

# Managing diabetes through addressing social determinants of health

Kate Kirley, MD – American Medical Association

Bob Morrow, MD – Albert Einstein College of Medicine

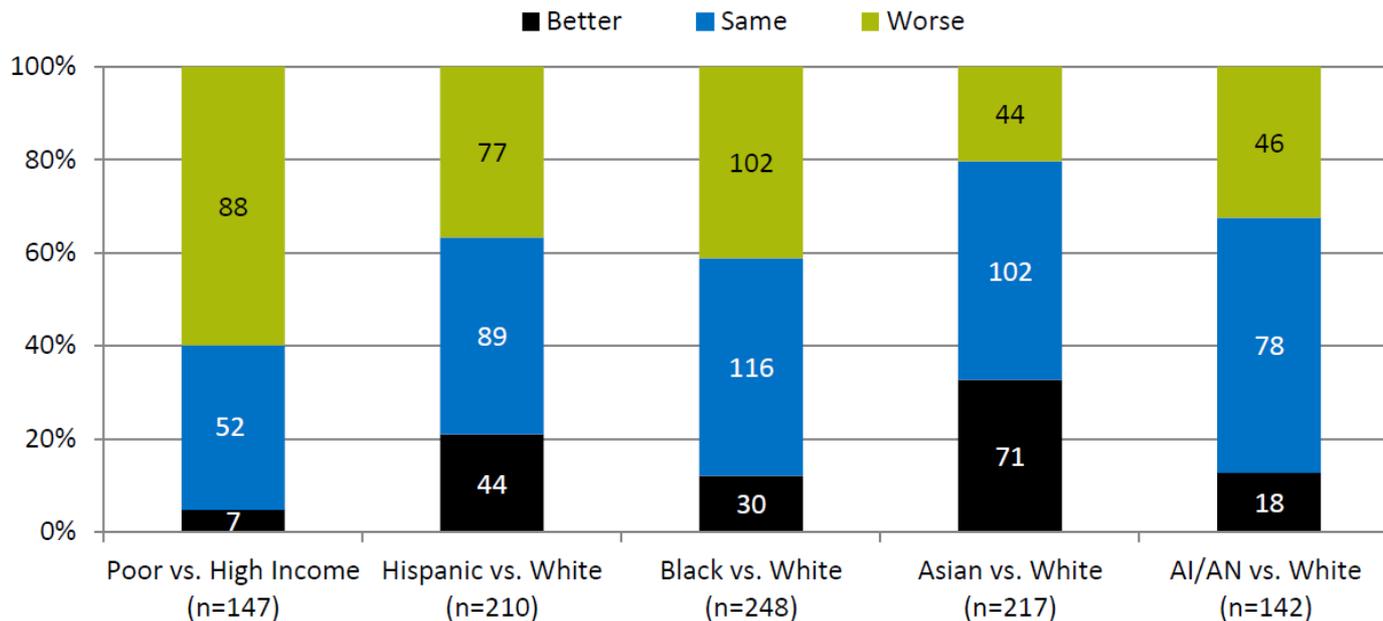


# Objectives

- Summarize the current state and trends in health disparities in diabetes
- Discuss the opportunity for community partners to address social determinants of health
- Outline how health disparities can be addressed through community-clinical linkages and describe successful examples
- Discuss barriers to developing community-clinical linkages, as well as potential solutions

