

Addressing the Social Determinants of Health: An imperative for the health professions

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PRESENTATION TO THE PAUL AMBROSE SCHOLARS

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Introduction

- Population Health
- Social Determinants of Health
- Health Impact Pyramid
- What can we do?

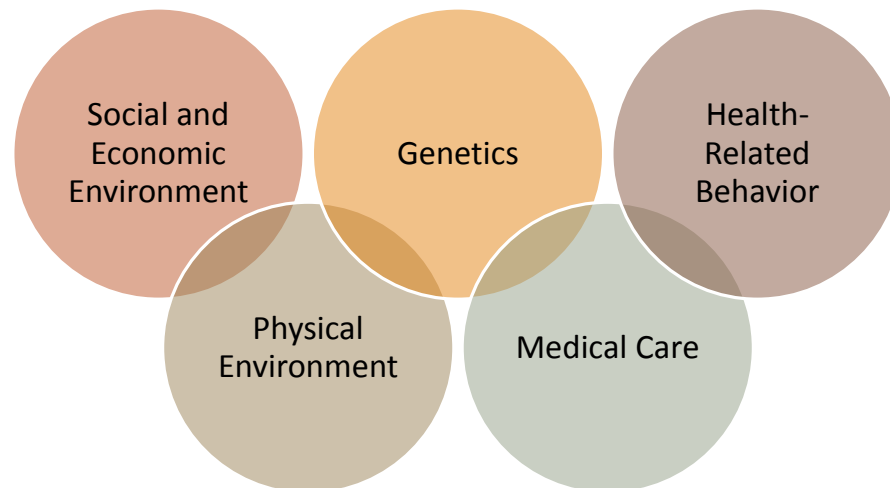
The Medical Model

- ◆ Focuses on factors linked to a specific disease
- ◆ Seeks the “silver bullet” that will stop the illness
- ◆ Reactive, responds to abnormality, disease, or injury



The Population Health Model

- ◆ Explains and intervenes in the causes of systematic differences in health among different population groups
- ◆ Health determinants are assessed in combination, including:



The Medical Model vs. The Population Health Model – Obesity as a case study

Medical

- Family history
- Diet & activity history
- Lab tests to rule out:
 - Hormonal causes
 - Other physiological causes
 - Diabetes
- Referral to nutritionist
- Diet & exercise prescription
- Bariatric surgery

Population Health

- Focus on obesity epidemic
- Race, income as risk factors
- Reasons for noncompliance
- Multiple factors
- Zoning law changes
- Menu labeling
- Challenging food industry
- Education

Causes of Obesity Epidemic Identified by the Population Health Model

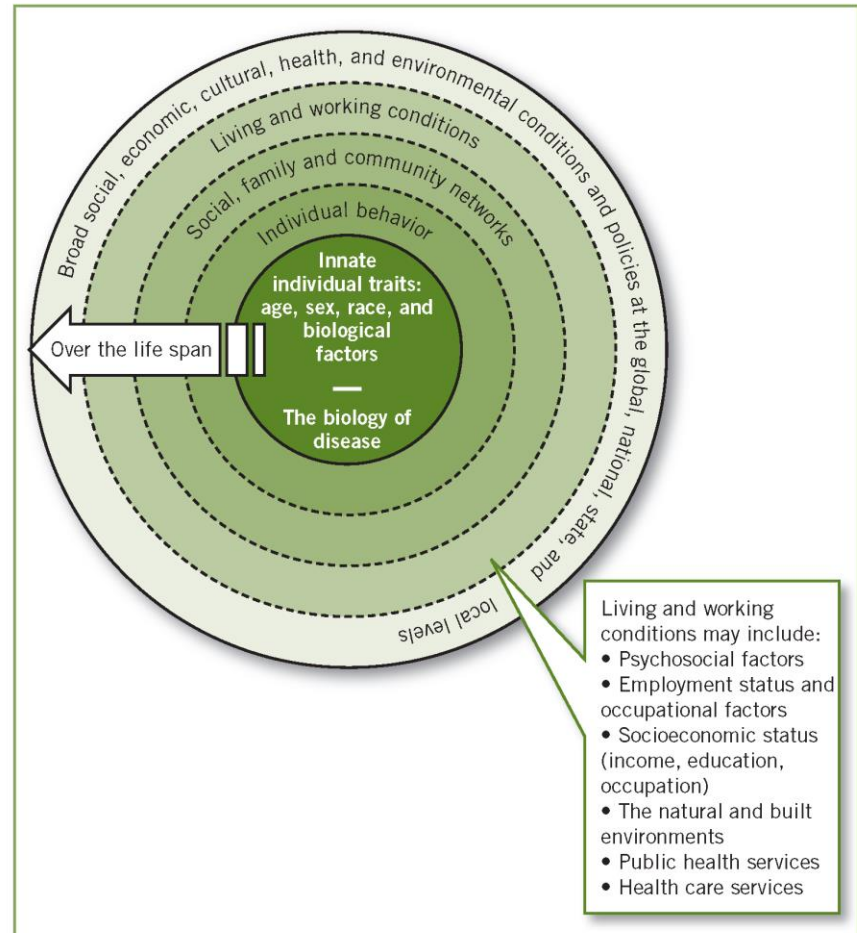
- ◆ Prevalence of fast food in low-income areas
- ◆ Presence of vending machines in schools
- ◆ Subsidized school lunches high in calories, fat
- ◆ Decrease in physical education & recess
- ◆ Less walking or bicycling to school
- ◆ No safe places to play or walk near home
- ◆ Lack of grocery stores with healthy options
- ◆ “Super Size Me”

