Addressing the Social Determinants of Health: Why it Matters

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Objectives

- Define the Social Determinants of Health
- Describe the factors that influence and create health
- Practical application of the social determinants
- Toxic stress and its impact on health
- Race, Racism and the impact of Cleveland’s Redlining history on health and well being today
- Examples of models to explain and address the social determinants
- The St. Luke’s Foundation Strategic Plan Goals and Strategies
Social Determinants of Health

- The complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities.
- These social structures and economic systems include the social environment, physical environment, health services, and structural and societal factors.
- Social determinants of health are shaped by the distribution of money, power, and resources throughout local communities, nations, and the world (CDC)

Source: Centers for Disease Control and Prevention
Cuyahoga County

- Cuyahoga County ranks in the bottom third of all 88 counties in Ohio for residents’ health outcomes.

- Even though Cuyahoga County ranks consistently in the top 10 in the state for clinical care (measured by access to and quality of care), this has not made our residents healthier.

- The conditions that shape health are not spread equitably across the county.

- There are significant differences in life expectancy, depending on where someone lives and their race/ethnicity.

*2017 County Health Rankings by University of Wisconsin Population Health Institute*
Consider What Creates Health

Determinants of Health

- Social and Economic Factors (40%)
- Health Behaviors (30%)
- Clinical Care (10%)
- Physical Environment (10%)
- Genes and Biology (10%)

Necessary conditions for health (WHO)

- Peace
- Shelter
- Education
- Food
- Income
- Stable eco-system
- Sustainable resources
- Mobility
- Social justice and equity


Spending Mismatch: Health Care and Other Key Determinants of Health

Determinants

- Social Circumstances, 40%
- Healthy Behaviors, 30%
- Environment, 10%
- Genetics, 10%
- Access to Care, 10%

National Health Expenditures

- Medical Services, 88%
- Other, 8%
- Prevention, 4%

Source: NEHI, 2012
Cuyahoga County

Life Expectancy in Cuyahoga County
By Neighborhood/Municipality
(2008-2010)

Life Expectancy (in years)

- < 72.7
- 72.8 - 78.6
- 78.7 - 82.7
- >= 82.8

Insufficient Data

Cuyahoga County: Poverty Rate
(2006-2010)

Poverty Rate

- >= 30.0%
- 20.0 - 29.9%
- 10.0 - 19.9%
- < 10.0%

Data Insufficient

Map created and analysis performed by Epidemiology, Surveillance, and Informatics at the Cuyahoga County Board of Health, September 2013. Data are preliminary.
“Social Determinants of Health”

- Social-Physical-Economic-Services Determinants
  - Income & income inequality
  - Education
  - Race/ethnicity/gender & related discrimination
  - Built Environment
  - Stress
  - Social support
  - Early child experiences
  - Employment
  - Housing
  - Transportation
  - Food Environment
  - Social standing

Source: California Department of Health
Stress pathway from brain to body

STRESSOR
Hypothalamus
CRH
Pituitary Gland
ACTH
Adrenal Glands
CORTISOL
AFFECTS MULTIPLE ORGANS & SYSTEMS
When the external becomes internal: How we internalize our environment

Allostatic Load

Lack of social capital

Housing

Inadequate Transportation Long Commutes

Stress

Stress

Stress

Stress

High Demand-Low Control Jobs

Lack of access to stores, jobs, services

Crime
Estimated Deaths Attributable to Social Factors in the US - 2000

- Low education: 245,000
- Racial segregation: 176,000
- Low social support: 162,000
- Individual level poverty: 133,000
- Income inequality: 119,000
- Area level poverty: 39,000

In comparison:
- Acute MI: 192,898
- Cerebrovascular disease: 167,661
- Lung cancer: 155,521

EstimatedDeaths Attributable to Social Factors in the US. Galea S et.al. AJPH:June 16,2011;eprint.
Equality doesn’t mean Equity
A Framework for Health Equity

Socio-Ecological

Medical Model

UPSTREAM

DOWNSTREAM

Health Inequities

Health Disparities

Discriminatory Beliefs (ISMs)
- Race
- Class
- Gender
- Immigration status
- National origin
- Sexual orientation
- Disability

Social Inequities
- Neighborhood conditions
- School
- Racial segregation
- Workplace conditions

Risk Factors & Behaviors
- Smoking
- Physical activity
- Violence
- Chronic Stress

Indirect Disparities
- Infectious disease
- Chronic disease
- Injury (intentional & unintentional)

Health Status

- Infant mortality
- Life expectancy

- Adapted by ACPHD from the Bay Area Regional Health Inequities Initiative, Summer 2008
Place Matters...

- Where you live impact your health, opportunity and life expectancy
- Communities just 8 miles apart have a 10 year difference in life expectancy
- The choice you make are often the choices you have
The Impact of Redlining

- Redlining is a term associated with the way banks used to grade (and map out) different geographic areas to determine how much federal backing a loan would receive.

