Exploring the Correlations between Health and Community

**Socioeconomic Status in Chicago**

Susan Longworth, Federal Reserve Bank of Chicago

Much research demonstrates that where you live – and the socioeconomic conditions present in that place – determine individual-level health outcomes. Based on the premise that individual stressors tend to determine individual-level health outcomes, we conducted field interviews with community development and health practitioners in Chicago to derive a localized perspective on the social-determinants of health. Using community-level data available through the City of Chicago Data Portal as well as aggregated census tract level economic data compiled by the Federal Reserve Bank of Chicago, we explored community-level SES conditions and corresponding health outcomes in Chicago’s 37 communities to determine the social-conditions of a place that contribute to the health outcomes of residents.

**Methodology**

Our analysis includes health outcomes that are influenced by one’s environment, including infant mortality, low birth weight, prenatal care, premature births, low birth weight, firearm-related casualties, cancer, diabetes, stroke, tuberculosis.

The socioeconomic variables included in the analysis relate to housing, income and education, workforces, racial and ethnic composition and climate and include:

- **Housing**
  - Percentage of owner-occupied housing
  - Percentage of units with overcrowding
  - Percentage of units with severe overcrowding
  - Percentage of units with poor housing

- **Income and Education**
  - Percentage of the over-25 population with a high-school diploma
  - Percentage of the over-25 population with a bachelor’s degree
  - Percentage of female headed households
  - Percent of income

- **Race and Ethnic Composition**
  - Percentage of the population that is African American
  - Percentage of the population that is Hispanic
  - Percentage of the population that is foreign born

- **Climate**
  - Crime rates
  - 311 Service call intensity rates
  - Monthly and small business lending volumes
  - Prevalence of financial institutions
  - Business density

- **Racial and Ethnic Composition**
  - Crime rates
  - 311 Service call intensity rates
  - Home mortgage and small business lending volumes
  - Prevalence of financial institutions
  - Business density

The first level of analysis compares the socioeconomic data with health outcomes (e.g., how strongly, positively or negatively do unemployment levels correlate with the incidence of diabetes?). To conduct these comparisons, we used statistics that are appropriate for the type of explanatory variable involved. Where our organization, we explore the extent to which health outcomes improve or deteriorate with various social characteristics and processes; as well as coordinating timelines and expectations regarding change and impact.

With aligned understanding should come aligned implementation. However, linking these correlations between health outcomes and socioeconomic conditions provide further indication of the importance of vibrant community resources, including access to credit and financial institutions. The thought that community development interventions – such as those that connect people to jobs, that create community networks and systems and that empower people within these communities – may have positive measurable health outcomes is becoming mainstream. Positive correlations between levels of HMDA lending and small business activity and health outcomes provide further indication of the importance of vibrant community resources, including access to credit and financial institutions.

Increasing numbers of successful collaborations across the health and community development field abound, most notably the role of access to healthy food, green space and outdoor recreation. Further, with small business activity and health outcomes provide further indication of the importance of vibrant community resources, including access to credit and financial institutions.

**Summary of Findings**

Without being able to fully assess causality, strong correlations exist between the socioeconomic characteristics of places and health outcomes of residents. Chicagoans' health outcomes appear to improve most steadily with increases in labor force participation and education. Employment and labor force participation are correlated with positive health outcomes, as are per capita income, and social and economic characteristics of places contribute to the health outcomes of residents.

**Implications**

The results of our analysis seem to indicate that the socioeconomic conditions of a place are strongly associated with health outcomes, especially in Chicago. However, we cannot conclude from our analysis that causality exists between the socioeconomic conditions of places and health outcomes. Further research is needed to understand the mechanisms through which these correlations between health outcomes and socioeconomic conditions may have positive measurable health outcomes. The thought that community development interventions – such as those that connect people to jobs, that create community networks and systems and that empower people within these communities – may have positive measurable health outcomes is becoming mainstream. Positive correlations between levels of HMDA lending and small business activity and health outcomes provide further indication of the importance of vibrant community resources, including access to credit and financial institutions.

Increasing numbers of successful collaborations across the health and community development field abound, most notably the role of access to healthy food, green space and outdoor recreation. Further, with small business activity and health outcomes provide further indication of the importance of vibrant community resources, including access to credit and financial institutions.

With aligned understanding should come aligned implementation. However, linking these correlations between health outcomes and socioeconomic conditions provide further indication of the importance of vibrant community resources, including access to credit and financial institutions.

Increasing numbers of successful collaborations across the health and community development field abound, most notably the role of access to healthy food, green space and outdoor recreation. Further, with small business activity and health outcomes provide further indication of the importance of vibrant community resources, including access to credit and financial institutions.