Welcome

Office for State, Tribal, Local and Territorial Support

presents . . .

CDC *Vital Signs*

Heart Age and Addressing Cardiovascular Disease Risk: The Role of States and Localities

September 8, 2015

2:00–3:00 pm (EDT)

Agenda

2:00 pm	**Welcome & Introductions**	**Judy Monroe, MD** Director, Office for State, Tribal, Local and Territorial Support Deputy Director, CDC
2:05 pm	**Presentations**	**Quanhe Yang, PhD** Senior Scientist, Epidemiology and Surveillance Branch, Division of Heart Disease and Stroke Prevention, CDC
		Melanie Rightmyer, DNP, RN Health Systems Program Manager, Chronic Disease Programs Branch, Alabama Department of Public Health
		Laura Oliven, MPP Tobacco Control Manager, Minnesota Department of Health
		LorieAnn Wilkerson-Leconte, MPH Diabetes, Heart Disease and Stroke Prevention Manager, New Jersey Department of Health
2:30 pm	**Q&A and Discussion**	**Judy Monroe, MD**
2:55 pm	**Wrap-up**	
3:00 pm	**End of Call**	

CDC Vitalsigns™ Teleconference

to support STLT efforts and build momentum around the monthly release of CDC *Vital Signs*

Predicted Heart Age and Racial Disparities in Heart Age among U.S. Adults at State Level

Quanhe Yang , Yuna Zhong, Matthew Ritchey, Mark Cobain, Cathleen Gillespie, Robert Merritt, Yuling Hong, Mary G. George, Barbara A Bowman

Burden of Cardiovascular Disease

- Each year, nearly 800,000 people die from cardiovascular disease (CVD) in the United States
  - That's 1 in every 3 deaths
- About 155,000 Americans who died from CVD in 2013 were younger than age 65 (1 in 5)
- About 1 in every 6 health care dollars is spent on CVD
  - Total costs each year: $320 billion
    - $195.6 billion in direct medical expenses
    - $124.5 billion in lost productivity costs

1 Deaths: Final data for 2013. National Vital Statistics Report. 2015;64. Detailed Tables released ahead of full report: http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf.

2 Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2013 on CDC WONDER Online Database, released 2015. http://wonder.cdc.gov/ucd-icd10.html. Accessed on Feb 3, 2015.

3 Mozzafarian D, et al. Heart Disease and Stroke Statistics – 2015 Update: a report from the American Heart Association. Circulation. 2015;131:e29-e322.

4 Heidenriech PA, et al. Forecasting the future of cardiovascular disease in the United States: a policy statement from the American Heart Association. Circulation. 2011;123:933–44

Major CVD Risk Factors

- Risk factors that you cannot change (e.g., increasing age or your family history)
- Major risk factors that are modifiable or manageable
  - High blood pressure
  - High blood cholesterol
  - Smoking
  - Obesity
  - Unhealthy diet
  - Physical inactivity
  - Diabetes
- >75% of CVD could be prevented
- CVD prediction models used to estimate 10yrs absolute CVD risk

Heart Age

- Framingham Heart Study
  - Developed the general CVD risk prediction models and introduced the new concept of heart age in 2008
  - Heart Age (HA): predicted age of the vascular system of a person based on his or her cardiovascular risk factor profile
- Comparison of HA to actual age
  - Alternative way to express a person's risk for having a CVD event
  - Might simplify risk communication
  - Might motivate more persons, especially younger persons, to establish heart-healthy lifestyle changes and adhere to recommended treatment strategies

D'Agostino RB, et al. General cardiovascular risk profile for use in primary care: the Framingham Heart Study. Circulation 2008;117:743-53.

