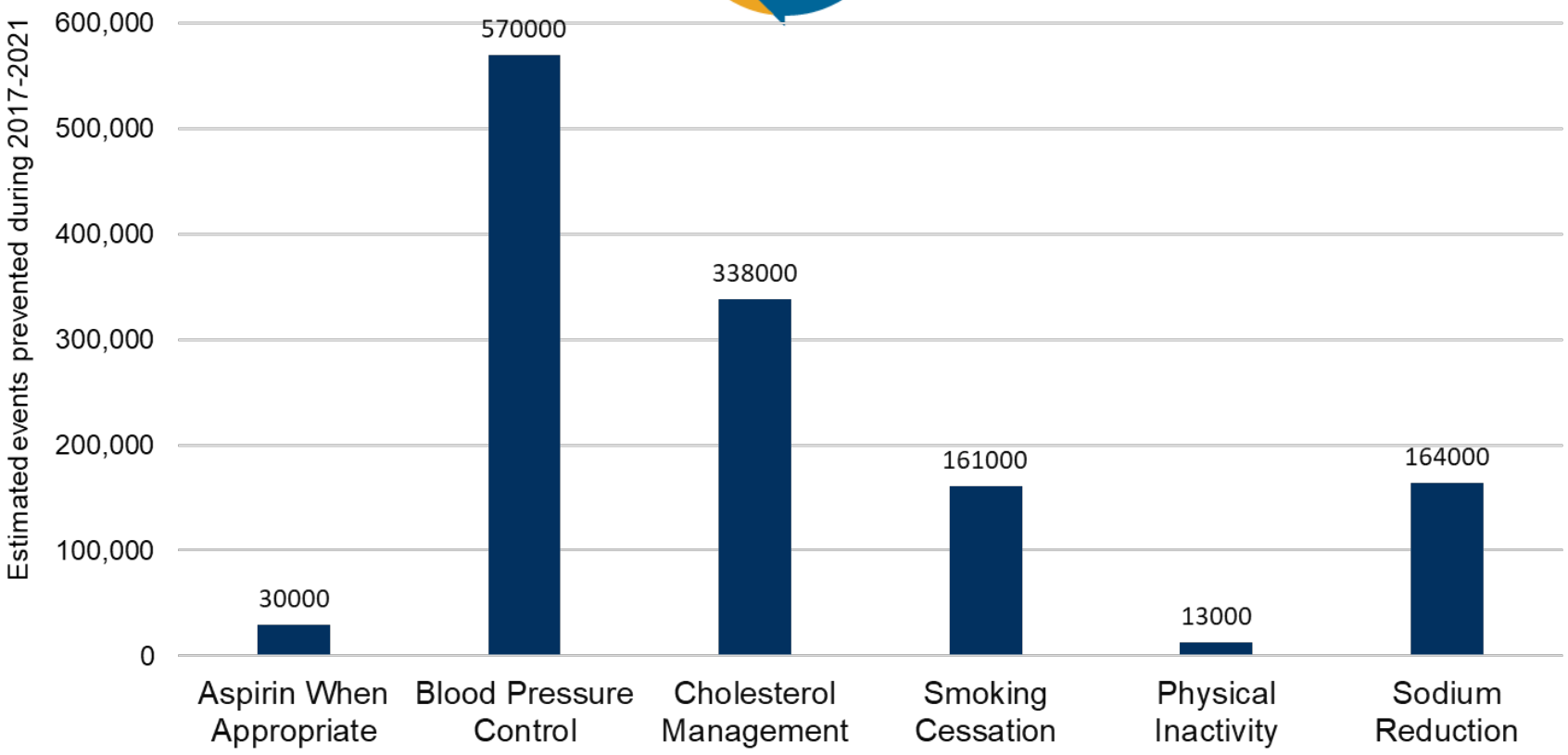


Aim

Prevent 1 million—or more—heart attacks and strokes in the next 5 years

Partners (select)

- Healthcare Resources and Services Administration
- Agency for Healthcare Research and Quality
- State and local departments of health
- National Association of Community Health Centers
- National Association of Chronic Disease Directors
- American Medical Association
- American Heart Association
- Million Hearts Cardiac Rehabilitation Collaborative
- American Association of Cardiovascular & Pulmonary Rehabilitation
- National Kidney Foundation
- And MANY, many others…



Notes: Aspirin when appropriate reflects aspirin use for secondary prevention only; total does not equal sum of events prevented by risk factor type as those totals are not mutually exclusive; applies ratios obtained from PRISM and ModelHealth:CVD to estimate the number of total events, to more closely align with the Million Hearts event definition (unpublished)
Data sources: Aspirin when appropriate – 2013-14 NHANES; blood pressure control and cholesterol management – 2011-14 NHANES; smoking cessation and physical inactivity – 2015 NHIS; sodium reduction – 2011-12 NHANES.

Million Hearts® 2022 Priorities

Keeping People Healthy
Reduce Sodium Intake
Decrease Tobacco Use
Decrease Physical Inactivity

Optimizing Care
Improve ABCS*
Increase Use of Cardiac Rehab
Engage Patients in Heart-healthy Behaviors

Improving Outcomes for Priority Populations
Blacks/African Americans with hypertension
35- to 64-year-olds
People who have had a heart attack or stroke
People with mental illness or substance use disorders who use tobacco

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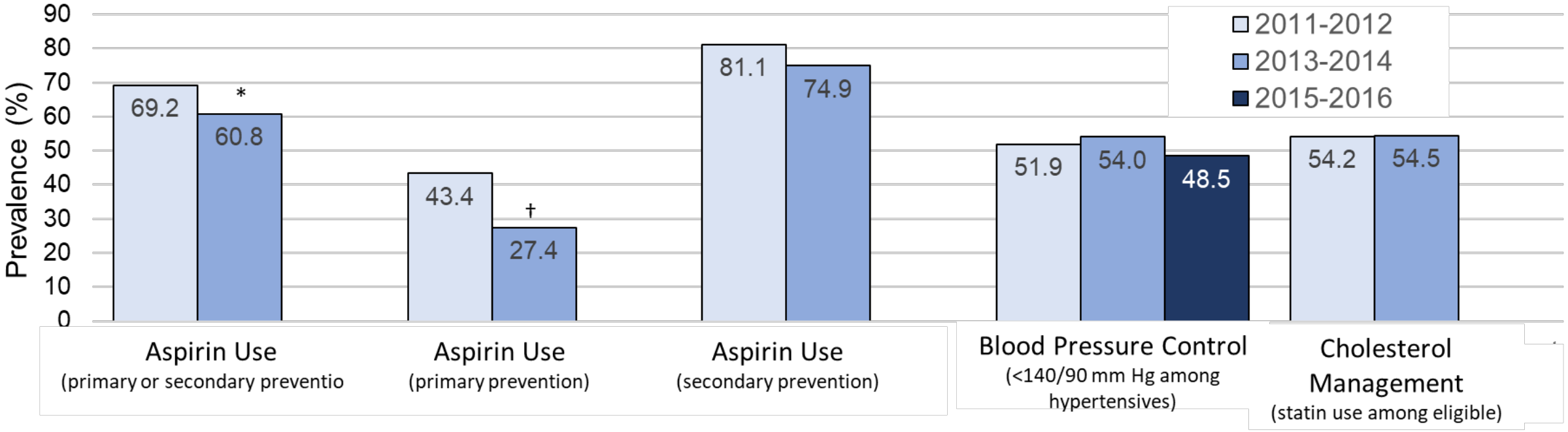
*Aspirin when appropriate, Blood pressure control, Cholesterol management, Smoking cessation

