social determinants of health:

- socioeconomic status,
- education,
- the physical environment,
- employment, and
- social support networks, & access to health care.

Social Determinants of Health

People Places and Things
Determinants of Health

Health and health problems result from a complex interplay of a number of forces.

- An individual’s health related behaviors (particularly diet, exercise and smoking),
- surrounding physical environments and
- health care (both access and quality), all contribute significantly to how long and how well we live.

However none of these factors is as important to population health as are the:

- social and
- economic environments

in which we live, learn, work and play. We refer to these factors as social determinants of health.
The Social Determinants Of Health (SDOH)

- The **social determinants of health (SDOH)** are the economic and social conditions and their distribution among the population that influence individual and group differences in health status.

- They are health promoting factors found in one's living and working conditions (such as the distribution of income, wealth, influence, and power), rather than individual risk factors (such as behavioral risk factors or genetics) that influence the risk for a disease, or vulnerability to disease or injury.

- According to some viewpoints, the distributions of social determinants are shaped by public policies that reflect the influence of prevailing political ideologies of those governing a jurisdiction.

- The World Health Organization says, "This unequal distribution of health-damaging experiences is not in any sense a 'natural' phenomenon but is the result of a toxic combination of poor social policies, unfair economic arrangements [where the already well-off and healthy become even richer and the poor who are already more likely to be ill become even poorer], and bad politics."
Components of Social Determinants

They are described as:

• socio-economic determinants (e.g., age, sex, education),
• psychosocial risk factors (e.g., social support, self-esteem, chronic stress, isolation) and
• community and societal characteristics (e.g., income inequality, social capital including civic involvement, level of trust).
Social determinants impact a person’s wellness and life expectancy

- It has been estimated that the healthcare delivery system accounts for less than a quarter of the health status of populations.
- Most of the 20th century’s 30 year increase in life expectancy has been attributable to public health interventions in societal sectors other than the health care delivery system, e.g. water, food transportation, workplace safety and smoking reductions.

Source: Sowad, Barbara J. A call to be whole: the fundamentals of health care reform, CT. S3

6 miles apart with a 20 year difference in life expectancy
Source: Lloyd B. Minor, M.D. John Hopkins

The medical systems treats people and then sends them back to the socio-economic conditions that made them ill.
America Is Not Getting Good Value for Its Health Dollar

The U.S. spends more money per person on health than any other country, but our lives are shorter—by nearly four years—than expected based on health expenditures.

Prepared for the Robert Wood Johnson Foundation by the Center on Social Disparities in Health at the University of California, San Francisco.

Sources: OECD Health Data 2007.

Does not include countries with populations smaller than 500,000. Data are for 2003.

*Per capita health expenditures in 2003 U.S. dollars, purchasing power parity

© 2008 Robert Wood Johnson Foundation

www.commissiononhealth.org

In the United States, the likelihood of premature death increases as income goes down. Similarly, lower education levels are directly correlated with lower income, higher likelihood of smoking, and shorter life expectancy. Michael Marmot et al., “Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health,” The Lancet 372, no. 9650 (Nov. 8, 2008):1661–1669.

Children born to parents who have not completed high school are more likely to live in an environment that poses barriers to health. Their neighborhoods are more likely to be unsafe, have exposed garbage or litter, and have poor or dilapidated housing and vandalism. They also are less likely to have sidewalks, parks or playgrounds, recreation centers, or a library. Gopal K. Singh, Mohammad Siahpush, and Michael D. Kogan, “Neighborhood Socioeconomic Conditions, Built Environments, and Childhood Obesity,” Health Affairs 29, no. 3 (March 2010):503-512, doi: 10.1377/hlthaff.2009.0730. Conditions, Built Environments, And Childhood Obesity. Health Affairs. 29(3): 503-512.

In addition, poor members of racial and ethnic minority communities are more likely to live in neighborhoods with concentrated poverty than their poor White counterparts. There is also growing evidence demonstrating that stress negatively impacts health for children and adults across the lifespan. Vincent J. Felitti et al., “Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study,” American Journal of Preventive Medicine 14, no. 4 (May 1998):245–258.

Recent research showing that where a child grows up impacts his or her future economic opportunities as an adult also suggests that the environment in which an individual lives may have multi-generational impacts. Raj Chetty et al., “Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States,” The Quarterly Journal of Economics 129, no. 4 (Sept. 14, 2014): 1553-1623, doi: 10.1093/qje/qju022.
Examples of *social determinants* include:

- Availability of resources to meet daily needs, such as educational and job opportunities, living wages, or healthful foods
- Social norms and attitudes, such as discrimination
- Exposure to crime, violence, and social disorder, such as the presence of trash
- Social support and social interactions
- Exposure to mass media and emerging technologies, such as the Internet or cell phones
- Socioeconomic conditions, such as concentrated poverty
- Quality schools
- Transportation options
- Public safety
- Residential segregation
## Social Determinants of Health

