2024

Manitoba Cancer System Performance Report

CancerCare Manitoba
ActionCancerManitoba


Respect
and
Personal
Safety...
you expect it and so do we.

CancerCare Manitoba

Our Vision

A world free of cancer.

Our Mission

To reduce and, where possible, eliminate the burden of cancer on the people of Manitoba through exemplary programs of prevention, diagnosis, treatment, rehabilitation, continuing care, research and education.

Our Values

Respect for People

Integrity

Stewardship

Excellence

Health Equity

CancerCare Manitoba's pledge is to provide evidence-based, high quality and equitable care for all people in our richly diverse province. Ethnicity, culture, socioeconomic status, age, identity and gender are respected and factored into cancer planning. We also acknowledge the challenges of racism and cultural safety in society challenges which must be compassionately understood in order to provide equitable care. Our enduring commitment to health equity enables the best cancer outcomes and improves the patient experience for all.

Equity, Diversity and Inclusion Commitment

CancerCare Manitoba is committed to a culture of Equity, Diversity and Inclusion in the delivery of care, and all the organization's operations, including research and education.

Inidgenous People

Indigenous People have a special status and deserve a special commitment from CancerCare Manitoba in accordance with the Calls to Action of the Truth and Reconciliation Commission and the UN Declaration on the Rights of Indigenous People.

Indigenous Land Acknowledgement

CancerCare Manitoba provides health services across Manitoba on the traditional land of the Anishinaabeg, Cree, Oji-Cree, Dakota and Dene peoples. We acknowledge that Manitoba is also located on the Homeland of the Red River Métis and northern Manitoba includes lands that were and are the ancestral lands of the Inuit.

CancerCare Manitoba acknowledges that colonial practices and policies have impacted the health and well-being of generations of First Nations, Métis and Inuit who continue to experience inequities and obstacles in accessing healthcare, including cancer services along the cancer continuum.

At CancerCare Manitoba, we respect the spirit and intent of the Treaties and Treaty Making and remain committed to working in partnership with First Nations, Métis and Inuit peoples in the spirit of trust, reconciliation and collaboration while also improving cancer control and outcomes for all Manitobans.

TABLE OF CONTENTS

A Message from Dr. Sri Navaratnam, President and CEO, CancerCare Manitoba

"What gets measured gets improved." Robin S. Sharma

CancerCare Manitoba is the legislated cancer authority for the province of Manitoba. As such, we are responsible for cancer control throughout the province, including strategic and long-term planning which leads us to achieve excellence in delivery of services related to cancer and blood disorders.

CancerCare Manitoba recognizes the importance of measuring and reporting on the performance of the cancer system. The Manitoba Cancer System Performance Report series offers a full summary of the measurement of key health, access, and outcome indicators illustrating how well the cancer system is functioning in our province.

CancerCare Manitoba's public reporting on performance brings transparency and accountability to the population we serve. This report lays the groundwork for our ongoing commitment to enhance cancer services provided to Manitobans. By continuously measuring, monitoring, and reporting on the cancer system's performance, we can drive improvements in cancer care.

As the President and CEO of CancerCare Manitoba, I am extremely proud to present this second report of its kind to the population we serve. I would like to express my gratitude to the report leads: Dr. Donna Turner, Chief of Population Oncology; Carrie O'Conaill, Manager of System Performance; the System Performance team; and all the dedicated CancerCare Manitoba staff and partners who collaborated to create this report.

Our rigorous process of measuring, monitoring and reporting ensures our continued commitment to delivering high-quality cancer care and services to the people of Manitoba, regardless of where they live.

Sincerely,

Dr. Sri Navaratnam,
President and CEO, CancerCare Manitoba

A Message from System Performance Report Leads

We are pleased to release the second comprehensive Manitoba Cancer System Performance Report.

This report is the latest in the tradition of offering open communications related to statistics, measurement, and benchmarking by CancerCare Manitoba (CCMB). Participation in this, as well as significant reporting with the Canadian Partnership Against Cancer (CPAC) and other CCMB Community Health Assessments, have allowed us to assess trends over time and by geography, as well as compare ourselves to benchmarks set by evidence and other high performing jurisdictions. This report style has been inspired by colleagues in the United Kingdom, Cancer Care Ontario, and CPAC. We recognize that indicator development is an ongoing progressive process with metrics being improved and refined as CCMB learns more and as better information and measurement tools become available. CCMB System Performance continues to work on providing additional detailed reports for the Manitoba Cancer System Performance series to enable a deeper analysis of various cancer control programs.

The intent of the Manitoba Cancer System Performance Report is to show "cancer care by the numbers". This current set of indicators builds on previous reports and expands to include innovative metrics developed since the 2019 report in consultation with our partners. We recognize that measurement is an essential part of good cancer system management. It allows us to focus on improving both the health of our community and the care we provide to Manitobans living with cancer. It meets the need to report on our services as outlined by Manitoba Health.

As we've mentioned before, there is no single data system to answer all our questions but there is growing consensus regarding which indicators best describe our cancer system's performance. The Manitoba Cancer System Performance Report includes measures from across the spectrum of cancer service delivery – from prevention to screening and diagnosis, to treatment, and survivorship and advanced disease. Outcomes reported include incidence, survival, mortality, prevalence, patient experience, and workload metrics related to cancer care delivery – all essential components of system performance as we monitor how our processes (what we do) influence our patients, their families, and Manitobans as a whole. We continue to expand our scope and breadth to ensure we feature important metrics related to various areas of the cancer system. This includes an assessment of cancer control during the COVID-19 pandemic.

Over the next few pages, you will find a full list of data sources used in this report. We are grateful for the analysis performed by CCMB staff (System Performance, Epidemiology Unit, Screening, and more), as well as our colleagues at Statistics Canada who analyze the Canadian Community Health Survey data. Munayie Wakie, a Programmer Analyst from System Performance, was invaluable in the creation of this report. We are incredibly grateful to her for her dedication and hard work in putting this report together.

Wherever possible, this report continues to use:

- Reliable data which have already been published or routinely cited, adding in new data where there are gaps;
- Indicator definitions used by at least one partner (provincial or national); and
- Trends or benchmarks to provide an indication of whether CCMB is improving in a particular cancer-related area.

The development of Manitoba Cancer System Performance reports is an ongoing process. Each report is only a milestone as we plan to publish updated reports every few years with complimentary reports on a more frequent basis. By measuring and reporting on how we are doing, we can advance areas of strength and address areas we identify as gaps. But changing the course of cancer is not one we will do alone. With our partners, CCMB will continue working towards its mission to reduce the impact of cancer throughout the province.

Dr. Donna Turner, PhD
Chief of Population Oncology
CancerCare Manitoba

Carrie O'Conaill, PhD Candidate
Manager of System Performance
CancerCare Manitoba

COMMON ACRONYMS FOUND IN THIS REPORT

AOPSS	Ambulatory Oncology Patient Satisfaction Survey
ASIR	Age-Standardized Incidence Rates
ASMR	Age-Standardized Mortality Rates
AYA	Adolescents and Young Adults
BI-RADS	Breast Imaging Reporting and Data System
CAR-T	Chimeric Antigen Receptor-T cells
CCMB	CancerCare Manitoba
CCHS	Canadian Community Health Survey
CCP	Community Cancer Program
CEO	Chief Executive Officer
CIHI	Canadian Institute for Health Information
CNS	Central Nervous System
ComPARe	Canadian Population Atrributable Risk of Cancer
COMPASS	Comprehensive Problem and Symptom Screening Questionnaire
COVID-19	Coronavirus Disease of 2019
CPAC	Canadian Partnership Against Cancer
CPC	Canadian Problem Checklist
CPJI	Cancer Patient Journey Initiative
CRC	Colorectal Cancer
CYP-C	Cancer in Young People in Canada
ECCOE	E-Quality Communication Centre of Excellence
ER	Estrogen Receptor
ESAS-r	Edmonton Symptom Assessment Survey - revised
FIT	Fecal Immunochemical Test
FOBT	Fecal Occult Blood Test
HER2	Human Epidermal Growth Factor Receptor 2
HPV	Human Papillomavirus
ICBP	International Cancer Benchmarking Partnership
IERHA	Interlake-Eastern Regional Health Authority
MAID	Medical Assistance in Dying
MBMT	Manitoba Blood and Marrow Transplant
NHR	Northern Health Region
NSCLC	Non-Small-Cell Lung Cancer
OECD	Organization for Economic Cooperation and Development
PR	Progesterone Receptor
PMH	Prairie Mountain Health
RCP	Regional Cancer Program
RHA	Regional Health Authority
SH-SS	Southern Health - Santé Sud
VATS	Video-Assisted Thoracoscopic Surgery
WMCC	Western Manitoba Cancer Centre
WRHA	Winnipeg Regional Health Authority

DATA SOURCES

Data sources used in this report include:

- Manitoba Cancer Registry
- Manitoba Health
- SharedHealth (especially the programs involved with diagnostics, language access, and palliative care)
- Canadian Partnership Against Cancer
- Statistics Canada
- Canadian Community Health Survey (CCHS)
- Ambulatory Oncology Patient Satisfaction Survey
- Medical Assistance in Dying (MAID) Program
- Winnipeg Regional Health Authority Language Access Program
- International Cancer Benchmarking Partnership
- Winnipeg Regional Health Authority Indigenous Health
- E-Quality Communication Centre of Excellence
- Organization for Economic Cooperation and Development
- CancerCare Manitoba Screening Programs Registries
- Other CancerCare Manitoba Datasets and Databases supported by:
  - System Performance
  - Department of Epidemiology and Cancer Registry
  - Cancer Clinical Information Management
  - Radiation Oncology Program
  - Systemic Treatment Program
  - Paul Albrechtsen Research Institute
  - Clinical Trials Unit
  - Dr. Ernest W. Ramsey Manitoba Prostate Centre
  - Patient and Family Support Services
  - Patient and Family Advisory Volunteer Program
  - Manitoba Blood and Marrow Transplant Program
  - Quality and Patient Safety
  - Urgent Cancer Care Clinic
  - COMPASS (Patient-Reported Outcome Measure)
  - Community Oncology Program
    - Provincial Cancer and Navigation Service
    - Moving Forward After Cancer Program
  - and other program leaders and researchers

COMMUNITY PARTNERS

We greatly value our relationships with patients, their loved ones, and the general public. The insight and experiences of the community was integral to telling the story of cancer care in Manitoba. During development and review phases of the first report we worked with community partners to ensure that the patient voice was reflected fairly and honestly. During development we met patient partners during various working group meetings and an interactive presentation at the *Community Cancer Conference*. During our review phase we consulted with community partners using focus group and survey methodologies. We also invited patients and their loved ones to share stories about their experience with cancer to highlight in section cover pages.