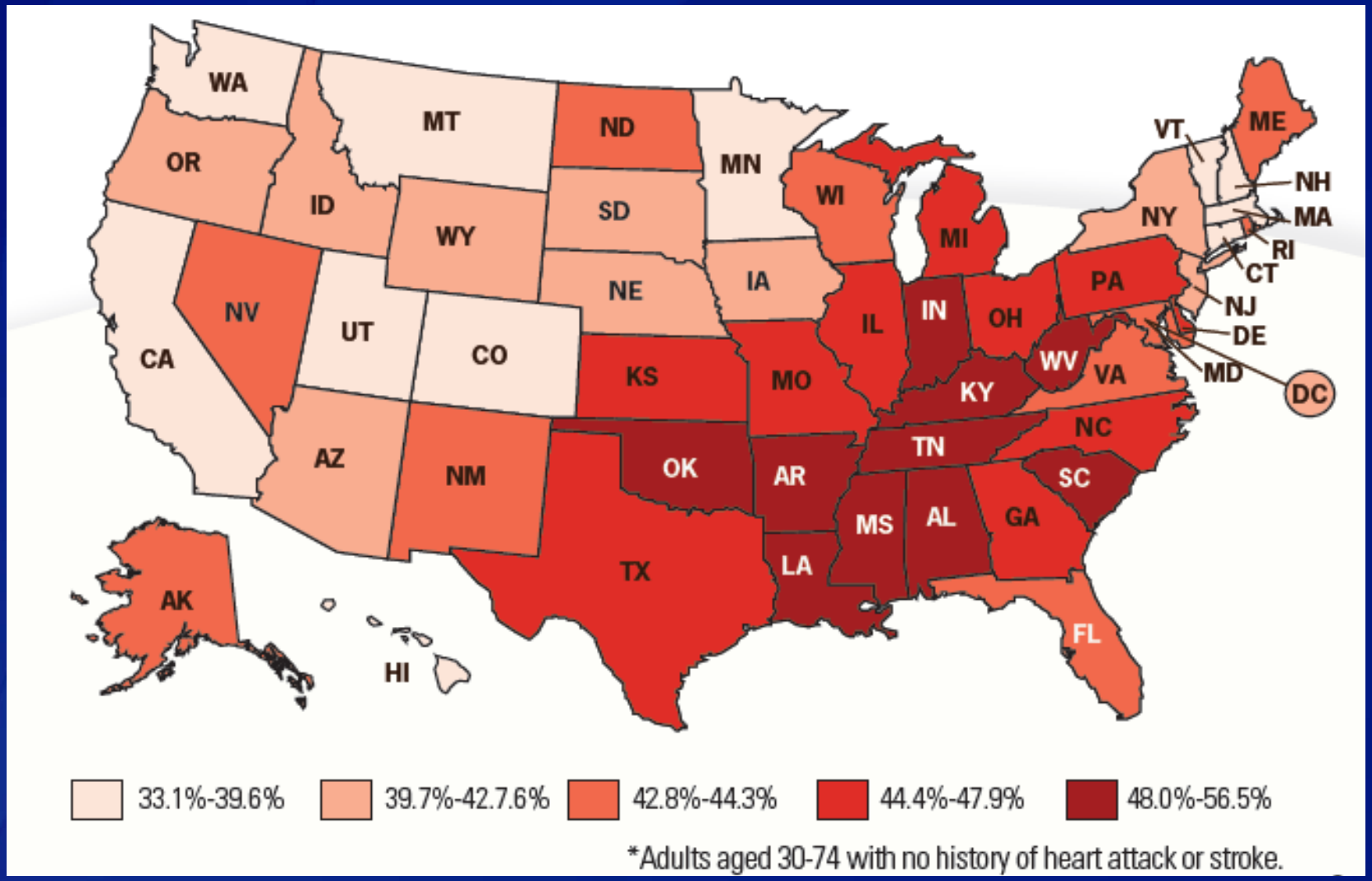
Vital Signs Overview

- Use information from the Framingham Heart Study and data collected from every US state in Behavioral Risk Factor Surveillance System (BRFSS) 2011–2013
- Provide national estimates of HA among US adults aged 30–74 years with no history of CVD
- Identify differences between HA and actual age (excess HA)
- Examines the racial, sociodemographic, and state-level disparities in excess HA

Main Findings

- About 69 million (43.7%) US adults aged 30–74 years had an HA that is 5 or more years older than their actual age
- On average, US men have an HA that is about 8 years older, and US women 5 years older, than their actual age
- 1 in 2 men and 2 in 5 women have an HA ≥5 years older than their actual age
- African Americans have an HA, on average, 11 years older than their actual age
- The average difference between HA and actual age was lowest in Utah for men and women (5.8 and 2.8 years, respectively) and highest in Mississippi (10.1 and 9.1 years, respectively)

Percent of Adults Aged 30–74 Years Whose HA is ≥5 Years Older Than Their Actual Age, by State



What Can Be Done?

- Everyone can help by
  - Knowing their heart age and taking steps to improve it
- Doctors and other health care providers can
  - Calculate heart age among patient population, talk with patients about what heart age means, work with patients on 1-2 risk factors to help lower heart age

What Can Be Done?

- Communities and health departments can help by
  - Using easily understood communication materials to promote how to lower heart age and reduce the risk of heart attack and stroke
  - Promoting safe walking areas and access to healthy food in communities
  - Addressing tobacco use comprehensively by promoting smoking quitlines and tobacco-free areas, increasing the price of tobacco products, and running hard-hitting, anti-tobacco ads
  - Partnering with hospitals to identify and address the health care issues in their community

Other Resources

- Heart Disease and Stroke Prevention
- www.cdc.gov/heartdisease
- Framingham heart age calculator
- www.cdc.gov/heartdisease/heartage.htm
- Million Hearts: millionhearts.hhs.gov

Framingham Heart Study
A Project of the National Heart, Lung, and Blood Institute and Boston University

Million Hearts™
PROUD SUPPORTER

Acknowledgements

Division for Heart Disease and Stroke Prevention

Jessica Spraggins
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Janet Wright
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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.

THE ALABAMA DEPARTMENT OF PUBLIC HEALTH
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ALABAMA

The Secret of Developing a Statewide Blood Pressure Protocol

September 2015

***Vital Signs* Town Hall**

CDC

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Building Collaborative Partnerships Identifying the Gaps

The Secret

Getting physicians, nurse practitioners, researchers, academia, pharmacists, national organizations, state and local government to……..

AGREE

SWOT

- Face-to-face meetings, conference calls
- Summarize differences JNC7 and JNC8
- Minority View
- Statement of “What Do We Agree On?”

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Blood Pressure Protocols Include Million Hearts® Elements

- Clarity and simplicity
- Lifestyle modification
- Time interval to titration and reassessment
- Use of low-cost treatment
- Suggestions for medications based on co-morbidities
- Reminder of underlying causes
- Adherence-enhancing approaches
- Congruent with current guidelines

http://millionhearts.hhs.gov/

Alabama's Blood Pressure Task Force

- Have we heard from everyone?
- Who is missing?
- Can we tell clinicians they need to use this blood pressure protocol?
- Disclaimer needed?
- Implementation, education, next steps

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What Should Clinicians Do Differently Tomorrow?

- Make blood pressure protocol a priority
- Look for high blood pressure in every patient
- Include non-physician team members
- Self-monitoring blood pressure
- Right monitor, right method, right readings
- Use health information technology
- Evidence-based guidelines

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Share Success – Others Want to Know

Ask.com | Kelly McGonigal: How to ... | Giving to others and the ... | Ask.com | How to take a screenshot | Alabama to implement blo...

hbpleaders.heart.org/blogs/16/231

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Leaders Blog

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Stay up to date with the latest and most relevant news for the Check. Change. *Control.* Leadership Community. Your community managers use this space to share curated content that may inspire and facilitate your high blood pressure initiatives.

Alabama To Implement Blood Pressure Protocol Statewide

A special announcement for our Leadership Community members. Read some exciting news from AHA regarding a big win for patients in Alabama with the adoption of the hypertension treatment algorithm.

Alabama — where more than 37 percent of adults reported having high blood pressure — is on track to become the first state to adopt the clinical practice algorithm for treating high blood pressure.

The clinical practice algorithm is a system for diagnosing and treating patients with high blood pressure. It was developed by the American Heart Association, the American College of Cardiology and the Centers for Disease Control and Prevention.

High blood pressure affects nearly 78 million adults in the United States and is a major risk factor for heart disease and stroke. Only half of people with high blood pressure have it under control, so adopting the hypertension algorithm could have a big impact in Alabama.

The state's department of public health has already trained its clinicians on the algorithm at its 65 county health departments, which serve more than 70,000 patients a year. It's encouraging other members of its Alabama Million Hearts Blood Pressure Taskforce to adopt the algorithm. This includes the state's 126 federally qualified health center sites, which serve 350,000 patients a year.

"A standardized statewide evidence-based blood pressure protocol as guidance from which to work is vital in providing continuity and consistency of care to all patients across the state," said Melanie Rightmyer, DNP, RN, who oversees the program for Alabama's public health department.

