The Power of Zip Code

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The Power of Your Zip Code

• “Zip code" has a greater impact on your health than your "genetic code"

• Strategies to reduce health disparities

• Challenges and opportunities for resolving health disparities
The Rich Live Longer Everywhere. For the Poor, Geography Matters.

By NEIL IRWIN and QUOC TRUNG BUI. APRIL 11, 2015

Life expectancy of 40-year-olds with household incomes below $28,000, adjusted for race.
Neighborhoods Matter for Health

- Health outcomes—including life expectancy—vary sharply by neighborhood.
- Between 2003 and 2007, life expectancy varied by as much as 33 years between census tracts in Boston.
- The census tract with the lowest life expectancy (in Roxbury, 58.9 years) is shorter than the life expectancy of many third world countries.

Source: Center on Human Needs, Virginia Commonwealth University, September 2012

Census tracts with the longest and shortest life expectancies are in Back Bay and Roxbury respectively.
A Short Distances To Large Disparities In Health: Washington, DC Where is the Outrage?

Red Line between Union Station in Washington and Shady Grove in Montgomery County, Md. are 17 metro stops spanning 30 miles and an estimated nine year difference in life span.

Orange Line between Metro Center in Washington and East Falls Church in Arlington County, Va. are nine metro stops spanning 10 miles and an estimated eight year difference in life span.

Green Line between Gallery Place in Washington and Greenbelt in Prince Georges County, Md. are 11 metro stops spanning 17 miles and an estimated three year difference in life span.

Blue Line between Foggy Bottom in Washington and Springfield-Franconia in Fairfax County, Va. are 10 metro stops spanning 12 miles and an estimated nine year difference in life span.
Determinants of Health & Their Contribution to Premature Death

Proportional Contribution to Premature Death

- Behavioral patterns: 40%
- Genetic predisposition: 30%
- Social circumstances: 15%
- Environmental exposure: 5%
- Health care: 10%

Adapted from: McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. Health Aff (Millwood) 2002;21(2):78-93.
Social Determinants of Health

- Clean Water
- Improving health care delivery
- Savings
- Living wage
- Access to High Quality Education
- Access to Public Transportation
- Access to Health Care
- Inclusive
- Access to Clinical Trials
- Secure Housing
- Complete Streets
- Access to Open Green Space to Play
- Banked
- Access to High Quality Affordable Food
- Community Safety
- Access to high quality education
Health is About More Than Health Care
Health Is About Risky Behavior

• Tobacco is the number one preventable cause of death
  – 400,000 deaths
  – Numerous morbidities

• Starts in early adolescence & adulthood

• Costs everyone

• There are individual & community based solutions
  – Health education
  – Cessation therapy
  – Clean air policy & laws
  – Reduce access to youth

Tobacco: Public Enemy Number One
Health Is About What We Eat: The Tale Of One Soda

Solutions
- Reduce consumption – portion size
- Increase food choices
- Reduce access in school vending machines
- Increase water, juices, etc.
- Junk food taxes under consideration

Numerous studies have shown the negative health effects of drinking soda on your waistline and your teeth.
- Drinking soda however, has far more health risks than many of us may realize.
- Regular consumption of sugary drinks is linked to numerous health problems including diabetes, heart disease, asthma, COPD and obesity.

Jul 25, 2016

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Nutrition Facts

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<td>Amount Per Serving</td>
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*Percent Daily Values are based on a 2,000 calorie diet.
Health Is About Equitable Access To Affordable Foods
A Mom’s Education, A Baby’s Chances of Survival

Babies born to mothers who did not finish high school are nearly twice as likely to die before their first birthdays as babies born to college graduates.
Health Is About Ensuring
Safe Water  Safe Air  Safe Food
Health Is About Where We Dump Our Trash

Separate toxins from residential locations
Identify & remediate risky waste sites
Health Is About Equitable Access To Quality Housing
A study in New York City found that playgrounds in low-income areas had more maintenance-related hazards than playgrounds in high-income areas. For example, playgrounds in low-income areas had significantly more trash, rusty play equipment, and damaged fall surfaces (Suecoff 1999).
Place Matters
Health Is About Broad Community Capacity

- Transportation
- Violence free
- Health providers
- Parks & open space
- Walkable & bikeable
Across America, Differences In How Long & How Well We Live
United States

- **The US ranks dead last in life expectancy** for men and second to last for women among the 17 wealthiest nations.
- **Infant mortality ranks last** among the most advanced countries in the world.
- **US health care outcomes fell from 20th to 27th** among the 34 most developed countries.
- **Latinos and African-Americans experience 30-40% poorer health outcomes** than white Americans.
- In low income neighborhoods, patients with diabetes are **10 times more likely to undergo limb amputation** than those in affluent areas.
- The **rate of hospitalization** for patients with diabetes is twice as high for Latinos and three times higher for African-Americans than for Whites.
- The **death rate from breast cancer for African-American women is 50% higher** than for white women.
- White women have higher breast screening rates than African-American and Latino women.
- **25% of African-American have elevated blood pressure** compared to 10% of Whites.
- African-Americans are 10% less likely to be screened for high cholesterol than for Whites – the result is a higher rate of heart failure and stroke.
African Americans