Clinical Strategies

Prevalence of Million Hearts® 2022 clinical strategies to prevent cardiovascular events among adults—United States, 2011–2016



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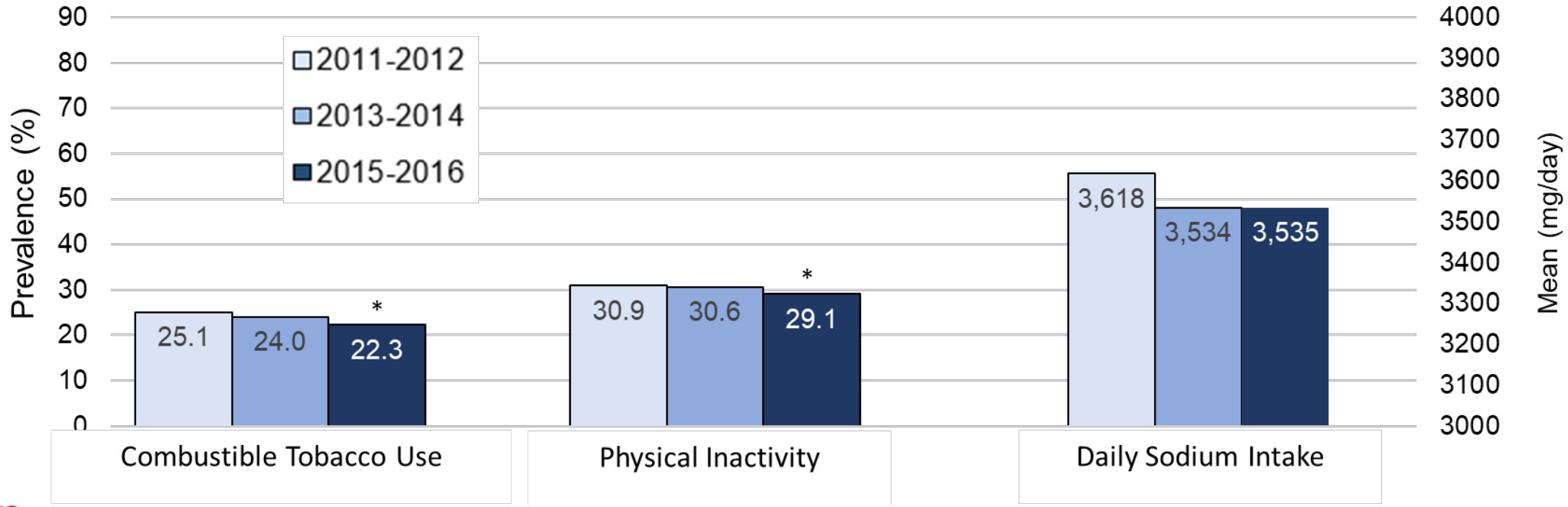
Source: National Health and Nutrition Examination Survey
* p<0.01; † p< 0.05

Wall HK, et al. MMWR. 2018;67(35):983-991

Community Risk Factors

Prevalence of Million Hearts® 2022 community-based cardiovascular risk factors among adults—United States, 2011–2016



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Sources:National Survey on Drug Use and Health, Substance Abuse and Mental Health Services Administration (SAMHSA); National Health and Nutrition Examination Survey, CDC; National Health Interview Survey, CDC

* p<0.01

Wall HK, et al. MMWR. 2018;67(35):983-991

Missed Opportunities

9.0 M not taking aspirin as recommended
40.1 M with uncontrolled high blood pressure
39.1 M not using statins when indicated
54.1 M tobacco users
\+ **70.9 M** who are physically inactive

213.1 M missed opportunities

55% of these opportunities are in adults aged 35–64 years

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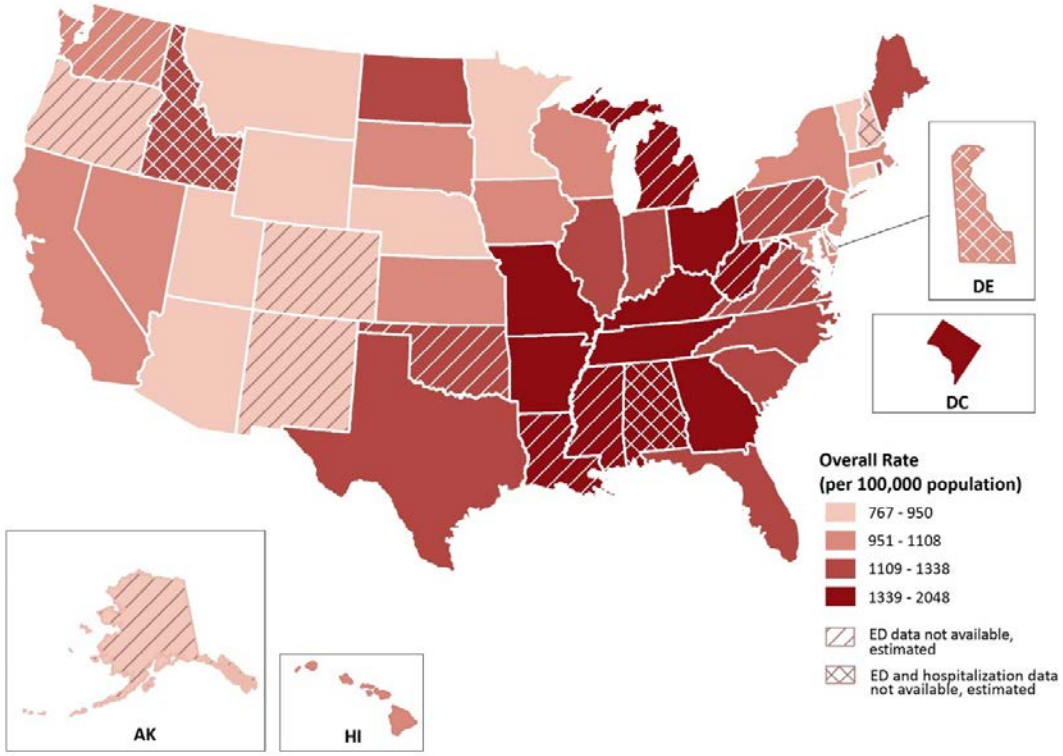
Wall HK, et al. MMWR. 2018;67(35):983-991