The hypertension algorithm was introduced in 2013 to urge coordinated efforts to treat high blood pressure with evidence-based, standardized treatment protocols. Combining regularly scheduled performance feedback within a coordinated approach has been associated with substantially improved high blood pressure control in large populations and varied clinical practice settings.

The advisory urged implementation among broader population segments, targeting intervention programs for groups at the greatest risk for heart disease and stroke.

Join This Community

Interested in the latest news and tools for controlling high blood pressure? The Check. Change. *Control.* Leadership Community shares the latest findings to help more Americans achieve blood pressure control.

JOIN NOW

Share with your friends:

Archives

2015
- August (10)
- July (15)
- June (12)
- May (11)
- April (3)
- March (14)
- February (9)
- January (8)

2014
- December (9)
- November (7)
- October (12)
- September (9)
- August (9)
- July (12)
- June (12)
- May (12)

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ADPH WISEWOMAN Hypertension Management

Stage 1 Hypertension

Systolic 140-159 or diastolic 90-99
Lifestyle modification as a trial of therapy.

(In patient with 2 or more CV risk factors, consider treating as stage 2)

Recheck and review BP readings in 3 months

Stage 2 Hypertension

Systolic ≥ 160 or diastolic ≥ 100
Ongoing lifestyle modifications and Medication therapy

Blacks	Non Black	*Compelling indications	
Thiazide	ACE/ ARB	Diabetes	CHF
CCB	Thiazide	CAD	Post MI
	CCB	Stroke prevention	

***Baseline BMP prior to starting medication**

Recheck and review BP readings in 4-6 weeks; f/u BMP if ACE/ ARB or diuretic started

BP at goal?

No

If stage 1, start meds based on race and compelling indications. Start low and go slow.

If stage 2, decide on treatment strategy:
1. Maximize first med before adding second or
2. Add second medication before reaching maximum dose of first

*For stage 2, Start with mid range dosing

Re-check in 4-6 weeks; **f/u BMP** if started on ACE/ARB or diuretic
Or
if patient had dose increase of 50% or more of same medication

BP at goal?

Yes

Reinforce lifestyle modifications and or medication compliance.

F/u at 3 months, then 6 months, then twice a year as long as patient remains controlled. BMP every 6 months if patient is taking ACE, ARB or diuretic.

No

Optimize dosage or add medications

Assess for compliance with treatment plan. Encourage home readings if not already being done. Consider secondary causes as reason for failure to reach goal

Yes

Reminders:
-If Bp is not at goal after 4 weeks on 3 drug therapy, referral is warranted
-Patients started on ACE/ ARB or diuretic therapy or pts with 50% increase in dose will need f/u BMP at 4-6 weeks to ensure stability
-Patients with an alert value of SBP≥180 or DBP≥110, MUST BE RE-EVALUATED WITHIN 7 DAYS; if pt has s/s of end organ damage refer to ER
-Consults are not a last resort

August 2015

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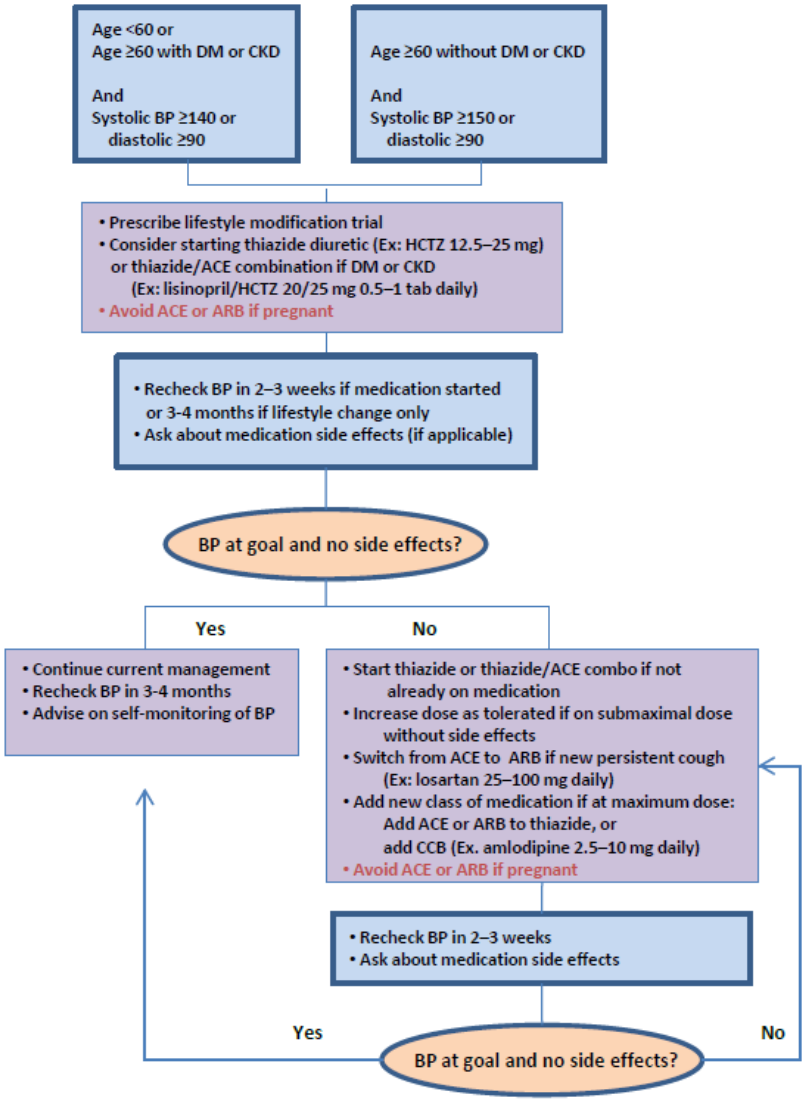
Alabama Hypertension Control Algorithm Template for Adults ≥18 Years



Protocol Recommended by the Alabama Blood Pressure Task Force

Caveats:

- Repeat BP if isolated BP elevation
- Consider secondary causes of BP elevation
- Consider white coat effect – try ambulatory BP measurement
- Consider medication non-adherence
- Consider interfering agents (e.g., NSAIDs, excess alcohol)
- **For age ≥60, if pharmacologic treatment for hypertension results in systolic BP <140 and is well tolerated without adverse effects, treatment does not need to be adjusted**

Special considerations:

