# Technical Supplement: Regional Survivorship Report (2023-24)

## Abbreviations

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| **ALR** | Activity Level Report |
| **CPDB** | Corporate Providers Database |
| **DAD** | Discharge Abstract Database |
| **ISAAC** | Interactive Symptom Assessment and Collection |
| **MO** | Medical Oncologist |
| **NACRS** | National Ambulatory Care Reporting System |
| **NDFP** | New Drug Funding Program |
| **OCR** | Ontario Cancer Registry |
| **ODB** | Ontario Drug Benefit |
| **OHIP** | Ontario Health Insurance Plan |
| **PCCF** | Postal Code$^{OM}$ Conversion File |
| **RCC** | Regional Cancer Centre |
| **RCP** | Regional Cancer Program |
| **RO** | Radiation Oncologist |
| **RPDB** | Registered Persons Database |
| **SSOIS** | Specialized Services Oversight Information System |

# Building the Survivorship Cohort

The regional survivorship report focuses on adults diagnosed with cancer from April 1, 2006, to the beginning of the fiscal year of interest, with a record of any cancer treatment, who are alive and treatment-free during the fiscal year of interest. This cohort is limited to those with stage I, II and III solid organ tumours, thus excluding stage IV and non-solid cancers.

## Step 1: Identify all cancer patients

- Using the Ontario Cancer Registry (OCR), identify all cases of cancer from April 1, 2006, until March 31, 2023
    - Note: April 1, 2006, is used as treatment records are incomplete prior to this time
- Only select for a patient's most recent cancer diagnosis in OCR

## Step 2: Extract cancer treatment records for all cancer patients up to March 31, 2024

- Radiation treatment records are captured in Activity Level Reporting (ALR)
- Interventional radiology records are captured in SSOIS (note: IR records are only complete after April 1, 2015)
- Systemic therapy records are captured in ALR, DAD, NACRS, NDFP, ODB, and OHIP
- Surgery records are captured in DAD, NACRS, and OHIP
    - Note: To reduce misclassification, surgical records are classified as 'cancer surgery' if the type of surgery matches the cancer type of the patient, and the surgery occurs within 365 days of the cancer diagnosis

## Step 3: Exclude those who does not meet the current definition of a 'cancer survivor', as listed below

- Stage IV disease.
- Non-solid tumour.
- Died prior to the end of the fiscal year of interest (i.e. they must be alive up until March 31, 2024 to be a survivor).
- No evidence of cancer treatment prior to the fiscal year of interest, i.e. not treated.
- Has a cancer treatment record in the fiscal year of interest (i.e. has at least one cancer treatment record between April 1, 2023 and March 31, 2024).

### Step 4: Finalize the survivorship cohort

- Ensure that all patients in the cohort have a diagnosis of a non-stage IV solid tumour, with evidence of a prior treatment, no evidence of treatment between April 1, 2023, and March 31, 2024, and alive as of March 31, 2024.

### Step 5: Isolate survivors who visited a regional cancer centre

- For patients appearing in the regional data, they must also have at least one follow-up visit to a Regional Cancer Centre (RCC) or partner site between April 1, 2023, and March 31, 2024.
    - Note: This is not a criterion for all patients included in this report.

# Assigning Follow-up Year of a Patient

A patient may have one, or several, treatments. The survivorship period begins once a patient has completed treatment. Thus, we must identify the last occurrence of treatment in our records to assign the year of follow-up the patient is in during our fiscal year of interest. This is calculated by taking the difference, in months, between the mid-point of the fiscal year of interest (Oct 1, 2023) and the last visit date. If the difference is ≤12 months, then the survivor is in follow-up year 1, 12-24 months = year 2, etc.

# Follow-up Visits

Follow-up visits can occur at either the RCC (or one of their partner sites), or in the community (e.g. a surgeon's office). All visits occurring in the RCC are recorded in the ALR database, whereas visits outside of the RCC can be found in OHIP data (Note: visits occurring in the RCC may also be found in OHIP). For the regional data, we focus on visits that appear in ALR.

We define visits as either a systemic, radiation, or 'other' follow-up visit. 'Other visits' includes visits for palliative care, psychosocial oncology, minor procedures, and nursing minor procedure visits. These visits can be in-person, virtual or other types of visits. These follow-up visits are found using follow-up specific visit codes in ALR.

# Specialist Follow-up Visits at the RCC

Of interest are follow-up visits that occur with either a medical oncologist (MO) or a radiation oncologist (RO). Follow-up visits with MOs or ROs are captured in ALR. There are several specialties captured by the definition of MO, including, but not limited to: medical oncology, hematology, family medicine, gynecologic oncology, and internal medicine, although the majority of visits are with a physician with a medical oncology specialty designation.

For the Regional Provider Visits page, the survivor/provider pair refers to the number of visits that each patient had with that provider, therefore, the patient or the provider can be represented more than once because:

- Providers see more than one patient.
- The patient sees multiple providers.

# Transition to Primary Care

There are many factors to consider in determining the most appropriate time for a cancer survivor's care to be transitioned out of the RCC. One important consideration is the likelihood of cancer recurrence. Conditional survival captures the concept that as time passes, the likelihood of recurrence decreases (e.g., a cancer survivor who is 3 years out from treatment is less likely to recur than a cancer survivor who is 1 year out). Cancer survivors with very high conditional survival (>95%) may be appropriate for transition from the cancer centre to community care. For more information, please refer to (The Follow-Up Model of Care for Cancer Survivors*) recommendations document.

- *Ontario Health (Cancer Care Ontario). Follow-up Model of Care for Cancer Survivors: Recommendations for the Delivery of Follow-up Care for Cancer Survivors in Ontario. Toronto, ON 2019 [Available from: https://www.cancercareontario.ca/sites/ccocancercare/files/guidelines/full/FollowUpModelOfCareCancerSurvivors.pdf].

# Reported Symptoms

Assessment of patient reported symptoms helps us better understand a patient's health condition and care needs unique to their care journey at the RCC or partner site. It also provides insights into the type of support they may need (e.g., supportive care) after completing treatment. The Edmonton Symptom Assessment System-Revised (ESAS-R) is a self-reported tool that screens symptom severity among nine common symptoms experienced by people with cancer, including pain, tiredness, nausea, depression, anxiety, drowsiness, appetite, wellbeing, and shortness of breath. This data is captured through the Your Symptoms Matter (YSM) – General Symptoms survey distributed at the RCC or partner site.