Kentucky + Million Hearts 2022

What One (Awesome) State Can Achieve

Kentucky + Million Hearts 2022

Executive Director: Million Hearts

Today's Objectives

• Million Hearts 2022 overview
• Lightning Round: Burning Questions and Feedback
  • What strikes you about this framework?
  • How could you use it to accelerate progress in Kentucky’s cardiovascular and cerebrovascular health and care?
  • What “pieces” of Million Hearts 2022 would you like to hear about in more detail?
• 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

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.
Major Contributors to “the Million”

Hypertension is also costly in dollars: $111 billion annually in health care services, meds & missed days of work.

Million Hearts® 2022

Objectives and Goals

 Keeping People Healthy

Optimizing Care

- Improve ABCS®
- Increase Use of Cardiac Rehab

Improving Outcomes for Priority Populations

Black/African Americans with Hypertension
- 35-64 year olds due to rising event rates
- People who have had a heart attack or stroke
- People with mental health and/or substance use disorders who smoke

Million Hearts® 2022

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

Keeping People Healthy

Goals

<table>
<thead>
<tr>
<th>Goals</th>
<th>Effective Public Health Strategies</th>
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<tbody>
<tr>
<td>Reduce Sodium Intake (2013)</td>
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<tr>
<td>Decrease Tobacco Use (2012)</td>
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<tr>
<td>Increase Physical Activity (2011)</td>
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Effective interventions

- Enhance consumers' options for lower sodium foods
- Institute healthy food procurement and nutrition policies
- Enact smoke-free space policies that include e-cigarettes
- Use pricing approaches
- 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

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<td>Improve ABCS® (2014)</td>
<td>High Performers Excel in the Use of...</td>
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<tr>
<td>Increase Use of Cardiac Rehab (2013)</td>
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<tr>
<td>Engage Patients in Heart-Healthy Behaviors (2012)</td>
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*Refers to care as appropriate: Microtargets as needed: Challenged management: Everyday population

Improving Outcomes for Priority Populations

Black/African Americans
- 35-64 year olds
- People who have had a heart attack or stroke

People with mental health and/or substance use disorders who smoke
- Increasing cardiac rehab referral and participation
- Avoiding exposure to pollutants

People with limited access to health care
- Reducing tobacco use
- Integrating tobacco cessation into behavioral health treatment

People with mental health and/or substance use disorders who smoke
- Reducing tobacco use
- Integrating tobacco cessation into behavioral health treatment

Strategies

- Deliver guideline-concordant treatment
- Problem-solve in med adherence
- Advance practice of out-readings
- Increase access to and participation in community-based activity programs
- Use optimal referral and CTS liaison visits as discharge ensures timely enrichment
- Increase use of Air Quality Index
- Tailored quitline protocols
Questions and Input

• What strikes you about this framework?

• How could you use this framework to accelerate progress in Kentucky cardiovascular and cerebrovascular health and care?

• What “pieces” of Million Hearts 2022 would you like hear about in more detail?

New in Million Hearts 2022

• Physical activity

• Cardiac Rehab

• Engaging Patients in Heart-healthy Behaviors

• Self-measured Blood Pressure Monitoring

• “Priority Populations”

• Particle pollution

Cardiac Rehab Saves Lives and Improves Health

Road-tested Strategies to Boost Participation

Increasing Cardiac Rehabilitation Participation

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

Philip A. Adams, MD, Steven J. Kozloski, MD, Jane A. Winger, MD
Larry E. Hannon, MD, Karen Liu, RN, MS, Kimberly Heard, AMFT
Donald S. Shepard, MD, and Kendall J. Thomas, MD, MS

Reducing the risk of sudden death or re-infarction

Limit the effects of cardiac illness

Stabilize or reverse the atherosclerotic process

Control cardiac symptoms

Stabilize or reverse the atherosclerotic process

Enhance psychosocial and vocational status

Typically administered in 36 sessions over ~12 weeks

Cardiac Rehabilitation: What is it?

Cardiac Rehabilitation: Who Benefits?

Strong evidence of benefit—and good insurance coverage—for individuals who have

• Had a heart attack.¹

• Stable angina.²

• Received a stent or angioplasty.³

• Heart failure with ejection fraction ≤ 35%.⁴

• Undergone bypass, valve, or a heart, lung, or heart-lung transplant surgery.⁵,⁶
Cardiac Rehabilitation: What is the Impact?

- **Reduces:**
  - Death from all causes by 13-24%\(^7\)
  - Death from cardiac causes by 26-31%\(^7\)
  - Hospitalizations by 31%\(^7\)

- **Improves:**
  - Medication adherence
  - Functional status, mood, and Quality of Life scores\(^7-11\)

- **More is Better**
  - 36 vs fewer sessions reduces risk of heart attack and death\(^12\)
  - 25 sessions is generally considered a healthy “dose”\(^13\)

Cardiac Rehabilitation: Is Referral the Problem?

- **Referral to CR varies by qualifying condition**
  - ~80% for patients with a heart attack\(^14\)
  - ~60% for patients who undergo angioplasty\(^15\)
  - ~10% for patients with heart failure\(^16\)

The strength of the physician’s endorsement is the greatest predictor of CR participation.\(^17\)

CR Referral After Cardiac Stent

**Striking Variation across Hospitals**

- 60% overall referral rate
- The HOSPITAL was the most important factor for predicting referral rate
- Ranges from 0 to 100%

CR Participation: Who does—and does not—participate?