- Coronary artery disease/post-MI: consider ACE, BB
- Heart failure with reduced EF: ACE or ARB, BB, aldo, diuretic
- Heart failure with preserved EF: ACE or ARB, BB, diuretic
- Diabetes: ACE or ARB, diuretic, BB, CCB
- Kidney disease: choose ACE or ARB; avoid thiazide if GFR <30
- Stroke or TIA: diuretic, ACE
- African American:
  - avoid **monotherapy** with ACE or ARB (may use in combination with HCTZ)
  - Consider CCB or thiazide as first-line agents

Abbreviations:

DM = Diabetes mellitus
CKD = Chronic kidney disease
BP = Blood pressure
HCTZ = Hydrochlorothiazide
ACE = Angiotensin converting enzyme inhibitor
ARB = Angiotensin II receptor blocker
CCB = Calcium channel blocker
MI = Myocardial infarction
BB = Beta blocker
EF = Ejection fraction
Aldo = Aldosterone antagonist
GFR = Glomerular filtration rate
TIA = Transient ischemic attack
DASH diet = Dietary Approaches to Stop Hypertension

The algorithm presented here is designed to provide general guidance and assist clinical decision-making, but does not take into account the unique health issues of individual patients and thus is not intended as a substitute for the clinical judgment of a qualified healthcare provider. Links to external resources are provided as a public service and do not imply endorsement by the Alabama Department of Public Health. The algorithm will be updated as new evidence is published.

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Identifiable Causes of Elevated Blood Pressure to Consider Before Diagnosis of Essential Hypertension

- Drug induced (see list)
- Renovascular disease
- Hyperaldosteronism
- Thyroid and parathyroid disorders
- Cushing's syndrome or chronic steroid therapy
- Pheochromocytoma
- Coarctation of aorta
- Sleep apnea

Drugs or Supplements Contributing to Elevated Blood Pressure

- Nonsteroidal anti-inflammatories and COX-2 inhibitors
- Sympathomimetics (decongestants, appetite suppressants)
- Oral contraceptives
- Corticosteroids
- Cyclosporine and tacrolimus
- Erythropoeitin
- Certain dietary supplements (ephedra, ma huang, caffeine)
- Cocaine, amphetamines or other illicit drugs

LIFESTYLE MODIFICATION

- Healthy weight
- DASH/low sodium diet
- Physical activity
- Limit alcohol
- Quit smoking

Lifestyle Modifications to Prevent and Manage Hypertension*

BEHAVIOR CHANGE	PLAN	APPROXIMATE SBP REDUCTION
Lose Weight	Maintain healthy weight (body mass index <25 kg/m²)	5-20 mm Hg per 22 lb weight loss
Adopt DASH Eating Plan	Diet rich in fruits, vegetables, low fat dairy, whole grains, fish, lean poultry, nuts with low saturated, trans, and total fat	8-14 mm Hg
Dietary Sodium Reduction	Reduce sodium intake to <2.4 g sodium (less than 1 teaspoon of sodium a day)	2-8 mm Hg
Physical Activity	Regular aerobic physical activity, brisk walking, at least 30 minutes per day, most days of the week	4-10 mm Hg
Moderation of Alcohol Consumption	No more than 2 drinks/day for men, 1 drink/day for women (1 drink = 12 oz. beer, 5 oz. wine, or 1.5 oz. spirits)	2-4 mm Hg

DASH, Dietary Approaches to Stop Hypertension; SBP, systolic blood pressure

*For overall cardiovascular risk reduction, stop smoking.

References: James PA, Oparil S, Carter BL, et al. 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). JAMA. 2014 Feb 5;311(5):507-20. Erratum in: JAMA. 2014 May 7;311(17):1809.

Chobanian AV, Bakris GL, Black HR, et al. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. JAMA. 2003 May 21;289(19):2560-72. Erratum in: JAMA. 2003 Jul 9;290(2):197.

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CARDIOVASCULAR HEALTH PROGRAM
Alabama Department of Public Health

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Thank You!

QUESTIONS?

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Addressing Health Disparities Through Innovative Cessation Strategies

Laura Oliven, MPP

Tobacco Control Manager

Minnesota Department of Health

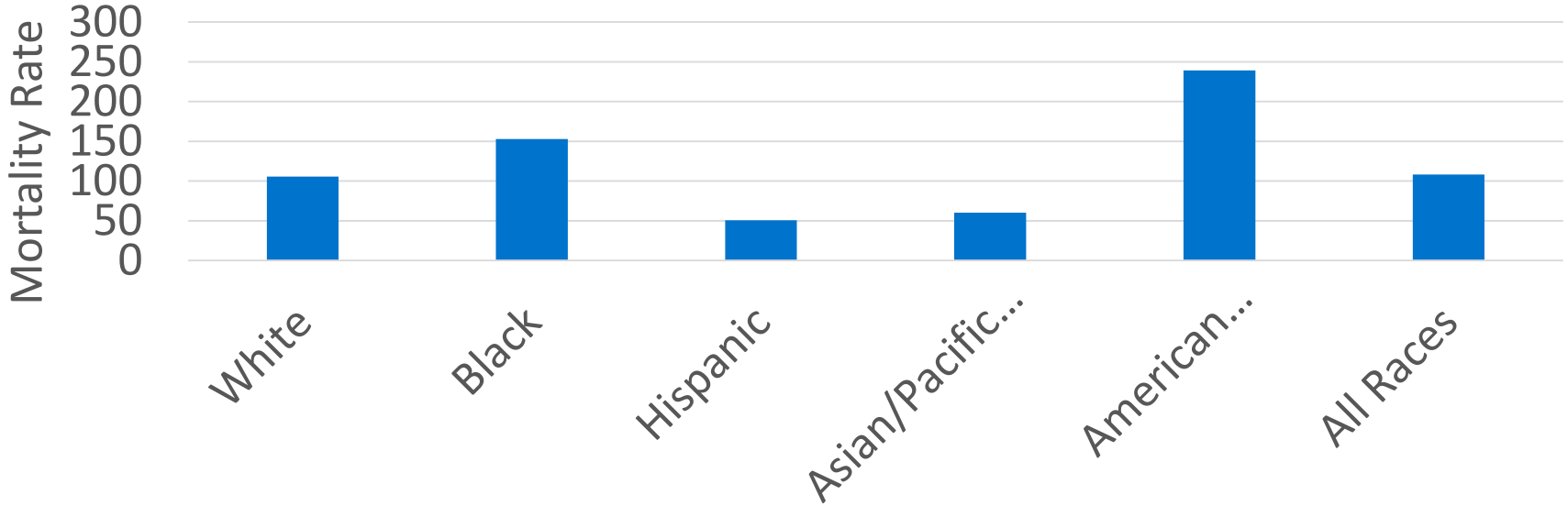
Health Is Improving Overall

- Heart Healthy State
- Declining Tobacco Use

MINNESOTA MDH DEPARTMENT OF HEALTH

Disparities in Premature Heart Disease Deaths

Heart disease mortality in Minnesota, ages 45-74, by race/ethnicity



Per 100,000 people, ages 45-74 years, 2009-2013.
Source: MDH Center for Health Statistics, ICD-10 codes I00-I09,I11,I13,I20-I51.

