

Wisconsin Million Hearts *What One (Awesome) State Can Achieve*

2018 Hypertension Symposium

Engagement and Commitment to Improve Hypertension and
Cardiovascular Outcomes

May 30, 2018



Janet Wright MD FACC

Today's Objectives

- Million Hearts 2022
- Challenges
- Good News
- The Gauntlet

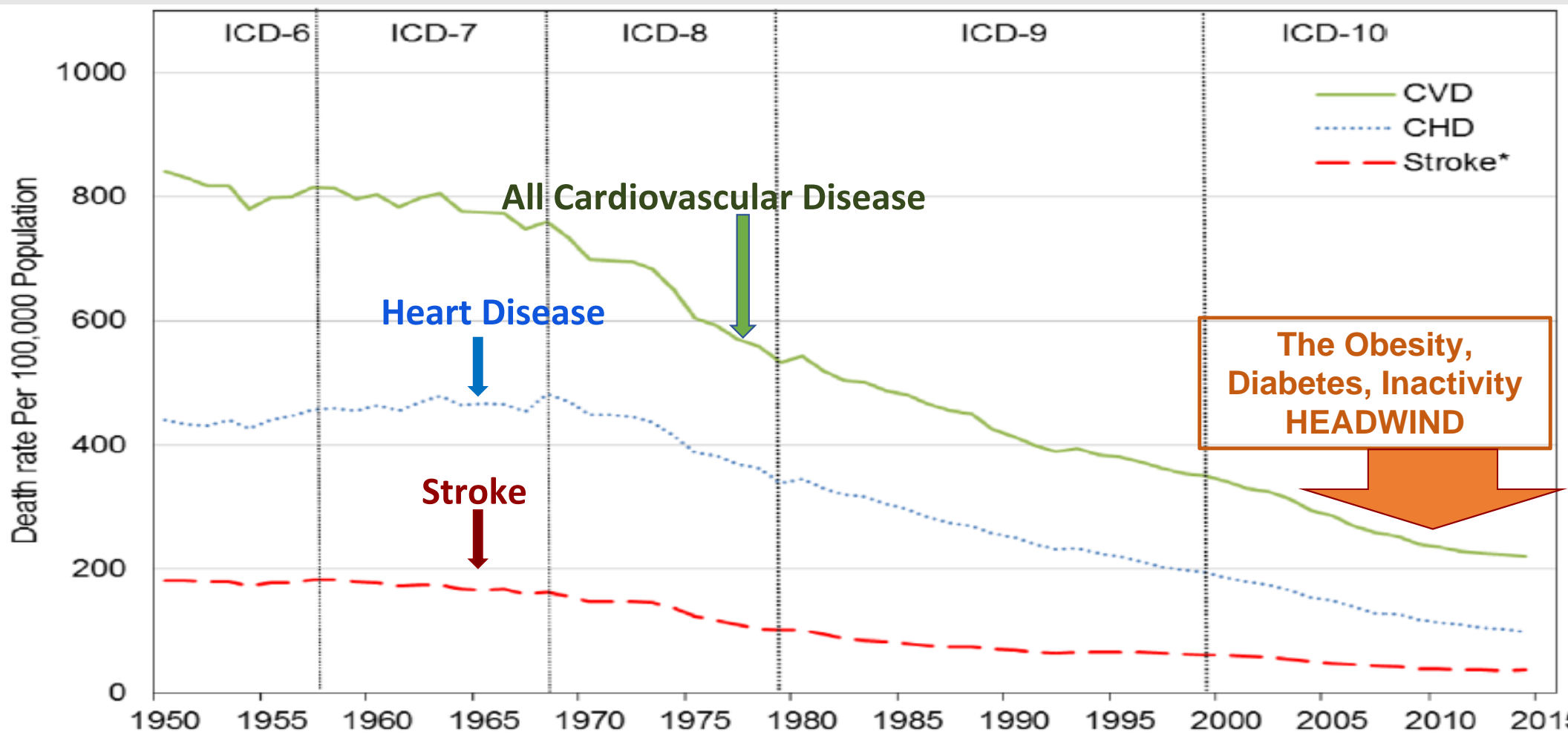


Million Hearts® 2012—2016

- Improved BP control and Cholesterol management
- Issuance of trans-fat and sodium policies
- Target will likely be hit for tobacco prevalence
- By 2014, nearly **115,000 CV events** were prevented
- We estimate that **up to 500K events** will have been prevented when final data are available in 2019
- Million Hearts = 120 partners, 20 federal agencies, all 50 states, and the District of Columbia



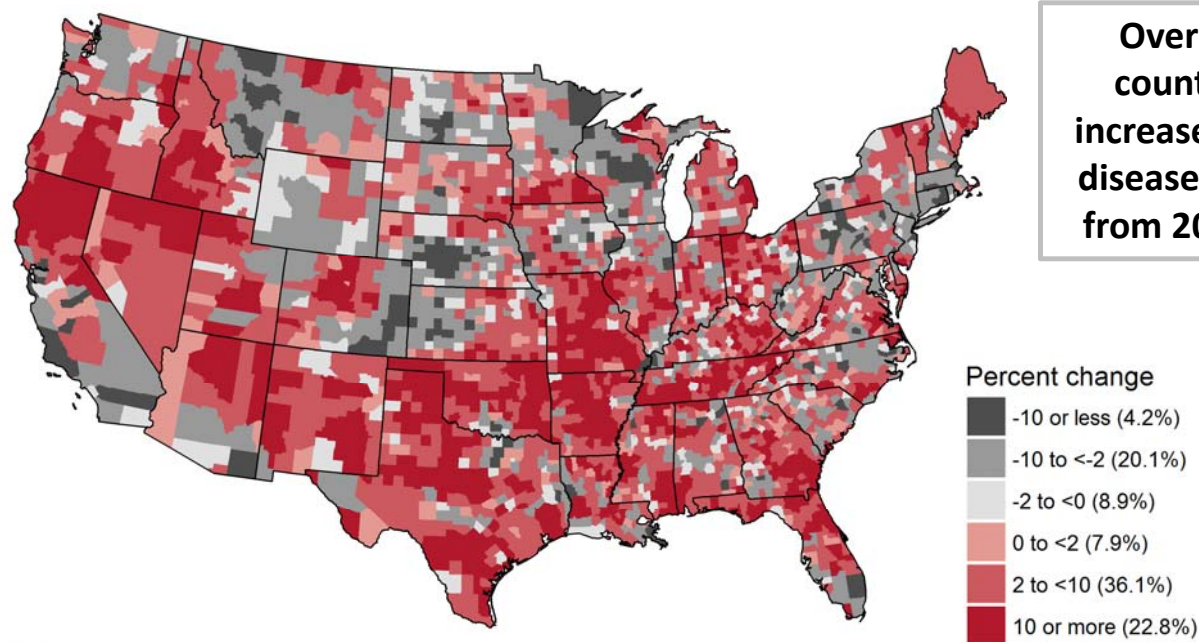
Heart Disease and Stroke Mortality Trends, 1950-2015



Source: Mensah GA, et al. Decline in Cardiovascular Mortality—Possible Causes and Implications. *Circ Res.* 2017;120:366-380.