- **Participation rates vary by diagnosis**
  - Higher for heart attack (~14%) and bypass surgery (31%)\(^19\)
  - Lower for patients with heart failure (<3%)\(^20\)

- **Lower participation rates among**
  - People of color
  - Women
  - Elderly
  - People with co-morbidities or low socio-economic status\(^19, 21\)

  - Significant geographic variation\(^22, 23\)

CR Participation: What Barriers do Patients Face?

- **Participation barriers include**
  - Logistics
  - Transportation/parking
  - Convenient hours
  - Proximity of programs
  - Cost-sharing
  - Competing responsibilities
  - Cultural and language issues\(^18\)

Only 20% to 30% of eligible people in the U.S. are participating in cardiac rehabilitation.\(^16\)
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

2017 Guidelines SMBP Recommendations

<table>
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<tr>
<th>Recommendation for Out of Office and Self-Monitoring of BP</th>
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<td>SMBP Recommendations</td>
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<tr>
<td>Recommendations for Monitoring Strategies to Improve Control of BP in Patients on Drug Therapy for High BP</td>
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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

Million Hearts® Accelerating SMBP in Kentucky

Health Center Teams
- Alliance/KentuckyCare
- St. Thomas Christian Health Center
- White House Clinics

Local YMCAs:
- YMCA of Greater Louisville
- Central Kentucky YMCA

Local Public Health
- Purchase District Health Department

State and Regional Organizations
- Kentucky Health Center Network
- Kentucky State Alliance of YMCAs
- Kentucky Dept. for Public Health

<table>
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<tr>
<th>SMBP Measures</th>
<th>Total Patients (Jul ’17 – May ’18)</th>
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<tr>
<td>Recommendation of SMBP</td>
<td>756</td>
</tr>
<tr>
<td>Use of SMBP among HTN Patients</td>
<td>477</td>
</tr>
<tr>
<td>Referral to Community Program (e.g., Y BPSM)</td>
<td>99</td>
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“...We were really excited with the early success of our program. We saw a 5% increase in the number of patients whose blood pressure was controlled over a relatively short implementation period.”

Stephanie Moore, MPA, CMPE, CEO, White House Clinics

Kentucky SMBP Best Practices

- Develop a written protocol with detailed EHR screen shots
- Train ALL staff on executing the protocol → ensure a “warm handoff”
- Train and use CHWs to:
  - Provide education on risk factors and lifestyle changes
  - Document BP measurements and calculate averages
- Use CARE Collaborative BP log and educational materials

SO..... What Can Kentuckians 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

Community Members and Public Health Experts

• Enact pricing strategies and smoke-free space policies, inclusive of e-cigarettes
• Serve or request healthy food at all meetings, 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

Requests and Up-comings

• Join the CR Collaborative and/or the SMBP Forum
• Visit millionhearts.hhs.gov
  • Hypertension Control Change Package
  • SMBP and Hiding in Plain Sight videos and guides
  • Million Hearts microsite for evergreen clinical resources
• Coming soon
  • Cardiac Rehab Change Package on website this September!
  • Vital Signs in September with Kentucky’s “share” of events
  • 2018 Hypertension Champions announced this fall
Thank you

- More on Million Hearts 2022 at millionhearts.hhs.gov
- To join
  - CR Collaborative, contact Haley Stolp at hstolp@cdc.gov
  - SMBP Forum, email MillionHeartsSMBP@nachc.org
- 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

Resources for Finding those with Undiagnosed Hypertension

- 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

- ASCVD Risk Estimator
  - Hypertension Control Champion Success Stories
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

Self-Measured BP Resources

Guidance for clinicians on:
- Training patients to use monitors
- Checking home machines for accuracy
- Suggested protocol for home monitoring
- Cuff loaner program
- https://millionhearts.hhs.gov/tools-protocols/smbp.html

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!

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

Particle Pollution

- PM$_{2.5}$ refers to particulate matter of 2.5 micrometers or less in diameter
- Exposure is linked to an increase in risk of heart attacks, strokes, and rhythm disorders
- Particle pollution info on Million Hearts website
**Populations At-Risk Are Known**

**Susceptible populations include** –
- Populations with pre-existing respiratory disease
- Populations with pre-existing cardiovascular disease
- Adults 65 years of age and older
- Populations with lower socio-economic status
- Children & the developing fetus

**Populations suspected to be at greater risk** –
- Populations with chronic inflammatory diseases (e.g., diabetes, obesity)
- Populations with specific genetic polymorphisms (e.g., GSTM1) mediate physiologic response to air pollution

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**Really Good News: Barbers + Pharmacists Teaming Up with Clinicians**

**Results**
- Intervention @ 6 months: 152.8 – 27 = 125.8 mm Hg
- 65.6% reached <130/80
- Control @ 6 months: 154.6 – 9 = 145.4 mm Hg
- 11.7% reached <130/80

Victor RG et al, NEJM 378;14 nejm.org April 5, 2018

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

Margolis KL, NEJM 378;14 nejm.org April 5, 2018

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**What is THIS?**

- Electronic vaporizer that uses nicotine salts
- Promoted as a “satisfying alternative to cigarettes”
- "By accommodating cigarette-like nicotine levels, JUUL provides satisfaction to meet the standards of smokers looking to switch from smoking cigarettes."
- Available in tobacco, fruit, mint and other flavors
- Every JUUL flavored pod contains nicotine

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https://www.juulvapor.com/