Million Hearts® -preventable event rates among adults aged ≥18 years by state, 2016



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Ritchey M, et al. MMWR. 2018;67(35):974-982

Identifying and Spreading Best Practices

- Publications
- Clinical quality measures/measure alignment
  - https://millionhearts.hhs.gov/data-reports/cqm/measures.html
- Treatment Protocols
  - https://millionhearts.hhs.gov/tools-protocols/protocols.html
- “Action Guide” series
  - https://millionhearts.hhs.gov/tools-protocols/action-guides.html
- Recognition

Clinical Quality Measures

Domain	NQF #	CMS #
Aspirin when appropriate	0068	164
Blood pressure control	0018	165
Cholesterol management (statin use)	n/a	347
Smoking cessation (assessment and treatment)	0028	138

- Included in CMS Quality Payment Program/Merit-based Incentive Payment System (QPP/MIPS)
  - Cardiology
  - Internal Medicine
  - General/Family Medicine

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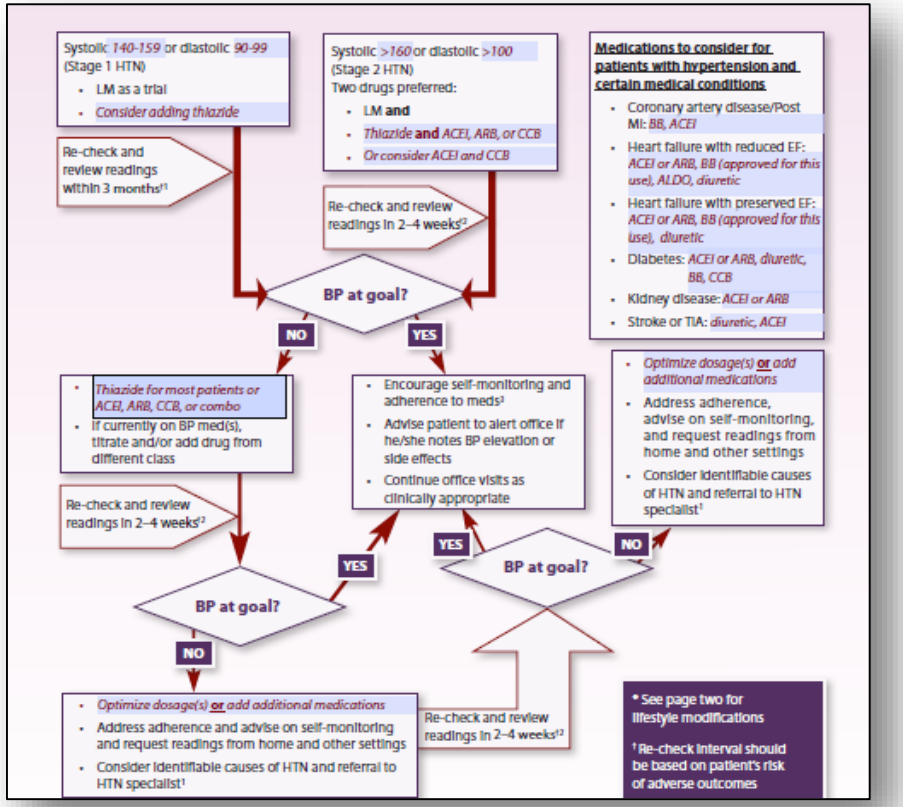
Clinical Quality Measure Alignment webpage on the Million Hearts website https://millionhearts.hhs.gov/data-reports/cqm/measures.html

Standardized Treatment Protocols

- Available for:
  - Hypertension control
  - Cholesterol management
  - Tobacco assessment and treatment
- Key components, implementation guidance
- Evidence-based protocols examples
- Customizable template
- Help address disparate populations



View and download protocols on the Million Hearts website: https://millionhearts.hhs.gov/tools-protocols/protocols.html

Hypertension Control Change Package

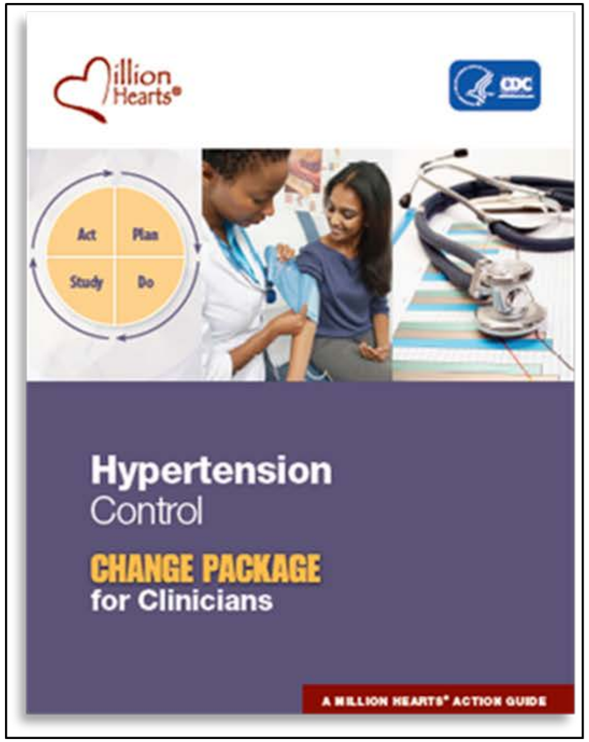


Table 1. Hypertension Control Change Package—Key Foundations (continued)

Change Concepts	Change Ideas	Tools and Resources
Implement a Policy and Process to Address BP for Every Patient with HTN at Every Visit	Develop HTN control policy and procedures	• American Medical Group Foundation. Provider Toolkit to Improvement Hypertension Control. BP Addressed for Every Hypertension Patient at Every Primary Care or Cardiology Visit:
	Leverage local Patient Centered Medical Home (PCMH) activities to help drive comprehensive approach to HTN management	
	Develop a flowchart for how hypertensive patients will be proactively tracked and managed	
Train and Evaluate Direct Care Staff on Accurate BP Measurement and Recording	Provide guidance on measuring BP accurately	
	Assess adherence to proper BP measurement technique	