GOALS OF THIS REPORT:

- to understand the health of Manitoba residents.
- to be responsive to local health issues.
- to describe and to understand those conditions which contribute to health disparities.
- to plan health services informed by evidence (to create and exchange knowledge and evidence in order to plan health services).
- to track changes in population health over time.
- to reflect the voices of our communities.

THE PURPOSE OF THIS REPORT IS TO:

- provide baseline information about health status of residents.
- understand the health status of diverse populations in the health regions.
- provide evidence about where to target interventions for prevention and health promotion.
- influence evidence-informed decision-making and priority setting for strategic planning and operational planning.
- guide policy and program development.
- monitor changes and trends in health status over time.
- encourage collaboration with community and stakeholders.
- identify links and opportunities to collaborate with other sectors.
- focus public discussion on health issues.

THE INTENDED USERS OF THIS REPORT IS TO INFORM:

- CancerCare Manitoba's strategic planning process, and the strategy of our partners including Manitoba Health, the Regional Health Authorities, and Shared Health.
- evidence-informed decision making at CancerCare Manitoba, and our health policy and service delivery partners including Manitoba Health, the Regional Health Authorities, and Shared Health.
- the Regional Health Authorities' community and stakeholders.
- our many communities, partners, public, and patients and their loved ones across Manitoba.

REPORT GUIDE

Each section of the Manitoba Cancer System Performance Report helps to identify the current state of our cancer care system in Manitoba. We explore the entire continuum of cancer - from prevention and early detection or screening to diagnosis and treatment to outcomes including survivorship and advanced disease. This report will give you a sense of where we have been and where we are going, as well as how we compare to other cancer agencies across Canada and the world. Our intention is to provide a comprehensive snapshot of Manitoba's cancer care system. Find out more in upcoming supplementary reports which will be found online.

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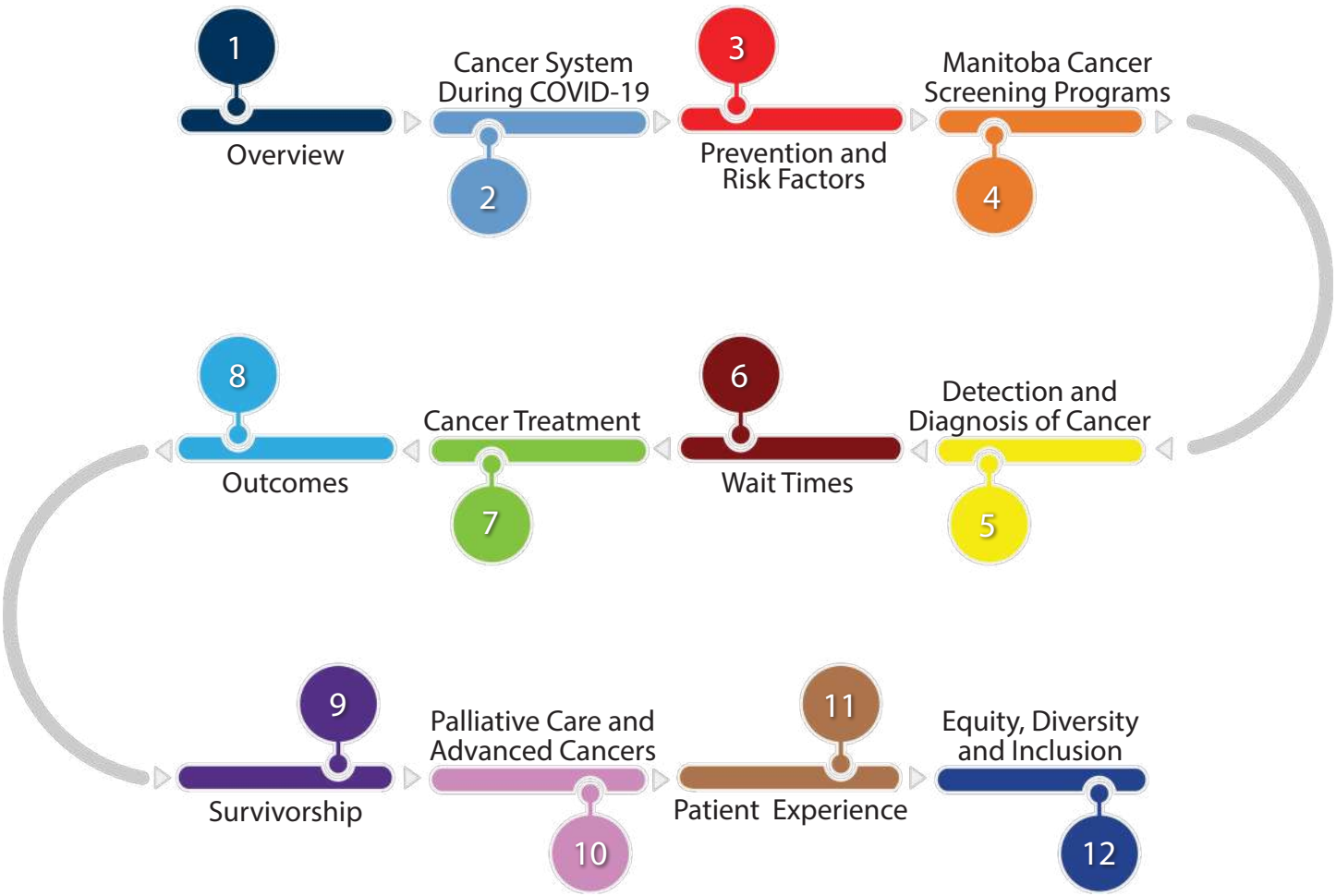
Colours align with those shown in diagram below.

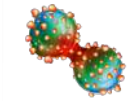


KEY FINDINGS

Important themes we have identified while developing the **2024 Manitoba Cancer System Performance Report:**

THE ANNUAL NUMBER OF NEW CANCER CASES CONTINUES TO GROW. In 2021, 7,249 Manitobans were diagnosed with invasive cancer which is a 30% increase since 2001. The next 20 years appear to change more drastically, with the number of new cancer cases reaching about 11,000 by 2040 (this is an increase of 50% from 2021). Across Canada, two in five individuals is expected to be diagnosed with cancer in their lifetime. We know prevention strategies are key to protecting Manitobans from cancer. We are focusing efforts to improve our prevention services with the aim of decreasing the number of Manitobans that ever have to face a cancer diagnosis.

COVID-19 PANDEMIC IMPACTED MANITOBA'S CANCER SYSTEM. The COVID-19 pandemic was an unprecedented time for our world. For people living with cancer, the pandemic triggered new worries and concerns for them and their families. CancerCare Manitoba was steadfast in providing high-quality cancer care services whilst adapting by modifying operations and the environment to keep people safe. At the beginning of the pandemic we saw a 23% decrease in the number new cancer diagnoses and a 43% decrease in surgical resections but these volumes quickly rebounded as the cancer system adapted to the new situation. We also saw a transition towards virtual physician visits to minimize in-person interactions during the pandemic. Virtual visits have since become a standard of care - an innovation brought on by pandemic learnings.



FINDING CANCER EARLY CAN MEAN MORE EFFECTIVE TREATMENT AND POSITIVE OUTCOMES. Lung cancers are often diagnosed at late stage (stage IV). Across Manitoba, as with the rest of Canada, over 40% of lung cancer cases are diagnosed at late stage with little variation between regions. For other cancers we see regional differences, such as more individuals being diagnosed with late stage colorectal and prostate cancer diagnoses in the Northern Health Region. By finding these cancers earlier we can improve survival, treatment effectiveness and related costs, and quality of life for people living with cancer in the province.

WAIT TIMES ARE IMPROVING. Median wait times decreased across many system wait time measures including those during screening (colon screening wait times), referrals to CancerCare Manitoba (for gastrointestinal), and chemotherapy (for lymphoma and breast). Median wait times for many measures decreased during the COVID-19 pandemic followed by a slight rebound in the post-pandemic period.

TREATMENTS FOR CANCER HAVE BECOME MORE COMPLEX. Surgery is the most common treatment modality - with 50% of patients receiving a surgical treatment within one year of diagnosis (compared to systemic therapy at 43% and radiation therapy at 29%). Advancements in eligibility for blood and marrow transplants and identification of cancer biomarkers have increased the complexity of patient care.

OUTCOMES ARE IMPROVING. Each year cancer kills nearly 2,700 Manitobans, however mortality rates continue to decrease year over year. This means that Manitobans diagnosed with cancer are more likely to survive the disease than ever before.

