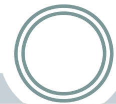
Community Health Workers as an Approach to Advance Population Health Equity

NADIA ISLAM, PHD

2014 MINORITY HEALTH & HEALTH DISPARITIES GRANTEES' CONFERENCE

NYU CENTER FOR THE STUDY OF
ASIAN AMERICAN HEALTH



NYU School of Medicine
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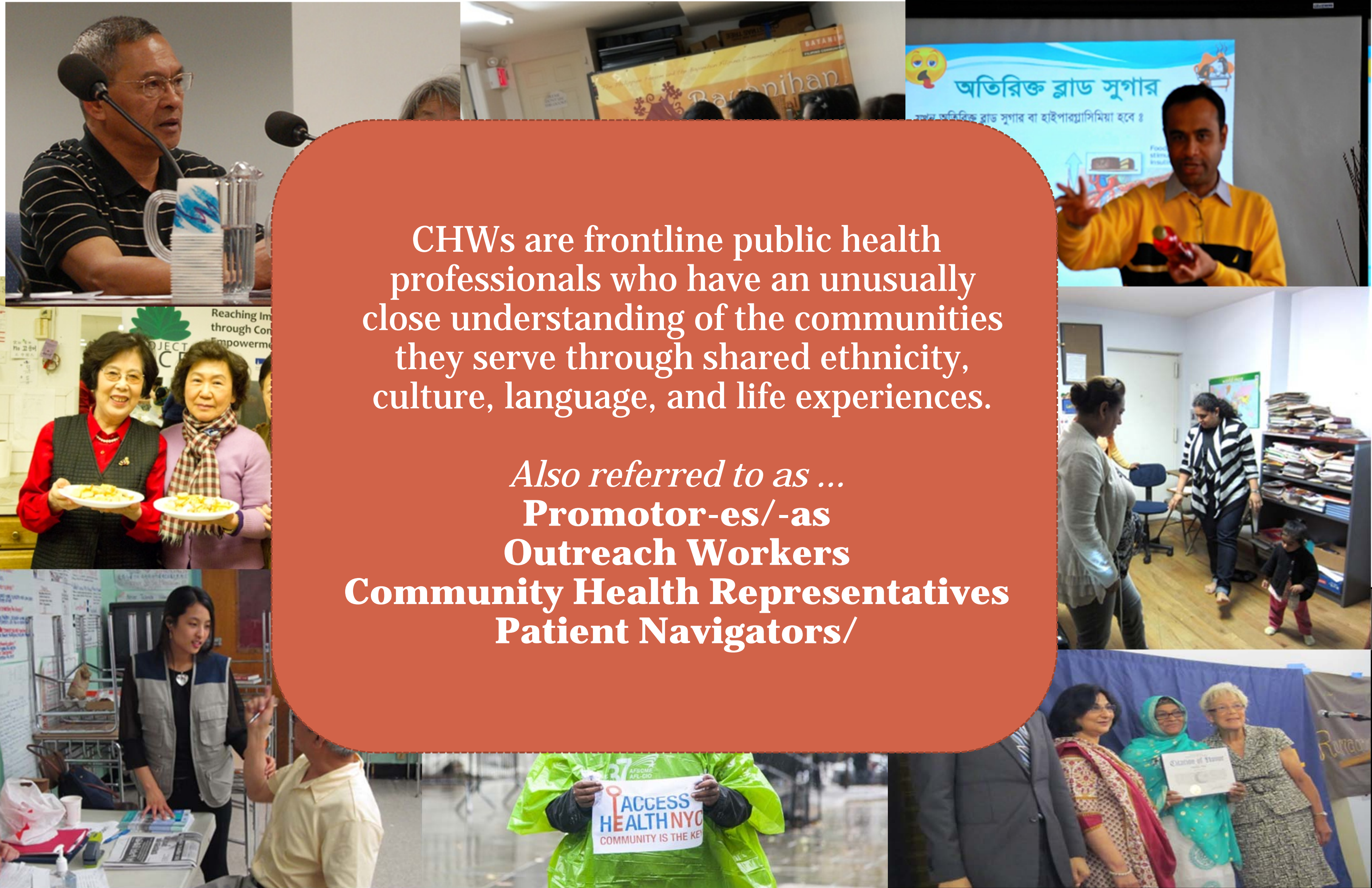
WHO ARE CHWs ?