Determinants of Health

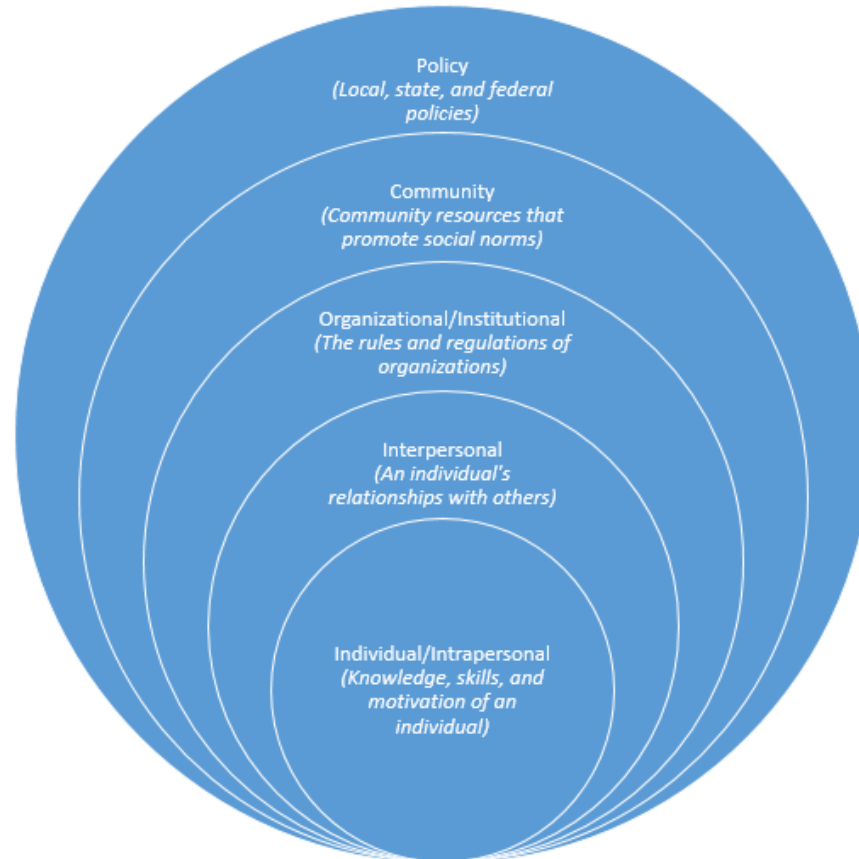
FIGURE 1

A guide to thinking about determinants of population health.

Source: Institute of Medicine (2002). *The future of the public's health in the 21st century*. Washington, D.C., National Academies Press, p. 52. Reproduced with permission from National Academies Press, copyright 2002, National Academy of Sciences.