MORE PEOPLE ARE LIVING WITH CANCER. Across Manitoba nearly 37,000 people are alive who were diagnosed with cancer in the past 10 years - a 12% increase since 2016. This number will continue to increase into the future as the number of cancer cases continue to increase but people live longer with the disease and after treatments are completed.

EMOTIONAL SUPPORT. We have heard our patients' needs for emotional support during their experience with cancer. We are establishing new and innovative ways to improve our emotional support services and the patient experience. The Ambulatory Oncology Patient Satisfaction Survey (AOPSS) will continue measuring progress in meeting these important needs.

REGIONAL VARIATION IN THE CANCER EXPERIENCE. We know Manitobans from different corners of our province have different experiences with cancer. Regional comparisons show more individuals in Northern Health Region are diagnosed with late-stage cancers than any other region while the highest incidence and mortality rates are seen in Interlake-Eastern RHA. These examples highlight the challenges we continue to face in equitably serving our population. See our Regional Profiles pages for more information.

OVERVIEW OF THE CANCER SYSTEM

"Everyone was outstanding in their level of care & compassion during all phases of my treatment, very knowledgable & competent. I felt like I was being well cared for and well informed of what steps were & would be taken. CancerCare Manitoba has amazing people working in the various programs who made a "scary experience" much more tolerable."

- CCMB patient.

CancerCare Manitoba is the provincially mandated cancer agency and is responsible for setting strategic priorities and long-term planning for cancer and blood disorders. The cancer services the organization provides to Manitobans cross the continuum of cancer from prevention and early detection, to cancer screening, to multidisciplinary cancer treatment, and supportive and end-of-life care. These clinical services are provided to both children and adults. CancerCare Manitoba relies on the ongoing support of Manitoba Health and its close working relationships with regional health authorities to deliver quality cancer services to Manitobans. The financial assistance provided by the donations of Manitobans to the CancerCare Manitoba Foundation is vital to undertaking research and providing quality care to Manitobans.

OVERVIEW

Cancer is a major cause of mortality in Manitoba. The information below provides summary statistics for cancer in Manitoba.

Table 1. Summary statistics for cancer in Manitoba.

Incidence	
Number of new cancer cases in 2021	7,249
Crude incidence rate, 2021 (cases per 100,000)	519.6
Age-standardized incidence rate, 2021 (cases per 100,000)	471.4
Mortality	
Number of cancer deaths in 2020	2,655
Crude mortality rate, 2020 (cancer deaths per 100,000)	192.3
Age-standardized mortality rate, 2020 (cancer deaths per 100,000)	177.4
Prevalence	
Ten-year prevalence: Number of people with cancer alive as of January 1st, 2021 (cohort: diagnosed 2011-2020)	36,664
Survival	
Age-standardized 1-year net survival rate, 2017-2021	78%
Age-standardized 5-year net survival rate, 2017-2021	63%

See technical appendix for data sources and methodological details.

UP TO 40% OF ADULT CANCER CASES CAN BE ATTRIBUTED TO PREVENTABLE RISK FACTORS.[1-3]

THEN AND NOW: INCIDENCE AND MORTALITY ESTIMATES

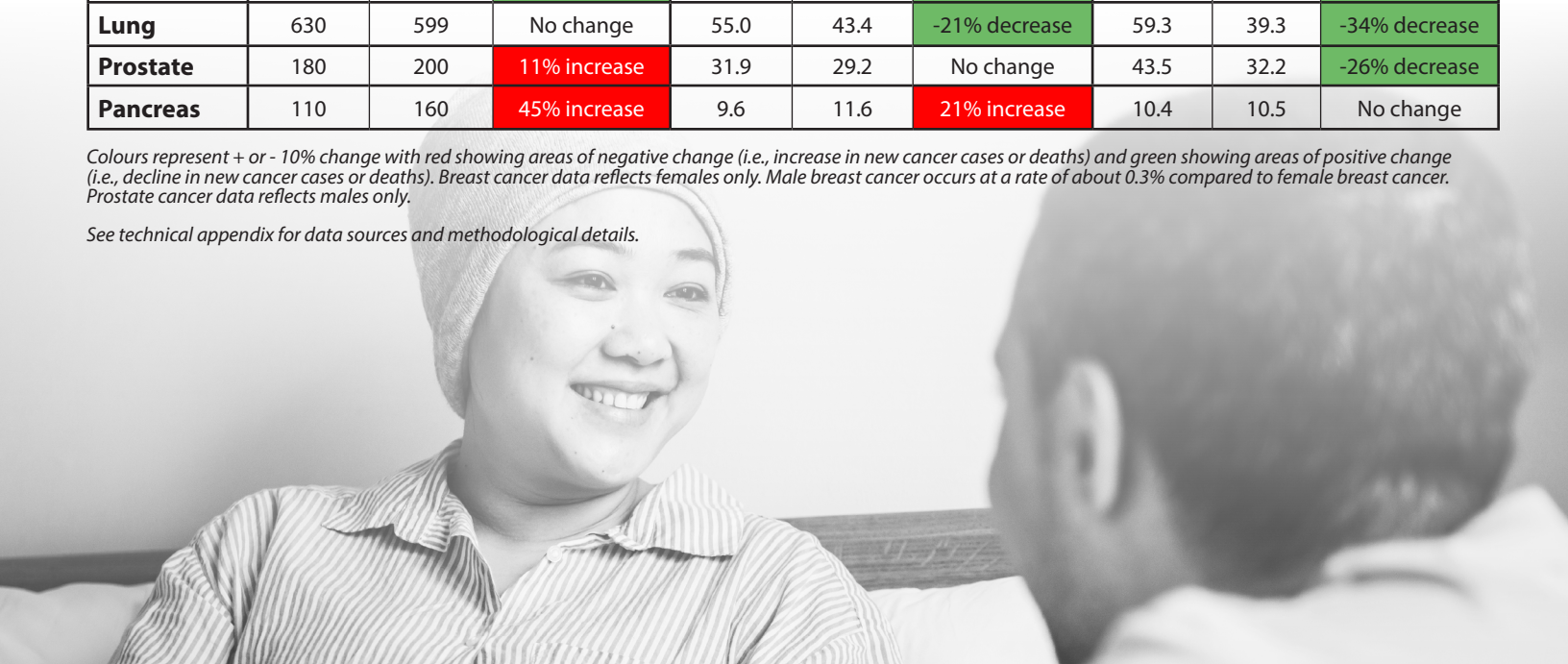
The burden of cancer is most often reflected through incidence (new cancer cases) and mortality (deaths). Both can be reported using three measures: the number of cases, the crude rate, or the age-standardized rate. There are indications for using each of these based on the questions asked. For example, the ***number of new cases or deaths*** can offer insight into service and capacity needs of a population and the associated resource allocations required. ***Crude rates*** help us to understand whether there are differences in cancer rates between different populations per capita (e.g., cancer types, regions, etc.) which can help in planning the allocation of resources. Finally, ***age-standardized rates*** remove the effect of age (a strong predictor of cancer) to allow us to compare differences in rates that may be due to other risk factors. It is the best way to understand how the actual risk for cancer or risk of dying from cancer varies across different populations.

Table 2. Incidence and mortality estimates: A comparison of cancer burden in 2001 and 2021 for incidence and 2000 and 2020 for mortality.

Cancer	Number of new cases			Crude incidence rate (per 100,000)			Age-standardized incidence rate (per 100,000)		
	2001	2021	Change (%)	2001	2021	Change (%)	2001	2021	Change (%)
All invasive	5,583	7,249	30% increase	486.0	519.6	No change	523.0	471.4	-10% decrease
Breast	765	999	31% increase	131.5	142.4	No change	134.0	127.5	No change
Colorectal	745	897	20% increase	64.9	64.3	No change	69.8	58.6	-16% decrease
Lung	801	901	12% increase	69.7	64.6	No change	75.7	57.1	-25% decrease
Prostate	792	982	24% increase	139.6	141.6	No change	169.6	130.6	-23% decrease
Pancreas	115	201	75% increase	10.0	14.4	44% increase	10.4	12.9	24% increase
Cancer	**Number of deaths**			**Crude mortality rate (per 100,000)**			**Age-standardized mortality rate (per 100,000)**		
	2000	2020	Change (%)	2000	2020	Change (%)	2000	2020	Change (%)
All invasive	2,593	2,655	No change	226.5	192.3	-15% decrease	245.6	177.4	-28% decrease
Breast	192	164	-15% decrease	33.1	23.6	-29% decrease	33.3	20.9	-37% decrease
Colorectal	342	309	-10% decrease	29.9	22.4	-25% decrease	32.6	20.9	-36% decrease
Lung	630	599	No change	55.0	43.4	-21% decrease	59.3	39.3	-34% decrease
Prostate	180	200	11% increase	31.9	29.2	No change	43.5	32.2	-26% decrease
Pancreas	110	160	45% increase	9.6	11.6	21% increase	10.4	10.5	No change

Colours represent + or - 10% change with red showing areas of negative change (i.e., increase in new cancer cases or deaths) and green showing areas of positive change (i.e., decline in new cancer cases or deaths). Breast cancer data reflects females only. Male breast cancer occurs at a rate of about 0.3% compared to female breast cancer. Prostate cancer data reflects males only.

See technical appendix for data sources and methodological details.



TODAY AND TOMORROW

The number of new cancer cases we see each year will increase to over 11,700 by 2045.

