Screening and Health Disparities

• Poor screening rates and access are tied to late-stage diagnosis

• When looking at geography-based data in GIS (such as at the county level), better mammography access is correlated with higher breast cancer mortality
  • This is true for both white women and black women
  • As highlighted in the Chicago study, black women might be more likely to live in areas with poor mammography access than white women

Addressing Screening: Mammography Access

• These GIS maps display poor capacity, adequate capacity, and excess capacity of mammography based on both the potential demand for mammography and distance to the nearest mammography facility.

• Categorization was determined at the Census block group level.
Addressing Screening: Mapping Screening Centers

- This map of the city of Chicago shows high mortality breast cancer areas for both African-American and non-African-American community areas, along with recognized excellent breast cancer screening centers.

- Mapping screening centers (or more specifically screening centers of a certain quality or accreditation) can illustrate geographic patterns of poor screening access.

Addressing Screening: FQHCs

- This map compares the presence of a Federally Qualified Health Center (FQHC) that provides mammography at the county level to a relatively high or low mortality-to-incidence ratio (MIR) using breast cancer data from 2006 to 2010.

- This study found that better mammography access at the county level was significantly associated with lower MIRs, and this trend was true for both white and black women.

Questions and Data Considerations

• How should follow up be defined in your state?
  • Time to diagnosis?
  • Time to treatment?

• In what other ways should the data be visualized?

• Other data sources that should be considered to make a more representative map for your state?

• Next steps?

• Vital Statistics
• State cancer registries
• Medicaid
• Behavioral Risk Factor Surveillance System (BRFSS)
• National Cancer Institute (NCI)
• Insurance providers such as BlueCross BlueShield
• Susan G. Komen and other non-profit organizations
• United States Cancer Statistics (USCS)
• Electronic Health Records (EHRs)
• Ambulatory Surgical Treatment Centers
• Hospital discharge data
• Federally Qualifying Health Centers (FQHCs)
• Health Information Exchanges (HIEs)
• FDA data on mammography locations (available with Freedom of Information Act request)
• Commission on Cancer (CoC)