<table>
<thead>
<tr>
<th>Economic Stability</th>
<th>Neighborhood and Physical Environment</th>
<th>Education</th>
<th>Food</th>
<th>Community and Social Context</th>
<th>Health Care System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment, Income, Expenses, Debt, Medical bills, Support</td>
<td>Housing, Transportation, Safety, Parks, Playgrounds, Walkability</td>
<td>Literacy, Language, Early childhood education, Vocational training, Higher education</td>
<td>Hunger, Access to healthy options</td>
<td>Social integration, Support systems, Community engagement, Discrimination</td>
<td>Health coverage, Provider availability, Provider linguistic and cultural competency, Quality of care</td>
</tr>
</tbody>
</table>

**Health Outcomes**
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations
Economic Stability

- Poverty
- Employment
- Food Security
- Housing Stability

Healthy People 2020
Poverty

- Twenty-eight percent (28%) of Philadelphians—between 430,000 and 440,000 people—live below the federal poverty level, including 39% (135,000) of our children, 27% (265,000) of work-age adults and 17% (32,000) of seniors.
## Philadelphia Household Income Statistics

<table>
<thead>
<tr>
<th>2012 Household Income Statistics</th>
<th>Philadelphia, PA</th>
<th>Pennsylvania</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Area Household Income</td>
<td>$27,560,621</td>
<td>$369,468,622,559</td>
<td>$9,110,376,126,223</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$43,800</td>
<td>$55,645</td>
<td>$57,639</td>
</tr>
<tr>
<td>Average Household Income</td>
<td>$55,721</td>
<td>$73,402</td>
<td>$77,190</td>
</tr>
<tr>
<td>Per Capita Household Income</td>
<td>$23,991</td>
<td>$28,954</td>
<td>$29,126</td>
</tr>
<tr>
<td>Income Less than $15,000</td>
<td>21.72%</td>
<td>12.06%</td>
<td>11.77%</td>
</tr>
<tr>
<td>Income $15,000 to $24,999</td>
<td>12.55%</td>
<td>10.13%</td>
<td>9.67%</td>
</tr>
<tr>
<td>Income $25,000 to $34,999</td>
<td>10.97%</td>
<td>10.12%</td>
<td>9.73%</td>
</tr>
<tr>
<td>Income $35,000 to $49,999</td>
<td>13.46%</td>
<td>13.54%</td>
<td>13.33%</td>
</tr>
<tr>
<td>Income $50,000 to $74,999</td>
<td>16.09%</td>
<td>18.38%</td>
<td>18.03%</td>
</tr>
<tr>
<td>Income $75,000 to $99,999</td>
<td>10.28%</td>
<td>13.05%</td>
<td>12.97%</td>
</tr>
<tr>
<td>Income $100,000 to $124,999</td>
<td>6.05%</td>
<td>8.49%</td>
<td>8.65%</td>
</tr>
<tr>
<td>Income $125,000 to $149,999</td>
<td>3.31%</td>
<td>5.10%</td>
<td>5.40%</td>
</tr>
<tr>
<td>Income $150,000 to $199,999</td>
<td>2.92%</td>
<td>4.59%</td>
<td>5.12%</td>
</tr>
<tr>
<td>Income $200,000 and Over</td>
<td>2.65%</td>
<td>4.55%</td>
<td>5.34%</td>
</tr>
</tbody>
</table>

- The data for Philadelphia, PA may also contain data for the following areas:
- Philadelphia Household Income: Data on consumer income collected by the Census Bureau covers money income received (exclusive of certain money receipts such as capital gains) before payments for personal income taxes, social security, union dues, medicare deductions, etc. Therefore, money income does not reflect the fact that some families receive part of their income in the form of non-cash benefits, such as food stamps, health benefits, rent-free housing, and goods produced and consumed on the farm.
- Information is deemed reliable but not guaranteed. Demographic Information FAQ
What Is Job Stress?

• Job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury.
What Workers Say About Stress on the Job

Survey by Northwestern National Life
Percentage of workers who report their job is “very or extremely stressful.”

Survey by the Families and Work Institute
Percentage of workers who report they are “often or very often burned out or stressed by their work.”

Survey by Yale University
Percentage of workers who report they feel “quite a bit or extremely stressed at work.”
22% of Philadelphia is food insecure, highest rate in Pa. [MAP]

Twenty-two percent of Philadelphians are “food insecure,” meaning they at times lack access to enough food for a “healthy, active life,” according to a recent report from the Greater Philadelphia Coalition Against Hunger. That’s the highest rate of food insecurity across the whole state.
Multiple Hardships Among Philadelphia Families with Young Children: 2008-2011

Often times, low-income families with young children under the age of 4 experience a continuous cycle of hardships (i.e., food insecurity, energy insecurity, and housing insecurity). These experiences have negative consequences on the developing bodies and brains of young children.

