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 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.
**Keeping People Healthy**

**Goals**

- **Reduce Sodium Intake**
- **Increase Use of Cardiac Rehab**
- **Increase Physical Activity**

**Effective Public Health Strategies**

- 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
- Increase use of Air Quality Index

**Optimizing Care**

**Effective Health Care Strategies**

- **Improve ABCS**
- **Increase Use of Cardiac Rehab**
- **Engage Patients in Heart-Healthy Behaviors**

**Strategies**

- Design communities and streets that support physical activity
- Increase use of Cardiac Rehab

**Million Hearts® 2022**

**Objectives and Goals**

- **Reduce Sodium Intake**
- **Increase Use of Cardiac Rehab**
- **Increase Physical Activity**

**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 abuse disorders who smoke**

**Notes**

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

**Event Prevention**

- **2017-2021**
- **300,000-400,000**

**Population At Risk**

- **2017-2021**
- **64-80 years due to rising event rates**

**Abbreviations**

- ABCS
- BP
- CVD
- CR
- PRISM
- NHIS
- NHANES
- NHANES

**References**

- Ritchey et al.
- ModelHealth:CVD
- PRISM (unpublished)
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 to 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. Kesselheim, MD; June S. Vargas, MD; Larry M. Harmon, PhD; Karen Lue, RN, MS; Kimberly Hawkins, AHFPA; Donald S. Spearman, PhD; and Randall J. Thomas, MS, RHIA

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

Cardiac Rehabilitation: What is it?

Comprehensive, team-delivered out-patient programs that
• Limit the effects of cardiac illness
• Reduce the risk for sudden death or re-infarction
• Control cardiac symptoms
• Stabilize or reverse the atherosclerotic process
• Enhance psychosocial and vocational status

Typically administered in 36 sessions over ~12 weeks

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 scores7-11

• More is Better
  • 36 vs fewer sessions reduces risk of heart attack and death12
  • 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 attack14
  • ~60% for patients who undergo angioplasty15
  • ~10% for patients with heart failure16

  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%)16
  • Lower for patients with heart failure (~3%)19

• Lower participation rates among
  • People of color
  • Women
  • Elderly
  • People with co-morbidities or low socio-economic status18,21

  • Significant geographic variation22, 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 issues18

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

The BP Power Cycle

2017 Guidelines
SMBP Recommendations

- 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 Steering Committee and Forum

• Vision: SMBP will be accessible to everyone for diagnosis and management of hypertension
• National leaders—researchers, clinicians, public health experts, community organizations—are developing the roadmap
• Those committed to advancing SMBP are welcome to join the quarterly Million Hearts SMBP Forum

Million Hearts® Accelerating SMBP in Kentucky

<table>
<thead>
<tr>
<th>Health Center Teams</th>
<th>SMBP Measures</th>
<th>Total Patients (Jul ’17 – May ’18)</th>
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<tr>
<td>☑ Albano/KentuckyCare</td>
<td>Recommendation of SMBP</td>
<td>736</td>
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<tr>
<td>☑ Shawnee Christian Health Center</td>
<td>Use of SMBP among HTN Patients</td>
<td>477</td>
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<tr>
<td>☑ White House Clinics</td>
<td>Referral to Community Program (in p. τ BPMS)</td>
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<th>State and Regional Organizations</th>
<th>SMBP Measures</th>
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<tr>
<td>☑ YMCA of Greater Louisville</td>
<td>Recommendation of SMBP</td>
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<tr>
<td>☑ Central Kentucky YMCA</td>
<td>Use of SMBP among HTN Patients</td>
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<tr>
<td>☑ Purchase District Health Department</td>
<td>Referral to Community Program (in p. τ BPMS)</td>
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</tr>
</tbody>
</table>

“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:
  o Provide education on risk factors and lifestyle changes
  o 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

Million Hearts Employer

- Adopt policies and practices to ensure clean air for employees, visitors, and staff
- Design benefits to enhance employee health:
  - No cost-share for BP, statin, tobacco cessation meds, cardiac rehab
  - Free BP monitors
  - Provide on-site BP monitoring with clinical support
  - Sponsor walking and other physical activity programs
  - Procure and label food consistent with national food service guidelines

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

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

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
  • Smoking Patients: Hiding in Plain Sight change package
  • Prevalence Estimation Tool
  • Making the Most of Health IT
• ASCVD Risk Estimator
• Million Hearts® ABCS
  • Million Hearts® Shared Tool: Quality reporting on the ABCS measures by state
• Other Tools
  • 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

• HeartAge 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

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

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!

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

Really Good News:
Barbers + Pharmacists Teaming Up with Clinicians

Results
Intervention @ 6 months: 152.8 – 27 = 125.8 mm Hg
63.6% reached <130/80
Control @ 6 months: 154.6 – 9 = 145.4 mm Hg
11.7% reached <130/80

Victor RG et al, n engl j med 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

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

What is JUUL?

https://www.juulvapor.com/

JUUL – Nicotine Delivery