Using Public Claims Data for Neighborhood Level Epidemiologic Surveillance of Breast Cancer Screening: Findings from Evaluating a Patient Navigation Program in Chicago's Chinatown

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What Is the Purpose of this Study/Review?

- To use geocoded public claims data to monitor change in mammography screening rates in low-income communities on Chicago's near south and southwest sides, over two screening cycles during 2011 through 2015, coinciding with implementation of a patient navigation program in Chinatown and the Affordable Care Act in Illinois.

What Is the Problem?

- It is rarely possible to evaluate the breadth of cancer screening rates among low-income populations in small areas and neighborhoods.
- Self-reported mammography screening surveys may be unreliable and inconsistent with actual use data.

What Are the Findings?

- Mammography screening rates per 100 were determined for approximately 65,000 low-income women ages 40 to 49 and 50 to 64 years in the study's 398 census tract areas.
- Census data and geocoded claims were obtained from Illinois Medicaid and the Illinois Breast and Cervical Cancer Screening Program (IBCCP), which provides screening to the uninsured.
- There were large 2013 to2015 increases in both Medicaid and IBCCP screening mammography.
- The overall mean screening rate for the whole study catchment area increased 62% for low income women ages 40 to 49 and 70% for low income women ages 50 to 64.
- The greatest increases occurred in the 16 census tracts with the highest Chinese ancestry populations, the focus of a concurrent National Institutes of Health–funded patient navigation effort.

Who Should Care Most?

- State policymakers and community health activists seeking to improve public health through expanding Medicaid coverage and continued provision of free care through the IBCCP, and community health activists seeking to evaluate the impact of neighborhood-level programs.

Recommendations for Action

- The study provides indirect evidence that patient navigation efforts can increase cancer screening.
- Community-level epidemiologic surveillance using geocoded public data can be used widely to track cancer screening interventions and other preventive services in low-income communities most in need.