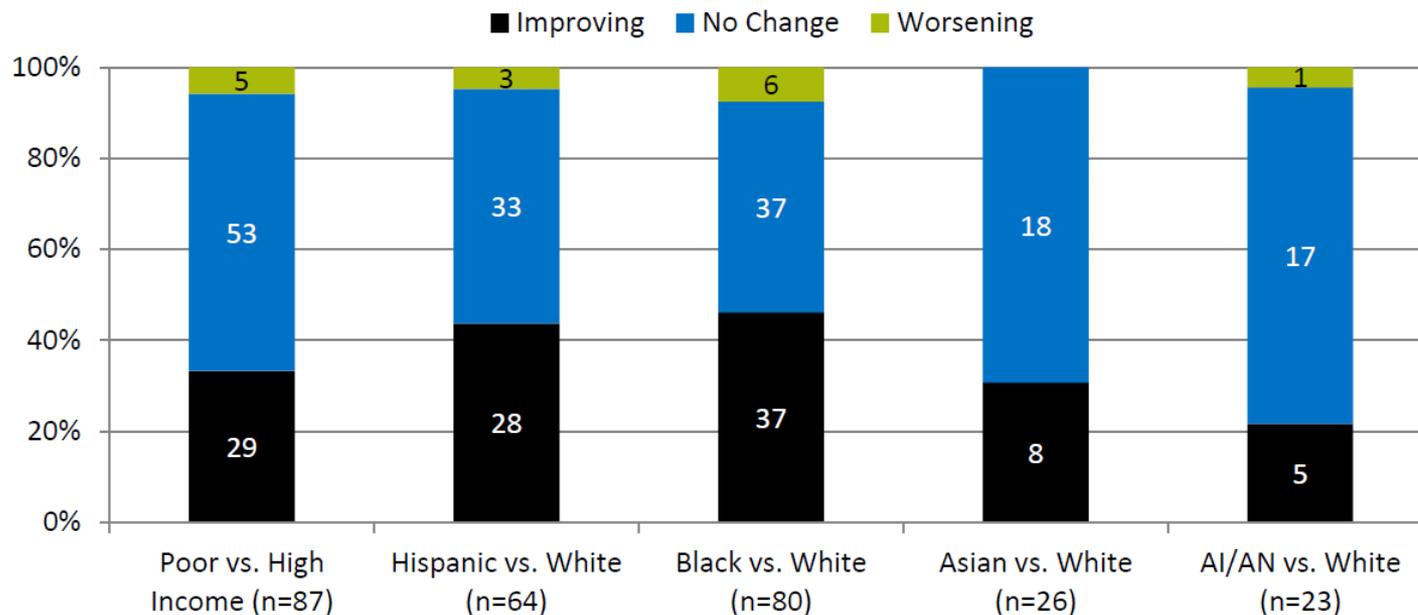
# Snapshot of disparities in quality in the U.S.

Number and percentage of quality measures for which members of selected groups experienced better, same, or worse quality of care compared with reference group

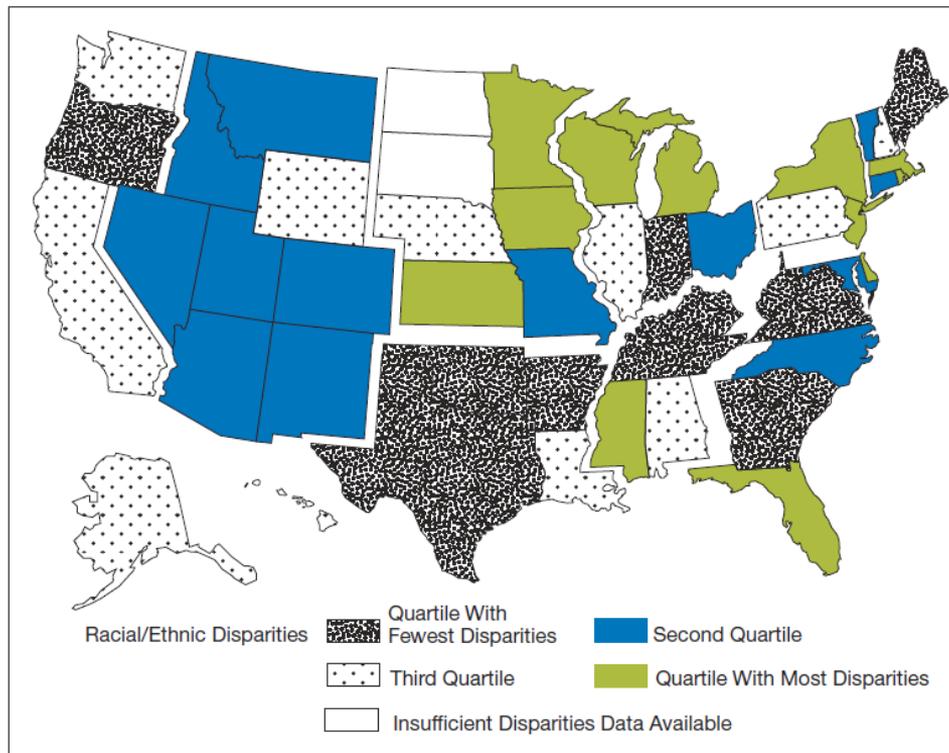


# Evolution of disparities in quality in the U.S.

Number and percentage of quality measures with disparity at baseline for which disparities related to race, ethnicity, and income were improving, not changing, or worsening through 2013



# The big picture: disparities in quality by state



Source: Agency for Healthcare Research and Quality, 2013 State Snapshots.