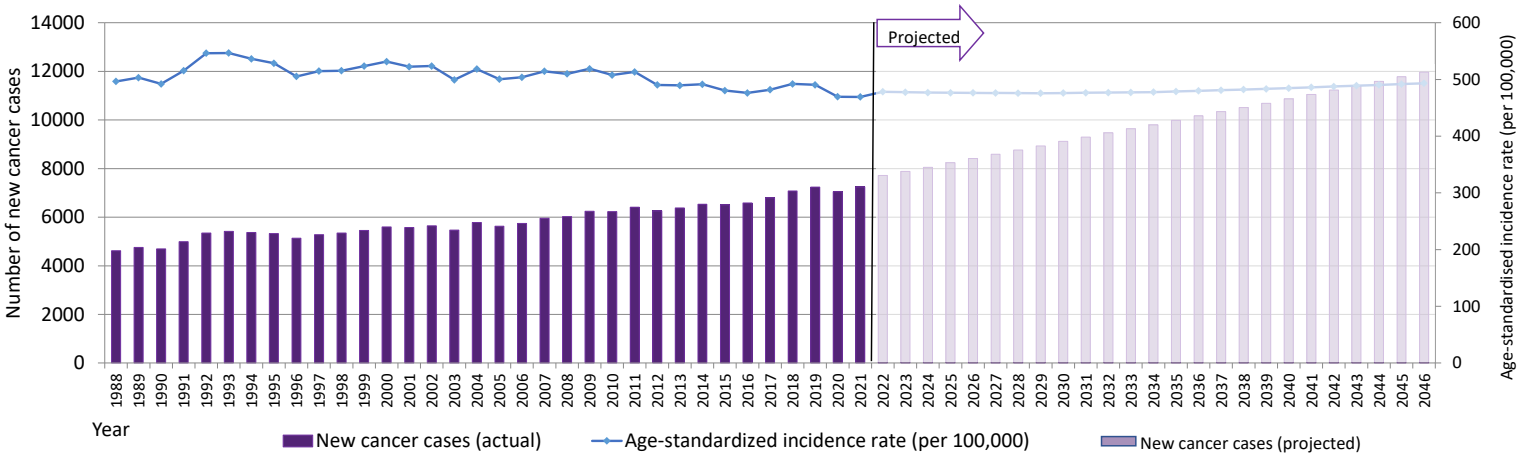
Cancer Incidence and Mortality in Manitoba

Cancer is a significant health concern for Manitobans. In 2021, 7,249 patients received a new invasive cancer diagnosis, and 2,655 Manitobans died of the disease. The increasing incidence of new cases each year, and the fact that many patients now survive longer, means that ***the number of people living with cancer is greater than ever before.*** In 2021, nearly 37,000 Manitobans are living with a cancer diagnosed in the previous 10 years. Similar to other Canadian provinces, the number of new cancer diagnoses are expected to rise by about 2% per year over the next 10 to 20 years. This increase is due largely to Manitoba's aging population, given that the incidence rate is steady and population growth has historically been flat.

2 in 5 Canadians will develop cancer in their lifetime.[4]

1 in 4 Canadians is expected to die from cancer.[4]

Figure 1. Actual and projected cancer incidence in Manitoba, 1988-2046.

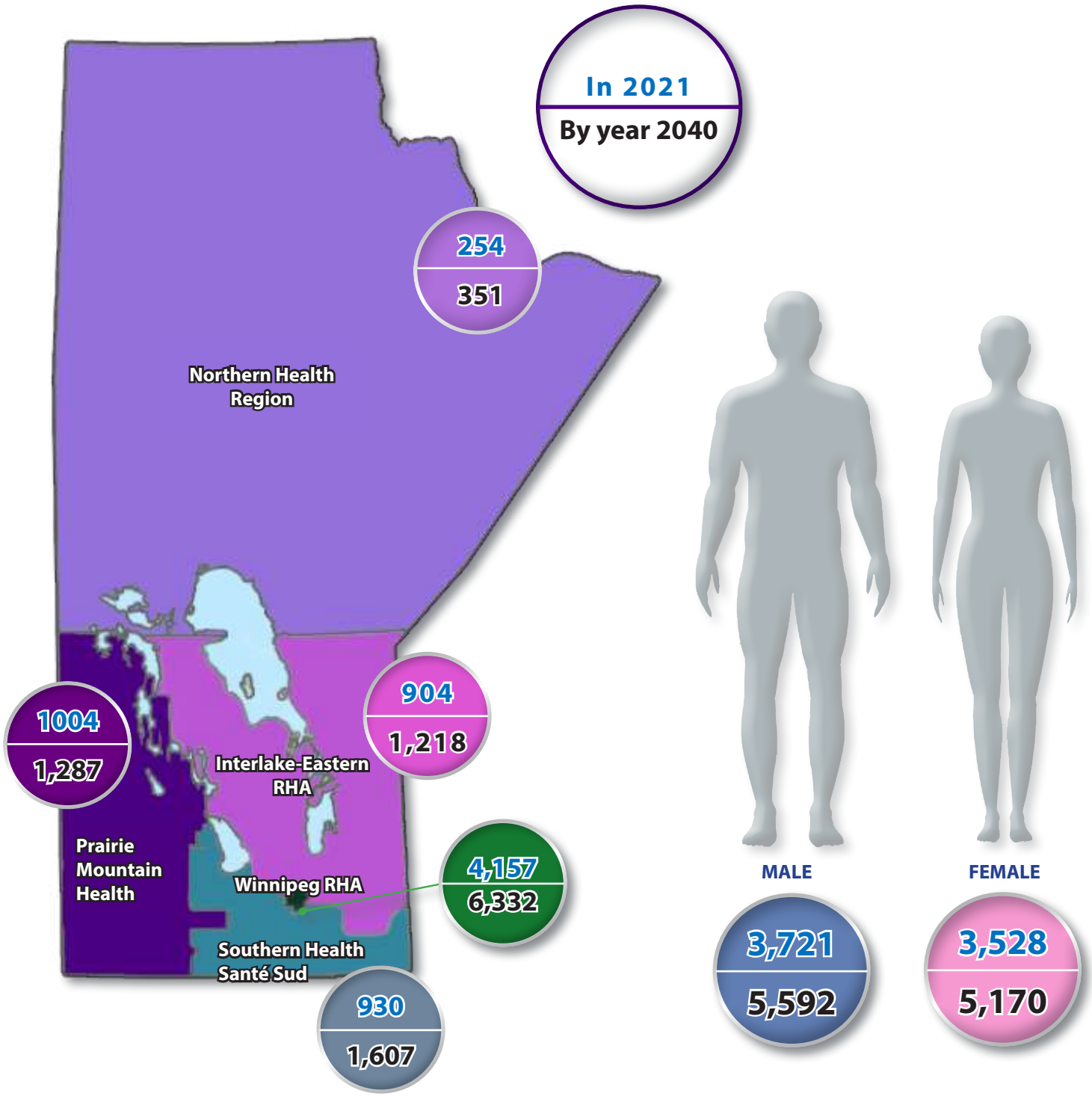


See technical appendix for data sources and methodological details.

SUSTAINABILITY OF OUR CANCER CARE SYSTEM

In Canada, cancer has become a serious health concern with two in every five people expected to be diagnosed with the disease in their lifetime. **We expect the number of invasive cancer cases in Manitoba to increase by 50% by 2040** (compared to 2021). This will put a considerable strain on the Manitoba health care system.

Figure 2. The number of individuals diagnosed with a new cancer in 2021 and 2040 by Regional Health Authority (RHA) and sex.



See technical appendix for data sources and methodological details.

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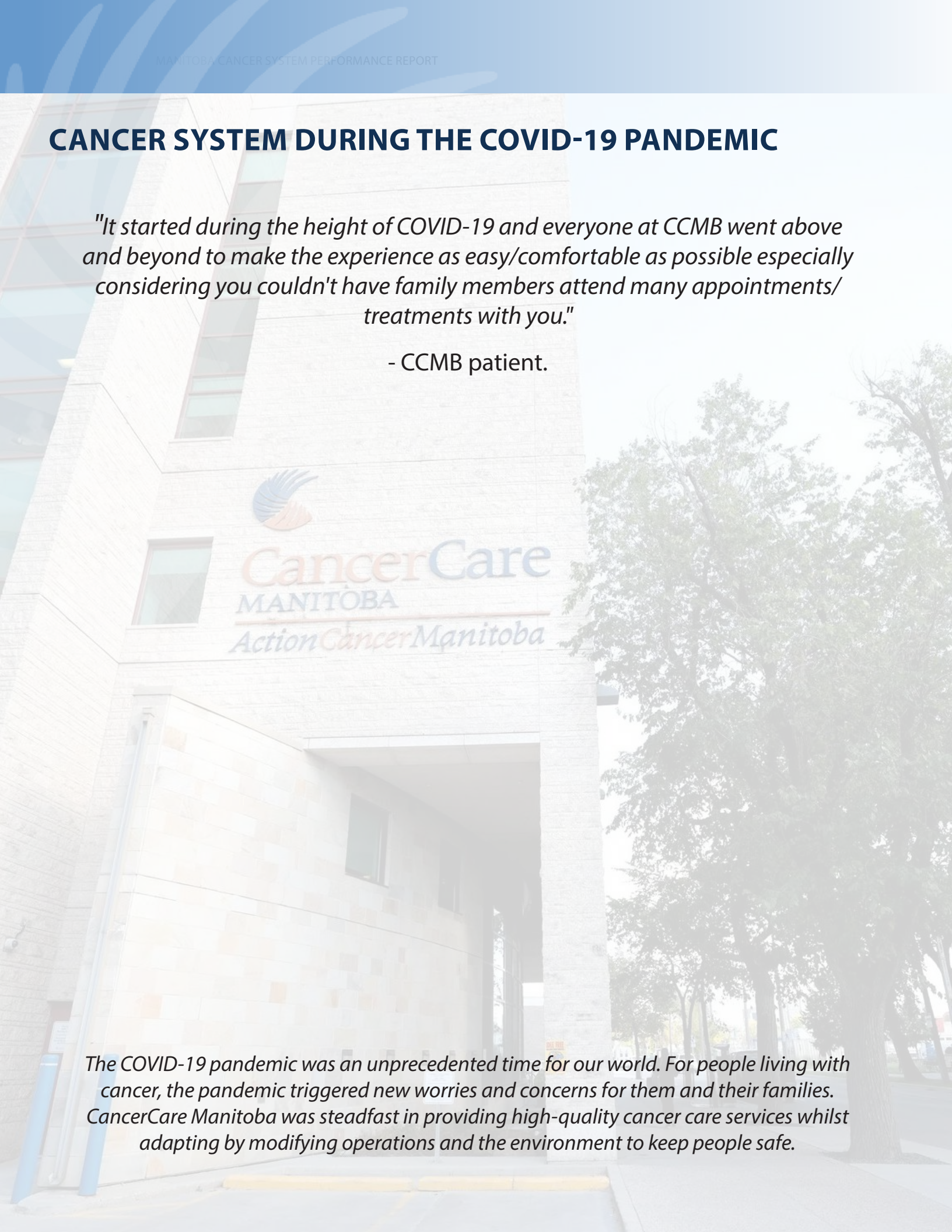
CANCER SYSTEM DURING THE COVID-19 PANDEMIC