CHWs are frontline public health professionals who have an unusually close understanding of the communities they serve through shared ethnicity, culture, language, and life experiences.

Also referred to as …

Promotor-es/-as
Outreach Workers
Community Health Representatives
Patient Navigators/

CHW SCOPE OF PRACTICE: ROLES AND RELATED TASKS

ROLE I — OUTREACH AND COMMUNITY MOBILIZATION
- Preparation and dissemination of materials
- Case-finding and recruitment
- Community strengths/needs assessment
- Home visiting
- Promoting health literacy
- Advocacy

ROLE II — COMMUNITY/CULTURAL LIAISON
- Community organizing
- Advocacy
- Translation and interpretation
- Community strengths/needs assessment

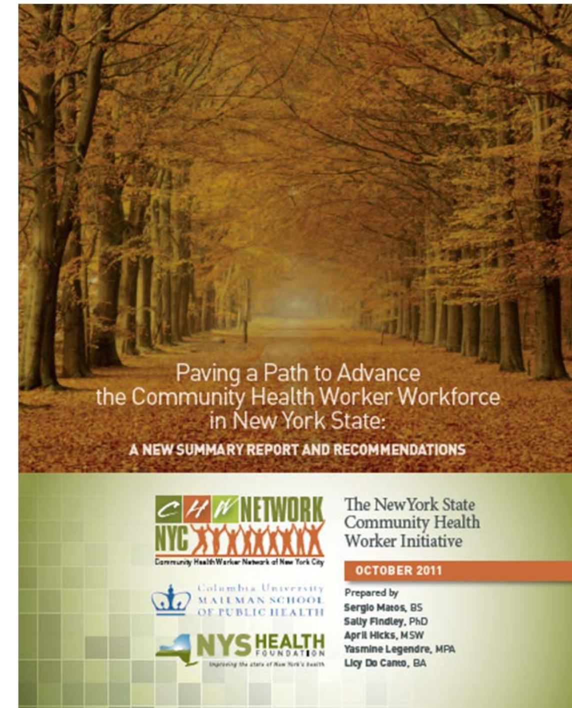
ROLE III — CASE MANAGEMENT AND CARE COORDINATION
- Family engagement
- Individual strengths/needs assessment
- Addressing basic needs – food, shelter, etc.
- Promoting health literacy
- Coaching on problem solving
- Goal setting and action planning
- Supportive counseling
- Coordination, referrals, and follow-ups
- Feedback to medical providers
- Treatment adherence promotion
- Documentation

ROLE IV — HOME-BASED SUPPORT
- Family engagement
- Home visiting
- Environmental assessment
- Promoting health literacy
- Supportive counseling
- Coaching on problem solving
- Action plan implementation
- Treatment adherence promotion
- Documentation

ROLE V — HEALTH PROMOTION AND HEALTH COACHING
- Translation and interpretation
- Preparation and dissemination of materials
- Teaching health promotion and prevention
- Coaching on problem solving
- Modeling behavior change
- Promoting health literacy
- Adult learning application
- Harm reduction
- Treatment adherence promotion
- Leading support groups
- Documentation

ROLE VI — SYSTEM NAVIGATION
- Translation and interpretation
- Preparation and dissemination of materials
- Promoting health literacy
- Patient navigation
- Addressing basic needs – food, shelter, etc.
- Coaching on problem solving
- Coordination, referrals, and follow-ups
- Documentation

