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Title

Breast cancer screening disparities between those with and without schizophrenia in Ontario, Canada: a cohort study

Priority 1 (Research Category)

Screening, prevention, and health promotion

Presenters

Braden O'Neill, MD, PhD, Tara Kiran, MD, MSc, CCFP, FCFP, Michelle Greiver, MD, MSc, CCFP, Aisha Lofters, MD

Abstract

Context: Breast cancer screening with mammography is recommended in Ontario, Canada for average-risk women starting at age 50. People with schizophrenia have lower breast cancer screening completion in other settings and higher mortality risk, but their screening rates are unknown in Ontario, Canada's largest province with a population of approximately 14 million. In addition, it is unknown how different primary care payment models influence rates of breast cancer screening. Objective: To determine breast cancer screening completion among women with schizophrenia compared to women without schizophrenia, and to determine how different physician payment models (including fee-for-service, blended capitation, and team-based models) affect breast cancer screening. Study Design and Analysis: Retrospective case-cohort study. Outcomes assessed using logistic regression. Setting or Dataset: Administrative health data from ICES, including all interactions between residents of Ontario, Canada (population approximately 14 million) and the health system. Population Studied: Women who turned 50 in Ontario between January 2010 and December 2019. Cases were women with schizophrenia and controls were women without schizophrenia, matched 1:10 based on birthdate (+/- 180 days), region of residence and health status. Intervention/Instrument: Primary exposure = validated diagnosis of schizophrenia. Outcome Measures: Mammogram completion. Results: 69.3% of cases (those with schizophrenia, N = 8,055) and 77.1% of controls (N = 89,405) had a mammogram during the study period. Over 50% of cases and controls had a mammogram before age 50. Cases had lower odds of having a mammogram (OR 0.820; 95% CI 0.773 – 0.871). Cases who received care from a fee-for-service primary care provider (OR 0.566, 95% CI: 0.533- 0.600) or enhanced fee-for-service model (OR 0.566, 95% CI: 0.533- 0.600) had lower odds of having a mammogram than those in a team-based primary care (Family Health Team) model. Conclusions: Differences in rates of mammogram completion among women with schizophrenia, compared to those without, may partially be explained by differences in physician payment models. Widening the availability of team-based primary care for women with schizophrenia may be useful in increasing breast cancer detection and treatment in this demographic.

Further exploration is required about why most women in Ontario have breast cancer screening before the recommended age.