Table 2. Hypertension Control Change Package—Population Health Management

Change Concepts	Change Ideas	Tools and Resources
Use a Registry to Identify, Track, and Manage Patients with HTN	Implement a HTN registry	• American Medical Group Association. Registry Used to Track Hypertension Patients: http://bit.ly/12k9MT1*
	Identify patients with elevated BP yet without a HTN diagnosis; diagnose HTN as appropriate	• Health Center Network of New York. Undiagnosed Hypertension Registry: http://bit.ly/1sUmOPG
	Use a defined process for outreach (e.g., via phone, mail, email, text message) to patients with uncontrolled HTN and those otherwise needing follow-up	• Redwood Community Health Coalition. Hypertension Recall Instructions: see Appendix B. • The Office of the National Coordinator for Health Information Technology. Quality Improvement in a Primary Care Practice: http://bit.ly/1tgdXdO • American Heart Association. Heart360. An Online Tool for Patients to Track and Manage Their Heart Health and Share Information: http://bit.ly/1hVJCWv
Use Clinician-Managed Protocols for Medication Adjustments and Lifestyle Recommendations	Use protocols to cover proactive outreach driven by registry use and respond to patient-submitted home BP readings	• Minnesota Board of Nursing. FAQ: Use of Condition-Specific Protocols: http://bit.ly/1wFw8YD • Kaiser Permanente. Protocol for Uncomplicated Hypertension: Registered Nurse Titration of Lisinopril, Hydrochlorothiazide, Atenolol, and Amlodipine: http://bit.ly/1u8S5sR • UNC Health Care Center. Standing Order: Antihypertensive Initiation and Titration: http://bit.ly/1thJlrE • Agency for Healthcare Research and Quality. Blood Pressure Titration Protocol for Diabetes Planned Visit: http://1.usa.gov/1rABLmk • Mercy Clinics, Inc. Hypertension Standing Orders: http://bit.ly/1032em6*
Use Practice Data to Drive Improvement	Determine HTN control metrics for the practice	• Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinic Practice Teams: Measurement Worksheet (pp.12-15): http://bit.ly/ZGoe6e • Health Center Network of New York. Specifications Hypertension Measures: http://bit.ly/1xErvxU
	Regularly provide a dashboard with BP goals,	• New York City Department of Health. Provider Dashboards: http://bit.ly/1wFB9Ao • New York City Department of Health. John Doe Dashboard: http://bit.ly/1zKuSsx • More detailed information: Your Practice Hypertension Panel Summary (http://bit.ly/1z31ADT) and Hypertension Panel Management Patient List

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Download the Hypertension Control Change Package on the on the Million Hearts website: https://millionhearts.hhs.gov/tools-protocols/action-guides/htn-change-package/index.html

‘Undiagnosed’ Hypertension

- National Association of Community Health Centers:
  - **Consolidated Change Package** - leveraging health IT, QI, and primary care teams to identify hypertensive patients hiding in plain sight
- **Hypertension Prevalence Estimator:**
  - For practices/health systems to use to estimate their expected hypertension prevalence among their patient population

Meador M, Osheroff JA, Reisler B. Improving Identification and Diagnosis of Hypertensive Patients Hiding in Plain Sight (HIPS) in Health Centers. Jt Comm J Qual Patient Saf. 2018 Mar;44(3):117-129

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Undiagnosed Hypertension webpage on the Million Hearts website https://millionhearts.hhs.gov/tools-protocols/hiding-plain-sight/index.html

Self-Measured Blood Pressure (SMBP) Resources

Million Hearts® SMBP Webpage
https://millionhearts.hhs.gov/tools-protocols/smbp.html

NACHC SMBP Patient Testimonials
http://www.nachc.org/taking-control-of-my-blood-pressure-patient-stories/

Target BP™: Patient-Measured BP
https://targetbp.org/blood-pressure-improvement-program/patient-measured-bp/

Million Hearts® SMBP Healthcare Communities Community
https://www.healthcarecommunities.org/ (Sign in to your free account; click the "Available Communities" tab; search for "SMBP"; click "Join Community")

Million Hearts® SMBP Forum
Register at: http://bit.ly/SMBPForum
Contact MillionHeartsSMBP@nachc.org for more information

2020 SMBP-Related CPT Codes

- **99473**: SMBP using a device validated for clinical accuracy; patient education/training and device calibration
  - Can be submitted once
  - **Staff time = $11.19 for patient education**

- **99474**: SMBP using a device validated for clinical accuracy; two SMBP readings, one minute apart, 2X/day over a 30-day period (minimum of 12 readings), collection of patient data reported to the physician or other qualified health care professional, with report of average systolic and diastolic pressures and subsequent communication of a treatment plan to the patient
  - Can be submitted monthly
  - **Provider = $15.16 monthly for data and treatment plan**

Tobacco Use

- Identifying and Treating Patients Who Use Tobacco: Action Steps for Clinicians https://millionhearts.hhs.gov/files/Tobacco-Cessation-Action-Guide.pdf
- E-cigarettes https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm
- Tobacco Cessation Change Package https://millionhearts.hhs.gov/tools-protocols/action-guides/tobacco-change-package/index.html

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Tobacco Use webpage on the Million Hearts website https://millionhearts.hhs.gov/tools-protocols/tools/tobacco-use.html

Physical Inactivity

- US Preventive Services Task Force recommends behavioral counseling for people with CVD risk factors
  - National Diabetes Prevention Program (https://www.cdc.gov/diabetes/prevention/index.html)
- Community-based referral programs
  - e.g., Walk with a Doc, Walk with Ease, GirlTrek
- Community Preventive Services Task Force:
  - "Recommendation on Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design" (https://www.thecommunityguide.org/findings/physical-activity-built-environment-approaches)