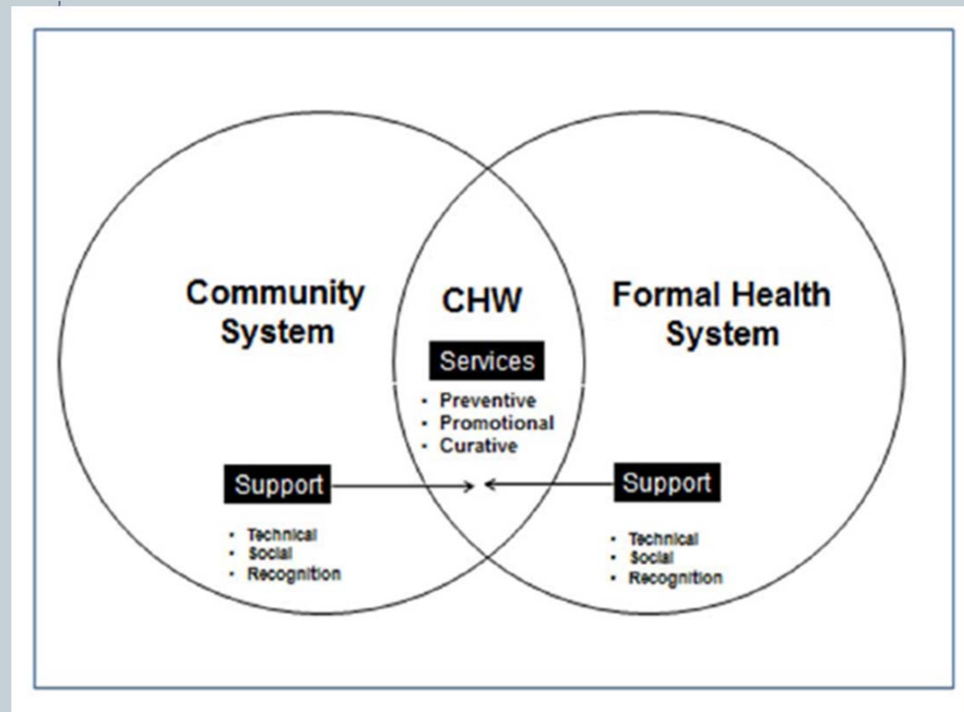
ROLE VII — PARTICIPATORY RESEARCH
- Preparation and dissemination of materials
- Advocacy
- Engaging participatory research partners
- Facilitating translational research
- Interviewing
- Computerized data entry and web searches
- Documentation



Source: http://goo.gl/mslWU5

CHW Approaches

- Improve access to health care resources
- Improve the quality and cultural appropriateness of service delivery
- Help others integrate disease prevention and management into their daily lives
- Organize communities to improve environmental, physical and social wellbeing
- Negotiate cultural & linguistic barriers to health
- Help others become active participants in their own health



USAID, *Community and Formal Health System Support for Enhanced Community Health Worker Performance Report*, 2012

Source: http://goo.gl/gvbh96

Why CHWs?

- Studies have demonstrated that CHW approaches improve:
  - Improve health outcomes across a range of conditions (Islam et al 2014; Ursua et al 2013; Tang et al 2014)
  - Reduce hospital re-admissions (Kangovi et al 2010)
  - Improve health promoting behaviors (Islam et al 2013)
- Demographic changes in the US population and the global migration of peoples worldwide necessitate culturally and linguistically tailored of promoting community-clinical linkages

Global Migration Flow (Abel and Sander 2014)