**Food Insecurity** is the lack of consistent access to sufficient healthy food for all family members to enjoy active, healthy lives. In 2010, 48.8 million people, including 16.2 million children lived in U.S. households that were food insecure. Approximately 24% (or 9 million) of very young children (under age 6) lived in households experiencing food insecurity in 2010. *Children’s HealthWatch* research in Philadelphia found that nearly 24% of families with young children were food insecure in 2011. This research has shown that young children who live in households experiencing food insecurity are more likely to:

- Be in poor or fair health
- Experience problems with cognitive development
- Exhibit behavioral and emotional problems

**Energy Insecurity** occurs when families lack consistent access to sufficient home heating or electricity to ensure healthy and safe conditions in the home. Households were classified as being energy insecure if the utility company sent a letter threatening to shut off services or had shut off services in the past year or if they had relied on a cooking stove to heat their house. Young children who live in households experiencing energy insecurity are more likely to:

- Be in poor or fair health
- Have higher hospitalization rates
- Be at risk for developmental delays

**Housing Insecurity** occurs when families move frequently, crowd into living spaces that are too small, or double up with another family for financial reasons. Nearly 40% of families that the Children’s HealthWatch team interviewed in North Philadelphia experienced some form of housing insecurity in 2011. Children living in families who have moved multiple times in the past year are more likely to:

- Be in poor or fair health
- Be at risk for developmental delay
- Have lower weight-for-age
Housing Stability

Philly Has an Income Problem, Not a Housing Affordability Problem

BY JONATHAN GREETING | MARCH 20, 2014
Facebook
Twitter
Email

Housing Stability Outcomes
Years July 2008 – December 2012

- Philadelphia Housing Authority provided Blueprint Vouchers to enable DBHIDS to access stable housing and to allow for transformation of the DBHIDS County-Housing slots

- 587 Individuals receiving vouchers came from:
  - Transitional (OMH-County-Housing-Slots)
  - Safe Havens (HUD & OMH)
  - Treatment (i.e.: CBH/BHSI Journey of Hope)
  - Permanent Supportive Housing (HUD, OMH, OAS)
  - Emergency Housing/Shelters (OSH)
  - High percentage were MA recipients (67.9%)
These data—based on a one-night, city-run count of people staying in emergency shelters, transitional housing, temporary drop-in centers, or on the street—show a 12 percent decrease in the number of homeless in Philadelphia from 2007 to 2014. The number of unsheltered homeless dropped by 30 percent during this period; the unsheltered represent only 6 percent of the total homeless population. In 2014, 54 percent of the homeless were individuals, while 46 percent were members of homeless families.

Source: Philadelphia Office of Supportive Housing, single-day counts
© 2015 The Pew Charitable Trusts
2014 Snapshot of Philadelphia’s Homeless Youth

A large share of homeless youth in Philadelphia are not living on the streets.

The majority of homeless youth do not sleep at a crisis shelter.

- Stay with a friend: 66%
- Sleep outdoors: 22%
- Stay at a shelter: 8%
- Sleep in a subway station: 2%
- Other: 2%

There is only one crisis shelter in Philadelphia that exclusively serves young adults and they have only 51 beds.

On average, 34 kids are turned away each month because there aren’t enough beds.

Of those turn-aways, an average of 15 are expectant mothers or young mothers with children.

The City of Philadelphia received $31 million for its homeless care programs in 2014.

Only $1.1 million was specifically targeted for youth.

Source: The City of Philadelphia Office of Supportive Housing; Covenant House Pennsylvania
Credit: Cynthia Andrews/NBC
Stable, Affordable Housing Supports Young Children’s Health in Philadelphia

Families should be able to afford a safe, decent place to live and still have enough money to pay for food, utilities, and health care. In Pennsylvania, the gap between fair market rent and the salary of a full-time minimum wage employee is $458 per month. Children’s HealthWatch research shows families sacrifice basic necessities when they confront this gap between the cost of housing and their ability to afford it. Tough choices between paying the rent and paying for childcare or groceries can have negative health consequences for parents and children.

Housing is often the largest expense in a family’s budget. Over 50% of renter households in Pennsylvania pay over one third of their income in rent. The shortage of affordable housing in Philadelphia disproportionately affects extremely low income households (ELI)—for every 100 ELI households seeking an apartment in Philadelphia, only 36 affordable units are available.

When families are faced with unaffordable housing, some move frequently in search of a decent home within their means. Many others fall behind on rental payments or live in overcrowded situations. Additional coping strategies include going without food, utilities, or needed healthcare or insurance. Recent research by Children’s HealthWatch illustrates the connection between lack of affordable housing, strained budgets and poor health outcomes for low-income families.

![Figure 1: Over half of Children’s HealthWatch Philadelphia families experience housing insecurity](image)

**Affordable Housing Protects Child Health and Family Well-Being**

Our research shows that too many families in Philadelphia are struggling to create and maintain healthy, stable environments for their children. In our sample of over 4,500 low-income families in Pennsylvania with children under age four, Children’s HealthWatch found that approximately 56% of families were housing insecure.

Housing insecurity is associated with poor health outcomes in very young children in Philadelphia. Compared to children in stably housed families, those whose families were behind on rent or moving frequently were significantly more likely to be:
- in fair or poor health
- at risk for developmental delays

Research has shown that children who suffer from inadequate home heating and poor nutrition have a greater likelihood of poor health, developmental delays, and in some cases an increased risk of hospitalizations. Compared to stably housed families, those who were behind on rent were more likely to:

- be energy insecure
- be food insecure
- be child food insecure
- need medical care for their child
- trade off between paying for healthcare costs and paying for other basic needs

Summary of Findings

1. Young children in housing insecure families are more likely to be household and child food insecure.

2. Young children in families who moved frequently or were behind on rent are at increased risk of poor health and developmental delays.