# Disparities in diabetes

## Prevalence of diagnosed diabetes

- Race
  - 9.0% of Asian Americans
  - 12.8% of Hispanics
  - 13.2% of non-Hispanic Blacks
  - 15.9% of American Indians or Alaska Natives
  - 7.6% of non-Hispanic Whites
- Education
  - 12.9% of less than high school
  - 9.5% of high school
  - 6.7% of greater than high school

## Risk factors for diabetes

- Race
  - Higher prevalence of obesity among minorities
  - Higher prevalence of smoking among minorities
  - Reduced leisure-time physical activity among minorities
- Income and education
  - Higher prevalence of obesity among low income women
  - Higher prevalence of obesity among women with less education
  - Generally higher prevalence of smoking among lower income and education

# Disparities in quality of diabetes care

Through 2012, a number of measures showed worsening quality across populations

- Admissions with diabetes with short-term complications per 100,000 population, age 18+
- Adults age 40+ with diagnosed diabetes who had their feet checked for sores or irritation in the calendar year

Disparities worsened for certain measures

- Difference between low-income and high income: Adults age 40+ with diagnosed diabetes who received 2+ hemoglobin A1c measurements in the calendar year

Disparities have been eliminated for other measures

- Difference between Asian and White: Adults age 40+ with diagnosed diabetes who had their feet checked in the calendar year
- Difference between Asian and White: Adults age 40+ with diagnosed diabetes who received a dilated eye examination in the calendar year



# What if we could narrow the gap?

Table. Significant Causes of Death With the Highest Ratio of Deaths of Black to White and Total Number of Deaths From Each Cause, 2014<sup>a</sup>

Cause of Death	Total No. of Deaths <sup>b</sup>	Age-Adjusted Death Rates per 100 000		Black-White Ratio
		Blacks	Whites	
Human immunodeficiency virus infection	6721	8.3	1.1	7.5
Homicide	15 809	17.2	3.0	5.7
Essential hypertension and hypertensive renal disease	30 221	15.6	7.4	2.1
Nephritis, nephrotic syndrome, and nephrosis	48 146	24.6	12.1	2.0
Cancer of prostate	28 344	13.9	7.3	1.9
Diabetes mellitus	76 488	37.3	19.3	1.9
Septicemia	38 940	10.2	17.9	1.8
Cancer of breast	41 678	16.4	11.0	1.5
Cerebrovascular disease	133 103	49.7	35.2	1.4
Cancer of colon, rectum, anus	52 234	18.6	14.0	1.3
Diseases of the heart	614 348	206.3	165.9	1.2

<sup>a</sup> Adapted from Kochanek et al<sup>1</sup> (Tables 12 and 16).

<sup>b</sup> Total number of deaths for all races and ethnicities.

Decrease disparities in diabetes care between black people and white people



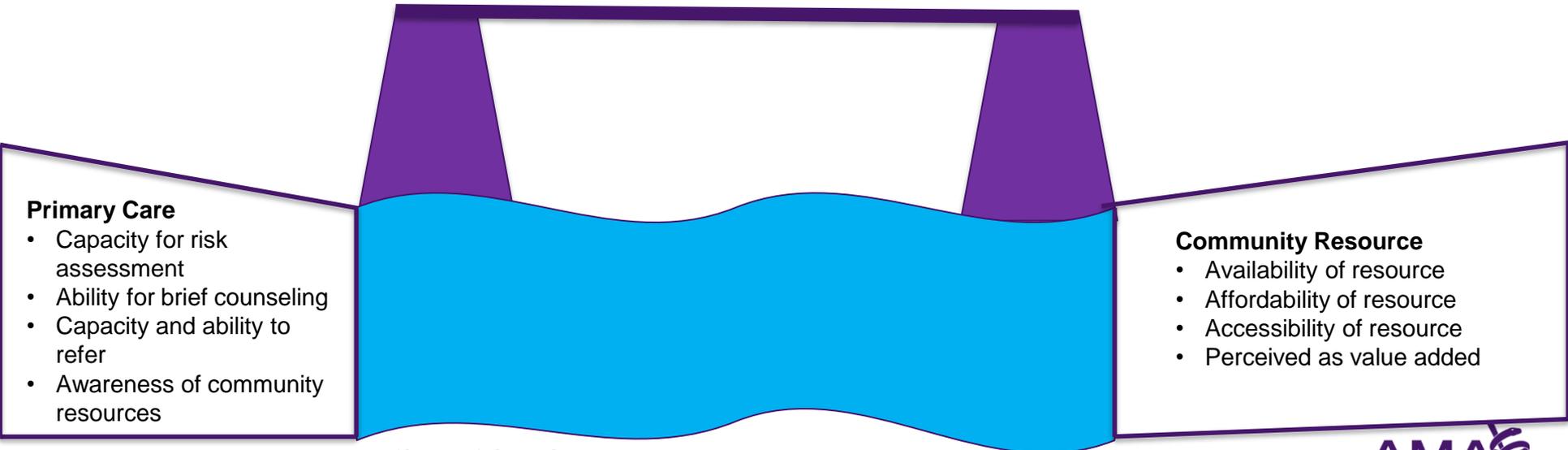
Decrease disparities in life expectancy between black people and white people