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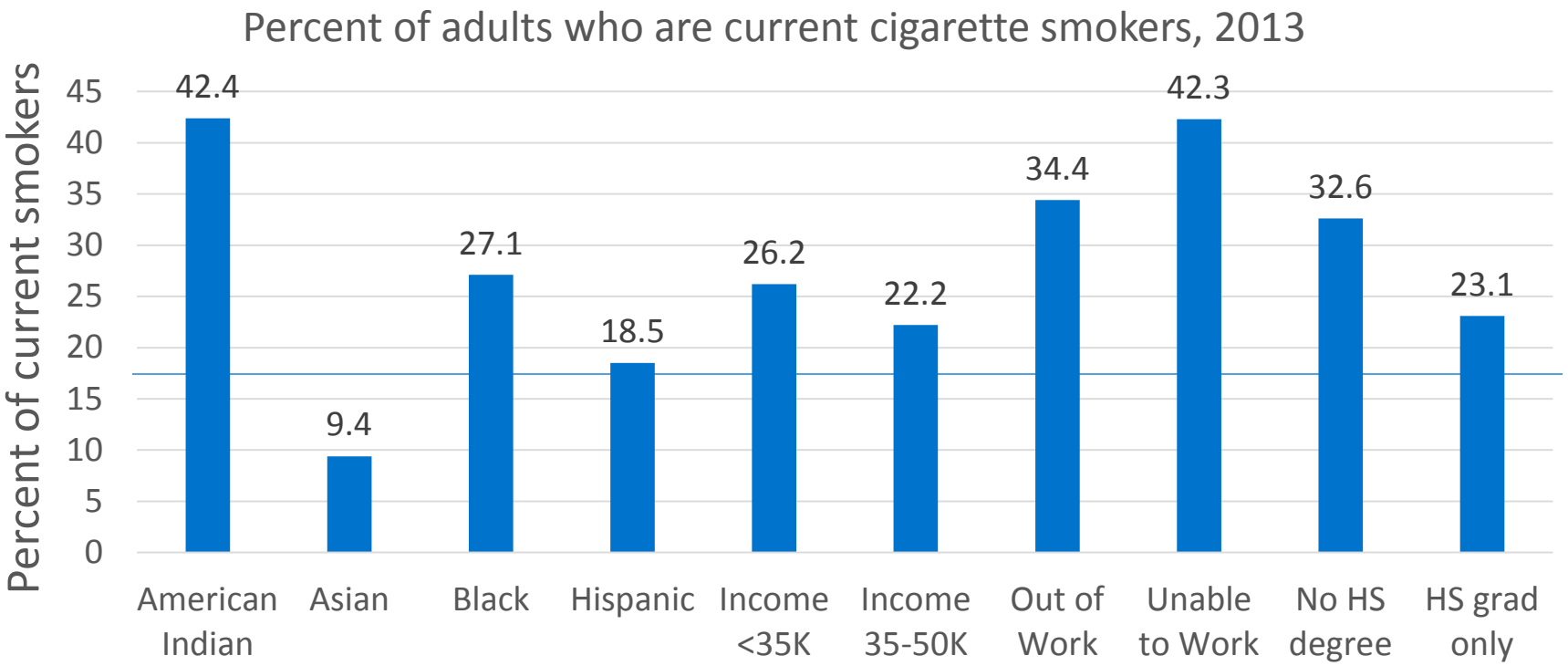
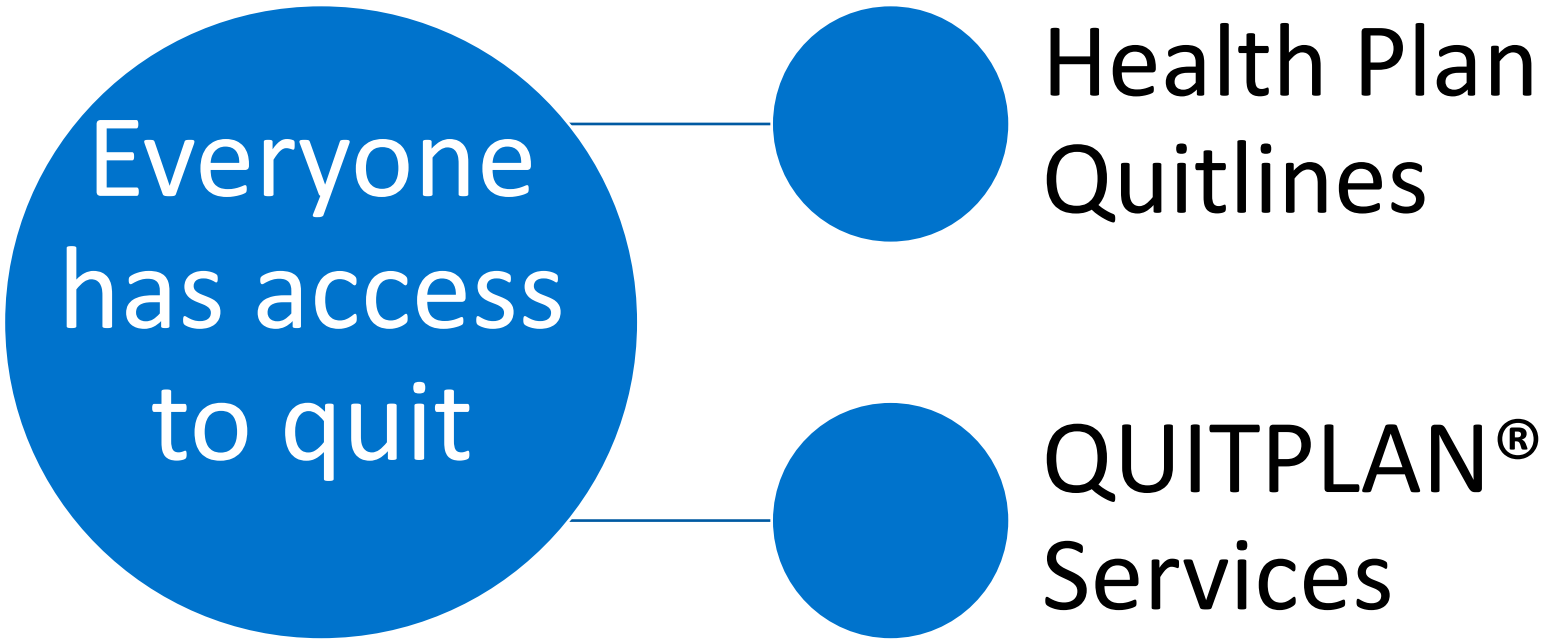
Disparities in Tobacco Use



Source for current smoking rates: All rates are from 2013 BRFSS, except that American Indian, Asian, Black and Hispanic rates are from combined 2011-2013 BRFSS data.

