ENGAGING COMMUNITY HEALTH WORKERS TO IMPROVE HEART HEALTH
Blood Pressure Self-Monitoring Program

COMMUNITY HEALTH WORKER CONFERENCE
April 12, 2018
SCOPE OF THE PROBLEM
Heart Disease and Stroke combined are the #1 cause of death in Washington State.
Burden of Heart Disease and Stroke In Washington State

Nationally, among adults with high blood pressure:

• **17% (or 1 in 6)** are not aware of their condition
• **Only about half (52%)** have their blood pressure under control

**Deaths**
- Heart Disease: 11,000
- Stroke: 2,700

**Hospitalizations**
- Heart Disease: 56,100
- Stroke: 15,000

**Adults ever had Heart Disease**
- 301,600 (5.5%)

**Adults ever had a Stroke**
- 148,700 (2.7%)

**Adults ever had High Blood Pressure**
- 1.6 million (30%)

HEART DISEASE AND STROKE BY RACE AND HISPANIC ORIGIN


Abbreviations: AIAN, American Indian/Alaska Native; NHOPi, Native Hawaiian/Other Pacific Islander. *Non-Hispanic, single race only. -- Sample too small to obtain reliable estimates.

Note: Among adults 18 years and older.
YMCA’S BLOOD PRESSURE SELF-MONITORING PROGRAM
THE Y’S UNIQUE ROLE

• That vast majority of factors affecting our health are outside of the health care system

• Ys have the right stuff to support people in the day to day work of preventing or managing chronic diseases

• Combination of local presence backed up by a national network makes the Y unique, credible, and powerful. We have a lot to give!
HEALTH EQUITY

Intentional engagement of underserved communities

Health Equity is “the condition in which everyone has the opportunity to ‘attain their full health potential’ and no one is ‘disadvantaged from achieving this potential because of their social position or other socially determined circumstance.”

- CDC

- Doing our part requires:
  - Approaching communities with respect
  - Building trust
  - Developing strategic partnerships
  - Gaining understanding of diversity and cultural competence
  - Navigating around barriers to ensure needed services are truly accessible
EVIDENCE-BASED PROGRAMS

• Research studies have proven their effectiveness. **We know they work**
• Must be run with fidelity to program design
  - Program looks the same at every location
  - Often require specific staff trainings
• Often require data collection
• Easier sell to medical providers, funders
• Developed by researchers, but need to get out into the community – the Y can be the missing link!
THE Y’S NATIONAL MILLION HEARTS® COMMITMENT

The Initiative: Launched by HHS, Million Hearts® brings together communities, health systems, nonprofit organizations, federal agencies, and private-sector partners from across the country to fight heart disease and stroke.


The Y Joins CDC, HHS and CMS in Million Hearts Initiative

YMCA of the USA announces commitment to expand efforts to help reduce heart disease and stroke

CHICAGO, September 13, 2011 – The Y announced its support of the Million Hearts Initiative – an initiative spearheaded by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and Centers for Medicare and Medicaid Services that aims to prevent one million heart attacks and strokes over the next five years – at an event today in Washington, D.C.
BLOOD PRESSURE SELF-MONITORING (BPSM) PROGRAM OVERVIEW

4 month evidence-based program designed to help persons with high blood pressure better manage their blood pressure by developing the habit of self-monitoring:

- Guidance and tools for self-monitoring and tracking
- Healthy Heart Ambassador support via weekly Office Hours and messages
- Monthly Nutrition Education Seminars
- Data collected and managed in customized online database (REDCap)
THE YMCA PRODUCED SLIGHTLY MORE FAVORABLE FINDINGS THAN THOSE REPORTED IN THE CHECK IT, CHANGE IT STUDY.

<table>
<thead>
<tr>
<th>“Check It, Change It” Study (n=1,784)</th>
<th>YMCA (n=526)</th>
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<tbody>
<tr>
<td>At baseline, 49.3% of participants had a BP &lt;140/90 mmHg.</td>
<td>At baseline, 51.7% of participants had a BP &lt;140/90 mmHg.</td>
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<tr>
<td>By 6 months, 74% of participants either reached a BP &lt;140/90 mmHg or had a ≥10 mmHg reduction in SBP.</td>
<td>After an average of 4.3 months, 75.1% of participants either reached a BP &lt;140/90 mmHg or had a ≥10 mmHg reduction in SBP.</td>
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<tr>
<td>Overall, mean SBP decreased by 4.8 mmHg.</td>
<td>Overall, mean SBP decreased by 6.3 mmHg.</td>
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<tr>
<td>Overall, mean DBP decreased by 2.5 mmHg.</td>
<td>Overall, mean DBP decreased by 3.2 mmHg.</td>
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“Check It, Change It” enrolled patients from 8 clinics in Durham County, NC between 12/09/2010 and 11/11/2011.
THE YMCA’S BPSM PROGRAM

Who?
- Adults with high blood pressure and/or on antihypertensive medication
- Interested in self-monitoring
- No recent cardiac events, no atrial fibrillation/arrhythmias, no risk for lymphedema

What?
- 4 month program supporting participants in developing the habit of self-monitoring and identifying opportunities for action through weekly support & 10-minute consultations
- Nutrition and physical activity information to aid in blood pressure control through lifestyle change

When? Where?
- Anytime, anywhere (lobby, clinic, multipurpose space)
- Space for blood pressure stations and nutrition education seminars; adequate privacy
- Many non-YMCA sites; workplaces, clinics, community centers

How?
- Training on proper blood pressure measurement technique
- Ongoing support, education and coaching from trained staff
- Tools for self-monitoring and tracking
- Weekly messages, drop-in consultations, and seminars
COLLABORATION WITH COMMUNITY HEALTH WORKERS

With the support of 1422 funding, a demonstration project was created to bring together disparate sectors that hadn’t worked together to create something new.