# Challenges faced by practicing physicians

- The current and growing **volume** of chronic disease
- **Lack of time** to effectively deliver the intensive counseling needed to result in lifestyle changes
- **Social determinants of health** often fall outside our scope of influence
- **Lack of adequate information** about community-based resources for diabetes prevention

# Bridging the Gap: Community-Clinical Linkages

## Connecting Strategies



Etz et al. Am J Prev Med 2008;35(Suppl. 5):S390-S397.



# The National Diabetes Prevention Program (National DPP)

The CDC-led National DPP is based on the evidence from the original DPP research study and subsequent effectiveness studies, and is proven to be effective. Patients work with a trained lifestyle coach and a small group of other patients focused on making lasting lifestyle changes.



**PHYSICAL ACTIVITY, 150  
MINUTES/WEEK**



**HEALTHY EATING**



**STRESS MANAGEMENT &  
BEHAVIOR MODIFICATION**

## Year-long in-person or online lifestyle change program

**FIRST 6 MONTHS**  
weekly curriculum



**NEXT 6 MONTHS**  
meet once/twice a month for  
maintenance



MINIMUM BODY  
WEIGHT LOSS **5% IN 6 MONTHS**

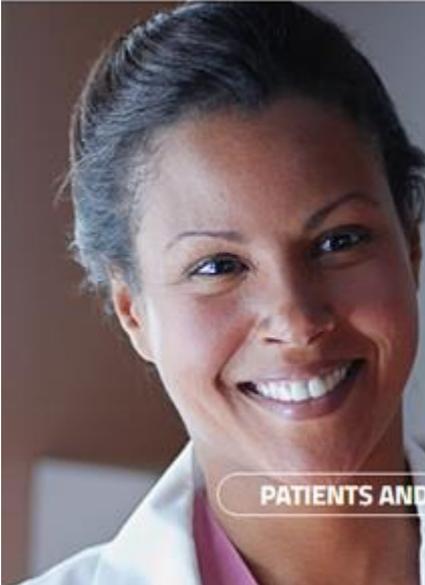
**+ 6 MONTHS OF MAINTENANCE**

(10 lbs. for a person that weighs 200 lbs.)

DPP reduces risk of developing type 2 diabetes by 58%, more effective than medication