Housing Insecurity: when families move frequently (two or more times in the last 12 months), are crowded (more than two people per bedroom or doubled up temporarily with another family for financial reasons), or were behind on rent at any point in the last twelve months.
Neighborhood and Built Environment

Access to Healthy Foods
Quality of Housing
Crime and Violence
Environmental Conditions
Access to Healthy Foods

**Walkable Access to Healthy Foods**

2012

**Walkable Access to Healthy Foods**

2014

**Legend**

- Planning Districts
- Non-Residential

**Walkable Access to Healthy Foods**

- Score:
  - Low: 0.00 - 0.99
  - Moderate: 1.00 - 19.99
  - High: 20.00 - 825.00

**Legend**

- Planning Districts
- Non-Residential

**Walkable Access to Healthy Food**

- Low: 0.00 - 0.99 (Low Access)
- Moderate: 1.00 - 19.99 (Low Access)
- High: 20.00 - 825.00 (High Access)
## Top ten sources of calories for low-income individuals

*Age two and older, per person per day*

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodas, energy drinks, sports drinks</td>
<td>139</td>
</tr>
<tr>
<td>Chicken dishes</td>
<td>122</td>
</tr>
<tr>
<td>Grain-based desserts</td>
<td>117</td>
</tr>
<tr>
<td>Yeast breads</td>
<td>107</td>
</tr>
<tr>
<td>Tortillas, burritos, tacos</td>
<td>100</td>
</tr>
<tr>
<td>Pizza</td>
<td>98</td>
</tr>
<tr>
<td>Beef dishes</td>
<td>72</td>
</tr>
<tr>
<td>Pasta dishes</td>
<td>69</td>
</tr>
<tr>
<td>Chips</td>
<td>62</td>
</tr>
<tr>
<td>Alcoholic beverages</td>
<td>59</td>
</tr>
</tbody>
</table>
Quality of Housing

• The quality-adjusted housing index points to a steady increase in house prices since 2011, though the City as a whole has not yet recovered to the level achieved at the peak of the real estate boom. The index indicates that house prices ended the year slightly higher than last year, though the 4th quarter was down from the previous quarter, reflecting expected price weakness in the late fall and early winter.
Crime and Violence

Homicides per 100,000 population: Cities studied vs. other major US and international cities (2006-2010)

In recent years, the epidemiology community has begun to assess the associations of physical disorder with health behaviors and outcomes, including associations with sexually transmitted infection incidence, obesity, and binge drinking.
Philadelphia by planning district – environmental health

Food establishments in compliance with food safety regulations

Rat complaints per 10,000 residents

Source: Environmental Health Services, FY2012

Notes:
Data ranges based on quintiles.
Outlined districts have highest and lowest values.
Environmental Stress

Environmental factors are also capable of inducing a skin stress response, and this may be signaled to the brain, where it affects behavior and leads to an increased vulnerability to additional stress perception. NGF, nerve growth factor.
Environmental Stress

• When a young child’s stress response systems are activated within an environment of supportive relationships with adults, these physiological effects are buffered and brought back down to baseline. The result is the development of healthy stress response systems. However, if the stress response is extreme and long-lasting, and buffering relationships are unavailable to the child, the result can be damaged, weakened systems and brain architecture, with lifelong repercussions.

Center for the Developing Child, Harvard University
• High School Graduation
• Enrollment in Higher Education
• Language and Literacy
• Early Childhood Education and Development
(first-time 9th graders from 2001 through 2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>4-year on-time graduates</th>
<th>Students graduating in 5 or 6 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>52%</td>
<td>5%</td>
</tr>
<tr>
<td>2002</td>
<td>52%</td>
<td>5%</td>
</tr>
<tr>
<td>2003</td>
<td>53%</td>
<td>5%</td>
</tr>
<tr>
<td>2004</td>
<td>57%</td>
<td>4%</td>
</tr>
<tr>
<td>2005</td>
<td>56%</td>
<td>5%</td>
</tr>
<tr>
<td>2006</td>
<td>58%</td>
<td>6%</td>
</tr>
<tr>
<td>2007</td>
<td>61%</td>
<td>6%</td>
</tr>
<tr>
<td>2008</td>
<td>64%</td>
<td>6%</td>
</tr>
<tr>
<td>2009</td>
<td>64%</td>
<td>6%</td>
</tr>
<tr>
<td>2010</td>
<td>65%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Data available in Fall 2015
Data available in Fall 2016

Source: School District of Philadelphia
Status Dropout* Rates Among Youth Ages 16 to 24, by Race and Hispanic Origin: ** October 1967-2014

*The status dropout rate measures the percentage of young adults aged 16 to 24 who were not enrolled in school and had not received a high school diploma or obtained a GED. This measure excludes people in the military and those who are incarcerated, but includes immigrants who never attended US schools.