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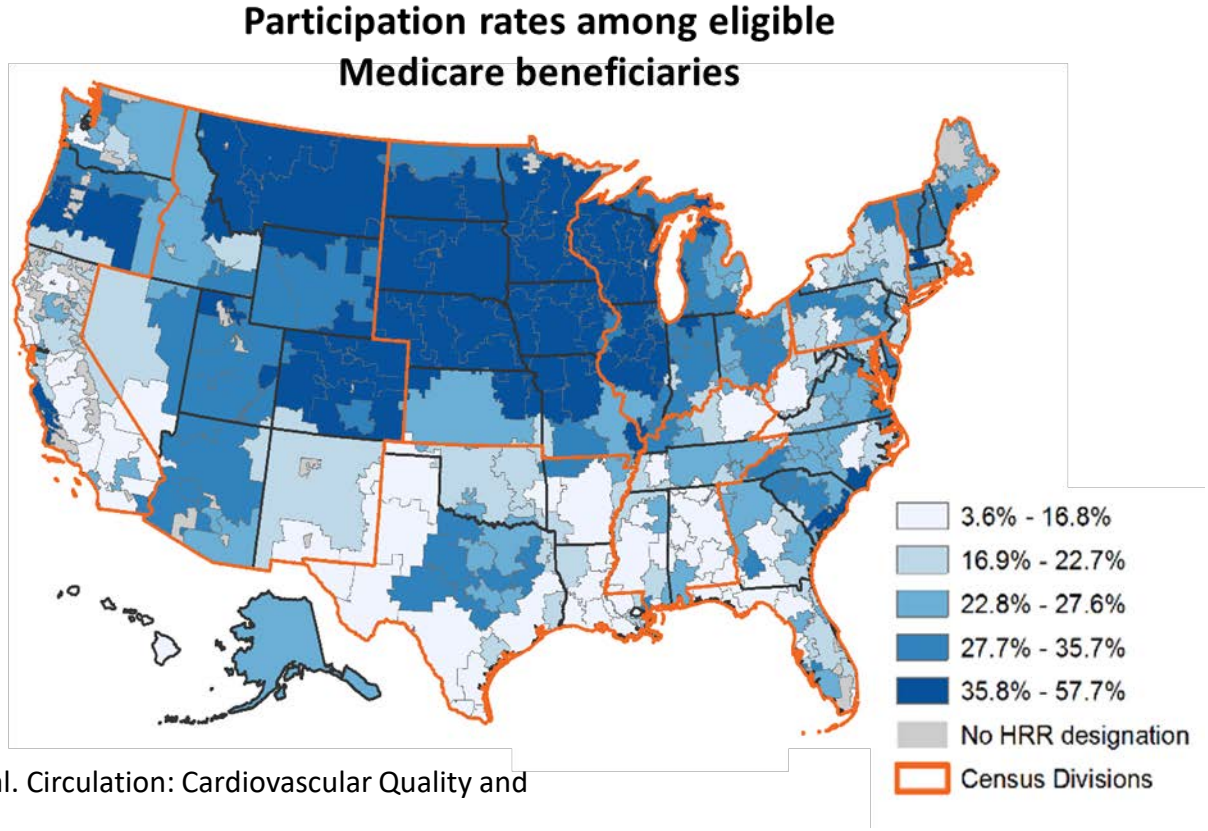
Physical Inactivity webpage on the Million Hearts website https://millionhearts.hhs.gov/tools-protocols/tools/physical-activity.html

Cardiac Rehabilitation

- Strong evidence of benefit for those who have had a heart attack, chronic stable angina, heart failure with reduced ejection fraction, or had a heart procedure
- Million Hearts Cardiac Rehabilitation Collaborative
- Cardiac Rehabilitation Change Package: https://millionhearts.hhs.gov/files/Cardiac_Rehab_Change_Pkg.pdf



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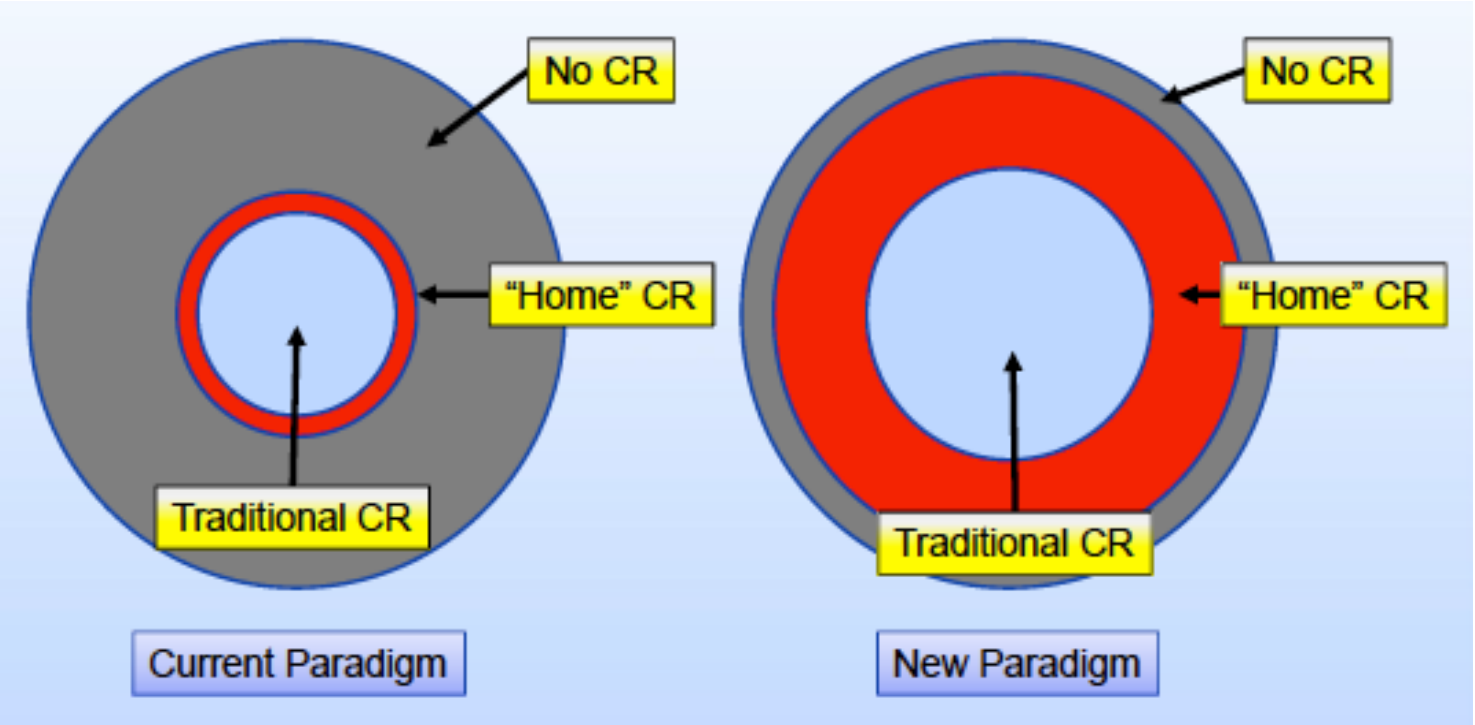
Ades PA et al. Mayo Clin Proc. 2017;92(2):234-242. Ritchey et al. Circulation: Cardiovascular Quality and Outcomes. In press.