# AMA-CDC National Collaboration to Prevent Diabetes



Prevent Diabetes **STAT**  
Screen / Test / Act Today™

**86 MILLION** AMERICAN ADULTS HAVE PREDIABETES

**9** OUT OF **10** PEOPLE WITH PREDIABETES DON'T KNOW THEY HAVE IT.\*

PATIENTS AND PARTNERS    HEALTH CARE PROFESSIONALS    EMPLOYERS AND INSURERS

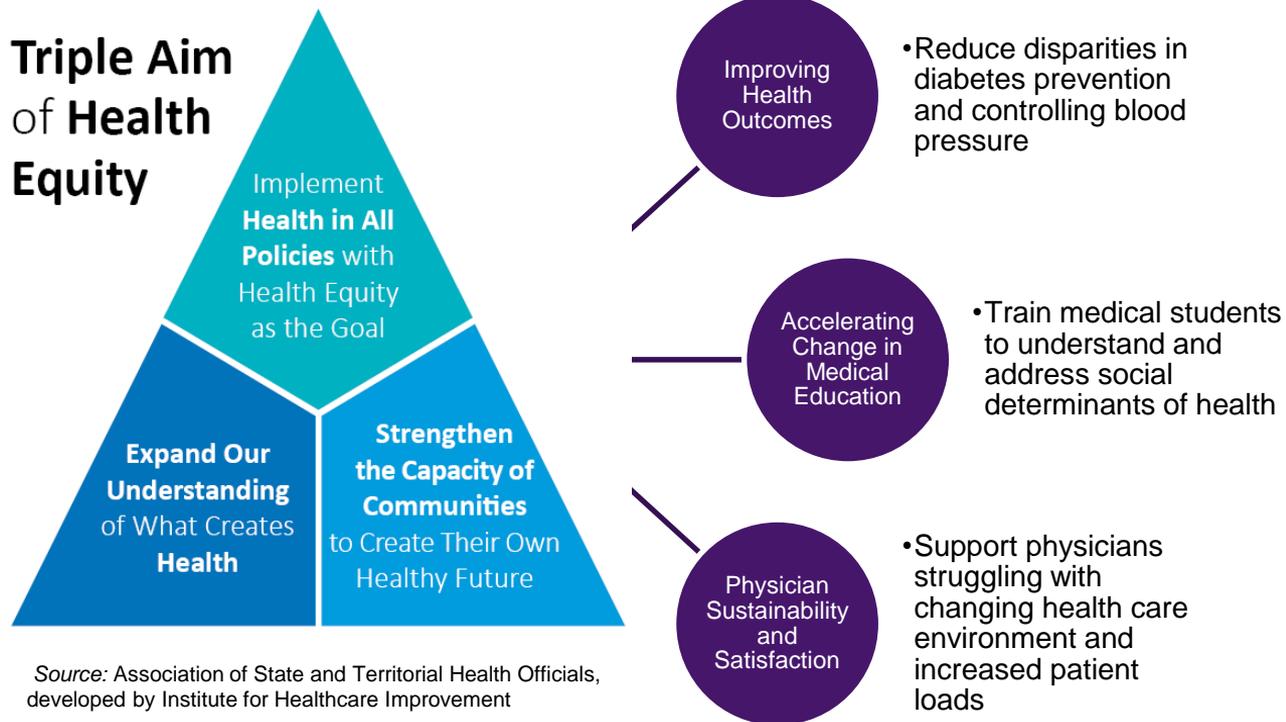
THE AMA AND CDC URGE YOU TO:



[www.preventdiabetesstat.org](http://www.preventdiabetesstat.org)



# AMA using one voice to improve the health of a nation



**The Prevention of Diabetes: A  
Collaborative Approach to Peer  
Education Across Health  
Sectors:**

**A Bronx New York Pilot Project**

# Participants [in part]

- Bob Morrow-NYSAFP/SACME/Albert Einstein College of Medicine
- Chris Norwood-Health People
- Phil McCallion-QTAC/SUNY Albany
- Doug Reich-Bronx Lebanon Hospital Center
- Vito Grasso-NYSAFP
- Erica Chito-Childs-Hunter College, CUNY
- Jose Tiburcio, Jose Lopez, Eleanor McGee

# Funding

- Research Grant-Society for Academic CME
- Quality and Technical Assistance Center
- And a host of in-kind volunteers

# IQ's

- Interrupt
- Question

the speaker

[please steal this idea]

# WHY DO THIS STUFF?

- It makes your practice easier and better—off load the tough stuff
- PCMH-APC-VBP-other letters
- Boards
- It helps your patients and communities

# Diabetes is a preventable plague

- How many feet in buckets?
- How many people blind?
- How many heart attacks?
- How many on dialysis?
  
- More than half are PREVENTABLE according to the CDC
- More is spent on new diabetes drugs than the budget of the NFL, MLB, and NBA...together!!

# South Bronx the most vulnerable

- US 8.3%
- NYC 9.7%
- Bronx 14%
  
- We found 30% with and 33% more at high risk when we interviewed 1000 residents of Public Housing

# Who lives in Public Housing?

- Poor, and majority are overwhelmingly minority

# What is a Sector?

- For us-community, public health/governmental, healthcare providers
- Overlapping networks-Network Theory
- We set up an advisory made up of these three groups.