- **Adult obesity rates are higher** than those for whites in nearly every state in the nation
- **Higher rates of diabetes, hypertension, and heart disease; 15%** compared to 8% in Whites
- **Asthma prevalence is also the highest**- 260% higher ED visit rate; 250% higher hospitalization rate; and a 500% higher death rate compared to white children
- **Higher incidence and mortality rates from cancers** that are amenable to early diagnosis and treatment exist
- Leading cause of death is heart disease, cancer and stroke
- There are **13.24 infant deaths per 1000** live births

Center for American Progress, 2010
Latinos

- Adult **obesity rates are 37.9%** among those age 20 and over
- **14% have diabetes** compared to 8% of Whites; higher rates of end-stage renal disease and are **50% more likely to die from diabetes**
- Women **contract cervical cancer at twice the rate** of Whites
- Leading cause of death is heart disease, cancer and accidents
- Interestingly, Hispanics live longer than other Americans and have lower rates of infant mortality (**5.52 infant deaths per 1000 live births**)
Asian Americans

- Obesity is not generally a problem, however 1 in 10 Vietnamese and Korean adults are underweight
- Asian Americans **suffer disproportionately from certain types of cancer, tuberculosis, and Hepatitis B**
  - Vietnamese-American have cervical cancer rates 5x higher than White women
- Leading causes of death are cancer, heart disease and stroke
- There are significant variations in infant mortality among subgroups that are not explained by known risk factors
- Older Asian-American women have the **highest suicide rate of all women over the age of 65** in the US
The Opportunity

• **Good health happens everyday outside of your doctor’s office:**
  
  - **According to the CDC,** factors such as physical activity can reduce risks for chronic illnesses, improve bone strength and benefit mental health.

• **Where you live can have a direct impact on your health:**
  
  - **According to Harvard researchers**

• **Cities have the power to become health hubs for a growing population:**
  
  - **According to the United Nations**

• **Walkability Matters:**
  
  - **A 2013 study from the Urban Land Institute**
# Social Determinants of Health Research Program Strategy

| Education and Training¹ | Focus on new and existing healthcare professionals  
Develop talent pipeline in SDOH |
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<td>Health-impacting social policy evaluation²</td>
<td>Community-level “health-in-all-policies” implementation impact assessment</td>
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| Technology and Innovations | Using Big Data in assessment, planning and identification of community SDOH trends  
Testing innovative strategies and technological solutions to address SDOH |
| Partners | Harvard University, Dr. Ichiro Kawachi  
Florida International University, Dr. Pedro Greer  
Stanford University, Dr. Sanjay Basu  
Emory University |

¹https://www.nap.edu/catalog/21923/a-framework-for-educating-health-professionals-to-address-the-social-determinants-of-health
Shifting Interventions Beyond Health Care


Where most of the interventions are now

Where they need to be

Increasing Population Impact

Increasing Individual Effort Needed

Counseling and Education

Clinical Interventions

Long-Lasting Protective Interventions

Changing the Context to Make Individuals’ Default Decisions Healthy

Socioeconomic Factors
Health Improvement Framework

TARGET OF INTERVENTION

Society & Institutions
Community
Individuals

INDIVIDUAL ILLNESS

TYPE OF INTERVENTION

Clinical Care
Health Promotion/Prevention
Public Policy Advocacy
Intersectoral Working: Jobs/Housing/Education

By: Jo Ivy Buffford, MD
A partnership between the Aetna Foundation, the American Public Health Association, and the National Association of Counties.

This $1.5 million dollar prize challenge will recognize and catalyze cities, counties, and tribal communities across the U.S. with ideas and solutions that are improving the overall health of their community while simultaneously empowering people to make healthier choices.

Challenge participants must address at least one domain from the cores set listed below. Please note, a challenge participant can pick more than one domain:

- Healthy Behaviors
- Community Safety
- Built Environment
- Social/Economic Factors
Healthiest Cities & Counties Challenge: Domains and Indicators

Healthy Behaviors
- Increased access to and consumption of fruits and vegetables
- Increased physical activity (physical fitness)
- Decrease in tobacco use

Community Safety
- Reduced incidences of community violence

Built Environment
- Increased access to high quality healthy foods
- Improved walkability, bikeability and transit use in the community

Social/Economic Factors
- Increased housing affordability
- Increased educational attainment
- Increased living wage

Environmental Exposure
- Improved air and water quality
- Decrease in the number of children exposed to secondhand smoke in the home
Questions