**Due to changes in the race categories, estimates from 2003 are not strictly comparable to estimates from 2002 and before. After 2001, the black race category includes Hispanics.


- 9th Grade: 40.6%
- 10th Grade: 38.1%
- 11th Grade: 18.3%
- 12th Grade: 3%

Source: EPE Research Center
2013 High School & College
Enrollment, Persistence, & Graduation Indicators for the School District of Philadelphia

- 4-year high-school graduation rate: 64%
- 6-year high-school graduation rate: 67%
- Enrolled in college within 1 year: 54%
- Persisted on to 2nd year of college: 80%
- Earned an Associates degree within 6 years: 15.4%
- Earned a Bachelors degree within 6 years: 35%

▲ since 2009
- School District of Philadelphia & charter school students
Pre-K is a gift that keeps on giving

- IQ was over 90 at age 5: 67% with pre-K, 28% without pre-K
- Achieved basic or better at 14: 49% with pre-K, 15% without pre-K
- Graduated high school: 65% with pre-K, 45% without pre-K
- Owned home at 27: 27% with pre-K, 5% without pre-K
- Earned over $20K at 40: 60% with pre-K, 40% without pre-K

Research shows that preschool education has a positive impact on child development.

The Center for American Progress noted that without preschool or like programs disadvantaged children are:

- 25 percent more likely to drop out of school
- 40 percent more likely to become a teen parent
- 50 percent more likely to be placed in special education
- 60 percent more likely never to attend college
- 70 percent more likely to be arrested for a violent crime
How Adverse Childhood Experiences Can Influence Health Throughout Life

Adapted from Felitti et al., 1998 and Whitfield CL at http://www.cwhit.com/ACEstudy.htm.

Why Education Matters to Health: Exploring the Causes, ©Virginia Commonwealth University Center on Society and Health, 2014
1. Education can create opportunities for better health
   - Income/resources
   - Social/psychological benefits
   - Healthy behaviors
   - Healthier neighborhoods

2. Poor health can put education at risk (reverse causality)
   - Attendance
   - Concentration
   - Learning disabilities

3. Conditions throughout people’s lives can affect both education and health

*Why Education Matters to Health: Exploring the Causes*, ©Virginia Commonwealth University Center on Society and Health, 2014
Healthy Communities Create Healthy People

As part of our work in South Australia between 2010–2012, we heard from people living in metropolitan Adelaide about their vision for the future. Dahlgren & Whitehead’s Social Determinants of Health Model (1991) provides a good basis to provide a summary of the key themes the community identified as important.

- Family Structure
- Social Cohesion
- Perceptions of Discrimination and Equity
- Civic Participation
- Incarceration/Institutionalization
Sometimes we stereotype families to the point we don’t recognize them.
THE CHANGING AMERICAN FAMILY
SOCIAL COHESION
Outcomes
- Public Trust
- Recycling
- Quality of Local Government Services
- Sense of Community
- Community as a Place to Live

Respondent and Community Characteristics

Measures of Civic Engagement
- Electoral Participation
- Volunteerism
- Public Meeting Attendance
- Participation in Community Life (Library and Parks & Rec)

ICMA
Leaders at the Core of Better Communities
One Step Away: The grassroots fight against food insecurity in Philadelphia  DECEMBER 11, 2015

ASOCIACIÓN PUERTORRIQUEÑOS EN MARCHA
Food Buying Club volunteers and paid community connectors prepare fresh, quality food for a pop-up food distribution center in North Philadelphia. This method of distribution allows clients to retain the power of choice.
“Fifty years after the height of the Civil Rights Movement, more than 25 years after electing its first African-American mayor, Philadelphia remains a largely segregated city, with uneasy boundaries in culture and understanding. And also in well-being. There is a Black middle class, certainly, and Blacks are well-represented in our power structure, but there remains a vast and seemingly permanent Black underclass. Thirty-one percent of Philadelphia’s more than 600,000 Black residents live below the poverty line. Blacks are more likely than whites to be victims of a crime or commit one, to drop out of school and to be unemployed.”

The article goes on to suggest that Whites are between a rock and a hard place because — as Philadelphia’s City Paper’s Daniel Denvir puts it, “[Whites are] muzzled in discussions of race”:

“What gets examined publicly about race is generally one-dimensional, looked at almost exclusively from the perspective of people of color. Of course, it is black people who have faced generations of discrimination and who deal with it still. But our public discourse ignores the fact that race—particularly in a place like Philadelphia—is also an issue for white people. Though white people never talk about it.