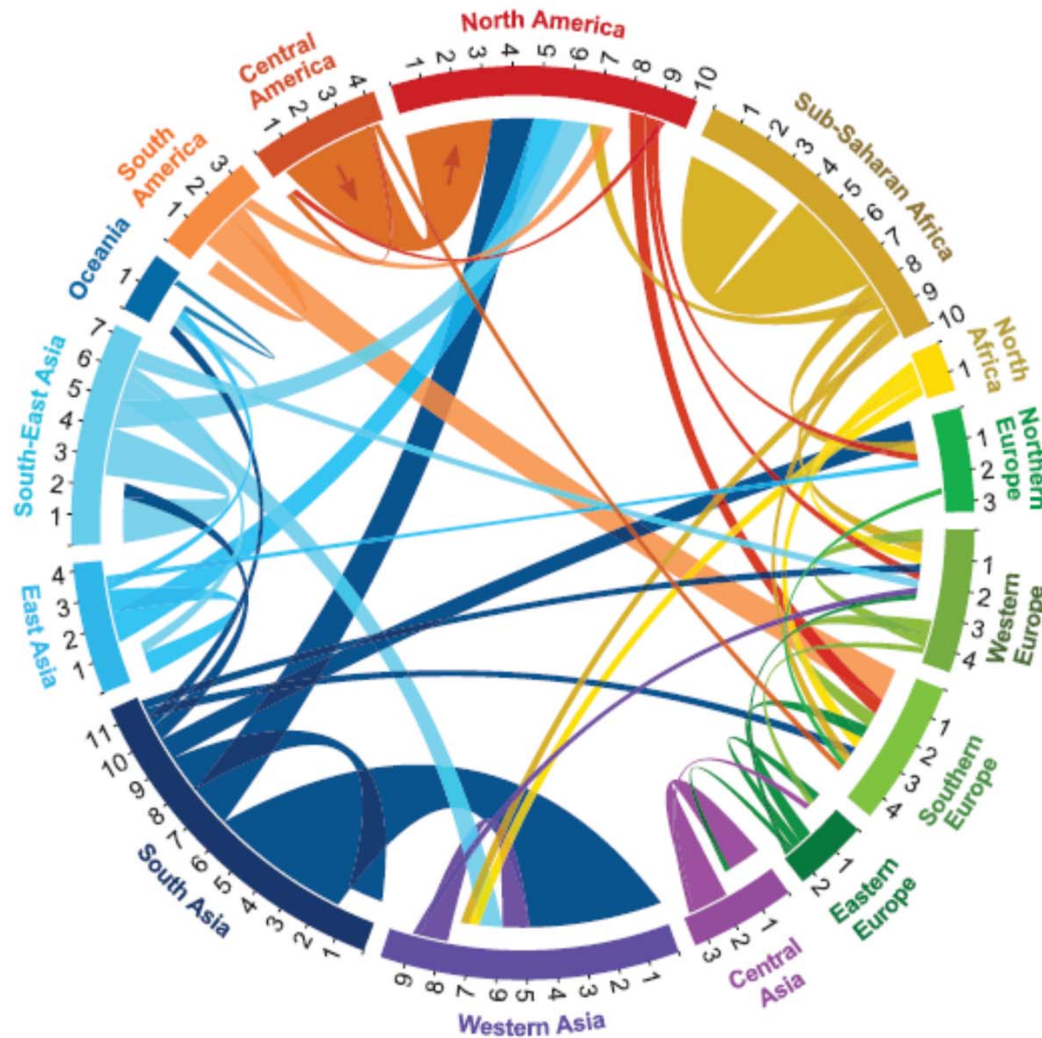


Fig. 4. Circular plot of migration flows between and within world regions during 2005 to 2010. Tick marks show the number of migrants (inflows and outflows) in millions. Only flows containing at least 170,000 migrants are shown.

Asian Americans in the US

ASIAN AMERICAN SUBGROUPS	TOTAL POPULATION	PERCENT CHANGE FROM 2000-2010
Total	308,745,538	
Total Asian*	14,674,252	43.3%
Total Asian in combination with 1+ races	2,646,604	59.8%
Asian Indian	2,918,807	69 .8%
Bangladeshi	142,080	202.9%
Cambodian	255,497	39.0%
Chinese*	3,535,382	37.9%
Filipino	2,649,973	38.9%
Hmong	252,323	44.4%
Indonesian	70,096	58.6%
Japanese	841,824	-1.2%
Korean	1,463,474	33.1%
Laotian	209,646	17.1%
Pakistani	382,994	132.6%
Thai	182,872	51.2%
Vietnamese	1,632,717	39.6%
Other Asian	218,922	0.5%

ASIAN AMERICAN SUBGROUPS	MEDIAN HOUSEHOLD INCOME ($)	LIVING IN POVERTY	SPEAKS ENGLISH LESS THAN "VERY WELL"
Asian Indian	$88,000	9%	24%
Bangladeshi	$35,964	20%	51%
Cambodian	$47,873	17%	53%
Chinese*	$65,050	14	48%
Filipino	$75,000	6%	22%
Hmong	$42,689	24%	48%
Indonesian	$56,207	13%	38%
Japanese	$65,390	8%	18%
Korean	$50,000	15%	46%
Laotian	$54,000	13%	51%
Pakistani	$60,000	13%	33%
Thai	$48,614	15%	46%
Vietnamese	$53,400	15%	59%
Other Asian	n/a	n/a	