Working to Reduce Tobacco Use



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Expanding Outreach

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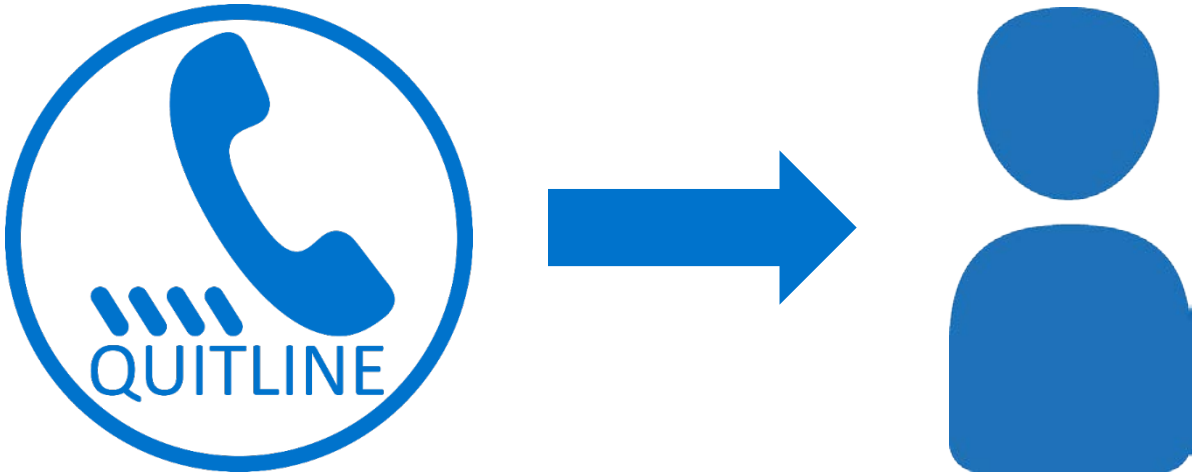
A Proactive Approach



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Health Systems Expansion

Statewide Health Improvement Program

Statewide Network

- 41 Community Health Boards
- 11 Tribes

Community-Clinical Linkages

- Local Public Health works directly with clinics

Grant Activities

- Certified Tobacco Treatment Specialist training

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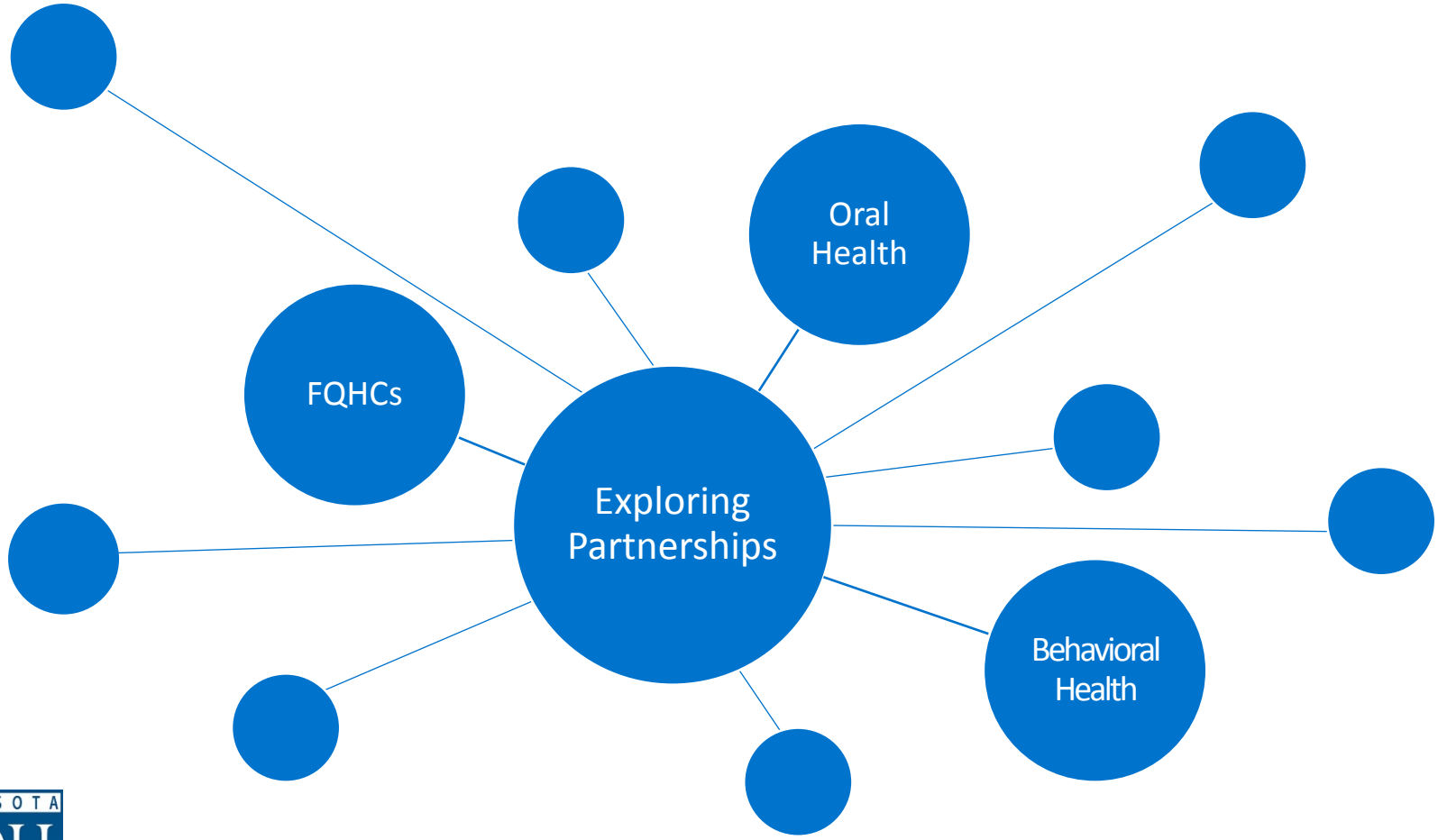
Unique Partnerships