Social Ecological Model

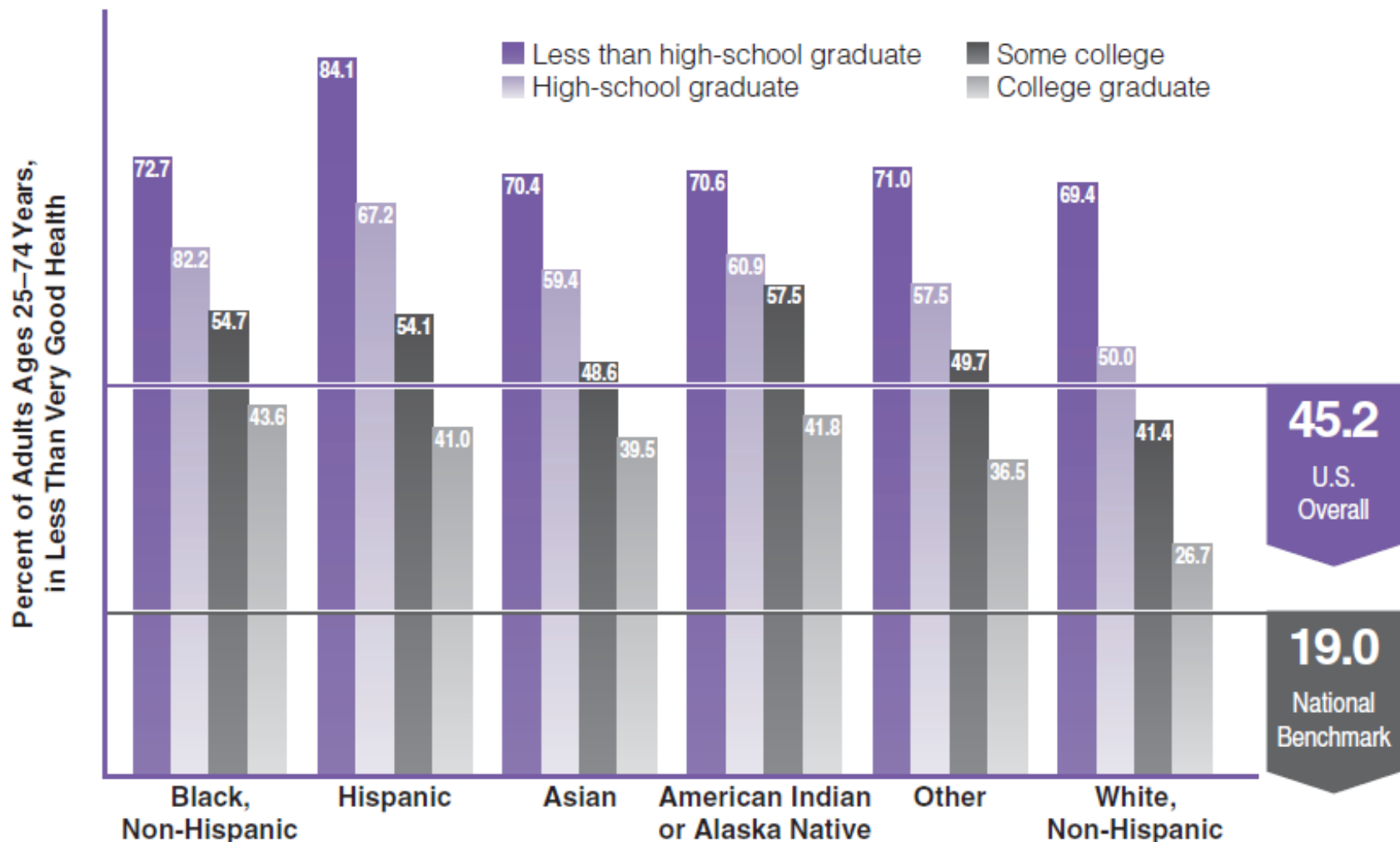


Social Determinants of Health

- Defined by Healthy People 2020 as:



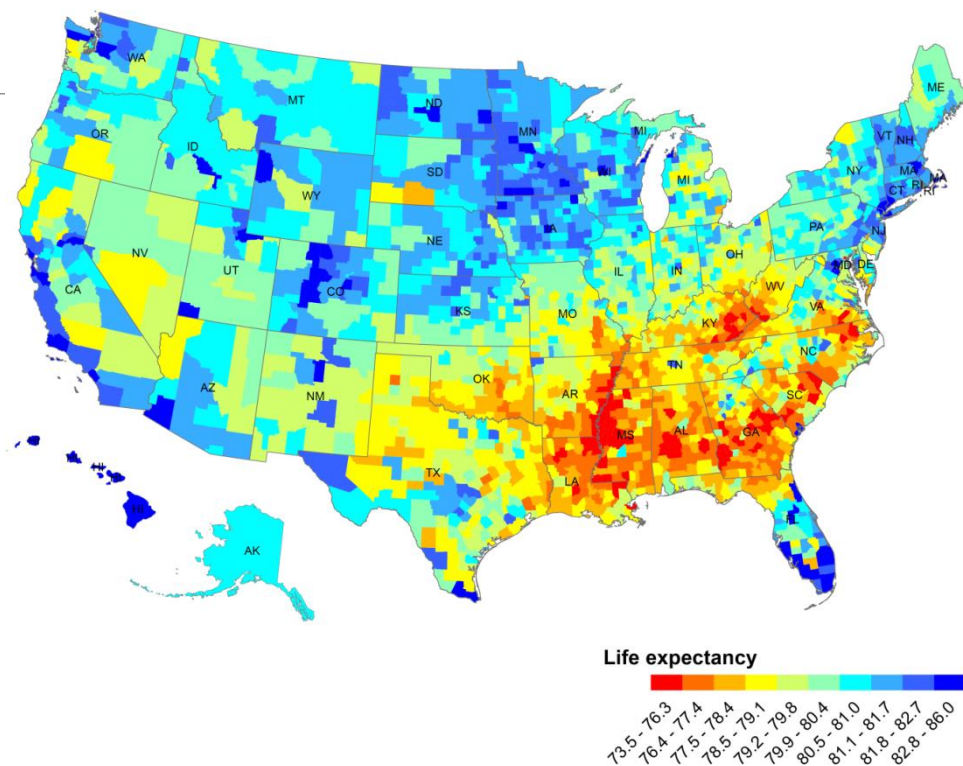
EDUCATION IS LINKED WITH HEALTH



Source: Robert Wood Johnson Foundation Commission to Build a Healthier America (2009). Available at www.commissiononhealth.org.

Where you Live Matters

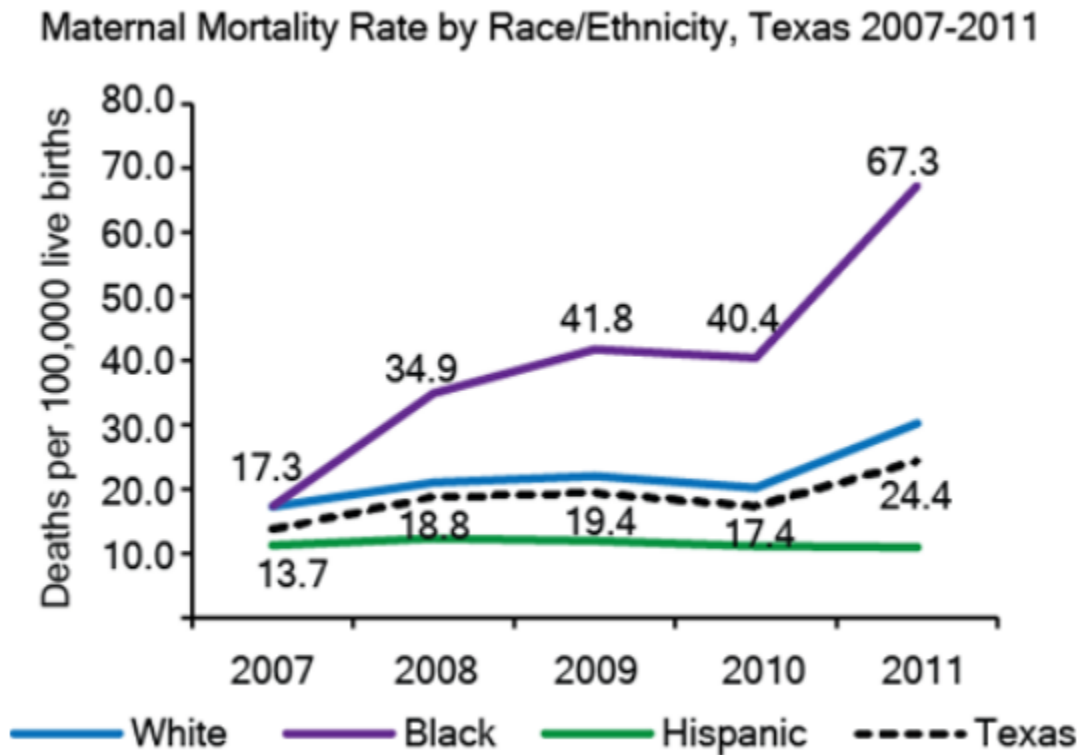
- ◆ Differences in the determinants of health from one part of the country to another help explain why the U.S. has dramatic health differences, county by county



