

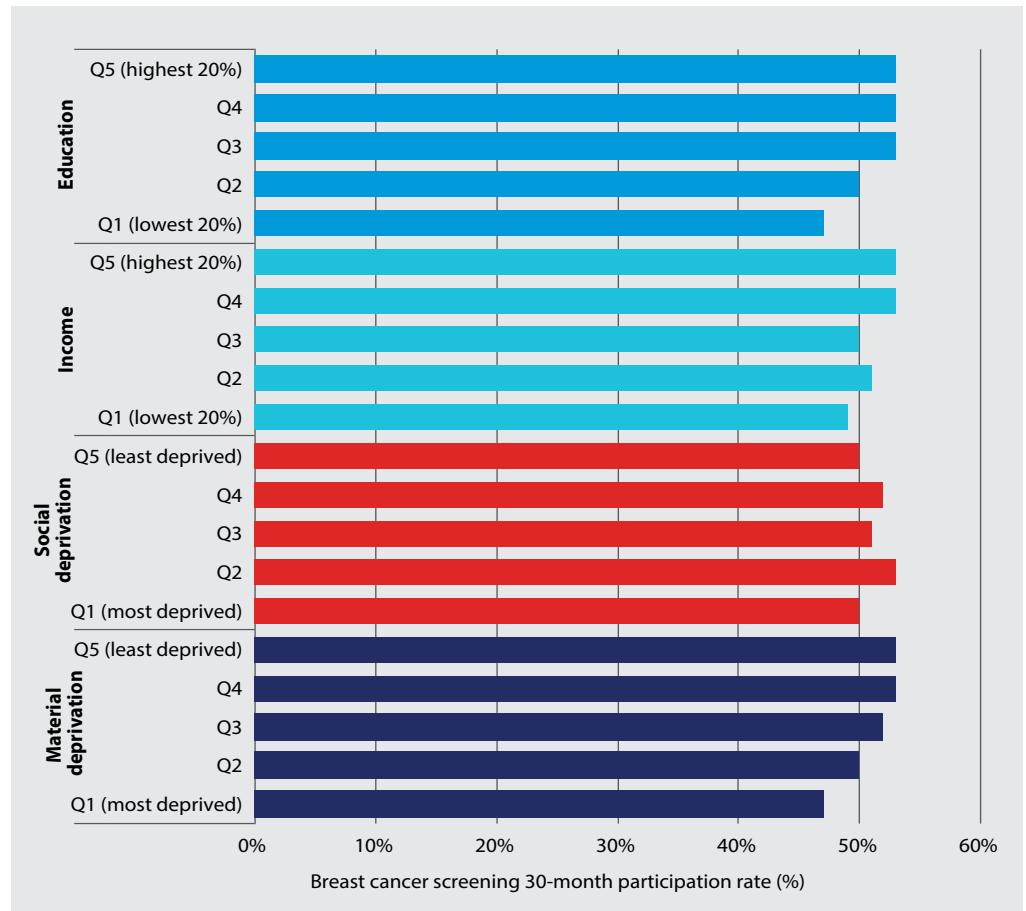
# Area-based disparities in breast cancer screening participation in British Columbia

Secondary prevention techniques (e.g., screening mammography) allow for early detection of cancer and reduction in mortality at the population level.<sup>1</sup> In Canada, the Canadian Task Force on Preventive Health Care recommends that average-risk women aged 50 to 74 years be screened for breast cancer with mammography every 2 to 3 years.<sup>2</sup> Despite well-documented evidence of the benefits of screening mammography, uptake often falls short of targets.<sup>3</sup>

During a public health emergency such as the one brought about by the COVID-19 pandemic, when preventive services are likely to see a drop in volume, any underlying disparities in screening uptake in various subpopulations may be exacerbated. Internationally, it has been reported that disproportionately low breast cancer screening participation is seen among women experiencing cultural or immigration-related barriers or in medically underserved communities in the United States.<sup>4,5</sup> There is also growing evidence that breast cancer screening rates in Canada vary based on geographic location,<sup>6</sup> demographics,<sup>7,8</sup> and socioeconomic status.<sup>9,10</sup> To provide local insights into screening service use by specific subpopulations in BC, we applied an equity lens to investigate breast cancer screening participation rates among BC women of screening age, examining the data for various geographic, demographic, and socioeconomic levels.

A collaboration of the Provincial Health Services Authority's (PHSA's) programs, the BCCDC's Population and Public Health, and BC Cancer examined the 30-month breast cancer screening participation rate of BC women

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**FIGURE.** Breast cancer screening 30-month participation rate in BC for women aged 50–69 years by education, income, social deprivation index, and material deprivation index quintiles for the period between 1 July 2009 and 31 December 2011.

aged 50 to 69 years using data from the BC Cancer Breast Screening Mammography. We included all records of women aged 50 to 69 with a valid six-digit BC postal code in service provided during the 30-month period between 1 July 2009 and 31 December 2011. By means of postal code translation, we assigned a unique census dissemination area (DA), health service delivery area (HSDA), and health authority (HA) to each record. By linking screening data with DA-level demographic as well as

socioeconomic data derived from Census Plus 2011,<sup>11</sup> we examined disparities in breast cancer screening participation among BC women aged 50 to 69 years across HSDAs, across income and education quintiles, and across quintiles of social and material deprivation [Figure]. We found that during the study period:

- The breast cancer screening participation rate for BC women aged 50 to 69 years ranged from 40% to 56% across the

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# Resources to support action on race and health inequity

**H**ealth inequity arising from personal and systemic bias against Black people, Indigenous people, and people of color is a pressing issue in Canada, but resources for addressing this in Canadian medical practice are limited in number. To help physicians deepen their understanding of race-related health inequity, College librarians have selected resources for a race and health equity reading list ([www.cpsbc.ca/files/](http://www.cpsbc.ca/files/)

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[pdf/Race-and-Health-Equity-Resources-for-Informed-Practice.pdf](#)).

The collected material was filtered through many lenses: it was curated by librarians with White settler backgrounds, as most librarians in Canada have, and these backgrounds may have affected the curation process. The College Library had not historically prioritized collecting material on racism in health care, so we are committing to addressing that deficiency by expanding the collection of books to support the health of racialized people. Canadian content is limited: disaggregated race-based data in Canada that document health inequalities have not been thoroughly gathered. Accordingly,

foreign materials are included on the list to fill the gaps left in Canadian literature. On the other hand, the specifics of the experiences of Black and other racialized peoples in Canada make many of the available resources (e.g., from the USA and UK) insufficient for Canadian practice.

In spite of these limitations, these print and online reading materials have the potential to stimulate personal growth and inspire the vision needed for systemic change. The College Library welcomes suggestions and comments on the reading list ([medlib@cpsbca.ca](mailto:medlib@cpsbca.ca)). ■

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HSDAs. Lowest rates were observed in the Northwest, Northeast, and Kootenay Boundary, and highest rates were observed in Central Vancouver Island and Okanagan.

- Women aged 50 to 69 years in lower education and income groups had lower breast cancer screening participation rates than those of higher education and income levels. The income disparity was consistent with more current published data.<sup>7</sup>
- The most materially deprived groups of women (50 to 69 years) had lower breast cancer screening participation rates compared with the least deprived groups.

Our findings provide important local evidence of disparities in cancer screening participation when we consider demographic, geographic, and socioeconomic factors. This information may help to inform targeted intervention strategies to improve cancer preventive care across BC. ■

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