Everyone might have a race story, but few whites risk the third-rail danger of speaking publicly about race, given the long, troubled history of race relations in this country and even more so in this city.
The Justice Department says 73 African-Americans were discriminated against at the Valley Swim Club in Huntingdon Valley, Pa. The 2009 incident was settled on Friday for $1.1 million. That money will be split among those involved in the case. NBC10’s Monique Braxton reports. (Published Friday, Aug. 17, 2012)
Racism and Health: Mechanisms

- Institutional discrimination (segregation) can restrict SES attainment and group differences in SES and health.
- Segregation can create pathogenic residential conditions.
- Discrimination can lead to reduced access to desirable goods and services.
- Internalized racism (acceptance of society’s negative characterization) can adversely affect health.
- Racism can create conditions that increase exposure to traditional stressors (e.g. unemployment).
- Experiences of discrimination may be a neglected psychosocial stressor.
Stress and Racism

• There is a substantial body of research that shows that racism is a chronic stressor throughout the life course for people of color, and that the stress caused by racism has serious negative effects on both psychological and physical health. For instance, Nancy Krieger and Stephen Sidney found that stress induced by racial discrimination has as much or more of an impact on blood pressure as smoking, lack of exercise, and a high-fat, high-sodium diet (“Racial Discrimination and Blood Pressure: The CARDIA Study of Young Black and White Adults,” American Journal of Public Health, 86(1996):1370-1378).
Stigma Induced Stress

• describes chronically high levels of stress faced by members of stigmatized minority groups. It may be caused by a number of factors, including:

• poor social support and low socioeconomic status, but the most well understood causes of minority stress are interpersonal prejudice and discrimination.

• Indeed, numerous scientific studies have shown that minority individuals experience a high degree of prejudice, which causes stress responses (e.g., high blood pressure, anxiety) that accrue over time, eventually leading to poor mental and physical health. Minority stress theory summarizes these scientific studies to explain how difficult social situations lead to chronic stress and poor health among minority individuals. It is an important concept for psychologists and public health officials who seek to understand and reduce minority health disparities.
In Philadelphia for example, the NAACP reports that: “Of the city's 35 lower performing schools, 23 (66 percent) are clustered in or very near neighborhoods with the highest rates of incarceration — where the biggest taxpayer investment is being made towards incarceration. By contrast, of Philadelphia's 28 higher performing schools, 21 (75 percent) are in neighborhoods with the lowest rates of incarceration.”

In Philadelphia, taxpayers spent nearly $290 million to imprison residents sentenced from just 11 of the city's neighborhoods. While these neighborhoods are home to just over one-quarter of the city's population, they account for more than half of the over $500 million dollars spent to imprison people sentenced in all of Philadelphia.
Health and Health Care

• Access to Health Care
• Access to Primary Care
  • Health Literacy
PHILADELPHIA – A new study by a University of Pennsylvania research team connected to the Leonard Davis Institute of Health Economics (LDI) has identified six areas of the city where residents have the lowest level of geographic access to primary care providers. The study focused only on geographic location data rather than outcomes and other health measures that are likely to be targeted in future studies. The project was commissioned by the Philadelphia Department of Health and funded by the locally-headquartered Independence Foundation.
77 Million Adults Have Basic or Below Basic Health Literacy

National Assessment of Adult Literacy (NAAL), Office of Disease Prevention and Health Promotion, Health Communication Activities, America's Health Literacy: Why We Need Accessible Health Information
Why Health Literacy Matters

The cost of limited health literacy to the nation’s economy is estimated to be between $106 billion and $236 billion per year.

90 million Americans are at risk for not acting on health information because of low health literacy, regardless of age, income, race, or background.

• In Philly your zip code sets your life expectancy

....Children born today can expect to live only to an estimated average age of 71 in Fairhill, part of what outsiders call the Badlands, a study released earlier this month predicts. It's the poorest community in America's poorest big city. And life expectancy there isn't as high as it is in Syria and Iraq (both over 74 years), research by the CIA shows. Overall U.S. life expectancy is 79 years.
Life is shorter still in the North Strawberry Mansion/Swampoodle area, Philadelphia's most violent place. On average, a child born there today couldn't count on living beyond age 68.
But five miles south, in Society Hill and Old City, newborns today in the city's most prosperous zip code could expect to see the year 2104, 88 years from now. That, the World Health Organization says, exceeds life expectancy in Japan by four years, the country where people live longest.
HEALTH EQUITY
There is no greater wealth than the health of our collective societies

HEALTH EQUITY IS...
The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.

HEALTH EQUITY MATTERS...
Health is a basic human right. It is a key determinant of economic and social development and has a positive impact on people's life chances and opportunities.

A Framework for Health Equity

Health Inequalities
(Social Factors)
Race, Class, Gender, etc., Corporations & other Businesses Schools Healthcare Access

Institutional Power
Social, Physical, Environmental, Residential Segregation

Neighborhood Conditions
Risk Behaviors
Smoking Nutrition Physical Activity Violence Sex

Disease & Injury
Infected & Chronic Disease, Injury (Intentional & unintentional)

Mortality
Infant Mortality, Life Expectancy

Health Inequalities are differences in health status & mortality rates across population groups that are systemic, avoidable, unfair and unjust.

-Margaret Whitehead

Source: Adapted from ACPHD from the Bay Area Regional Health Inequities Initiative, Summer 2008
Equality doesn't mean Equity
Health Equity

• The transition from “eliminating health disparities” to “eliminating health inequities” and creating “health equity,” stresses the necessity of placing the issues of human rights, social justice and the right to access healthcare in the forefront of any discussion of the health status of population groups measurably worse than more privileged groups in the U.S. (Troutman, 2007).