Paulson, T. (2011, June 15). US continues to fall behind other nations on life expectancy. *Humanosphere.org*. Retrieved from: <http://www.humanosphere.org/2011/06/us-continues-to-fall-behind-other-nations-on-life-expectancy/>

Race/Ethnicity Matter

Figure 1: Maternal Mortality Rate by Race/Ethnicity, Texas 2007-2011



Source: Vital Statistics Death Files: ICD10 O00-O959, O98-O999, A34 & Check Box
Prepared by: Office of Program Decision Support, FCHS, DSHS, 2014

Structural Racism vs. Institutional Racism

Structural racism refers to “the totality of ways in which societies foster [racial] discrimination, via mutually reinforcing [inequitable] systems...(eg, in housing, education, employment, earnings, benefits, credit, media, health care, criminal justice, etc) that in turn reinforce discriminatory beliefs, values, and distribution of resources”, reflected in history, culture, and interconnected institutions. This definition is similar to the “über discrimination” described by Reskin.

Within this comprehensive definition, institutional racism refers specifically to racially adverse “discriminatory policies and practices carried out...[within and between individual] state or non-state institutions” on the basis of racialised group membership.

Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: evidence and interventions. *The Lancet*, 389(10077), 1453-1463.

Mechanisms of Racism – 20th Century

- Zoning
- Public Housing
- Restrictive Covenants
 - Developers and Mortgages
- Contract Loans
- Redlining
- Blockbusting and Neighborhood Violence
- Discriminatory Taxation and Rule Enforcement

Mechanisms of Racism – 21st Century

- Maintenance of housing and economic exclusion
- Retreat from school integration
- Foreclosures post 2008
- Mass incarceration
- Symbolic racism and white fragility

Who's in Charge of Public Health?