*Chinese including Taiwanese

Source: U.S. Census Bureau , The Asian Population: 2010 Census Brief : http://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf
Demographics of Asian Americans; Pew Research Center: http://www.pewsocialtrends.org/2013/04/04/asian-groups-in-the-u-s/

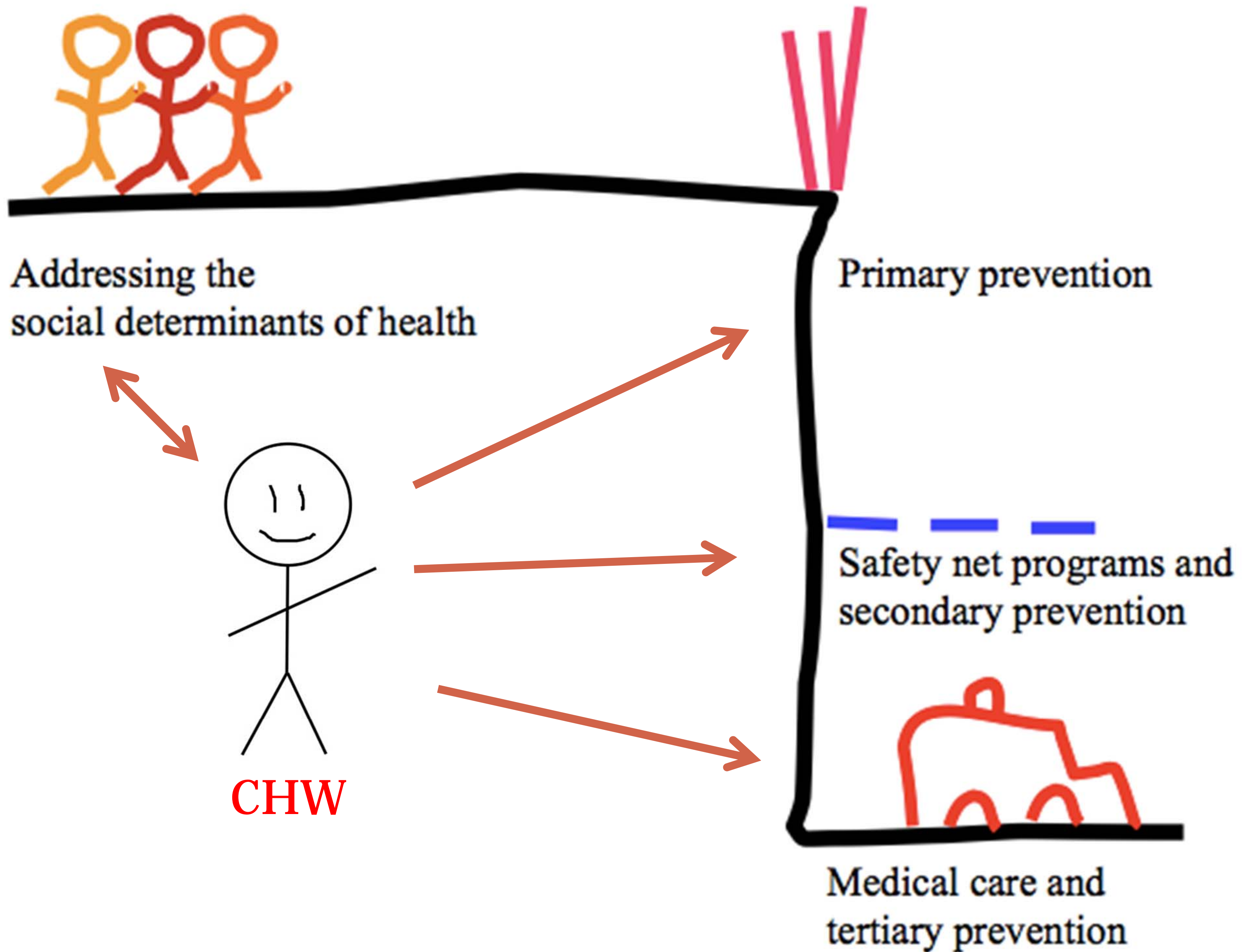
Population Health vs. Population Health Equity