Cardiac Rehabilitation webpage on the Million Hearts website https://millionhearts.hhs.gov/tools-protocols/tools/cardiac-rehabilitation.html

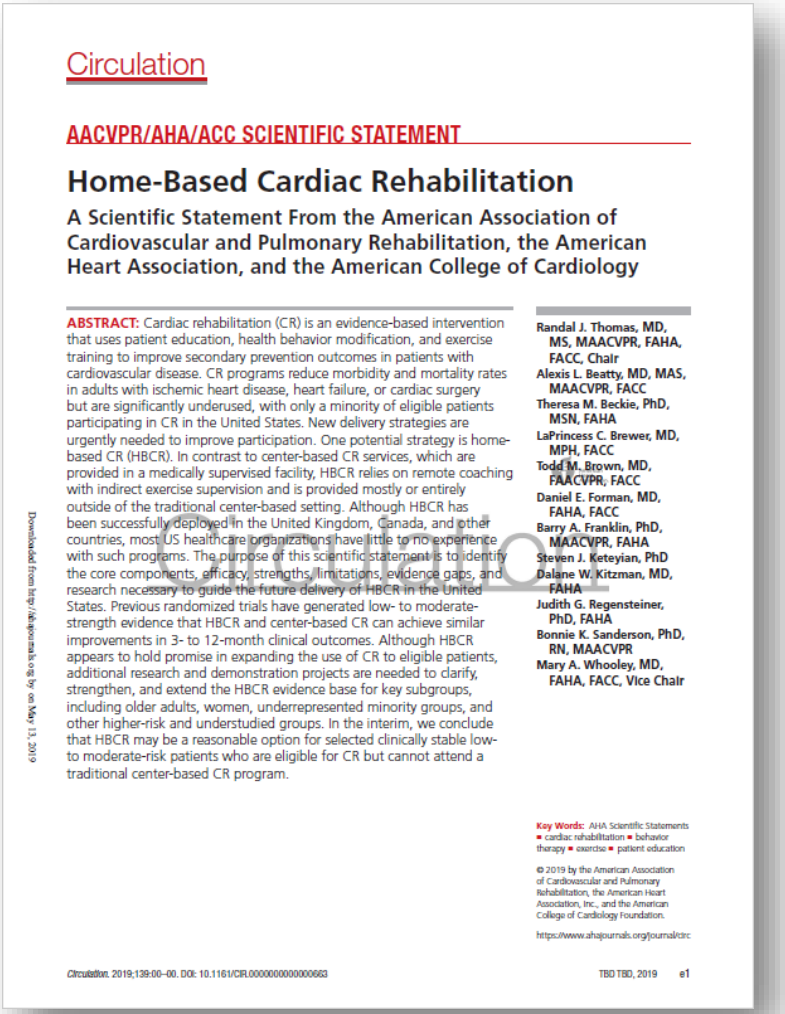
Hybrid or Home-based Cardiac Rehabilitation



Olson, T. Balancing Technology with the Human Touch to Promote Exercise is Medicine. AACVPR 2018

AACVPR/AHA/ACC Scientific Statement: Home-based Cardiac Rehabilitation (HBCR)

"The purpose of this scientific statement is to identify the core components, efficacy, strengths, limitations, evidence gaps, and research necessary to guide the future delivery of HBCR in the United States."



Circulation

AACVPR/AHA/ACC SCIENTIFIC STATEMENT

Home-Based Cardiac Rehabilitation

A Scientific Statement From the American Association of Cardiovascular and Pulmonary Rehabilitation, the American Heart Association, and the American College of Cardiology

ABSTRACT: Cardiac rehabilitation (CR) is an evidence-based intervention that uses patient education, health behavior modification, and exercise training to improve secondary prevention outcomes in patients with cardiovascular disease. CR programs reduce morbidity and mortality rates in adults with ischemic heart disease, heart failure, or cardiac surgery but are significantly underused, with only a minority of eligible patients participating in CR in the United States. New delivery strategies are urgently needed to improve participation. One potential strategy is home-based CR (HBCR). In contrast to center-based CR services, which are provided in a medically supervised facility, HBCR relies on remote coaching with indirect exercise supervision and is provided mostly or entirely outside of the traditional center-based setting. Although HBCR has been successfully deployed in the United Kingdom, Canada, and other countries, most US healthcare organizations have little to no experience with such programs. The purpose of this scientific statement is to identify the core components, efficacy, strengths, limitations, evidence gaps, and research necessary to guide the future delivery of HBCR in the United States. Previous randomized trials have generated low- to moderate-strength evidence that HBCR and center-based CR can achieve similar improvements in 3- to 12-month clinical outcomes. Although HBCR appears to hold promise in expanding the use of CR to eligible patients, additional research and demonstration projects are needed to clarify, strengthen, and extend the HBCR evidence base for key subgroups, including older adults, women, underrepresented minority groups, and other higher-risk and understudied groups. In the interim, we conclude that HBCR may be a reasonable option for selected clinically stable low- to moderate-risk patients who are eligible for CR but cannot attend a traditional center-based CR program.

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Key Words: AHA Scientific Statements ▪ cardiac rehabilitation ▪ behavior therapy ▪ exercise ▪ patient education

https://www.ahajournals.org/journal/circ

Circulation. 2019;139:00–00. DOI: 10.1161/CIR.0000000000000663

TBD TBD, 2019 e1

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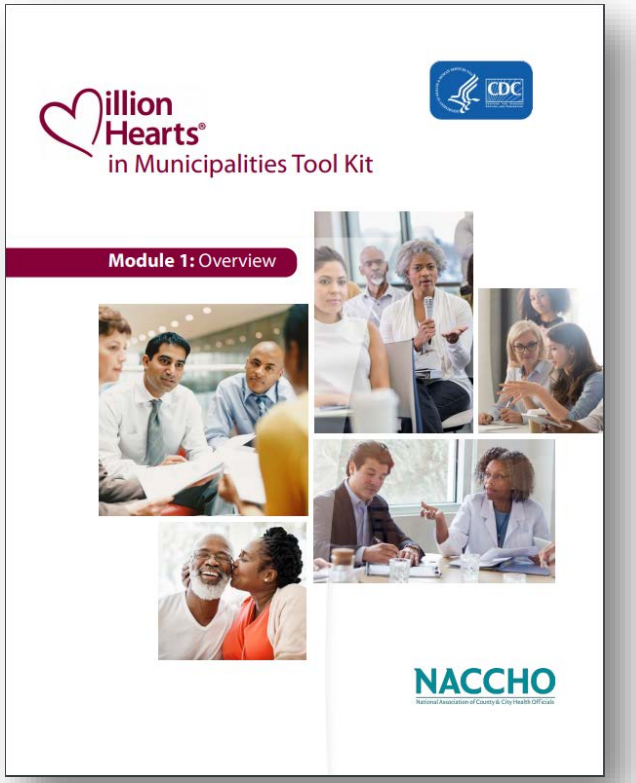
[AACVPR/AHA/ACC Scientific Statement: Home-based Cardiac Rehabilitation (HBCR) is publicly accessible at https://www.ahajournals.org/doi/10.1161/CIR.0000000000000663](https://www.ahajournals.org/doi/10.1161/CIR.0000000000000663)

Million Hearts® in Municipalities Toolkit

- A toolkit to help health departments and municipal organizations implement Million Hearts® strategies at a local level.