◆ Public health

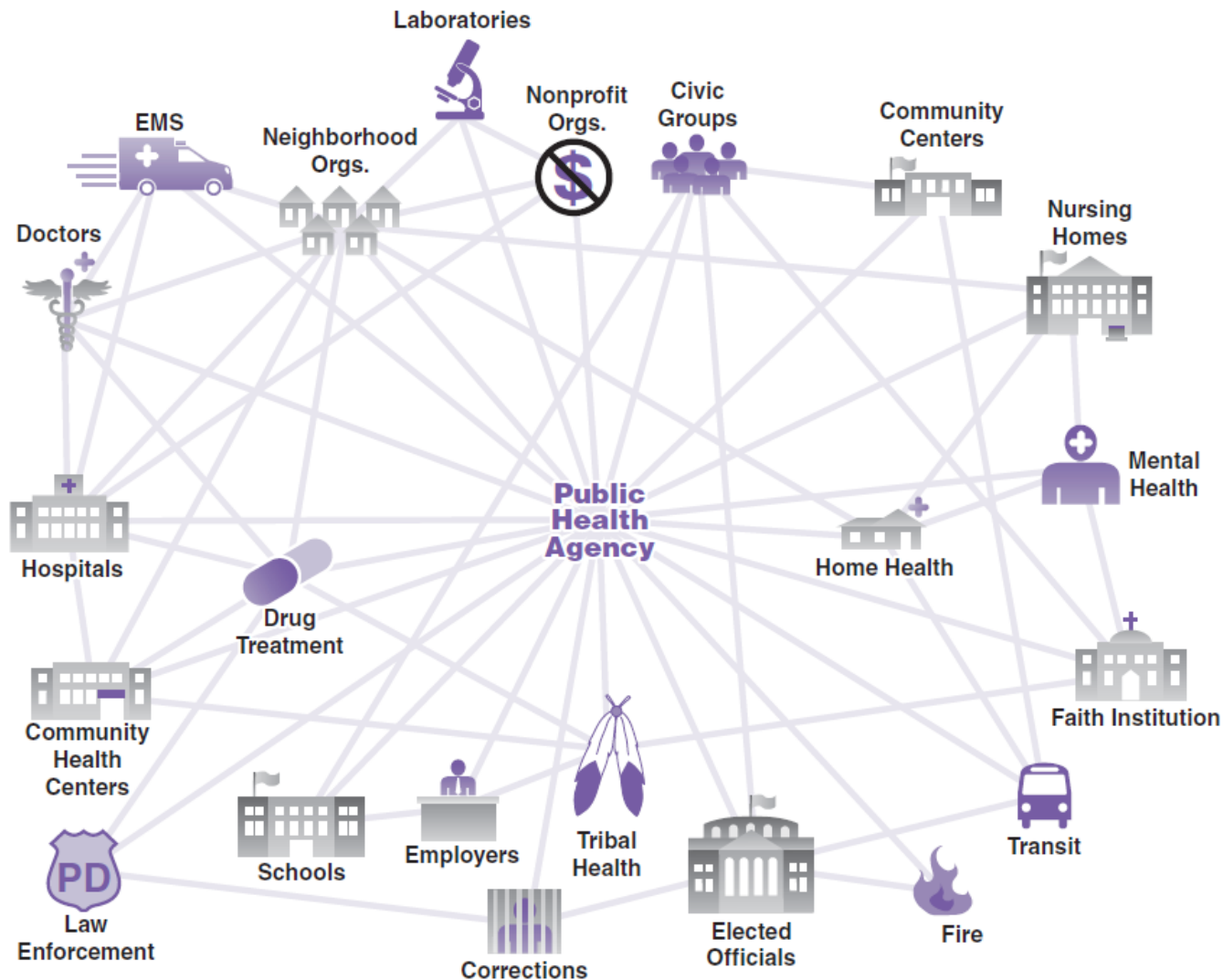
- “What society does collectively to assure the conditions for people to be healthy” (IOM)
- Science, practice, & art of protecting & improving health of populations
- Historically focused on sanitation & environment
- Later on communicable diseases, health behavior
- Late 20th cen., last-resort provider of indigent care
- With ACA, new focus on prevention



Public Health in Every Day Life

- ◆ Recommendations on healthy sleep
- ◆ Safe, fluoridated water supply
- ◆ Preventive dental care
- ◆ Sewer and waste disposal services
- ◆ Nutrition labels
- ◆ Regulations on food processing & safety
- ◆ Flu shots & other vaccinations
- ◆ Hand-washing guidelines
- ◆ Travel precautions
- ◆ Educational programs on STIs & condom use
- ◆ Smoking cessation programs
- ◆ Community exercise programs
- ◆ Safety belt regulations
- ◆ Occupational safety regulations

THE PUBLIC HEALTH SYSTEM AT THE LOCAL LEVEL



Source: Redrawn from the Centers for Disease Control and Prevention, 2013, The Public Health System and the 10 Essential Public Health Services <http://www.cdc.gov/nphsp/essentialservices.html>

Health Policies and Returns on Investment

U.S. expenditures on health care:

- Two thirds spent treating preventable diseases
- 5% spent on prevention of these diseases
- 95% spent on direct medical care