"It started during the height of COVID-19 and everyone at CCMB went above and beyond to make the experience as easy/comfortable as possible especially considering you couldn't have family members attend many appointments/ treatments with you."

- CCMB patient.



The COVID-19 pandemic was an unprecedented time for our world. For people living with cancer, the pandemic triggered new worries and concerns for them and their families. CancerCare Manitoba was steadfast in providing high-quality cancer care services whilst adapting by modifying operations and the environment to keep people safe.

THE COVID-19 PANDEMIC AND CANCER CARE IN MANITOBA

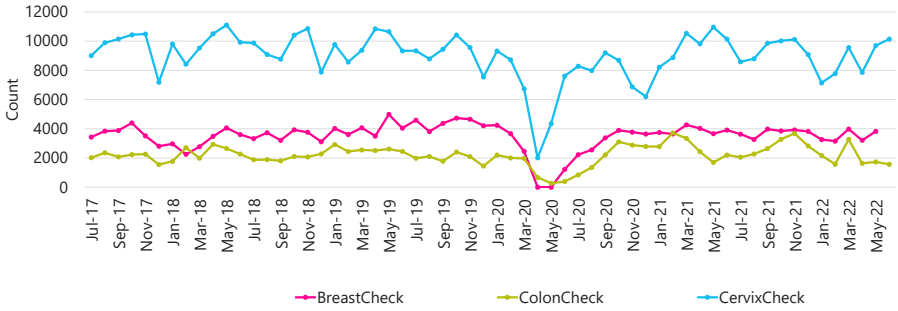
The COVID-19 pandemic was challenging for all Manitobans. For those living with cancer, it brought new worries and anxieties about how their treatments and outcomes would be impacted. Manitoba was not unique in the burden placed on our healthcare system. From the beginning, it was critically important to all at CancerCare Manitoba to continue providing high-quality care to all Manitobans living with cancer. We were open to new and innovative solutions to ensure all patients had what they needed, when they needed it. Sometimes this required adapting to new ways of providing care (e.g., virtual physician visits) and sometimes it meant a reduction in access to services (e.g., temporary suspension of breast cancer screening mammograms).[1] New screening and safety measures were implemented to ensure all individuals entering CancerCare Manitoba would be kept as safe as possible from COVID-19 exposure. It was the effort of many which led us out of the pandemic. In this section we highlight the COVID-19 experience at CancerCare Manitoba.

Operations Response to COVID-19

Cancer Screening:

Cancer screening operations were impacted in the early days of the pandemic including a temporary suspension of breast screening and other screening operations. However, within months screening returned to normal capacity.[2]

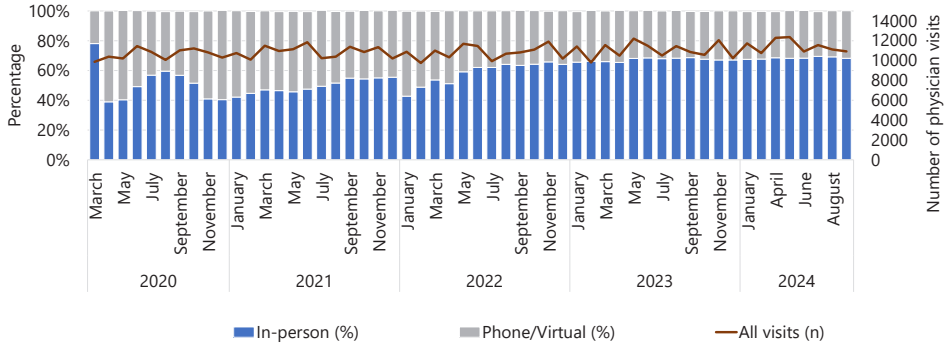
Figure 3. Cancer screening volume by month and screening program in Manitoba, July 2017 - June 2022.



Physician Visits:

Before the pandemic, virtual visits represented a very small proportion of overall physician visits (<1%). A shift to virtual platforms for patient appointments occurred at the beginning of the pandemic. As a result, virtual visits were highest during months when COVID-19 risks were highest in Manitoba.[3,4] Virtual visits have been adopted as an option for patients and a standard of care at CancerCare Manitoba – an innovation brought on by pandemic learnings.

Figure 4. Physician visits by type of visit in Manitoba, March 2020 - September 2024.



Note: In-person visits include telehealth visit as they require patients to visit centers where the telehealth appointment is being held. Telehealth visits account for 3% of all physician visits.

The total number of physician visits did not change between April 2020 and June 2021 reflecting a switch from in-person visits (which decreased by 52%) to the introduction of virtual visits.[3]

Virtual visits saved significant time spent traveling between April 2020 and December 2022.[4,5]

From 420,000 to 750,000 km per month **saved**![4]

From 5,500 to 9,600 hours of driving per month **saved**![4]

This equates to 87 to 155 metric tons of CO_2 emissions saved per month.[4]

We asked patients about their care during the COVID-19 pandemic in the 2021 Ambulatory Oncology Patient Satisfaction Survey.

Over 75% of patients who had a virtual visit rated their experience as *easy or very easy*.

Over 95% were satisfied with the quality of care they received during the COVID-19 pandemic.

Almost 92% felt *very safe* receiving care at CCMB.

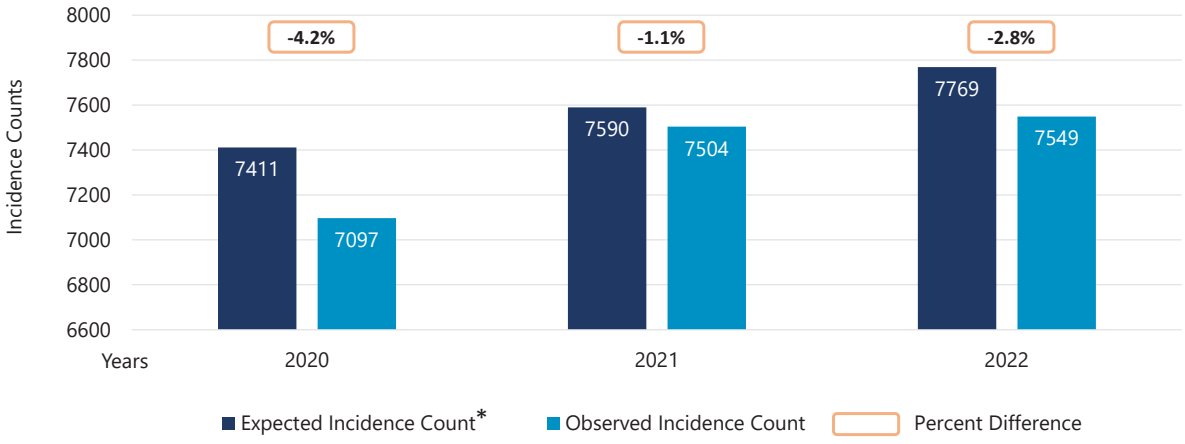
See technical appendix for data sources and methodological details.

Cancer Outcomes during the COVID-19 Pandemic

Cancer Incidence:

As expected, the COVID-19 pandemic led to a change in the number of people diagnosed with cancer. Some reasons for this include temporary suspension of cancer screening, interruptions to diagnostic services, and barriers to other medical appointments that could help detect cancers. In April 2020, there was an initial 23% decrease in new cancer diagnoses followed by a recovery across most cancer sites.[6] During the same time, a drop of nearly 30% in new cancer case registrations was observed nationally.[7] Figure 5 highlights the difference between the number of cases expected and observed over the pandemic.

Figure 5. The expected and observed number of new cancer cases in 2020, 2021, and 2022.



** Estimated data – expected incidence counts are based on a statistical model for trend using an interrupted-time series analysis for January 2015- June 2023. Figure 5 highlights the timeframe in the analysis when COVID-19 was most active.*
A minus sign denotes a deficit and a plus sign denotes a surplus.
See technical appendix for data sources and methodological details.