# Peers

- We set up an advisory
- We educated community peers-QTAC, NDPP protocol
- We set up a curriculum for and trained Academic Detailers
- We connected with public health HIT systems at the State and City level
- We interviewed our peers and PH for enablers and challenges

# Trained community residents

- 8 Coaches trained 52 individuals [2 coaches/class]
- Average age 52, 63% African American, 37% Latino, 75% female
- Average weight loss at 16 weeks 7.4, majority doubled physical activity

# Academic Detailing

- Trained 7
- Visited 12 sites
- Visits by AD and Coach together to enhance trust---and to have another set of eyes and ears to observe process

# Analytics

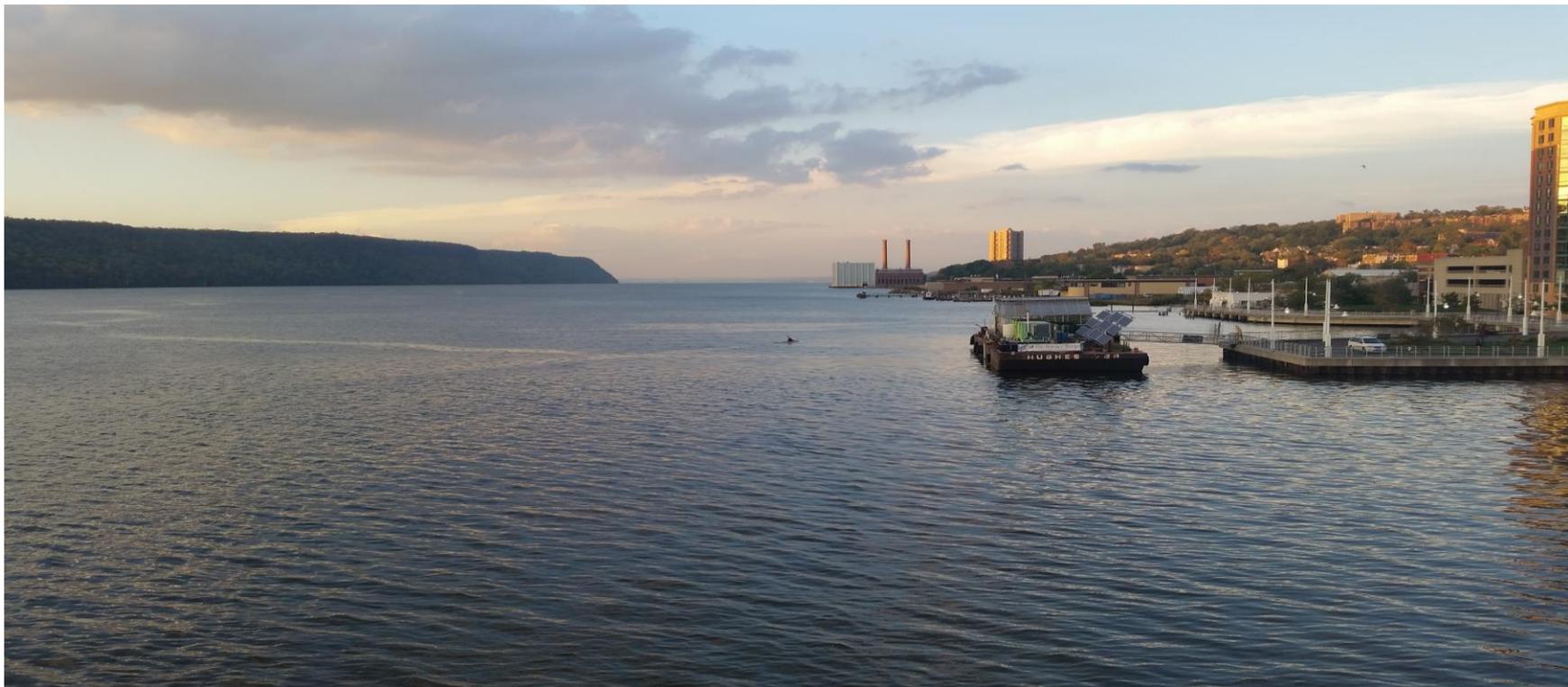
- Data-quantitative-obtained by Coaches with QTAC portal
- Qualitative interviews with observations of detailing, coaching, and advisory deliberations
- Computer assisted analysis
- Recurring discourses and themes were identified using thematic analysis framework

# Challenges

- Lack of insurance, coverage by and [not] having it
- Lack of linkages-how to refer and follow
- Cost and privacy
- Use of non-licensed personnel to provide services

# Enablers

- Striking, clear interest of community, health care organizations and providers, and Public Health
- Patient-centered interprofessional teams with community residents can produce meaningful design, implementation, and analysis
- DSRIP has accelerated process





## Discussion



## Question 1 (5 minutes)

How could you extend your practice to become collaborative with community partners?

- What appeals to you?
- What feels safe?
- What would give you joy?

## Question 2 (5 minutes)

What are the challenges?

And how can you overcome these challenges?

What is the value to us?



# Synthesis