- The United States Congress created the Home Owners' Loan Corporation ("HOLC") in June 1933. The purpose of the corporation was to refinance mortgages that were in default, in order to prevent foreclosures. In 1935, the Federal Home Loan Bank Board asked the HOLC to look at 239 cities and create "residential security maps" to indicate various levels of security for real estate investments.
  - Red areas received no backing and yellow areas received 15% backing.
  - Members in these areas were essentially cut off from receiving any federal loans.

- These maps institutionalized existing biases and discriminatory practices because they were subjective and openly discriminatory.
  - Race, ethnicity, and social class were used as determinants of security.

- This practice did not end officially until 1976 when a lawsuit finally stopped the use of race in property appraising and mortgage underwriting (US v. AIREA).

Source: Kirwan Institute and The Ohio State University
Comparisons between “Redlining”, High-Cost Mortgage Loans, and the Areas Hardest Hit by the Foreclosure Crisis
Comparisons between the poverty rate, the distribution of African American and the Hispanic population, and "Redlining" within Cuyahoga County.
2008-2010 Birth Rate among Adolescents Aged 15-17 Years
by Cleveland Neighborhood and Suburban Municipality

Legend
- 0.0 - 43.0 (Meets HP 2010)
- 43.1 - 86.0
- 86.1 - 129.0
- 129.1 or greater
- Insufficient Data

See "Appendix A" for indexed map of neighborhoods/municipalities.
Distribution of Poverty and Race for Child Deaths
Cuyahoga County, Ohio (2007-2016) [n=1,953]

**Race**
- All Other Races (24)
- Black (1,289)
- White (638)

**Legend**
- Municipality
- Unpopulated areas

Percentage of Persons Below Federal Poverty Guideline
- 0.0 - 6.0
- 6.1 - 12.5
- 12.6 - 24.9
- 25.0 - 40.5
- 40.6 - 86.7

*Note: 2 children were of an unknown race*

Disease Deaths by Tract
Composite Quartile Score*

- 4
- 5 - 8
- 9 - 12
- 13 - 16
- Non-Food Desert Area
- Open Space

*Includes Quartile Scores for:
- Cancer
- Diabetes
- Heart Disease
- Stroke
Upstream interventions and strategies focus on improving fundamental social and economic structures in order to decrease barriers and improve supports that allow people to achieve their full health potential.

Downstream interventions and strategies focus on providing equitable access to care and services to mitigate the negative impacts of disadvantage on health.

Source: National Collaborating Center for Determinants of Health, Canada
Downstream vs Upstream

- Legal Needs/Services
- Physical Inactivity
  - Unsafe Neighborhoods/Access
- Hypertension
  - Insurance
  - Management Education
- Community Policing/Neighborhood Engagement
- Concentrated Poverty/Racial & Economic Segregation
  - Housing Policy
- Alcohol outlet density
- Food Deserts
- Land Use/Zoning

Adapted from Johns Hopkins University
EQUITY

ACTION AREA 1
MAKING HEALTH A SHARED VALUE

ACTION AREA 2
FOSTERING CROSS-SECTOR COLLABORATION TO IMPROVE WELL-BEING

OUTCOME
IMPROVED POPULATION HEALTH, WELL-BEING, AND EQUITY

ACTION AREA 3
CREATING HEALTHIER, MORE EQUITABLE COMMUNITIES

ACTION AREA 4
STRENGTHENING INTEGRATION OF HEALTH SERVICES AND SYSTEMS
MAKING HEALTH A SHARED VALUE

DRIVERS

MINDSET AND EXPECTATIONS
- Value on health interdependence
- Value on well-being
- Public discussion on health promotion and well-being

SENSE OF COMMUNITY
- Sense of community
- Social support

CIVIC ENGAGEMENT
- Voter participation
- Volunteer engagement
FOSTERING CROSS-SECTOR COLLABORATION TO IMPROVE WELL-BEING

DRIVERS

1. ACTION AREA

NUMBER AND QUALITY OF PARTNERSHIPS

Local health department collaboration
Opportunities to improve health for youth at schools
Business support for workplace health promotion and Culture of Health

INVESTMENT IN CROSS-SECTOR COLLABORATION

U.S. corporate giving
Federal allocations for health investments related to nutrition and indoor and outdoor physical activity

POLICIES THAT SUPPORT COLLABORATION

Community relations and policing
Youth exposure to advertising for healthy and unhealthy food and beverage products
Climate adaptation and mitigation
Health in all policies (support for working families)
CREATING HEALTHIER, MORE EQUITABLE COMMUNITIES

DRIVERS

BUILT ENVIRONMENT/PHYSICAL CONDITIONS
- Housing affordability
- Access to healthy foods
- Youth safety