Heart Disease Mortality Rates

County-level percent change in heart disease death rates,
Ages 35-64, 2010-2015

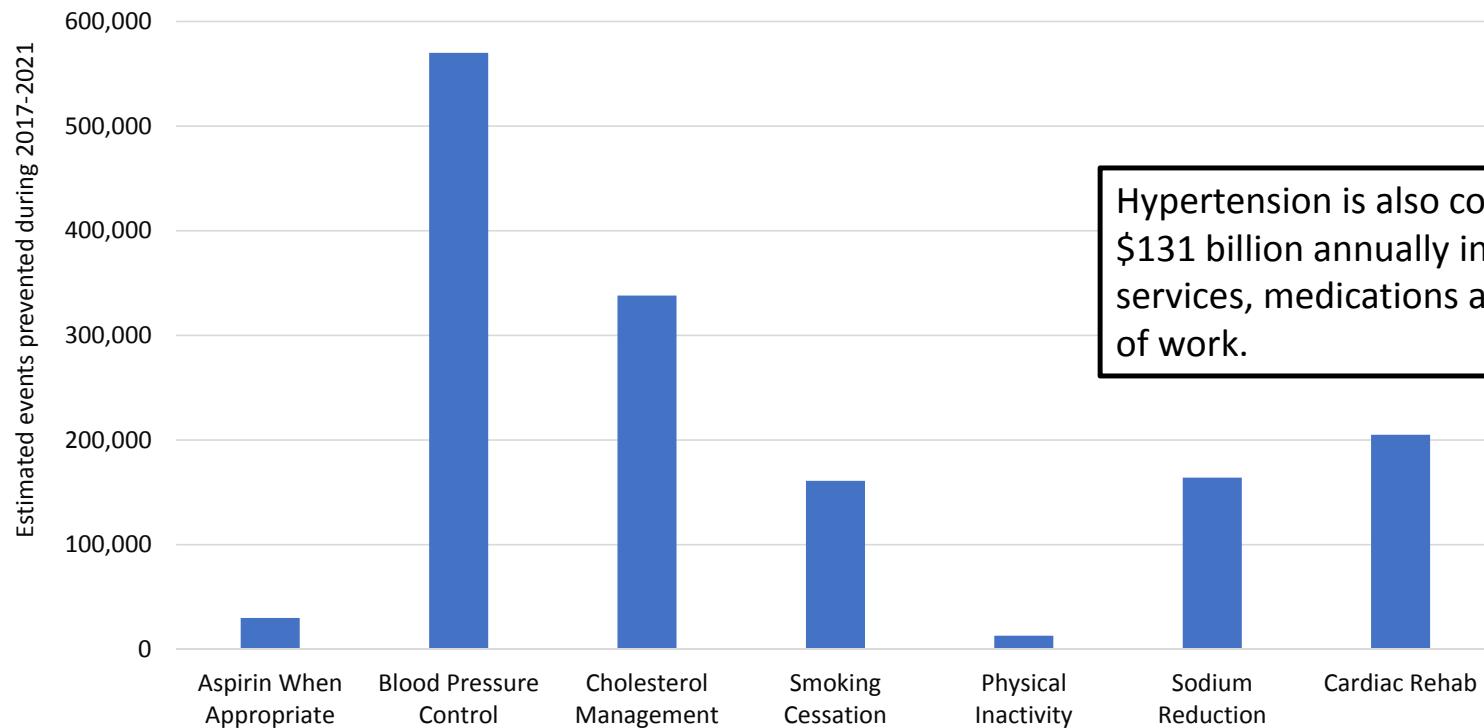


Over 50% of
counties had
increases in heart
disease mortality
from 2010-2015.



Source: Adam Vaughan, PhD, MPH (email communication, December 11, 2017);
Vaughan et al. Widespread recent increases in county-level heart disease mortality
across age groups. *Annals of Epidemiology*. 2017;27:796-800

Contributors to “the Million”



Hypertension is also costly in \$. \$131 billion annually in health care services, medications and missed days of work.



Notes: Describes the estimated number of events prevented if Million Hearts objectives are gradually achieved during 2017-2021. The events included closely aligns with those outlined in Ritchey *et al. JAHA*. 2017;6(5). The total no. of expected events prevented does not equal the sum of events prevented by risk factor type as those totals are not mutually exclusive. The “aspirin when appropriate” intervention reflects aspirin use for secondary prevention only.

Data sources: ¹Reflects preliminary findings from simulation modeling conducted using the CVD Policy Model, ModelHealth:CVD, and PRISM (unpublished). Baseline risk factor data were determined for: aspirin when appropriate using 2013-14 NHANES; BP control and cholesterol management using 2011-14 NHANES; smoking cessation and physical inactivity using 2015 NHIS; and sodium reduction using 2011-12 NHANES. ²Cardiac rehab estimates from: Ades P, et al. Increasing Cardiac Rehabilitation Participation From 20% to 70%: A Road Map From the Million Hearts Cardiac Rehabilitation Collaboration. *Mayo Clin Proc.* 2017;92(2):234-242.

Million Hearts® 2022

Aim: Prevent 1 Million Heart Attacks and Strokes in 5 Years

Keeping People Healthy

Optimizing Care

COMMUNITY



Priority Populations



Million Hearts® 2022

Objectives and Goals

Keeping People Healthy

Reduce Sodium Intake

Decrease Tobacco Use

Increase Physical Activity

Optimizing Care

Improve A^BCS*

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 due to rising event rates

People who have had a heart attack or stroke

People with mental and/or substance use disorders who smoke



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

Keeping People Healthy

Goals	Effective Public Health Strategies
Reduce Sodium Intake Target: 20%	<ul style="list-style-type: none">• Enhance consumers' options for lower sodium foods• Institute healthy food procurement and nutrition policies
Decrease Tobacco Use Target: 20%	<ul style="list-style-type: none">• Enact smoke-free space policies that include e-cigarettes• Use pricing approaches• Conduct mass media campaigns
Increase Physical Activity Target: 20% (Reduction of inactivity)	<ul style="list-style-type: none">• Create or enhance access to places for physical activity• Design communities and streets that support physical activity• Develop and promote peer support programs



Optimizing Care

Goals	Effective Health Care Strategies
Improve ABCS* Targets: 80%	<p><i>High Performers Excel in the Use of...</i></p> <ul style="list-style-type: none"> • Teams—including pharmacists, nurses, community health workers, and cardiac rehab professionals • Technology—decision support, patient portals, e- and default referrals, registries, and algorithms to find gaps in care • Processes—treatment protocols; daily huddles; ABCS scorecards; proactive outreach; finding those with undiagnosed high BP or cholesterol, tobacco use, particulate matter exposure • Patient and Family Supports—training in home blood pressure monitoring; problem-solving in medication adherence; counseling on nutrition, physical activity, tobacco use, risks of particulate matter; referral to community-based physical activity programs and cardiac rehab
Increase Use of Cardiac Rehab Target: 70%	
Engage Patients in Heart-healthy Behaviors Targets: TBD	



*Aspirin use when appropriate, BP control, Cholesterol management, Smoking cessation