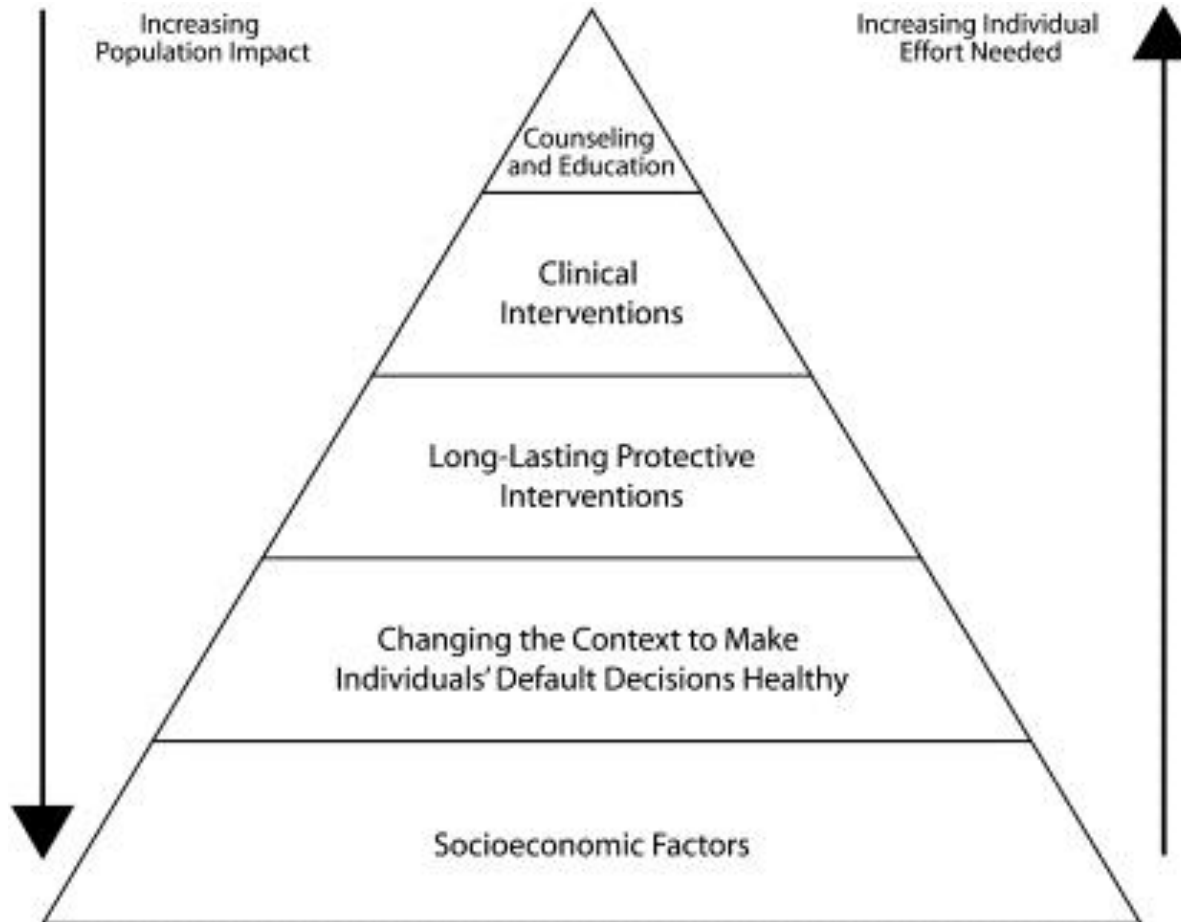
Education vs. medical services

Community-based prevention programs

Health impact assessments

Community benefits from nonprofit hospitals

Health Impact Pyramid



Am J Public Health. 2010 April; 100(4): 590–595.

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What can I do about all this?

- ◆ Pay attention to the social history!
- ◆ Consider community
 - What role can clinical institutions play?
 - Is there a handoff problem?
- ◆ Leadership, advocacy, and expanded roles
- ◆ Expand...and teach... the science
- ◆ Reflect on your limits
 - With patients
 - With your tools
 - With partnerships
 - With policy
- ◆ Consider Advocacy
- ◆ Understand the connections, and make the medical system part of the health system

Summary

- ◆ The medical model focuses on the individual, while the population health model examines variances between communities
- ◆ Social determinants of health are an important predictor of health
- ◆ Population health science is achieving recognition in the U.S. as an important foundation for improving health outcomes

QUESTIONS?