• Social Determinants of health are mostly responsible for health inequities {health disparities} -the unfair and avoidable differences in health status seen within and between communities.
Disparity vs. Inequities

Health Disparities

A term predominantly used in the United States (Bleich, et. al., 2012), are defined as the:

• differences in the incidence, prevalence, mortality and burden of diseases and other adverse health conditions existing among specific population groups in the United States (NIH, 2000)

Health Inequities

Commonly used in Europe (Bleich, et. al., 2012), are defined as:

• systematic, avoidable unfair and unjust differences in status and mortality rates and in the distribution of disease and illness across population groups.

• They are sustained through generations and are beyond individual control (Carter-Pokras & Baquet, 2002; Troutman, 2007).
Community Health Assessment
Addressing Social Determinants of Health

• MAPPING AND PLACE-BASED APPROACHES: A number of initiatives are using geospatial analysis and community needs assessments to guide place-based approaches to address social and environmental factors impacting individual and community health.

Addressing Social Determinants of Health

• HEALTH IN ALL POLICIES: Health in All Policies is a collaborative approach to improve health by incorporating health considerations into decision-making across sectors and policy areas. A Health in All Policies approach identifies the ways in which decisions in multiple sectors affect health and how better health can support the goals of these multiple sectors. It engages diverse partners and stakeholders to work together to promote health, equity, and sustainability, and simultaneously advance other goals such as promoting job creation and economic stability, transportation access and mobility, a strong agricultural system, and improved educational attainment.

The Factors Underpinning Successful Action On Social Determinants were identified as:

• the significance of the original intent and vision of the program,
• how this was carried through into all aspects of program design,
• the role of the community and their identification with those experiencing trauma,
• ongoing training and support,
• the relative autonomy of the program.
Trauma to the Next Level

Focusing on Trauma will often expose patterns of abuse by population and by geographic areas.

• Effectively addressing the issue requires action on social determinants by:
  1. raising awareness on rights,
  2. mobilizing coalitions focused on trauma,
  3. coordinating with local structures and social action targeting both the community and service providers.

Through these processes, the community may develop identities as agents of change and advocates for those at risk, both with respect to local cultural and gender norms and in ensuring accountability of service providers.
Addressing Social Determinants of Health

- INTEGRATING SOCIAL DETERMINANTS INTO HEALTH CARE
  In addition to the growing movement to incorporate health outcomes and assessments of health impact into other policy areas, there also are emerging efforts to integrate social and environmental needs into the health care system. In particular, a number of delivery and payment reform initiatives within Medicaid address the diverse needs of the population served through an increased focus on social determinants of health.
Social Determinants Affecting Child Development And Health

• Environments that are poorly kept where children have little access to outside activities in neighborhoods where there is little to no play areas, libraries, or organized activities reinforce that those children may end up being exposed to 4 or more hours of TV daily thus becoming a major contributor to obesity.

• Response: support the community reaching out to the local school to get the schools hours extended so as to develop longer after school activities. Get parents to participate in running those activities with their children
Addressing Social Determinants of Health

• STATE INNOVATION MODELS INITIATIVE
   Through the State Innovation Models Initiative (SIM), a number of states are engaged in multi-payer delivery and payment reforms that include a focus on population health and recognize the role of social determinants. SIM is operated by the Center for Medicare and Medicaid Innovation and provides financial and technical support to states for the development and testing of state-led, multi-payer health care payment and service delivery models that will improve health system performance, increase quality of care, and decrease costs. To date, the SIM initiative has awarded grants to over half the states to design

| Table 1: Possibilities for V-BID Integration in Broader Delivery System Reform Efforts |
|----------------------------------------|-----------------------------------|-----------------------------------------------|
| Goal                                  | Components of Multi-payer Strategy | Components of Consumer Strategy |
| Improve management of chronic diseases | Assess provider performance on the basis of relevant quality metrics (properly adjusted for risk); fund learning collaboratives for providers; develop patient portals | Reduce or eliminate cost-sharing for key drugs, services, and visits to high-performing providers (e.g., insulin and diabetic retinal exams) |
| Emphasize quality of inpatient services | Promote competition among hospitals through reliable performance measurements, publicly available center of excellence designations, pay-for-performance programs, listing of providers according to quality achievements | Vary cost-sharing for inpatient stays or emergency room visits according to provider’s quality tier |
| Promote the medical home model       | Establish rigorous expectations for designated practices; provide resources to support needed personnel and infrastructure; fund interoperable health IT that supports care coordination | Reduced cost-sharing for office visits at recognized medical homes |
| Reduce use of dangerous and wasteful care | Identify services with variation in rates of use across providers; publicly report on use patterns; provide academic detailing to low-performers | Increase cost-sharing for services likely to be harmful or of low-value to patients |
| Encourage healthy lifestyles         | Assess provider performance on changes in smoking status and management of chronic conditions; develop effective public health messaging campaigns; provide well-developed tools for provider use | Decrease premium costs for individuals who agree to use lifestyle improvement services |
| Incentivize shared decision-making for preference-sensitive conditions | Encourage providers to promote shared decision-making tools; provide decision support tools for preference-sensitive conditions (e.g., prostate cancer treatment) | Decrease cost-sharing for office visits with providers who utilize shared decision-making tools |
Driver Diagram