Improving Outcomes for Priority Populations

- ✓ Disparate outcome
- ✓ Effective interventions
- ✓ Well-positioned partners

Priority Population	Objectives	Strategies
Blacks/African Americans	<ul style="list-style-type: none"> Improving hypertension control 	<ul style="list-style-type: none"> Deliver guideline-congruent treatment Problem-solve in med adherence Advance practice of out-of-readings Increase access to and participation in community-based activity programs
35-64 year olds	<ul style="list-style-type: none"> Improving BP control & statin use Decreasing physical inactivity 	<ul style="list-style-type: none"> Implement treatment protocols Increase access to and participation in community-based activity programs
People who have had a heart attack or stroke	<ul style="list-style-type: none"> Increasing cardiac rehab referral and participation Avoiding exposure to particulates 	<ul style="list-style-type: none"> Use opt-out referral and CR liaison visits at discharge; ensure timely enrollment Increase use of Air Quality Index
People with mental and/or substance abuse disorders who smoke	<ul style="list-style-type: none"> Reducing tobacco use 	<ul style="list-style-type: none"> Integrate tobacco cessation into behavioral health treatment Institute tobacco-free policy at treatment facilities Tailored quitline protocols



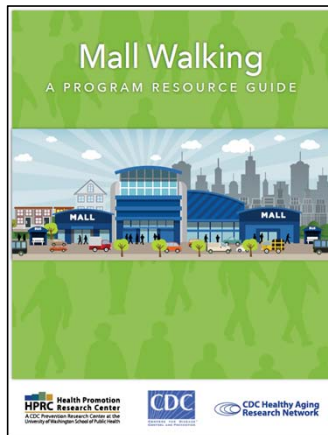
New for 2022

- Physical activity
- Cardiac Rehab
- Engaging Patients in Heart-healthy Behaviors
- “Priority Populations”
- Particle pollution



Tips for Communities to Improve Physical Activity

- Create or enhance access to places for physical activity
- Design communities and streets that support physical activity
- Develop and promote peer support groups



http://www.ca-city.com/complete_streets/fundamentals.html



WALK WITH EASE
a program for better living



Million Clicks for Million Hearts®

- Allentown, PA Health Bureau program
- 10 click-in stations on walking paths around the city
- Participants tap a keytab to track their walks
- PRIZES!



<https://www.allentownpa.gov/Health-Bureau/Million-Clicks-for-Million-Hearts>

Cardiac Rehab Saves Lives and Improves Health

....increasing CR participation to 70% would save 25,000 lives and prevent 180,000 hospitalizations annually in the U.S.

Increasing Cardiac Rehabilitation Participation From 20% to 70%: A Road Map From the Million Hearts Cardiac Rehabilitation Collaborative

Philip A. Ades, MD; Steven J. Keteyian, PhD; Janet S. Wright, MD; Larry F. Hamm, PhD; Karen Lui, RN, MS; Kimberly Newlin, ANP; Donald S. Shepard, PhD; and Randal J. Thomas, MD, MS

Abstract

The primary aim of the Million Hearts initiative is to prevent 1 million cardiovascular events over 5 years. Consistent with the Million Hearts' focus on achieving more than 70% performance in the "ABCS" of aspirin use, at risk, blood pressure control, cholesterol management, and smoking cessation, we outline the cardiovascular events that would be prevented and a road map to achieve more than 70% participation in cardiac rehabilitation (CR)/secondary prevention programs by the year 2022. Cardiac rehabilitation is a Class I recommendation of the American Heart Association and the American College of Cardiology after myocardial infarction or coronary revascularization, promotes the ABCS along with lifestyle counseling and exercise, and is associated with decreased total mortality, cardiac mortality, and rehospitalizations. However, current participation rates for CR in the United States generally range from only 20% to 30%. This road map focuses on interventions, such as electronic medical record–based prompts and staffing liaisons that increase referrals of appropriate patients to CR, increase enrollment of appropriate individuals into CR, and increase adherence to longer-term CR. We also calculate that increasing CR participation from 20% to 70% would save 25,000 lives and prevent 180,000 hospitalizations annually in the United States.



Million Hearts CR Collaborative

2018-2021 Action Plan Objectives

- ***Increase awareness of the value of CR*** among health systems, clinicians, patients and families, employers, payers
- ***Increase use of best practices*** for referral, enrollment, and participation; address knowledge gaps.
- ***Build equity*** in CR referral, participation, and program staffing
- ***Increase sustainability*** of CR programs through innovations in program design, delivery, and payment
- ***Measure, monitor, report progress*** to the 70% aim



Engaging Patients in Heart-healthy Behaviors

- Self-Measured BP Monitoring
- Participation in
 - Diabetes Prevention Program
 - Chronic Disease Self-Management Program
 - Cardiac Rehab
- In consideration
 - Shared Decision-making around statin use
 - Keeping a Physical Activity log and sharing with clinical team



Self-Measured BP Monitoring

- Strong evidence for SMBP + clinical support for achieving control
 - 1:1 counseling
 - Group classes
 - Web-based or telephonic support
- Good evidence for SMBP for confirming diagnosis



The BP Power Cycle



2017 Guidelines

SMBP Recommendations

Recommendation for Out-of-Office and Self-Monitoring of BP		
References that support the recommendation are summarized in Online Data Supplement 3 and Systematic Review Report.		
COR	LOE	Recommendation
I	A ^{SR}	1. Out-of-office BP measurements are recommended to <u>confirm the diagnosis</u> of hypertension (Table 11) and for <u>titration of BP-lowering medication</u> , in conjunction with telehealth counseling or clinical interventions (1-4).

SR indicates systematic review.

Recommendation for Monitoring Strategies to Improve Control of BP in Patients on Drug Therapy for High BP		
References that support the recommendation are summarized in Online Data Supplement 29.		
COR	LOE	Recommendation
I	A	1. Follow-up and monitoring after initiation of drug therapy for hypertension control should include systematic strategies to help improve BP, including use of HBPM, team-based care, and telehealth strategies (1-6).



SMBP Implementation Challenges

- Lack of a standard definition, protocol
- Distrust of readings
- Health IT limitations
- Patient-generated data are not used in quality metrics
- Coverage for or access to BP monitors
- Reimbursement for clinician time to
 - Train patients and families
 - Validate monitors
 - Interpret home readings and provide timely advice



Progress to the Ideal System?