Cancer Treatment:

Radiation Treatment:

- Hypofractionation benefitted patients during the pandemic as it allowed them to receive the same amount of treatment over fewer treatment visits and reduced potential exposure to COVID-19.[1]
- No change was observed in the number of first radiation treatment visits occurring during the pandemic[3]

Systemic Treatment:

- Oral therapies were provided to allow patients to take their treatment from home.[1]
- No change to the number of intravenous chemotherapy visits per month.[1]

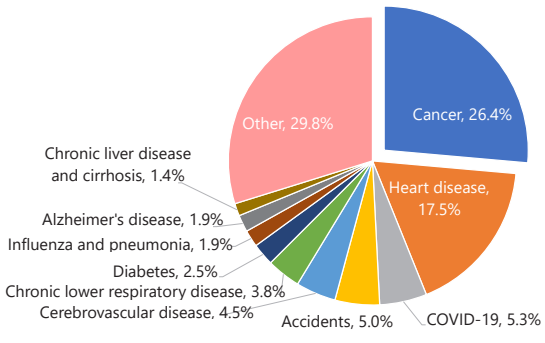
Surgery:

- Cancer surgeries were prioritized in Manitoba during the pandemic.[1]
- In April 2020, there was a 43% reduction in surgical resection, but the volume resumed to pre-pandemic levels by July 2020.[3]

Mortality:

While COVID-19 was a threat to Canadians, it did not surpass the impact of cancer. The figure below shows 26.4% of Canadians died from cancer in 2020 in comparison to 5.3% who died from COVID-19.[8] Cancer remains the leading cause of premature death in Canada.[8]

Figure 6. Proportion of deaths due to cancer and other causes during the COVID-19 pandemic in Canada, 2020.



See technical appendix for data sources and methodological details.

We continue to evaluate the impact of COVID-19 on the cancer system and cancer outcomes in Manitoba. Watch for new information as it becomes available on cancer survival, incidence, and cancer screening.

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PREVENTION AND RISK FACTORS

"The CancerCare Manitoba website emphasizes "YOU can reduce your cancer risk!" But I feel people who already have cancer are the ones looking at the website and it's relevant to all adults. Constant efforts are taken to get the message out to us, but we don't hear it or choose not to listen. I think about this often. If only, if only someone, if only I, could come up with a creative way to communicate this message!"

- CCMB patient.

How healthy we are, depends on choices we make every day. These choices include our use of tobacco and alcohol, the food we eat, intensity and frequency of physical activity, staying up to date on vaccinations and cancer screening, protecting ourselves from the sun, and reducing our exposure to radon gas. Healthy lifestyle behaviours can protect us from cancer risk factors related to up to 40% of cancers. CancerCare Manitoba continues to reach the public with its messaging around cancer prevention and risk factors.

YOU CAN REDUCE YOUR RISK OF CANCER

Evidence shows that about 4 in 10 cancers could be prevented through lifestyle changes.[1-3] In fact, a Canadian research project has shown that about 70,200 cancer cases were attributable to lifestyle and environmental factors in 2015, as well as infections.[1] In Manitoba, at least 2,500 cancer cases could have been prevented in 2015.[1] The national research identified that the most common modifiable risk factors in Manitoba are use of tobacco, physical inactivity, low fruit consumption, and excess weight. These cancers can be prevented through healthy living, risk reduction interventions, policies, and public health campaigns.[1]

Table 3. Summary of cancer risk factors.

	Manitoba			How do we compare to the rest of Canada?	Why is this important?
	Past (2017)	Current (2021)	Trend		
INCREASE YOUR CANCER RISK					
OBESITY % of adults (age 18+) with Body Mass Index classified as "obese". Based on self-reported height and weight	29.0%	**33.9%**	↑	Prevalence of obesity in Manitoba is higher than the national average of 29.2% (2021).[4]	**Obesity is one of the leading factors related to cancer development.**[2,5] Worldwide, the burden of cancer attributable to obesity, expressed as population attributable fraction, is 11.9% in men and 13.1% in women.[6] Risk of cancer will continue to increase as national obesity rates rise.[2,7]
SMOKING % of current or occasional smokers (age 12+)	15.7%	**11.1%**	↓	Manitoba's smoking rate is slightly lower than the national average of 11.8% in 2021 (equates to about 3.8 million Canadians who currently smoke cigarettes).[4]	**Smoking is linked to mortality and chronic disease.**[8] 1 in 5 deaths in Canada are due to tobacco use. Smoking is a cause for many cancers including cancer of the lung, larynx, and esophagus, as well as heart disease, emphysema, and ulcers[1,2,7,9] The chance of being diagnosed with or dying from lung cancer decreases by 30-50% within 10 years of quitting.[2,7]
ALCOHOL % consuming more than 5 alcoholic drinks on one occasion for male (4 or more for female) within the past week (age 12+)	16.7%	**14.6%**	↓	Excessive alcohol consumption rate is slightly lower in Manitoba than the national average of 15.6% (2021).[4]	**Excessive alcohol consumption leads to increased risk for cancer.**[10] Alcohol consumption is linked to development of cancers of the oral cavity, pharynx, larynx, esophagus, colorectum, female breast, stomach, pancreas and liver.[2,3,11] Alcoholic drinks are classified as a Group 1 carcinogen by the International Agency for Research on Cancer.
REDUCE YOUR CANCER RISK					
FRUITS & VEGETABLES % consuming 5 or more servings of fruits and vegetables per day (age 12+)	25.0%	**19.7%**	↓	Fruit and vegetable intake rate in Manitoba is lower than the national average of 21.8% (2021).[4] The provincial rates range from 12% in Newfoundland and Labrador to 29% in Quebec.[12]	**Eating well can reduce overall cancer risk.** A high intake of green and yellow fruits and vegetables is linked to a reduced risk for lung, colon, esophagus, and stomach cancers.[3,7] Diets high in plant foods can protect against cancers of the endometrium and colon.[13,14]
PHYSICAL ACTIVITY Persons age 18+ who were categorized as moderately active or active based on the number of minutes of moderate to vigorous activity done in a week.	55.6%	**52.8%**	→	No significant difference in the proportion of Manitobans who are physically active compared to the national proportion - 53.9% (2021).[4]	**Physical activity can decrease the risk of developing cancer.**[15,16] Physical activity lowers the risk of developing colon cancer and may lower the risk for breast, prostate, stomach, lung, liver, and endometrial cancers.[3,5,7,14]
HPV VACCINATION % of 17-year old girls who received full doses of the HPV vaccine.	62.7%	**72.6%**	↑	HPV vaccination completion rates (i.e., full doses) for 2021 range from 57.5% to 77.2% across Manitoba.[a] Across Canada these rates range from 57.1% to 91.3%.[17] To help eliminate cervical cancer, a national target has been set to vaccinate 90% of girls by 2025.[18]	**HPV vaccination can protect you from HPV related cancers.** The HPV vaccine provides protection against certain types of HPV that can cause genital warts, cervical cancer, as well as cancers of the mouth, throat, anus, vulva, vagina and penis.[19]

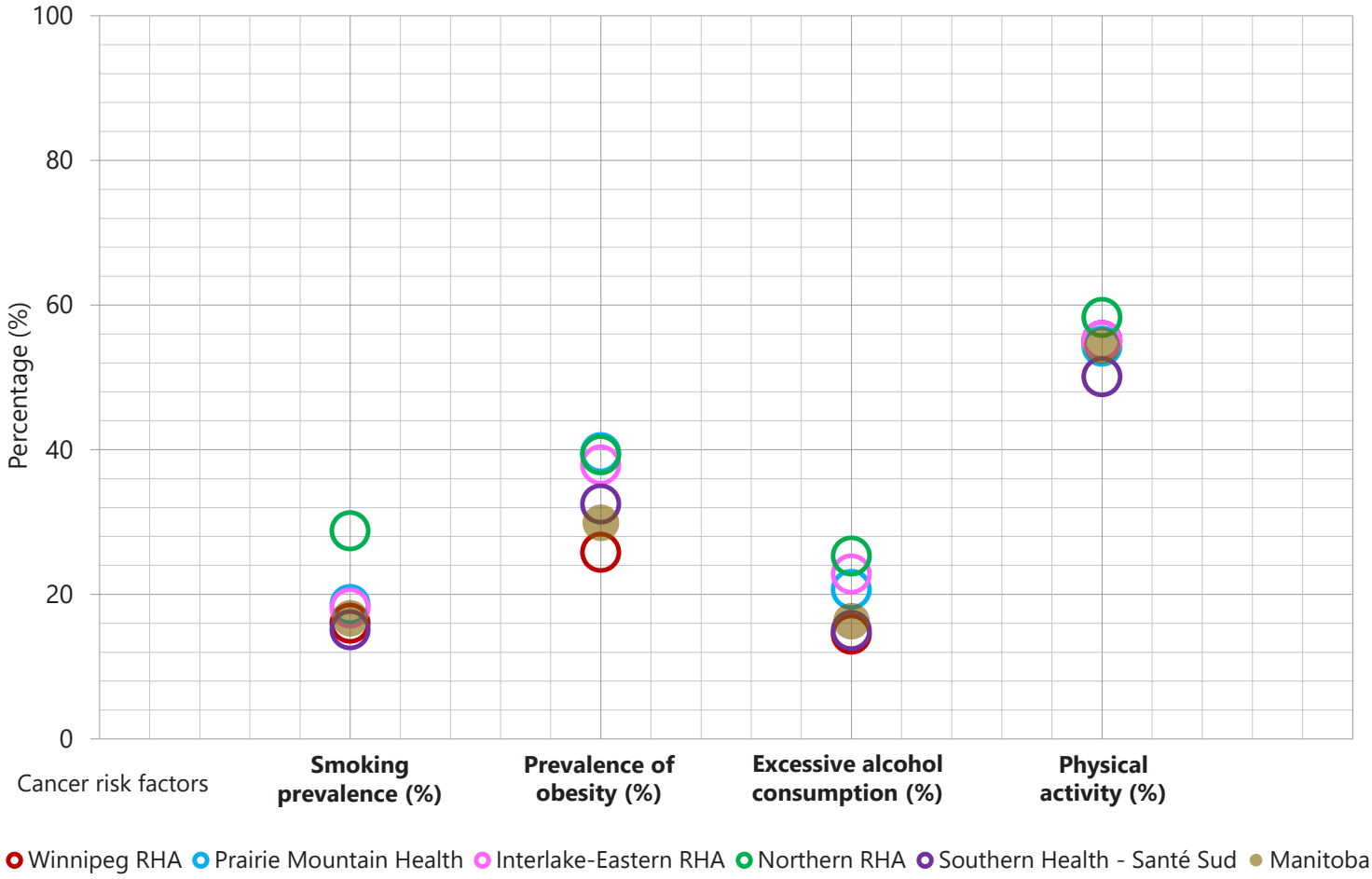
Trend arrow is based on + or - 10% of the past value. Arrow colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red). Past estimates for indicators from the Canadian Community Health Survey are for 2017. The current estimates for the same indicators are for 2021. The HPV indicator past and current estimates reflect vaccinations completed for the 2000 birth cohort between 2011-2017 (past) and vaccinations completed for the 2004 birth cohort between 2015-2021 (current).
[a] Province of Manitoba, Annual Report of Immunization Surveillance, 2021.
See technical appendix for data sources and methodological details.