- Includes 5 modules:
  1. Overview
  2. Setting Goals
  3. Partnerships
  4. Communication
  5. Evaluation and Monitoring

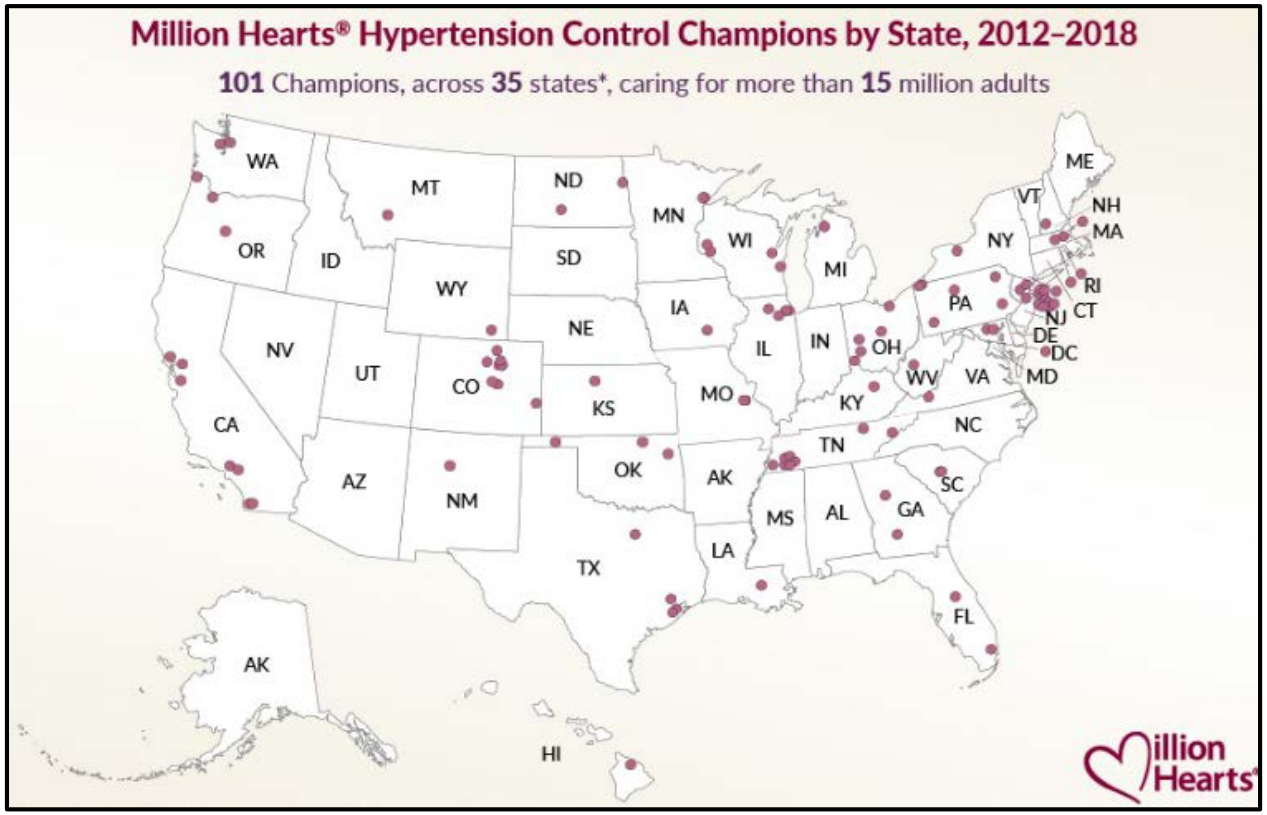
- Each module offers:
  - Key concepts, principles, and resources
  - Tips and problem-solving solutions
  - Readiness Assessment worksheets and the Action Plan Template



The Toolkit and Million Hearts® Municipalities Success Stories are accessible online at: https://millionhearts.hhs.gov/tools-protocols/tools/municipalities.html

Recognition

- HRSA Million Hearts “badge”
- Million Hearts Hypertension Control Champions
  - https://millionhearts.hhs.gov/partners-progress/champions/list.html
- Million Hearts Hospitals and Health Systems recognition program



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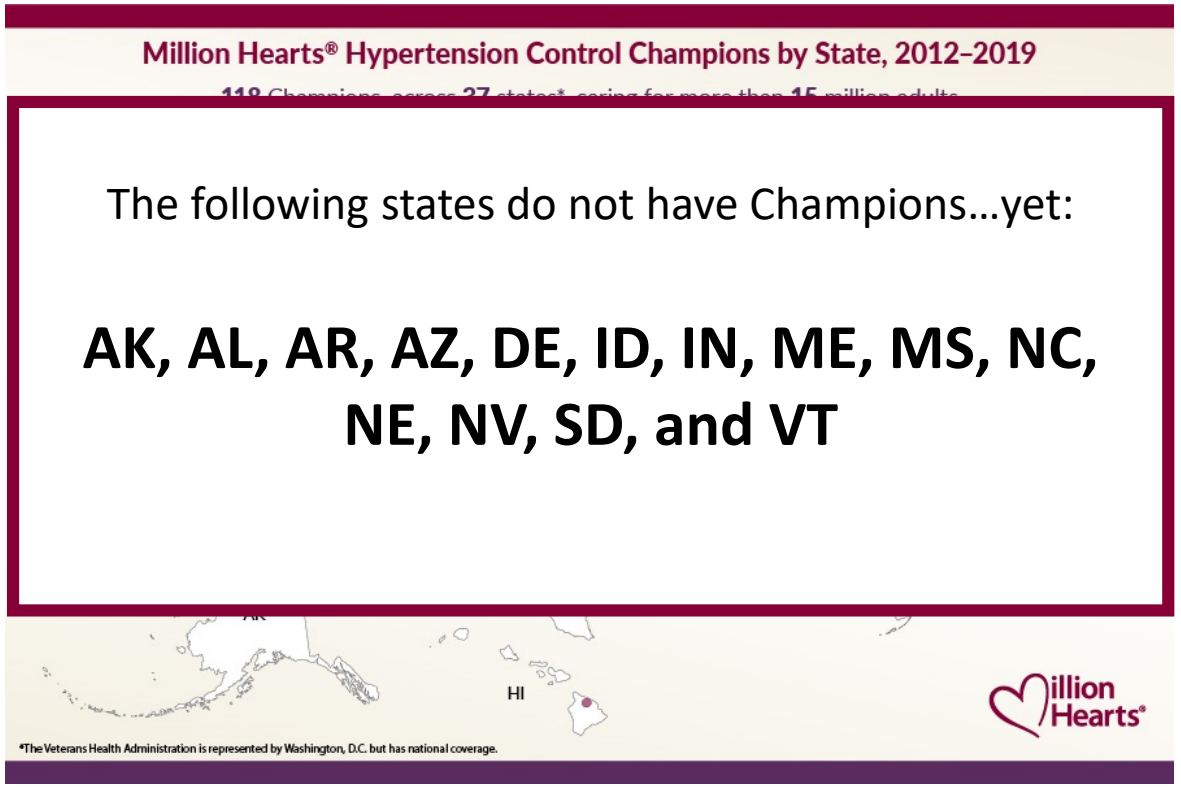
Million Hearts® Hypertension Control Challenge