- ✓ Compelling case for accuracy and OOO readings
- ☒ Billing codes or value-based contracting
- ☐ Performance measure(s) that consider OOO readings
- ☐ EZ, smart connection between patients and clinicians
- ☐ Exemplars and implementation guidance
- ☐ Activation of people with HTN to “own” their BPs



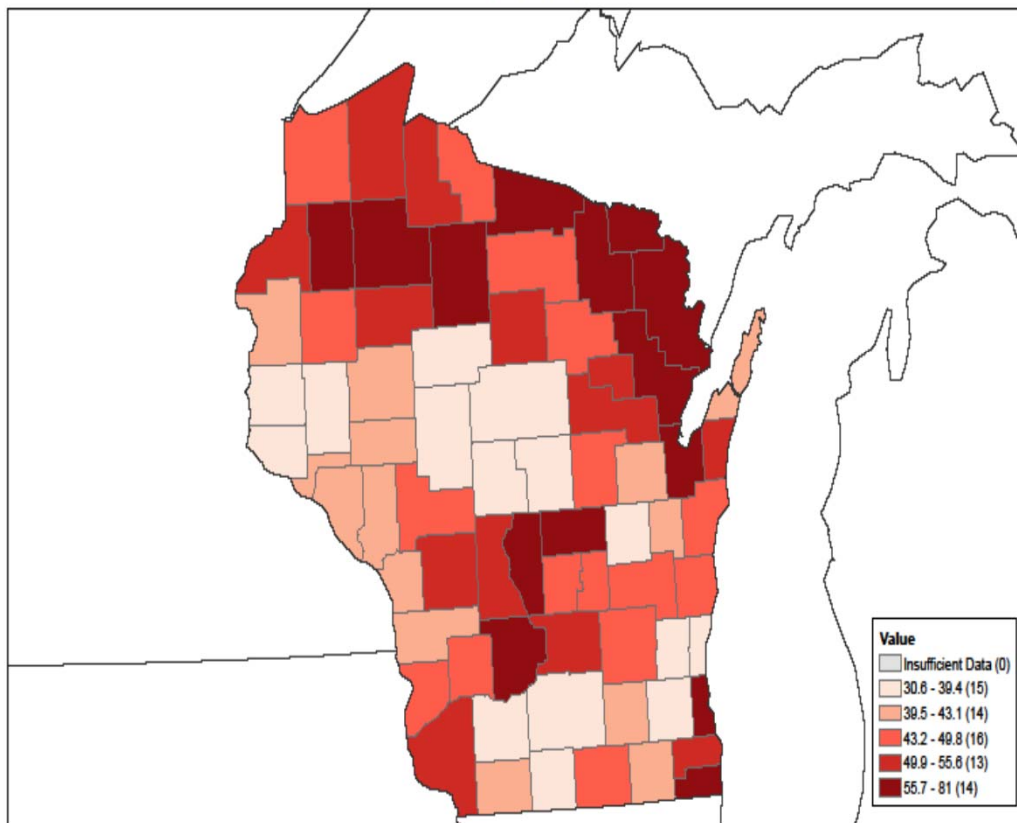
National SMBP Strategy

- Long-term vision: SMBP will be accessible to everyone for diagnosis and management of hypertension
- National experts--researchers, clinicians, public health experts, community organizations—have convened to advance this practice



Avoidable Cardiovascular Deaths in Wisconsin

Avoidable Heart Disease and Stroke Death Rate per 100,000, All Race, All Gender,
2013-2015

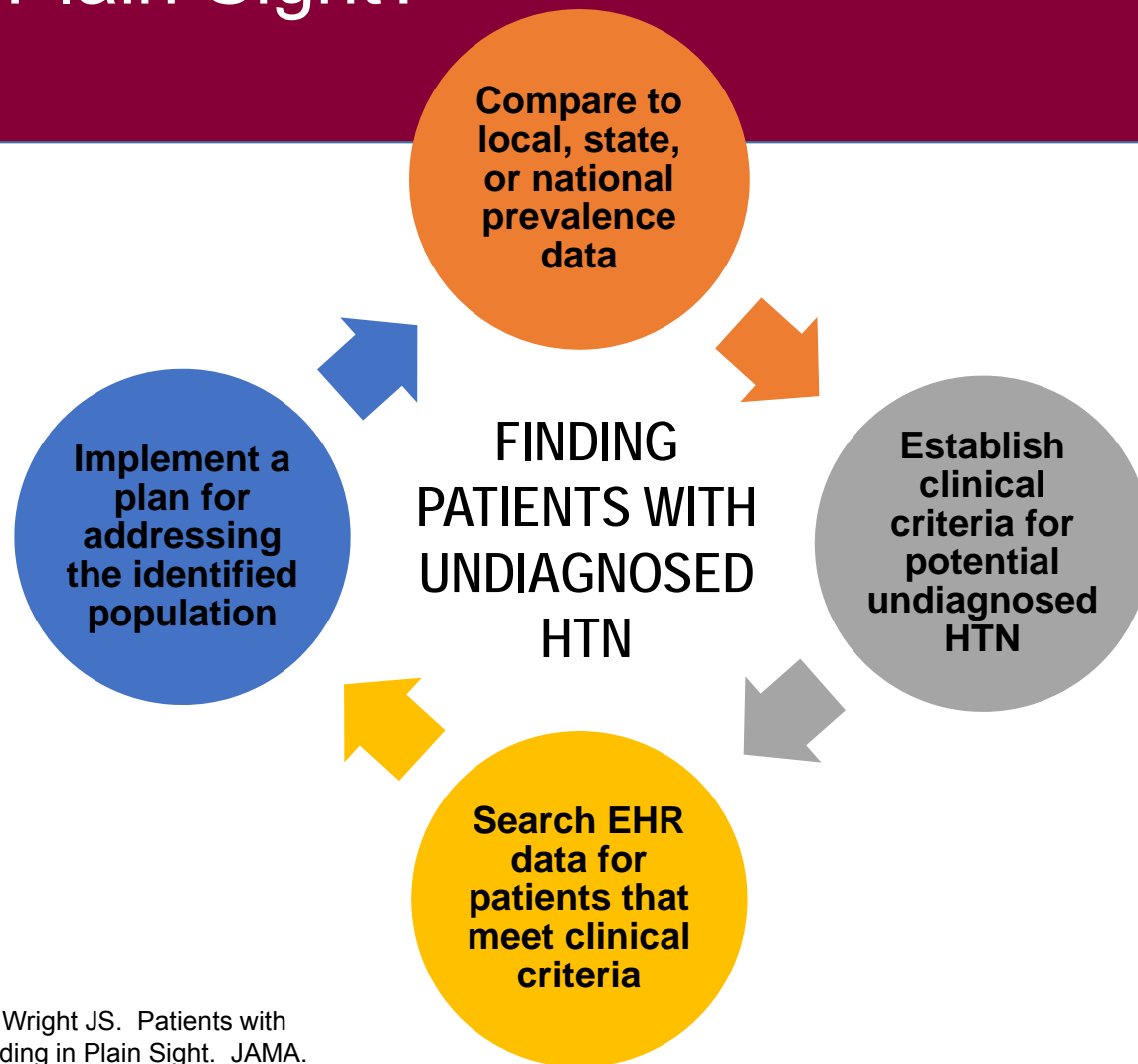


- Nationally, the total avoidable heart disease and stroke death rate is **58.2** per 100,000
- In Wisconsin, the rate is **50.2** per 100,000
- Higher for Blacks, American Indian/Alaskan Native, Asian and Pacific Islander

Source: CDC Interactive Atlas of Heart Disease and Stroke, 2013-2015

Who is Hiding in Plain Sight?