Population Health

- the health outcomes of a group of individuals, including the distribution of such outcomes within a group (Kindig & Stoddart 2003)
- Population health interventions are often policy, systems and environmental level in nature, focused on upstream interventions for reaching the wider population and yielding broad improvements in net outcomes

Population Health Equity

- Health equity aims at achieving the highest attainment of health for all populations (Srinivasan & Williams 2014)
- Population health equity approach encompasses both targeted interventions for socially disadvantaged and medically underserved communities and population-wide interventions using a health equity lens to maximize health impact (Trinh-Shevrin et al, forthcoming)



Addressing the
social determinants of health
CHW
Primary prevention
Safety net programs and
secondary prevention
Medical care and
tertiary prevention
Camara Phyllis Jones, MD, MPH, PhD

Asian American Partnerships in Research and Empowerment

Grant Type: **R24**
Funder: **NIMHD**
Duration: **8 Years**

Overall Goal:

To improve health care access and **CVD status** in the NYC **Filipino American** community through a CHW intervention

DREAM Project

Diabetes Research, Education, & Action for Minorities

Grant Type: **P60**
Funder: **NIMHD**
Duration: **5 Years**

Overall Goal:

To develop, implement and test a CHW program designed to improve **diabetes control and management** in the **Bangladeshi** community in NYC.

Reaching Immigrants through Community Empowerment

Grant Type: **PRC**
Funder: **CDC**
Duration: **5 Years**

Overall Goal:

To develop, implement, and test a CHW program designed to promote **diabetes prevention** among **Korean** and **South Asian Americans** in NYC

Asian American Partnerships in Research & Empowerment

Intervention Duration:

4 mos.

Design: **RCT**

(Treatment & Control arms)

Components: (Treatment)

4 Education Sessions

4 Follow-Up Visits

8 Follow-Up Phone Calls

Diabetes Research, Education, & Action for Minorities

Intervention Duration:

6 mos.

Design: **RCT**

(Treatment & Control arms)

Components: (Treatment)

5 Education Sessions

2 Follow-Up Visits

Phone Calls as needed

Reaching Immigrants through Community Empowerment

Intervention Duration:

6 mos.

Design: **RCT/ Quasi-Experimental**

Components: (Treatment)

6 Education Sessions

10 Follow-Up Phone Calls

Asian American Partnerships in Research & Empowerment

....significant reductions in mean weight, BMI, and hip-to-waist ration (P<.01)

....significant reductions in systolic & diastolic blood pressures (P<.01)

.....significant increases in blood pressure control, medication adherence, and appointment keeping (P<.01)

DREAM Project

Diabetes Research, Education, & Action for Minorities

... significant reductions in mean weight & BMI (p<.0.05)

... significant improvements in: (p<0.05 – 0.001)

- Recommended physical activity
- food-related behaviors
- diabetic management knowledge
- self-efficacy

Reaching Immigrants through Community Empowerment

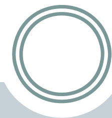
...significant reductions in weight loss, BMI, and fasting glucose levels (p<.004-.001)

