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Title

Linking cancer screening interventions with the data: Intervention recommendations

Priority 1 (Research Category)

Screening, prevention, and health promotion

Presenters

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Abstract

Context: There are known inequities in breast, cervical and colorectal cancer screening which may have been exacerbated over the COVID-19 pandemic. Objective: Using cancer screening data from 2012 to 2021, identify if and how screening inequities changed over the pandemic. Design and Analysis: We determined up-to-date status by cancer screening type at six-month intervals (April 1, 2012 to April 1, 2022) for overall study cohorts and stratified by income quintile and immigrant status. We determined up-to-date breast, cervical and colorectal screening status at two time points for overall study cohorts and stratified by study variables noted above. For each screening type, we conducted multivariable regression analyses using generalized linear models, with rate difference between the post- and prepandemic time points as outcome. Other key variables included: cancer screening type/modality, primary care model, region of origin (newcomers to Ontario only), geography including rurality. Dataset: Health administrative data sets in Ontario, Canada. Population Studied: Ontarians eligible for cancer screening (breast, cervical, colorectal: colonoscopy, FOBT). Outcome Measures: Rates of cancer screening across breast, cervical, colorectal, colonoscopy, and FOBT. Results: During COVID, substantial declines in up-to-date status for screening occurred, except for colonoscopies, which may be due to the 10-year testing schedule. Some recovery was seen in data as of February 2022. Not all patients were equally affected, with large differences seen between high and low income groups (12-15%), large regional variations in screening rates, and decreases in screening rates observed by primary care enrollment model. Largest decreases seen in models where physicians are exclusively or predominantly paid by fee-for-service. Smallest decreases seen in alternate payment models (e.g. capitation) and interprofessional team-based models. Immigrant status was associated with larger post-pandemic drops for breast and colorectal cancer screening. Conclusions: Pre-existing inequities for people living in lowincome neighbourhoods and for immigrants grew during the pandemic. Establishing attachment to a

primary care provider who is supported to prioritize screening for rostered patients is a priority. Other recommended interventions include: targeted attachment to team based care for people experiencing inequities, pop up screening clinics, and engagement with community outreach groups.