A 4-Step Process



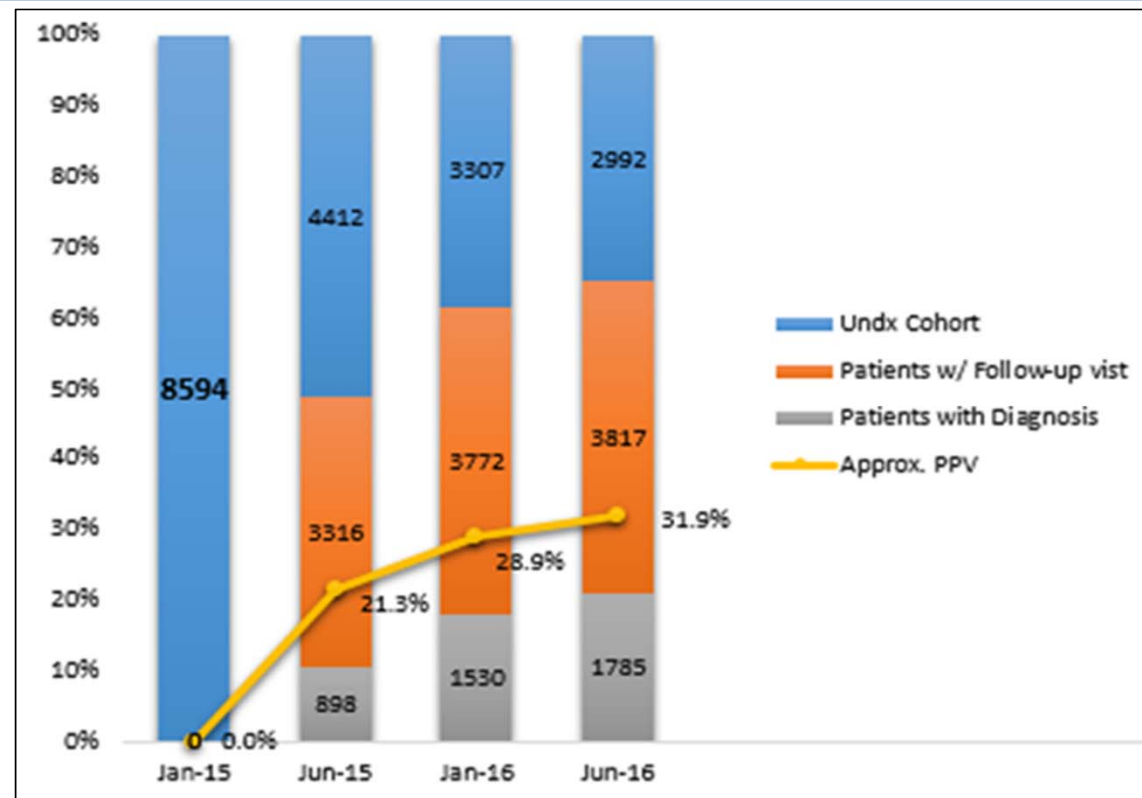
Source: Wall HK, Hannan JA, Wright JS. Patients with Undiagnosed Hypertension: Hiding in Plain Sight. JAMA. 2014;312(19):1973-74.

National Association of Community Health Centers *Undiagnosed Hypertension Cohort*

100K patients at
10 FQHCs

65% had a follow
up visit

Of these, ~32%
were diagnosed
with HTN



<http://mylearning.nachc.com/diweb/fs/file/id/229350>

Really Good News: Barbers + Pharmacists Teaming Up with Clinicians

Results

Intervention @ 6 months:
152.8 – **27** = 125.8mm Hg

63.6% reached <130/80

Control @ 6 months:
154.6 – **9** = 145.4mm Hg

11.7% reached <130/80



The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

A Cluster-Randomized Trial of Blood-Pressure Reduction in Black Barbershops

Ronald G. Victor, M.D., Kathleen Lynch, Pharm.D., Ning Li, Ph.D.,
Ciantel Blyler, Pharm.D., Eric Muhammad, B.A., Joel Handler, M.D.,
Jeffrey Brettler, M.D., Mohamad Rashid, M.B., Ch.B., Brent Hsu, B.S.,
Davontae Foxx-Drew, B.A., Norma Moy, B.A., Anthony E. Reid, M.D.,*
and Robert M. Elashoff, Ph.D.

ABSTRACT

BACKGROUND

Lessons

1. Community care
2. Pharmacists prescribed dual therapy by protocol
3. Frequent contact
4. Aimed for lower target

Margolis KL, n engl j med 378;14
nejm.org April 5, 2018

Victor RG et al, n engl j med 378;14 nejm.org April 5, 2018

Wisconsin (Hypertension) Throw-Down

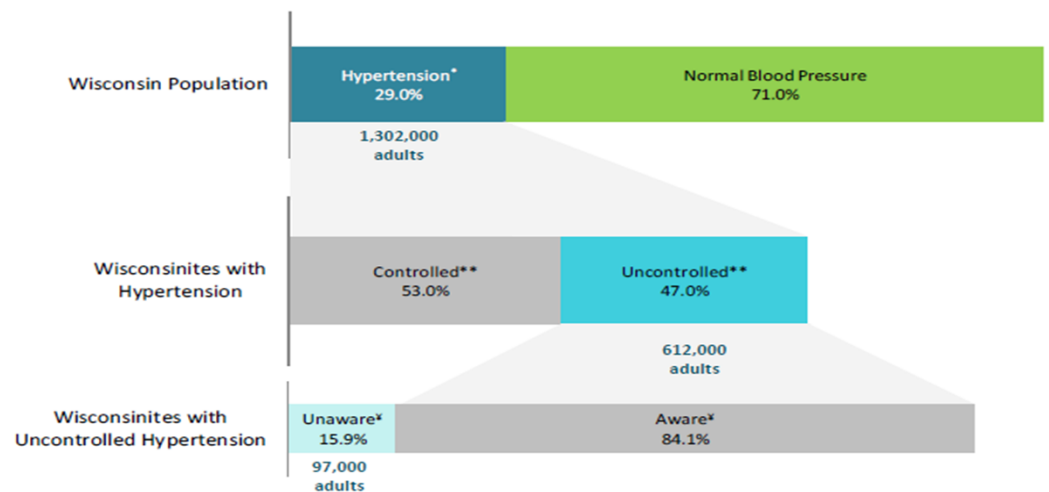
From 53% to 80% Control by 2022?

1.3 M adults with HTN

612,000 Uncontrolled

97,000 Unaware

Estimated number and percent of Wisconsin adults with hypertension classifications, 2016
Based on the National Health and Nutrition Examination Survey (NHANES)



Weighted percentages based on NHANES, 2011-2016. Population based on applying hypertension survey percentages to US Census Bureau's 2016 Wisconsin population estimates (www.census.gov/quikfacts/WI/).
*Hypertension is defined as an average systolic blood pressure ≥ 140 mmHg, and average diastolic blood pressure ≥ 90 mmHg, or reported current use of blood pressure lowering medication (Yoon, S. et al. 2015). "Hypertension Prevalence and Control Among Adults." NCHS Data Brief, No. 220.
**Uncontrolled hypertension is defined as an average systolic blood pressure ≥ 140 mmHg, and average diastolic blood pressure ≥ 90 mmHg, among those without hypertension (Yoon, S. et al. 2015).
*Unaware is defined as those who answered "No" to the question, "Have you ever been told by a doctor or other health professional that you had hypertension, also called high blood pressure?" Aware is defined as "Yes" to the same question, calculated among those with uncontrolled hypertension. (Paulose-Ram, R. et al. 2017. "Characteristics of U.S. Adults with Hypertension who are Unaware of their Hypertension, 2011-2014." NCHS Data Brief, No. 278).