Project Partners:
- Leaders in Women’s Health;
- Samoan Nurses Organization of Washington;
- Mercy Housing Northwest;
- YMCA of Pierce and Pierce and Kitsap Counties;
- SeaMar HealthCare;
- Asian Pacific Cultural Center
- Tacoma Pierce County Health Department
PURPOSE OF THE COLLABORATION

PROJECT

- Create a model for recruiting and hiring community health workers who are trusted members of the community.

- Demonstrate the medical value of community health workers, who are trusted members of their communities, to conduct culturally and linguistically centered outreach and health education in community settings.

- Design and create the infrastructure for a “HUB” that can integrate several sources of funding that pay community health workers to work on several interventions in an integrated fashion.

- Create linkages to connect the work of community health workers in community settings to a health system (Sea Mar CHC) via a database and interface with the Clinic’s Electronic Medical Records (EMR);
BENEFITS OF THE COMMUNITY HEALTH WORKER PROJECT

• Addresses access to care and equity issues project serves people with low incomes at 2 community sites

• Promotes self-management of health and prevention of chronic disease people learn to understand and track their “numbers” people learn preventative strategies - healthy eating and exercise

• Serves “the Whole person” people have adequate housing at Mercy – able to focus on health trusting relationships – people discuss other social determinants
BENEFITS OF THE COMMUNITY HEALTH WORKER PROJECT (CON’T)

• Development of the Community Health Workers in the delivery of evidence-based chronic disease programming

• Inform communication opportunities from community-based health care services to health care providers

• Identification of participants living with hypertension without health care insurance or provider: care navigation
OUTCOMES
CHW-LED BPSMP DEMOGRAPHICS

From the first cohort (registration date between: November 2016-March 2017)

# of people who enrolled: **175**

# who ever been diagnosed with high blood pressure/hypertension: **175**

# who’s first BP reading **140/90** or above (hypertension): **115**

% of those who began the program uncontrolled: **92%**

- **Race**
  - White/Caucasian: 20
  - Black/African American: 41
  - American Indian or Alaska Native: 2
  - Asian: 84
  - Native Hawaiian or Other Pacific Islander: 19
  - Prefer not to answer: 3
  - Two or more races: 4
  - Other: 2

- **Age**
  - 18-24: 2
  - 25-44: 5
  - 45-64: 47
  - 65+: 111
  - Missing: 10
CHW-LED BPSMP DEMOGRAPHICS

From the first cohort (registration date between: November 2016-March 2017)

From the remaining cohorts (registration date between: April 2017-Jan 2018)

- # of people who enrolled: 71
- # who ever been diagnosed with high blood pressure/hypertension: 71
- # who’s first BP reading \textbf{130/80} or above (hypertension): 61
- % of those who began the program uncontrolled: 86%
- Race
  - White/Caucasian: 6
  - Black/African American: 12
  - Asian: 34
  - Native Hawaiian or Other Pacific Islander: 11
  - Prefer not to answer: 6
  - Other: 2
- Age
  - 18-24: 0
  - 25-44: 1
  - 45-64: 25
  - 65+: 45

Note: Different hypertension guidelines were used for the first cohort (140/90 vs. 130/80), based on American Heart Association recommendations at the time.
CHW-LED BPSMP OUTCOMES

Mercy Housing CHW Collaboration Data (November 2016-January 2018)

Cohort 1 (n=98)*

- Average change in systolic blood pressure (in those starting uncontrolled): -14.5 mm/Hg
- Average change in diastolic blood pressure (in those starting uncontrolled): -7.8 mm/Hg

Other Cohorts (n=15)*

- Average change in systolic blood pressure (in those starting uncontrolled): 2.3 mm/Hg
- Average change in diastolic blood pressure (in those starting uncontrolled): -2.0 mm/Hg

Both Cohorts

- Percent of participants who begin the program uncontrolled (130/80): 89%
- Percent of participants who begin the program uncontrolled and become controlled: 21% (for those who completed all four months and all four classes)

* those who have been in the program 4 months, started the program uncontrolled, and have at least 2 months between their initial and final reading, as this is how we define “completers” in this program.

National Data (as of February 2018):

- Percent of participants who begin the program uncontrolled (130/80): 79.4%
- Percent of participants who begin the program uncontrolled and become controlled: 19.5%
- Average change in systolic blood pressure (in those starting uncontrolled): -7.7 mm/Hg
- Average change in diastolic blood pressure (in those starting uncontrolled): -4.7 mm/Hg
STORIES OF IMPACT

SINIVA DRIGGERS
ASIAN PACIFIC CULTURAL CENTER
TACOMA WA
QUESTIONS?