

## Background

Advances in screening, diagnostic technologies, and treatment have contributed to an increase in the number of cancer survivors in Ontario. This rapid growth has placed greater emphasis on the importance of high-quality follow-up care; however, the magnitude and demographics of this population have yet to be comprehensively identified using administrative data.

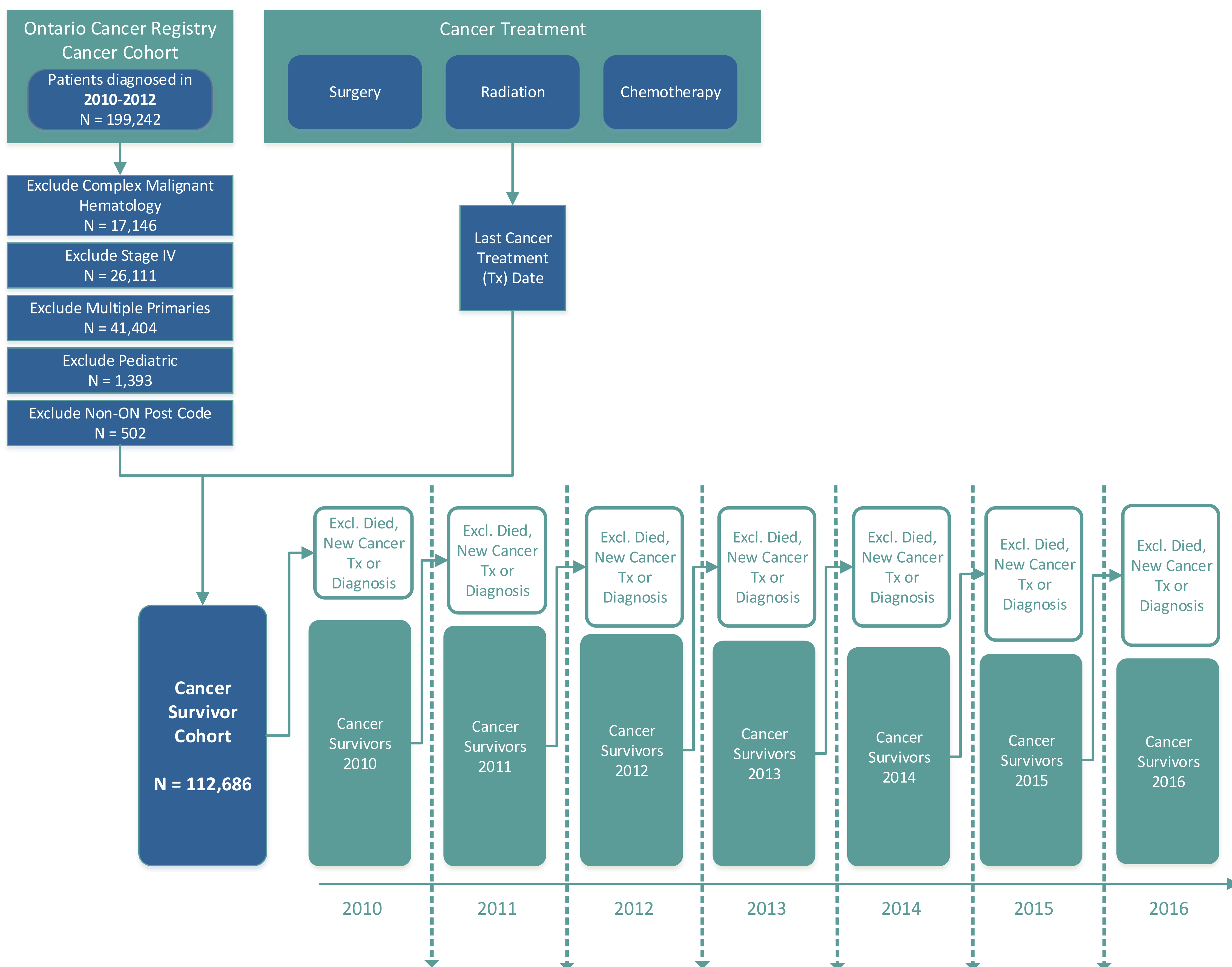
To date, no standard method has been developed in Ontario for identifying cancer patients at the point of entry into survivorship (defined as the phase of the cancer continuum following diagnosis and treatment, prior to recurrence, subsequent cancers, or death). As a result, there is currently a knowledge gap regarding health care service utilization, surveillance for recurrence, and long-term outcomes among the current Ontario cancer survivor population. This information is critical for the development of survivorship models of care that are evidence-based and person-centred.

The aim of the study described is to develop a standard survivor cohort using administrative data to produce accurate and timely information about cancer survivors in Ontario.

## Methods

To create the survivor cohort, the following steps were taken:

1. Develop incident cancer cohort using Ontario Cancer Registry
  - i. Include patients diagnosed in calendar years 2010-2012 with a valid Health Care Number
  - ii. Initial exclusions: Patients age <18 years at diagnosis, Stage IV, multiple primary patients, Complex Malignant Hematology patients, patients with non-Ontario postal code
2. Establish cancer treatment definitions (surgery, chemotherapy, radiation)
  - i. Review activity records in CCO's Activity Level Reporting (ALR) and Canadian Institute for Health Information's Discharge Abstract Database (DAD) and National Ambulatory Care Reporting System (NACRS) to identify all cancer treatments
3. Create yearly survivor cohort
  - i. Identify last treatment date of incident cancer treatment
  - ii. Include in yearly cohorts patients whose last treatment date is prior to year end
  - iii. Exclude patients from yearly cohort if: New cancer diagnosis in year, new cancer treatment in year (TBD; following window of time post-last treatment), died in year



## Challenges

- No clear flag or identifier for cancer recurrence
  - Proxy developed using treatment data
- No "last treatment visit" flag in administrative databases to signal the start of survivorship
  - Comprehensive technical treatment definitions were developed using ALR, DAD and NACRS to ensure all treatment dates are captured
  - End of treatment is defined as the most recent of all treatment dates for an incident cancer
- Complex Malignant Hematology (CMH) patients have a unique patient care continuum, rendering it difficult to identify end of treatment
  - CMH patients have been temporarily excluded from the survivor cohort
  - In future, a CMH-specific treatment concept will be developed

## Conclusions

This standardized survivor cohort will provide previously unavailable, timely data on the Ontario cancer survivor population which will create new opportunities to:

- Measure and improve concordance with guideline recommended surveillance testing
- Understand patterns of follow-up visits for cancer survivors and inform recommendations on survivorship models of care
- Plan for human health resources and capacity within Ontario, for the provision of high quality follow-up care
- Align funding mechanisms to support best practice
- Provide a basis for continued research to improve understanding of treatment outcomes and symptoms in survivorship