Wisconsin Hypertension Champions

2012-2017

Back To The ABCS

2012: Ellsworth Medical Group
2013: ThedaCare Appleton
2013: River Falls Medical Group
2017: Plymouth Family Physicians

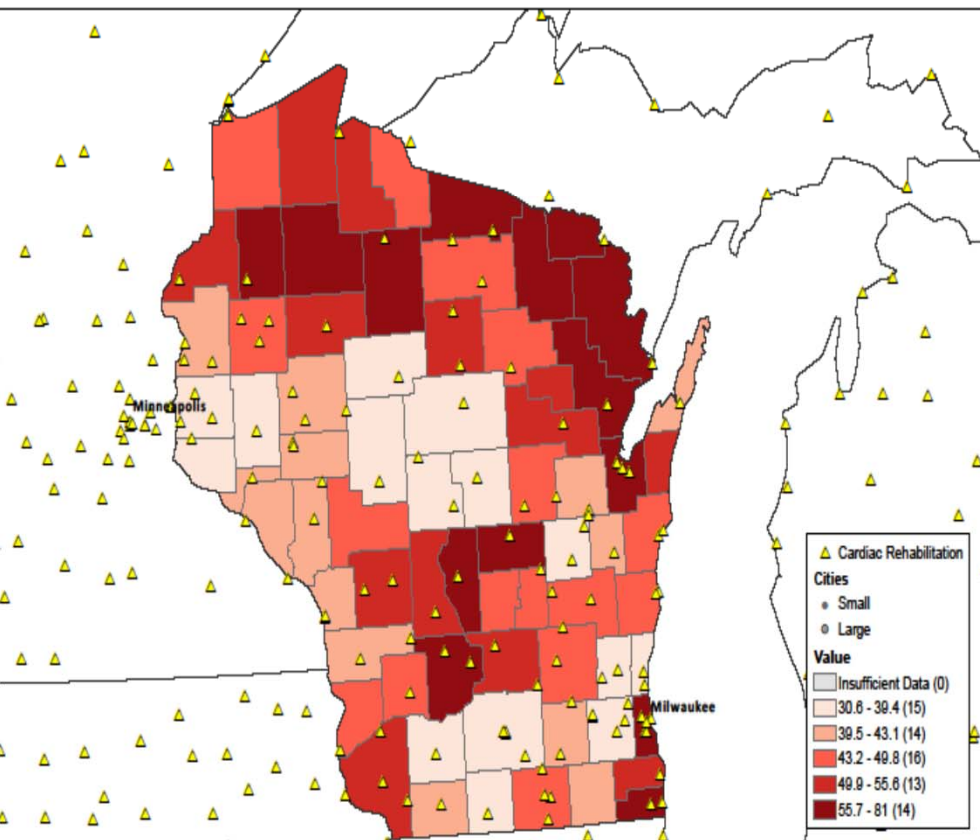
- Start measuring your performance
- Don't waste time denying the data
- We are not doing as well as we think we are
- Resolving to work harder won't affect improvement
- You have been working hard all along
- You need to recruit help



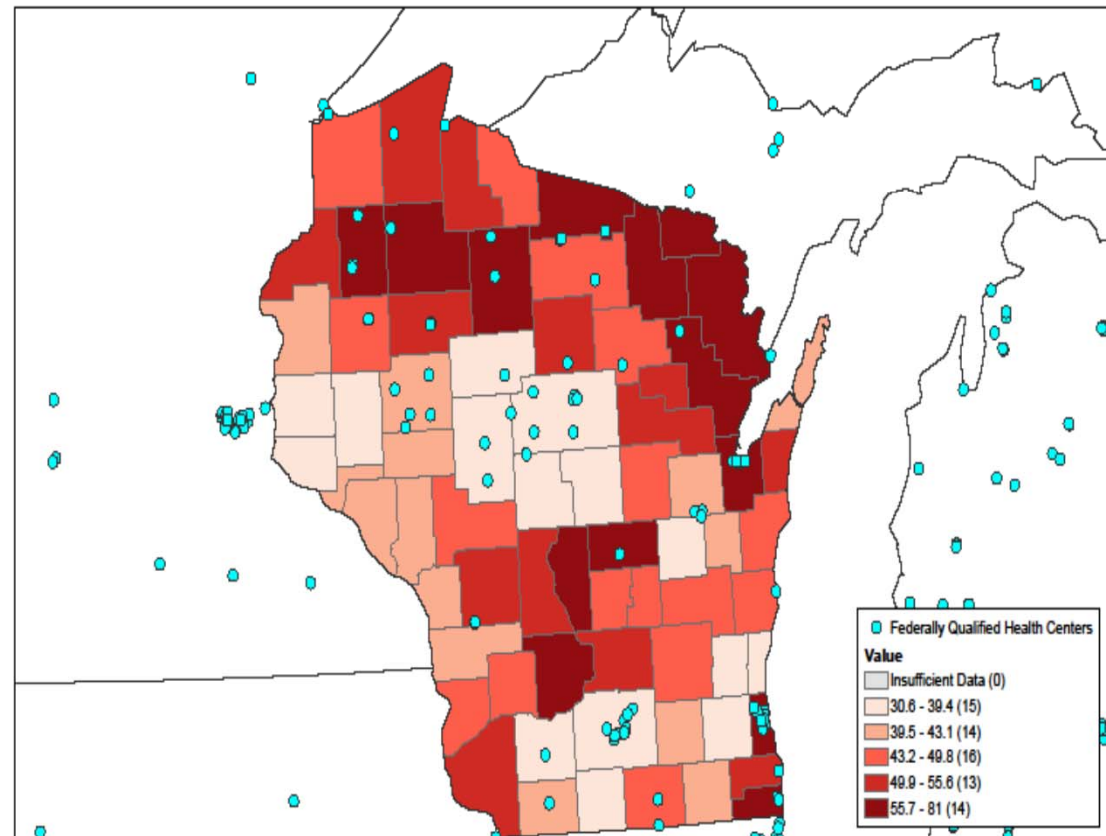
Avoidable CV Deaths

Cardiac Rehab Programs, FQHCs

Avoidable Heart Disease and Stroke Death Rate per 100,000, All Race, All Gender,
2013-2015