Aims

- Improve Patient Care (Quality and Experience)
- Reduce Per Capita Cost of Care
- Improve Population Health

Primary Drivers

- Drive effective and efficient care delivery through value-based payment
- Drive effective use of Health Information Exchange/Health Information Technology
- Improve population health and regional coordination between community and health care entities through Community Health Innovation Regions

Secondary Drivers

- Increase care coordination and care management
- Integrate care across medical and behavioral health
- Promote well-being
- Develop person-centered care plans with a comprehensive approach for maintaining a patient's health or managing a chronic condition
- Adopt self-management support approach
- Promote adoption of team-based care
- Provide proper care transitions and medication management
- Provide quality and resource use data, metrics, and dashboards through data aggregation and provider portals
- Ensure treatment frequency and intensity is appropriate for high-value and low-value services
- Drive effective use of Health Information Exchange/Health Information Technology
- Utilize knowledge management platform to share best practices

- Ensure incentives are aligned to have patients in the most appropriate setting
- Align incentives with key quality and utilization outcomes
- Align metrics across payers and programs
- Implement shared savings to better align the health plan and provider business case for
  - Health Information Exchange/Health Information Technology, and data analytics
  - Collaboration and investment in Community Health Innovation Regions
  - Navigating patients to needed social services
  - Encourage appropriate use of medications and diagnostics
  - Improve adherence to evidence-informed practice on elective interventions and treatment
- Increase performance and evaluation reporting

- Identify and prioritize potential interventions through community health needs assessments
- Improve outcomes by identifying and addressing non-clinical determinants of health
- Drive effective coordination through regional strategic plans
- Increase availability and granularity of population health data
- Utilize data to measure impact in health outcomes improvement
- Utilize knowledge management platform to share best practices

STATE INNOVATION MODEL OPERATIONAL PLAN
PUBLIC FEEDBACK VERSION - MAY 31, 2016
WHAT IS HEALTH IN ALL POLICIES?

Good health requires policies that actively support health.

It requires different sectors working together, for example:

- Health
- Transport
- Housing
- Work
- Nutrition
- Water & Sanitation

To ensure all people have equal opportunities to achieve the highest level of health.

HOW DOES IT WORK?

Here is one example:

Worldwide

1 in 8 deaths

is linked to air pollution exposure.

To tackle air pollution collaboration is needed.

CLEAN ENERGY
- Sustainable, clean fuels
- Less diesel, less coal

URBAN PLANNING
- Compact and efficient

TRANSPORT
- Low emission vehicles
- Public transport

HAUSING
- Heating and lighting
- Cooking
- Ventilation

CONSTRUCTION STANDARDS

WASTE MANAGEMENT
- Emission controls
- Reduce, reuse, recycle

LOCAL AND REGIONAL AUTHORITIES
- Planning codes

HEALTH MINISTRY
- Track health impact

The health sector drives conversations within all sectors to keep good health at the top of everyone's mind.
Increase the number of Americans who are healthy at every stage of life.
Addressing the Social Determinants of Health

Population Health seeks to address these factors to reduce disparities and safeguard everyone's right to optimal health and self-determination.

• **Department Initiatives:** Permanent Supportive Housing Initiative, 100,000 Homes Homeless Initiative, Aging-Out Youth, Certified Peer Specialist, CPS Employment Technical Assistance Program (CETAP), CPS Internship Program, Community Response Teams (CRT), Deaf/Hard of Hearing, Diversity Day, Domiciliary Care Housing, Employment 1st, Employment Now Philadelphia, Engaging Males of Color Initiative (EMOC), Family Resource Network, Housing First, Morris Home, Network for the Improvement of Addiction Treatment, Tobacco Recovery & Wellness Initiative (TRWI), Philadelphia Prevention Partnership, Physical/Behavioral Health Integration Work Group (IWG), Recidivism Reduction Initiative, Recovery Advocates
Empower Individuals and Communities to Keep Themselves Healthy

Population Health educates, empowers and motivates communities to take responsibilities for promoting health, wellness and self-determination in all.

**Department Initiatives:** Community Support Program (CSP), Everyone Communicates, Faith & Spiritual Affairs, Family Resource Network (FRN), Interdepartmental Community Outreach Advisory Committee, Journey of Hope Project, Lifesharing – Everybody Deserves A Family, Mental Health First Aid (MHFA) Initiative, Morris Home, National Suicide Prevention Line, Tobacco Recovery & Wellness Initiative (TRWI), Philadelphia Prevention Partnership, Philadelphia Hepatitis Outreach Project, Post-Arrest Crisis Screener (PACS) – Philadelphia RESPONDS Pre-Trial Team, Problem and disordered Gambling, Recidivism Reduction Initiative, Recovery Advocates
Questions?
More Information?

Roland Lamb (holding the ball), Planning & Innovation