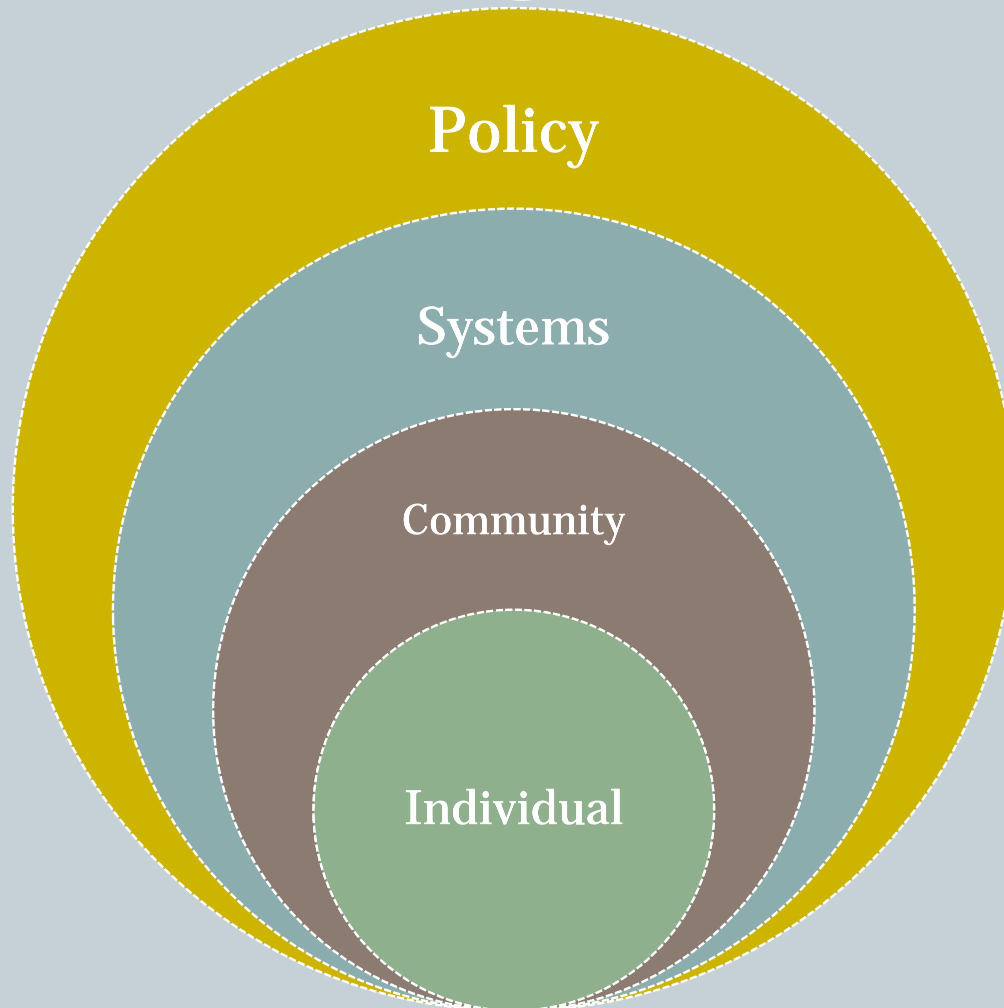
....significant improvements in systolic & diastolic blood pressure control (both groups) (p<.04-.001)

....significant improvements in: (P<.001)

- Physical activity
- food-related behaviors
- diabetic management knowledge
- self-efficacy

CHW Levels of Intervention





Individual-Level

- ❖Culturally tailored health education
- ❖Linguistically tailored access to care and patient navigation
- ❖Culturally tailored health promotion strategies
- ❖Empowerment & enhancing self-efficacy
- ❖Providing linkages to housing, immigration, and other services

Community level

- ❖Promoting positive health contexts
  - Increasing access to affordable physical fitness opportunities
  - Environmental changes in faith-based organizations, ethnic grocery stores, and restaurants

- ❖Building organizational capacity

Systems & Policy Level

❖Promoting cultural competency within healthcare systems

❖Advocating for responsive healthcare system & data disaggregation

59 y/o Filipino Female Caregiver with Hypertension

"Joining Kalusugan and attend sessions on cardiovascular health has changed my life. I learned to exercise even when am at work. I have gained many friends whom I can share my thoughts. I am stress-free and my blood pressure is stable."

52 y/o Bangladeshi Female, Diabetic for 3½ Years

Initially felt uncomfortable traveling to and from the hospital by herself. Empowered by a CHW to learn how to travel via public transportation, and take charge of her own health. Since 2011, she has referred several friends and family members into the project and remains an active volunteer.

Korean female participant at risk of diabetes

"The CHWs would give me a follow-up call once a week. I raised three children, but do you think they call me that often? Of course not, however, the CHWs call me to ask about my health, if I am going through any difficult times, and how I have been doing. **After a while, I started looking forward to these calls, so that if they didn't call me, I called them and asked for their advice.**"

Korean male participant at risk for diabetes

"**I was able to see how important and valuable vegetables and fruits are, so I gained confidence about my occupation.** I sell vegetables and fruits and now I manage a food court. I have a store in Manhattan and within concrete walls we sell natural food that people can eat every day. **I sometimes talk with my customers about how important vegetables and fruits are.**

Looking Forward

- CHWs in PPACA (Islam et al 2015)
- The science of CHWs
- Documenting CHW impact on the social determinants of health

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