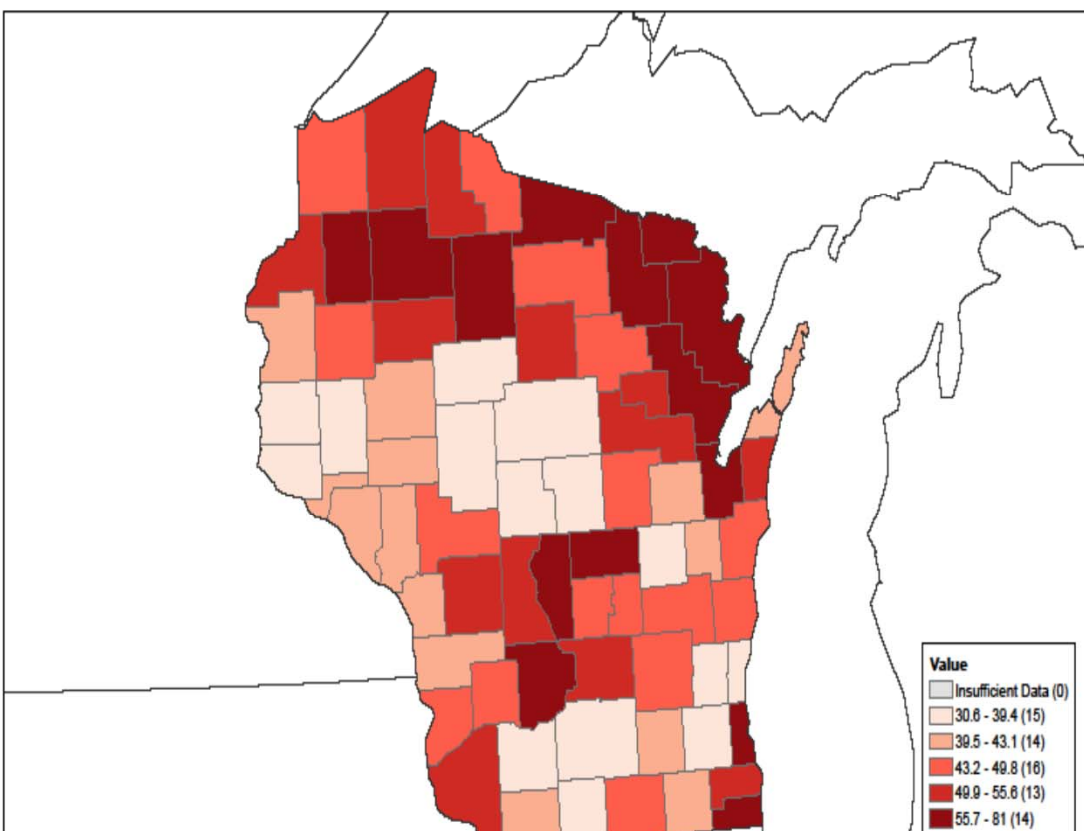
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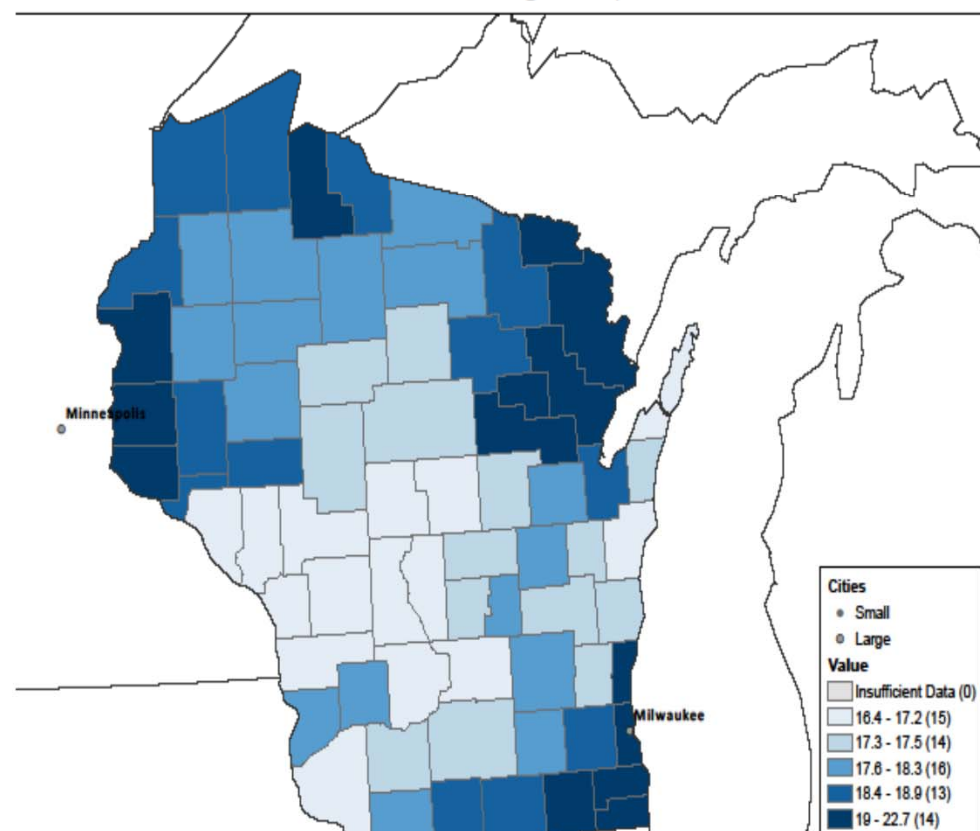
Avoidable CV Deaths

BP Medication Non-Adherence

Avoidable Heart Disease and Stroke Death Rate per 100,000, All Race, All Gender, 2013-2015



Blood Pressure Medication Nonadherence Percentage, Medicare Part D Beneficiaries Aged 65+, 2014



SO.....

What Can Wisconsinites Do?

- Individual and Family Member
- Healthcare Professional
- Community Member and Public Health Expert
- Health System Leader
- Employer



You and Your Family

- Aim for at least 150 min/week of physical activity
- Read the labels for sodium and choose wisely
- Know and manage your ABCS
- Check the AQI and mitigate your exposure to PM 2.5
- Attend CR and encourage family and friends to do so



Healthcare Professional

- Prioritize and excel in the ABCS and CR referral

- **Teams**—including pharmacists, nurses, community health workers, and cardiac rehab professionals
- **Technology**—decision support, patient portals, e- and default referrals, registries, and algorithms to find gaps in care
- **Processes**—treatment protocols; daily huddles; ABCS scorecards; proactive outreach; finding patients with undiagnosed high BP, high cholesterol, or tobacco use
- **Patient and Family Supports**—training in home BP monitoring; problem-solving in medication adherence; counseling on nutrition, physical activity, tobacco use, risks of particulate matter; referral to community-based physical activity programs and cardiac rehab



Community Members and Public Health Experts

- Enact smoke-free space policies and pricing strategies, inclusive of e-cigarettes
- Serve or request healthy food at all meetings and in all facilities
- Contribute to healthy design of your community and to accessible, affordable, and safe places to be active
- Improve awareness of the local air quality index
- Build linkages between health systems and community resources



Health System Leader

Set Expectations and Equip Your Teams to

- Achieve 80% performance on the ABCS among ambulatory primary care and relevant specialty practices
- Achieve 90% referral to CR programs of those eligible
- Achieve 70% initiation rate among those eligible for CR
- Recognize/reward high performance on ABCS and CR



Million Hearts Employer

- Adopt policies and practices to ensure clean air for patients, visitors, and staff
 - smoke free policies that include e-cigs
 - no-idling policies for deliveries
 - education about impact of poor air quality
 - posting of local Air Quality Index on site
- Design benefits to enhance employee health: no cost-share for BP, statin, and tobacco cessation medications; BP monitors; cardiac rehab
- On-site BP monitoring with clinical support
- Sponsor walking and other physical activity programs
- Adopt procurement and food labeling practices consistent with national guidelines