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Addressing Health Disparities

MINNESOTA MDH DEPARTMENT OF HEALTH

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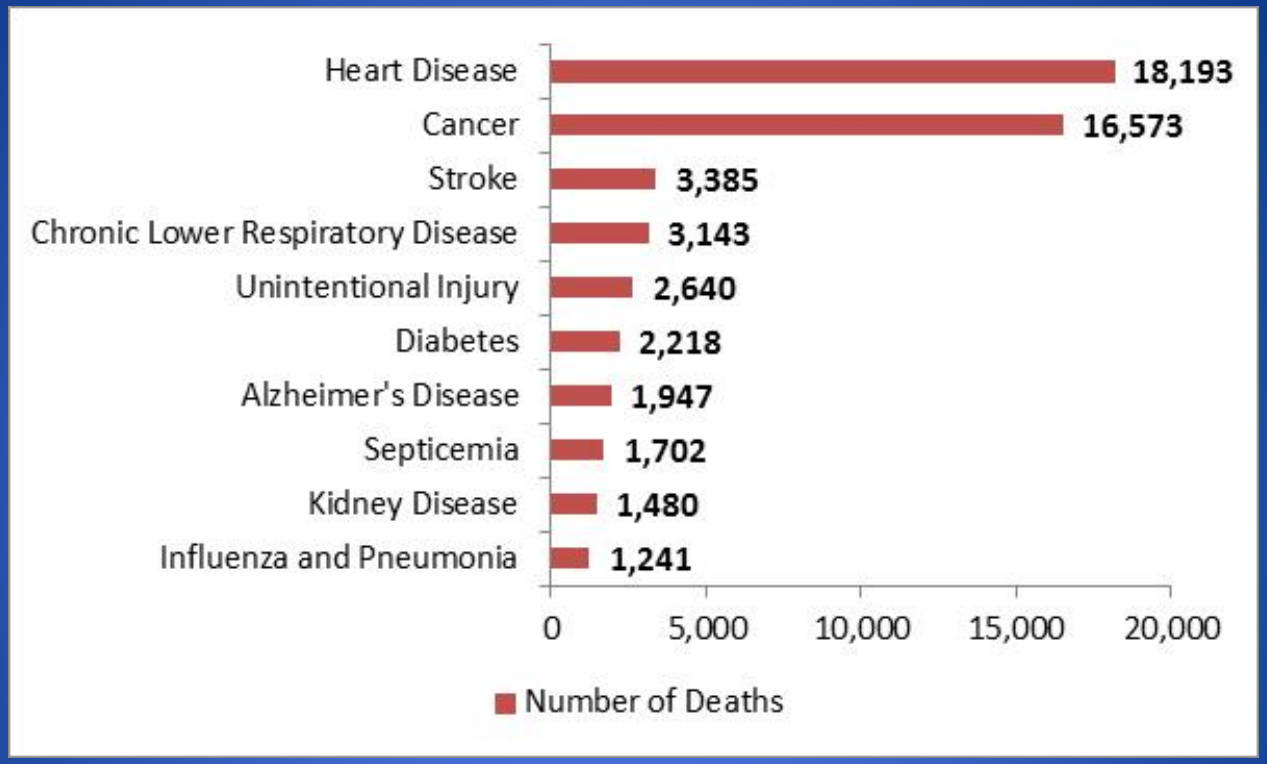
New Jersey's Efforts to Control High Blood Pressure through Health Systems Interventions

New Jersey Department of Health
Division of Family Health Services
Heart Disease and Stroke Prevention

LorieAnn Wilkerson-Leconte, MPH

NJ Health
New Jersey Department of Health

2011 Leading Causes of Death, New Jersey Residents



Heart Disease is the Leading Cause of Death for New Jersey Residents

Center for Health Statistics and Informatics, New Jersey Health State Assessment Data
http://www4.state.nj.us/dhss-shad/home

NJ Health
New Jersey Department of Health

The Charge

- Promote and Increase:
  - Monitoring and Reporting of Quality Measures
  - Electronic Health Record (EHR) Adoption
  - Use of Health Information Technology (HIT)
  - Engagement of Non-Physician Staff Team Members

- Target Health Care Systems:
  - Federally Qualified Health Systems (FQHCs)
  - Regional Planning Collaboratives (RPCs)

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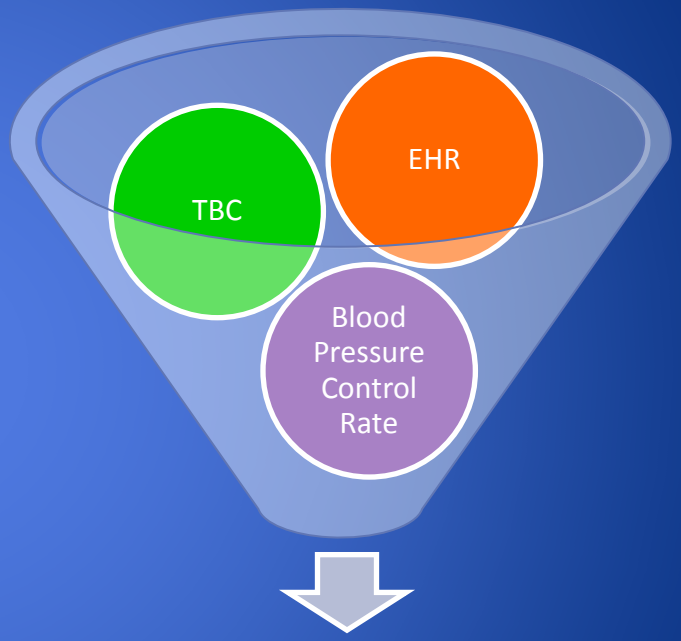
New Jersey Department of Health

Health Systems Enhancements

- FQHCs
  - Phase One: Team-based Care (TBC) and EHR Assessments
  - Phase Two: Implementation of Systems Modifications