SOCIAL AND ECONOMIC ENVIRONMENT
- Residential segregation
- Early childhood education
- Public libraries

POLICY AND GOVERNANCE
- Complete Streets policies
- Air quality
STRENGTHENING INTEGRATION OF HEALTH SERVICES AND SYSTEMS

ACTION AREA

ACCESS

- Access to public health
- Access to stable health insurance
- Access to mental health services
- Routine dental care

CONSUMER EXPERIENCE AND QUALITY

- Consumer experience
- Population covered by an Accountable Care Organization

BALANCE AND INTEGRATION

- Electronic medical record linkages
- Hospital partnerships
- Practice laws for nurse practitioners
- Social spending relative to health expenditure
IMPROVED POPULATION HEALTH, WELL-BEING AND EQUITY

ENHANCED INDIVIDUAL AND COMMUNITY WELL-BEING
- Well-being rating
- Caregiving burden

MANAGED CHRONIC DISEASE AND REDUCED TOXIC STRESS
- Adverse child experiences
- Disability associated with chronic conditions

REDUCED HEALTH CARE COSTS
- Family health care cost
- Potentially preventable hospitalization rates
- Annual end-of-life care expenditures
Define Individual Health in Context of Community Health

Community Indicators for Health and Quality of Life

1. Access to Recreation and Open Space
2. Access to Healthy Foods
3. Access to Medical Services
4. Access to Public Transit and Active Transportation
5. Access to Quality Affordable Housing
6. Access to Economic Opportunity
7. Completeness of Neighborhoods
8. Safe Neighborhoods and Public Spaces
9. Environmental Quality
10. Green and Sustainable Development and Practices
Healthy Communities
- Anti-blight
- Public safety
- Preferred housing types
- Affordable housing
- Homeownership & rental opportunities
- Neighborhood retail and amenities

CITY ECONOMIC HEALTH

Business Growth
- Innovation
- Commercialization of discoveries
- Connections to markets, strategic partners
- Economic inclusion commitments for M/W/LBE
- Management assistance
- Entrepreneurship support
- Risk capital
- Networks

Workers’ Knowledge & Skills
- Family literacy
- Pre-conception health
- 0-3 child development
- Pre-K – 12 education
- Substance abuse treatment
- Ex-offender re-entry
- Higher education
- Skills training
- Asset building

Source: Marsha R. B. Schachtel, Johns Hopkins Institute for Policy Studies Bloomberg School of Public Health
Provost’s Symposium on the Social Determinants of Health, May 2012
SLF Goals

Goal #1: Close the health equity gap

Goal #2: Advocate for more equitable and responsive policies and practices that reduce the unfair treatment and disparate impact of structures, institutions and systems

Goal #3: Be a High Performing Foundation
SLF Strategies

Educational Attainment
Among the factors that contribute to health inequity is the quality and duration of education - from early childhood through post-secondary education and/or job training.

Financial Stability
According to data from the Robert Woods Johnson Foundation (RWJF), it really is simple: adult life expectancy increases with increasing income. People in the highest-income group can expect to live at least six and a half years longer than poor men and women.

Housing Safety and Stability
According to research compiled by the Robert Woods Johnson Foundation, the affordability of housing has clear implications for health. Housing is a social determinant of health for three main reasons: adequate and safe housing conditions, affordability, and residential stability. Housing instability can involve trouble paying rent, overcrowding, moving frequently, staying with relatives, or spending the bulk of household income on housing (spending more than 30% of their income on housing is considered "cost burdened").

Social Connections
Social isolation is a state in which a person lacks a sense of belonging, isn’t engaging with others, and has few social connections and quality relationships. Social connections help give our lives purpose and meaning. When we have family, friends, and coworkers to celebrate and commiserate with, and when we feel part of our communities, we live longer, healthier lives.

Healthy Eating & Active Living
All communities need access to healthy foods and safe places to play and be active—but not all communities have equal access. Low-income communities, particularly communities of color, are more likely to lack access to healthy foods and safe places to play and be active.

Saint Luke’s Neighborhood
There is a growing body of research that illustrates the connection between “place” and health – and it is well documented that a person’s zip code can influence health more than their genetic code. The commission to build a Healthy America tells us that our homes and communities have enormous impact on our health.
“It’s the decisions that we make as a collective that matter more than any choice we make on our own.”
“Wise statesmen as they were, they knew the tendency of prosperity to breed tyrants, and so they established these great self-evident truths, that when in the distant future some man, some faction, some interest, should set up the doctrine that none but rich men, or none but white men, were entitled to life, liberty and pursuit of happiness, their posterity might look up again to the Declaration of Independence and take courage to renew the battle which their fathers began…”

-Abraham Lincoln on the Declaration of Independence, 1858
Health is determined by “the water”...our environment and social context