Requests and Up-comings

- Prioritize, set an aim, gather a team, and go get results
- Find resources at millionhearts.hhs.gov
 - Hypertension Control Change Package
 - SMBP and Hiding in Plain Sight videos and guides
 - Million Hearts microsite
- Coming soon
 - Cardiac Rehab Change Package posted in August
 - Vital Signs in September with Wisconsin's "share" of events
 - 2018 Champions this fall



Thank you

- More information about Million Hearts 2022 at www.millionhearts.gov
- Reach me at janet.wright@cms.hhs.gov

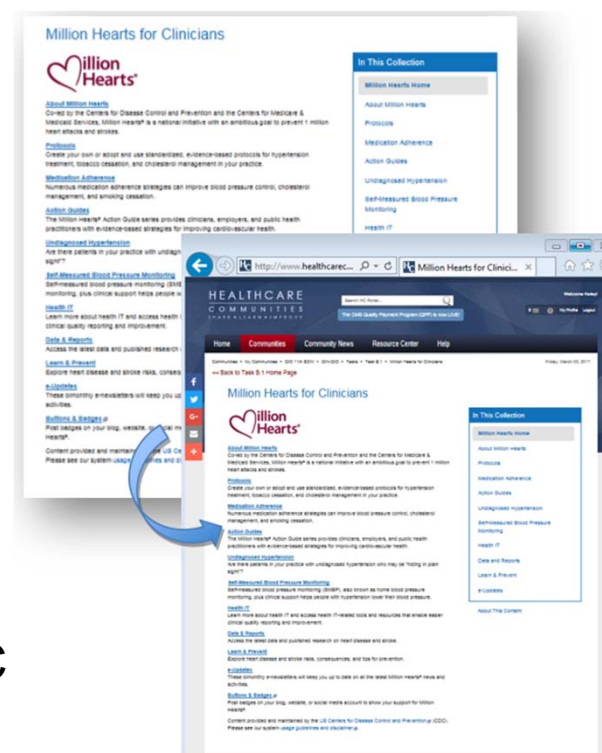


Resources and Additional Data



Million Hearts® Microsite for Clinicians

- Features Million Hearts® protocols, action guides, and other QI tools
- Syndicates **LIVE** Million Hearts® on your website for your clinical audience
- Requires a small amount of HTML code—customizable by color and responsive to layouts and screen sizes
- Content is free, cleared, and continuously maintained by CDC



Available at <https://tools.cdc.gov/medialibrary/index.aspx#/microsite/id/279017>

New Resources

- Million Hearts® 2022 web content

- [Particle Pollution](#)
- [Physical Activity](#)
- [Tobacco Use](#)
- [Partner Opportunities](#)
- [Cardiac Rehabilitation](#)



- EPA's citizen science mobile app:

[Smoke Sense](#)



Smoke Sense

'Undiagnosed' Resources

- Maine Center for Disease Control and Prevention **HIPS video** – <https://vimeo.com/136615637>
- National Association of Community Health Centers – **Consolidated Change Package** - leverages HIT, QI, and care teams to identify hypertensive patients hiding in plain sight
- **Hypertension Prevalence Estimator** – For practices/systems to use to estimate their expected hypertension prevalence
- **Whiteboard animation** – a creative depiction of the “hiding in plain sight” phenomenon and what clinical teams can do
- <https://millionhearts.hhs.gov/tools-protocols/hiding-plain-sight/index.html>



Million Hearts Clinical Resources and Tools

- Action Guides
 - Hypertension Control: Change Package for Clinicians
 - Self-Measured Blood Pressure Monitoring: Action Steps for Clinicians
 - Identifying and Treating Patients Who Use Tobacco: Action Steps for Clinicians
- Team Protocols for treating Hypertension, Tobacco use, Cholesterol
- Undiagnosed Hypertension
 - Finding Patients “Hiding in Plain Sight” change package
 - Prevalence Estimator Tool
- Making the Most of Health IT
 - Million Hearts® EHR Optimization Guides-how to find and use data on the ABCS
- Clinical Quality Measures
 - Million Hearts® ABCS
 - Million Hearts® Dashboard – quality reporting on the ABCS measures by state
- Other Tools
 - ASCVD Risk Estimator
 - Hypertension Control Champion Success Stories



Million Hearts® for Clinicians Microsite at
<https://tools.cdc.gov/medialibrary/index.aspx#/microsite/id/279017>

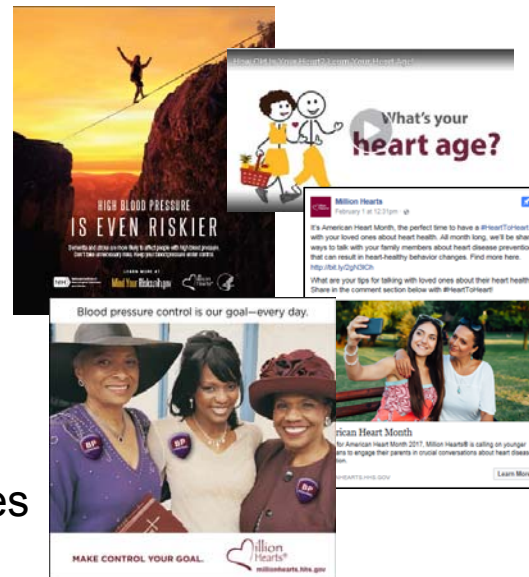
Million Hearts Community Resources and Tools

- Action Guides
 - Self-Measured Blood Pressure Monitoring: Action Steps for Public Health
 - Medication Adherence: Action Steps for Public Health Practitioners
 - Medication Adherence: Action Steps for Health Benefit Managers
 - Cardiovascular Health: Action Steps for Employers
- CDC State Heart Disease and Stroke Prevention Programs
 - State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health (1305)
 - Coverdell National Acute Stroke Program
 - WISEWOMAN
 - Sodium Reduction in Communities
 - Building GIS Capacity for Chronic Disease Surveillance
- Million Hearts Cardiac Rehab Collaborative
- Healthy Is Strong
- 100 Congregations for Million Hearts



Million Hearts Consumer Resources and Tools

- Heart Age Predictor
- My Life Check ®
- High Blood Pressure: How to Make Control Your Goal
- Visit Checklist
- Supporting Your Loved One with High Blood Pressure
- Blood Pressure Wallet Card
- Smoke Free (SF)
- Million Hearts Videos (on YouTube)
- Million Hearts E-Cards & Shareables
- Mind Your Risks
- Tips from Former Smokers



University of Wisconsin

- 14,970 patients (2008-2011)
- Clinical criteria:
 - Excluded patients with a diagnosis code or current antihypertensive Rx
 - ≥ 3 outpatient BPs from 3 separate dates, at least 30 days apart, within a 2-year period (≥ 140 or ≥ 90)
 - ≥ 2 elevated BPs (≥ 160 or ≥ 100), at least 30 days apart, but within a 2-year period
- After 4 years, 18–31-year-olds had a 33% slower rate of receiving a diagnosis compared to those 60+



Johnson HM, Thorpe CT, Bartels CM, Schumacher JR, Palta M, Pandhi N, Sheehy AM, Smith MA. Undiagnosed hypertension among young adults with regular primary care use. J Hypertens . 2014, 32:65–74