- Annual recognition program for health care professionals, practices, and health systems
- **≥ 80%** blood pressure control
- 118 Champions from 36 states and D.C. (2012–2019); 61% have a rural or urban/rural service area
- The call for 2020 Champions will open in February of 2020

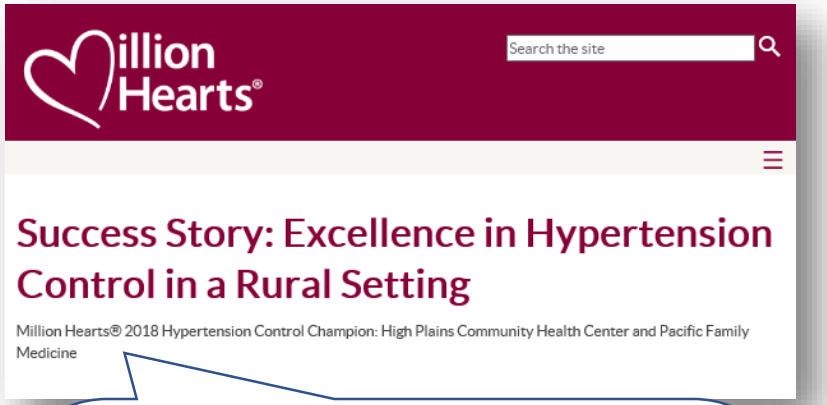


More information and success accessible online at: https://millionhearts.hhs.gov/partners-progress/champions/list.html

Rural Health Success Stories

- **White House Clinics (KY)**
  - https://youtu.be/XGO-I59UMDg
  - SMBP monitoring

- **High Plains Community Health Center (CO) and Pacific Family Medicine (OR)**
  - https://millionhearts.hhs.gov/partners-progress/champions/success_story2_2018.html
  - Patient education
  - SMBP
  - EHRs with clinical support tools



"We have an amazing relationship with our patients. They know it's a two-way street. We're very communicative about the fact that patients need to be equally engaged in their care. That's the culture we share with them from the first visit onwards."

Janet Mossman, FACMPE, clinic manager for Pacific Family Medicine

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More information and success accessible online at: https://millionhearts.hhs.gov/partners-progress/champions/list.html

Million Hearts® Hospitals & Health Systems Recognition Program

- A new recognition program to recognize institutions working to improve the cardiovascular health of the population & communities they serve by:
  1. Keeping People Healthy
  2. Optimizing Care
  3. Improving Outcomes for Priority Populations
  4. Innovating for Health

- Online applications open mid-January through March 2020

- Million Hearts® will publicly recognize and feature top-performing Million Hearts® Hospitals and Health Systems

Million Hearts® Hospitals & Health Systems

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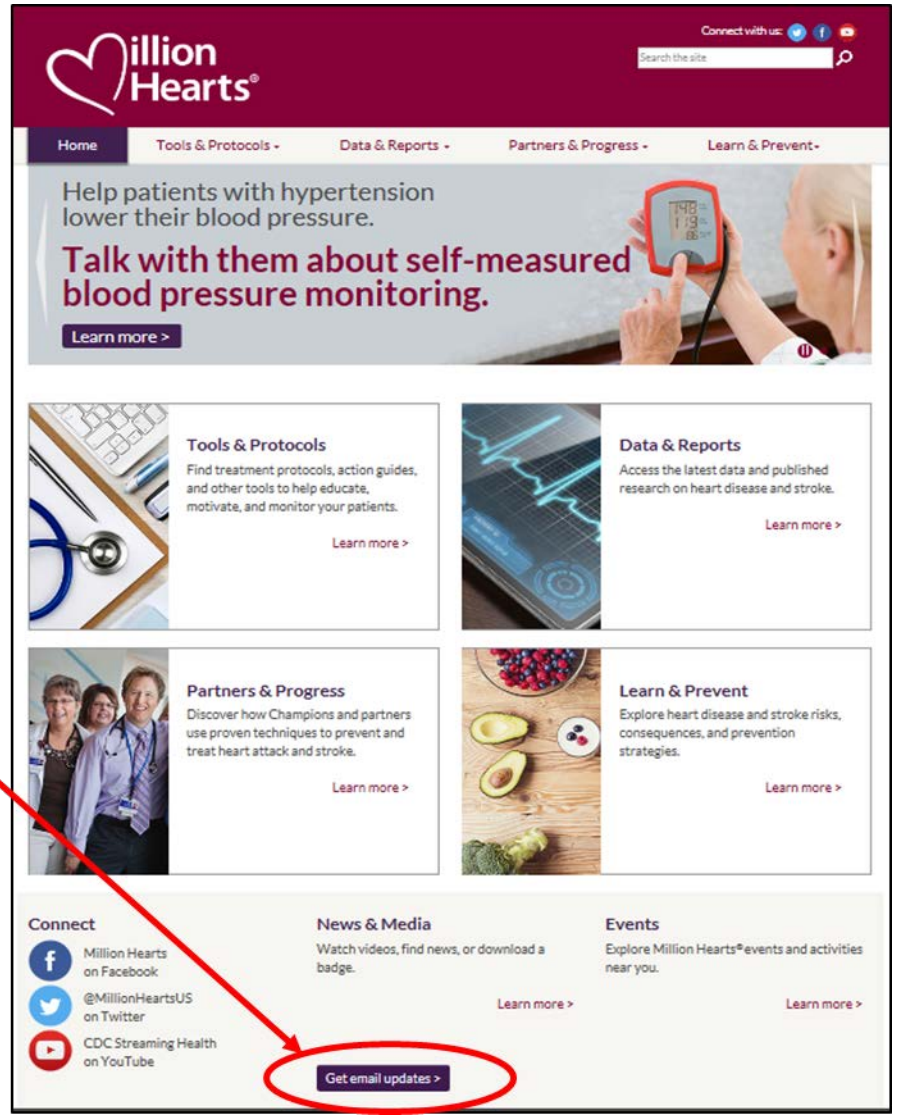

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Questions?

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