Green = trend is good
Yellow = trend is neutral
Red = trend needs to improve
Up = trend is increasing by 10% or more
Horizontal = no change
Down = trend is decreasing by 10% or more

REGIONAL VARIATION IN RISK FACTORS

The figure below shows regional variation across key cancer risk factors.

Figure 7. Regional variation in cancer risk factors, across Manitoba for 2017-2018, data from the Canadian Community Health Survey.[20]



See technical appendix for data sources and methodological details.

Smoking remains a major health concern due to the substantial impact it has on health and life expectancy. The good news is people who smoke and quit can benefit from reduced risk of 12 types of cancers. [21,22]

High rates of obesity are a public health concern in Manitoba and the rest of Canada.

Tobacco smoking and a lack of physical activity were associated with the highest proportion of cancer cases in the Canadian Population Attributable Risk of Cancer (ComPARe) study released May 2019 .[1]

REDUCE YOUR CANCER RISK

You can help reduce your risk of certain cancers with these healthy lifestyle behaviors.[1,23]

For more information, visit www.cancercare.mb.ca/screening/cancer-prevention

Primary Message	Secondary Messages
Live smoke free	• Do not start smoking, quit smoking, and avoid second-hand smoke. • Keep tobacco sacred. Do not smoke commercial tobacco.
Move more	• Be physically active for at least two and a half hours per week. • Avoid sitting for more than six hours a day.
Eat healthy	• Eat plenty of fruits and vegetables, whole grains, beans and lentils. • Limit fast foods, highly processed food, sugar-sweetened drinks and red meat.
Avoid alcohol	• It is best not to drink alcohol. The less alcohol you drink, the more you reduce your risk.
Maintain a healthy weight	• Maintain a weight within the healthy range.
Get checked for cancer	• Most women age 50-74 should have a screening mammogram every two years to check for breast cancer. • Most women age 21-69 who have ever been sexually active should have a Pap test every three years to check for cervical cancer. Transgender and non-binary people may need to be screened for breast and cervical cancers. • Most men and women age 50-74 should do a colon cancer screening test every two years to check for colon cancer.
Be sun safe	• Avoid UV rays from the sun and indoor tanning beds. • Cover up, use sunscreen, and find shade when outdoors.
Get vaccinated	• Get vaccinated against human papillomavirus (HPV) if you are eligible. • Get vaccinated against hepatitis B if you are eligible.
Reduce exposure to radon	• Test your home for radon and reduce radon levels in your home.

Over the course of a year, CancerCare Manitoba's website attracted more than **9,000** views for its prevention messaging.

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MANITOBA CANCER SCREENING PROGRAMS

"I appreciate you contacting me. It was a great reminder. I understand that you will also contact me again when it is needed. I am in full support of this program and know its importance in detecting cancer early."

- Screening Participant.

CancerCare Manitoba's Screening Programs offer evidence-based organized screening for breast, cervical, and colorectal cancer. Cancer screening means checking for cancer before any signs or symptoms appear. It is beneficial as it enables us to detect cancer early leading to improved survival and fewer complications associated with advanced disease.

CANCERCARE MANITOBA'S CANCER SCREENING PROGRAMS

What is cancer screening and why is it important?

Cancer screening means checking for cancer before any signs or symptoms appear. Research shows that we are more likely to find cancers early, before they advance to late stage cancer, with effective evidence-based cancer screening.[1] The benefits of screening allow us to not only detect cancer at an earlier stage, but also improve chances of survival and prevent complications associated with advanced disease.[1] Most Manitobans are eligible to participate in breast, cervical, and colorectal cancer screening.

OUR GOAL IS TO DECREASE DEATHS FROM BREAST, CERVIX AND COLORECTAL CANCER

CancerCare Manitoba Screening Programs

The CCMB Screening Programs include **BreastCheck**, **CervixCheck**, **ColonCheck**

The three programs operate population-based registries to:

- ✓ Identify individuals for cancer screening
- ✓ Send invitation letters to encourage participation
- ✓ Communicate screening test results to participants and their healthcare providers
- ✓ Facilitate diagnostic follow-up after abnormal screening results
- ✓ Evaluate program operations and impact on the population's health outcomes

How do screening programs look out for Manitobans?

- ✓ We provide or coordinate all cancer screening tests available to Manitobans
- ✓ We strategically recruit eligible Manitobans through correspondence letters and notifications, as well as through various health promotion activities
- ✓ We partner with healthcare providers to increase access to cancer screening services across the province with particular attention to underserved individuals
- ✓ We work with healthcare providers to ensure that individuals with abnormal screening results get the follow-up care they need
- ✓ We develop and share information and resources about cancer screening with the public and healthcare providers
- ✓ We facilitate informed decision-making regarding other potential screening programs and new technologies
- ✓ We keep up to date with policy implementation, national recommendations, and evidence

OVER THE LAST 5 YEARS (January 1, 2019 to December 31, 2023):

BreastCheck
Ages 50-74

Nearly **320,000** invitation and recall letters sent to eligible Manitobans.

Over **198,000** mammograms completed at BreastCheck sites and on the mobile.

1,009 breast cancers detected.

CervixCheck
Ages 21-69

270,000 invitation and recall letters sent to eligible Manitobans.

Nearly **21,000** fail-safe letters sent to Manitobans and their healthcare providers.

Approximately **505,000** Pap tests and **48,000** colposcopies registered in the CervixCheck Registry.

ColonCheck
Ages 50-74

Over **281,000** fecal test kits sent to eligible Manitobans.

Nearly **134,000** fecal tests were completed by Manitobans.

Nearly **5,500** Manitobans referred for follow-up testing after an abnormal fecal test.

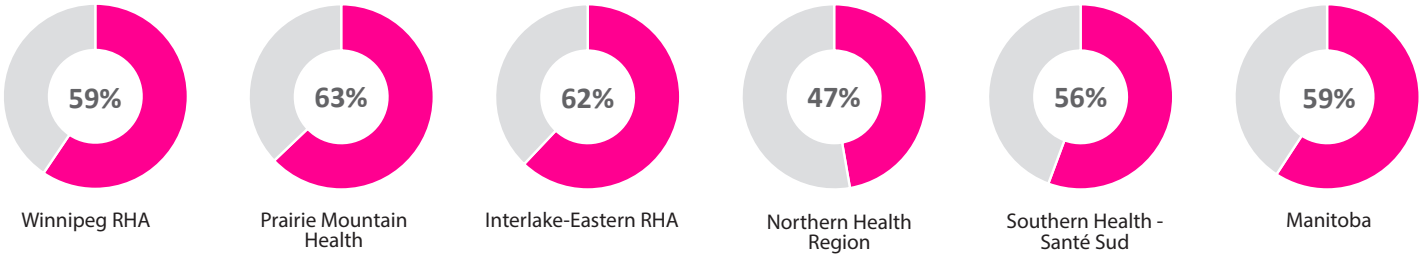
See technical appendix for data sources and methodological details.

MANITOBA CANCER SCREENING RATES

BreastCheck

Most women age 50 to 74 years of age should have a screening mammogram every 2 years. Transgender, non-binary, and gender diverse people may also need regular mammograms.

Figure 8. Percentage of Manitoban women 50-74 years of age who had a screening mammogram or bilateral diagnostic mammogram within 30 months, July 1, 2020 to December 31, 2022.

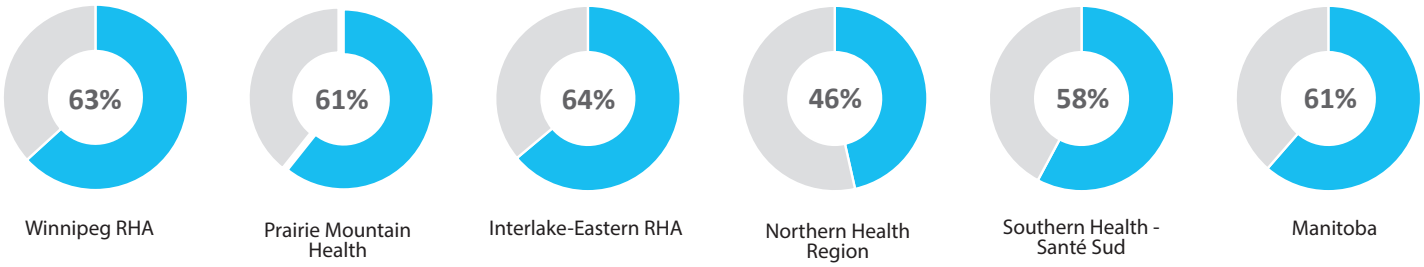


National target (50 to 74 years): ≥70% of the target population within 30 months.

