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Investigating disparities in cancer by linking the Canadian Cancer Registry to survey and administrative databases: a collaboration between the Canadian Partnership Against Cancer and Statistics Canada

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Introduction

The Canadian Partnership Against Cancer reports on pan-Canadian system performance across the cancer control continuum, including how sociodemographic disparities create barriers in access and utilization of cancer control services. This has been done using mostly ecological data, which does not contain the individual level information required to identify the extent of disparities.

Conclusion/Implications

This initiative illustrates the value of collaboration between data custodians and health researchers as well as how linkage of existing datasets can leverage the full potential of available data, and broaden cancer research in supporting efforts to create a more equitable cancer control system.

Objectives and Approach

The Partnership collaborated with Statistics Canada (STC) to build individual level datasets that will allow researchers to investigate the relationship between sociodemographic factors, cancer outcomes and treatment patterns in Canada. The record linkage was conducted at STC within the Social Data Linkage Environment. Data from the Canadian Cancer Registry were linked to the Discharge Abstract Database, the National Ambulatory Care Reporting System and the Canadian Vital Statistics Death Database to obtain treatment information and death and death outcomes. To obtain sociodemographic information the following datasets are also being linked: T1 Personal Master File (income), Immigrant Landing File and the Census Long Form (education and geography).

Results

Linkage of all datasets is expected to complete by the end of January 2019. For the first time in Canada, record-level linkage of national cancer registry data with key datasets containing sociodemographic information will be available for exploratory analysis. The challenges with linkage and data limitations will be discussed, as well as the application of these linked databases to answer current disparities-related research questions.