Opportunities for Blood Pressure Control

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New Jersey Department of Health

Progress To Date (FQHCs)

- EHR System Upgrades
  - Alerts for Abnormal Blood Pressure
  - Smart Forms
  - Text Messages and Reminders
- Training and Proficiencies for Staff
- New Policies and Procedures
- Integration of Onsite Pharmacists

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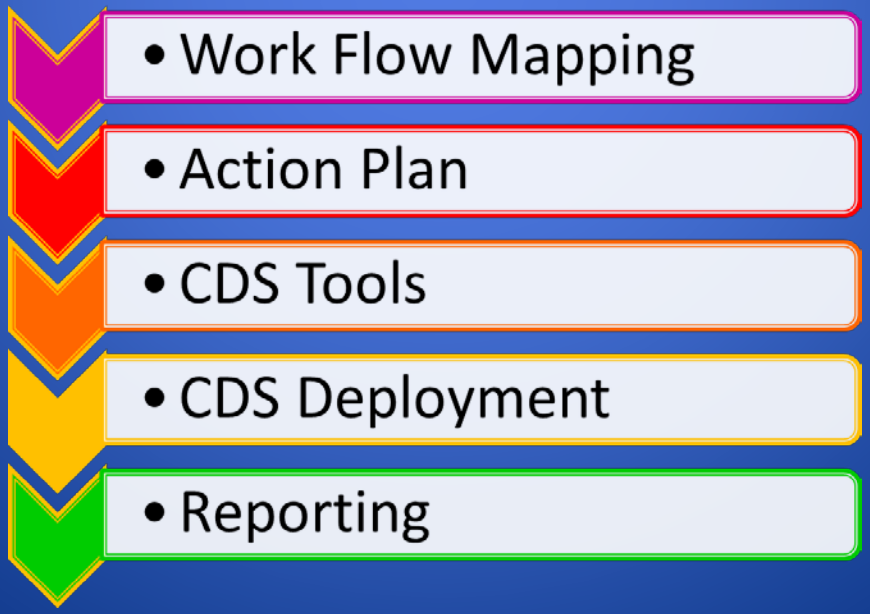
Clinical Decision Support (CDS) Systems

- RPCs
  - New Jersey non-profit organizations comprised of multiple, distinct corporate entities that collaborate to improve individual and community health and belong to Health Information Organizations (HIO).



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Progress To Date (RPCs)

- Pilot Completed
- Adoption of EHR for Clinical Delivery Sites
- Clinical Workflow Modifications
- CDS System Reporting

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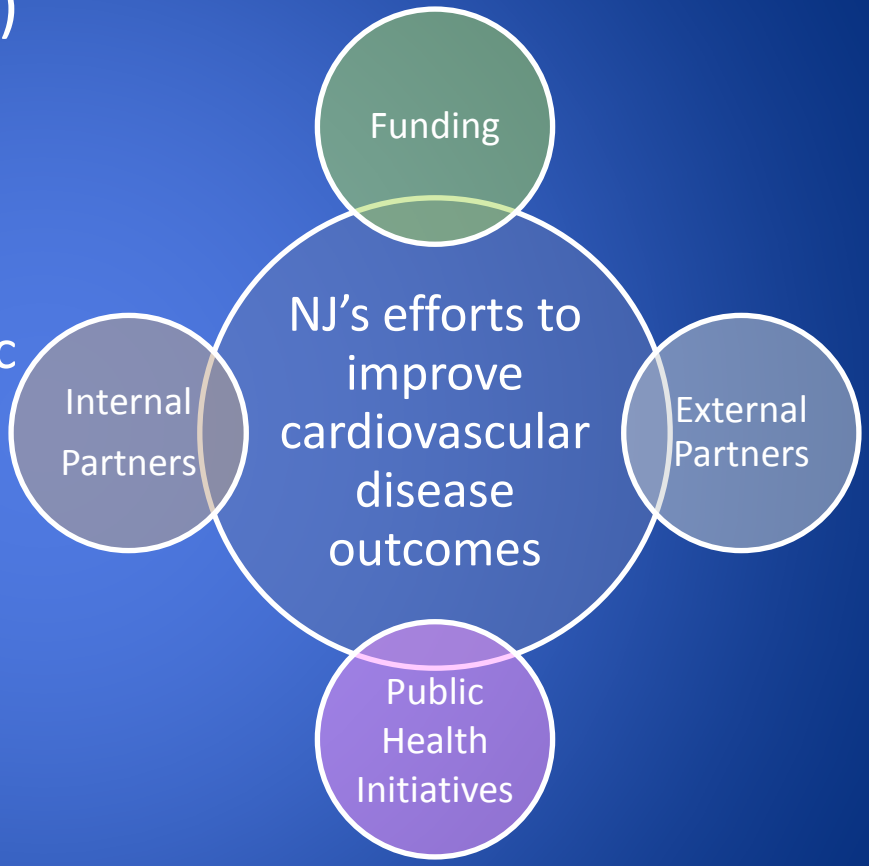
New Jersey Department of Health

Facilitators

- Funding (Program Support)
- Internal Partners (Capacity Builders)
  - Office of Primary Care
  - Office of Policy and Strategic Planning
- External Partners (Implementers)
  - Intervention Champions
- National Public Health Initiatives (Influencers)
  - EHR Incentive Programs
  - Million Hearts®



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Challenges

- Program planning and development required more time than anticipated
- EHR Product Limitations
  - English only
- Technical Language Barriers
- Partner Availability

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The Vision

- Increased use of EHR and HIT at FQHCs
- RPCs will refine CDS models to be replicated in other health care systems
- Project documents will be published and disseminated

NJ Health
New Jersey Department of Health

Thank you!

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NJ Health
New Jersey Department of Health

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Vital Signs interactive buttons and banners

http://www.cdc.gov/socialmedia/tools/buttons/vitalsigns/index.html

Prevention Status Reports

- The Prevention Status Reports (PSRs) highlight—for all 50 states and the District of Columbia—the status of public health policies and practices designed to prevent or reduce 10 important public health problems.

www.cdc.gov/psr/

Provide feedback on this teleconference:
OSTLTSFeedback@cdc.gov

Please mark your calendars for the next

***Vital Signs* Town Hall Teleconference**

October 13, 2015

2:00–3:00 pm (EDT)

For more information, please contact Centers for Disease Control and Prevention.

1600 Clifton Road NE, Atlanta, GA 30333
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The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.