CervixCheck

Most women age 21-69 who have ever had sexual contact should have a Pap test every 3 years. Transgender, non-binary, and gender diverse people may also need regular Pap tests.

Figure 9. Percentage of Manitoban women 21-69 years of age who had a Pap test within 42 months, July 1, 2019 - December 31, 2022.

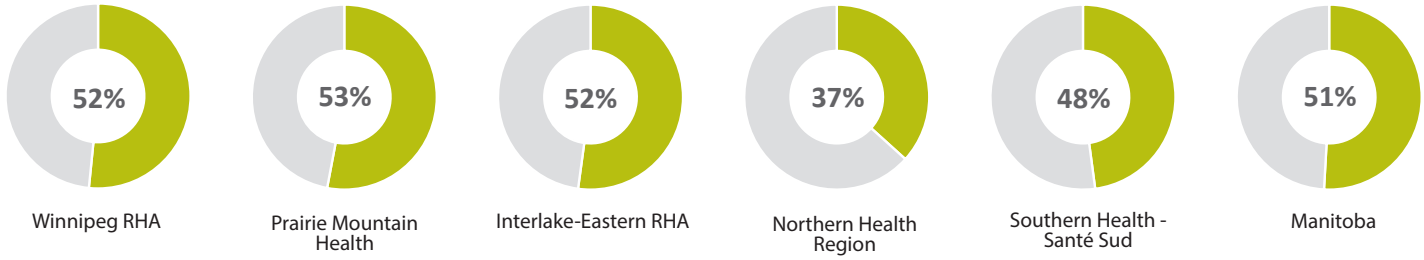


National Target (21 to 69 years): ≥ 80% should be screened within the recommended screening interval plus 6 months.

ColonCheck

Most people age 50-74 should do a home screening test (fecal test) every two years.

Figure 10. Percentage of Manitobans 50-74 years of age who are up to date[+] on colon cancer screening within 30 months, July 1, 2020 - December 31, 2022.



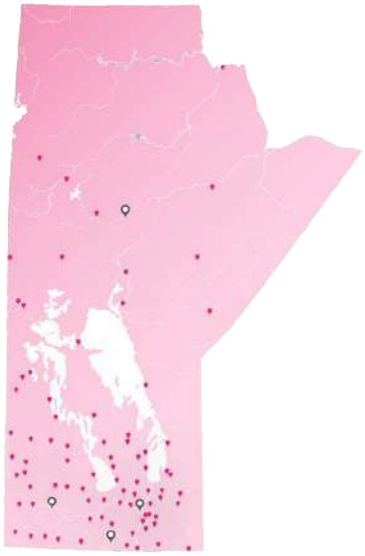
[+] *Up to date for screening describes individuals 50-74 years who have completed a fecal test within 30 months and/or a colonoscopy/sigmoidoscopy in the last five and half years.*

Note that this time period includes the reductions in screening due to COVID-19 pandemic.
See technical appendix for data sources and methodological details.

BREAST CANCER SCREENING IN MANITOBA - BreastCheck

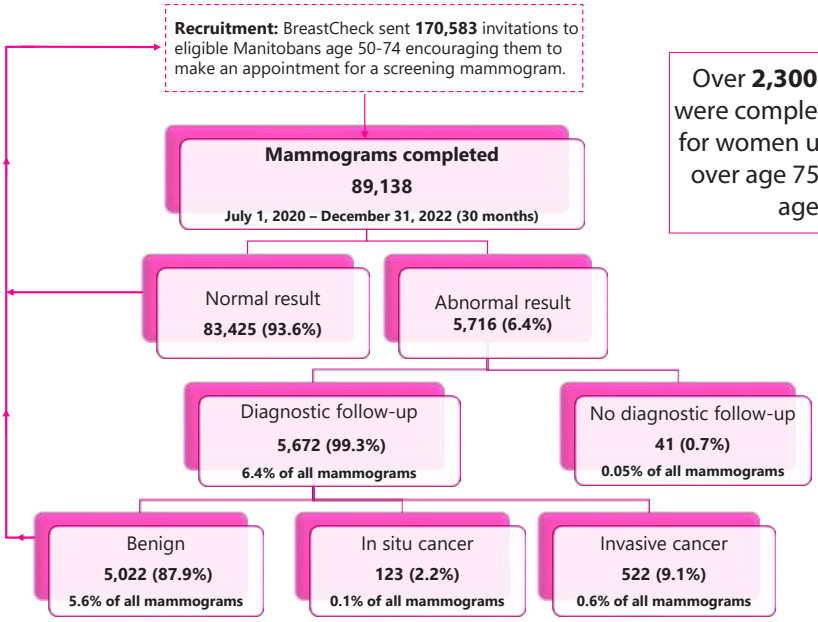
Breast cancer is the second leading cause of cancer death for women in Manitoba. About 1,000 women in Manitoba are diagnosed every year, and over 160 die from the disease.[2] Routine mammograms may find breast cancer 2 to 3 years before it can be felt. Breast cancer mortality can be reduced by up to 40% through early detection of the disease. BreastCheck was established in Winnipeg and Brandon in 1995, followed by locations in Thompson (1997) and Boundary Trails (2003). In 1998, a mobile program was created to provide mammograms at about 90 sites throughout Manitoba.

CancerCare Manitoba provides Mammogram Clinics across the province.



- BreastCheck mobile clinic sites
- BreastCheck permanent clinic sites

Figure 11. Breast cancer screening outcomes: Women 50-74 years of age screened, July 1, 2020 - December 31, 2022.



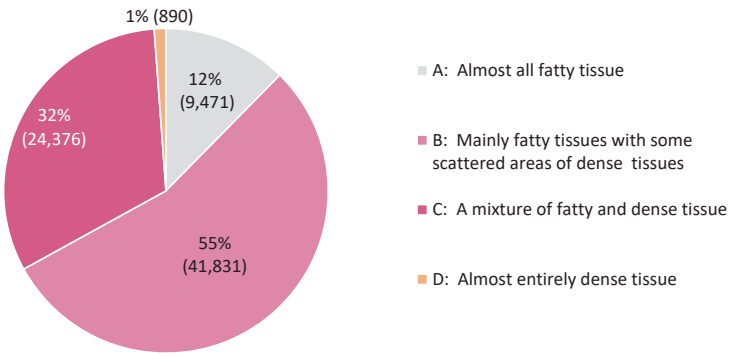
Over **2,300** mammograms were completed in 2022-2023 for women under age 50 and over age 75 (over 74,000 in age 50-74).

See technical appendix for data sources and methodological details.

BreastCheck aims to screen 70% of women to achieve a mortality benefit.

Since 2019, BreastCheck has been including breast density with screening mammogram results that are sent to clients and healthcare providers. Breast density is a term used by radiologists to describe how breast tissue appears on a mammogram image. In 2021, we started using the Breast Imaging Reporting and Data System (BI-RADS) to interpret the ratio of glandular and fibrous connective tissue to fatty tissue in the breast. Breast density is reported as categories A, B, C, and D. Although not an abnormal finding; breast density may mask cancerous tissue in mammograms.

Figure 12. BI-RADS breast density results, Manitoba, January 1, 2022- December 31, 2023.



See technical appendix for data sources and methodological details.

Over **18,000** mobile appointments completed in 2022-2023.

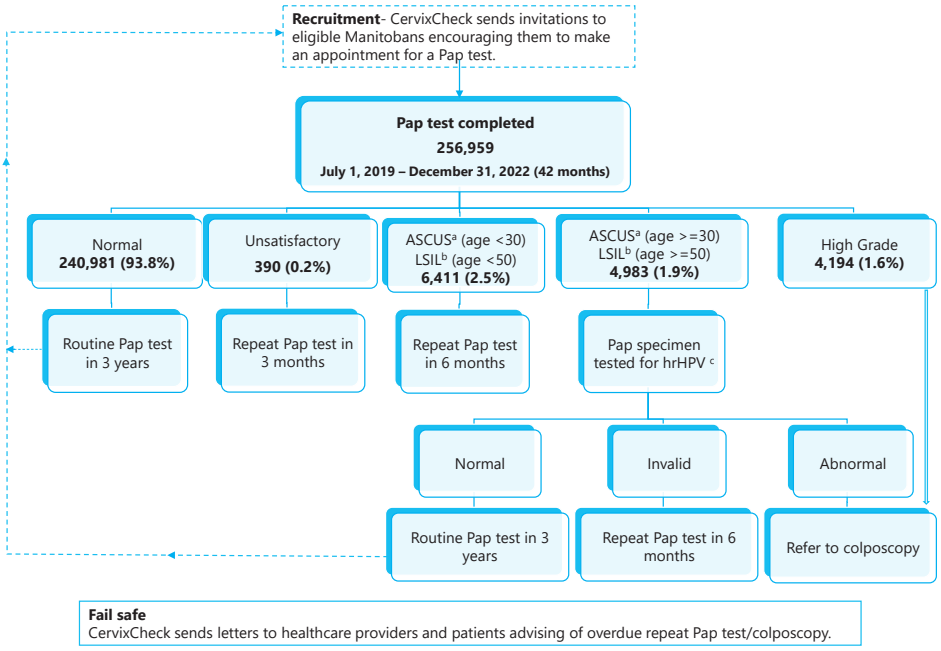
"It [BreastCheck mobile clinic] is the quickest, easiest way to have a breast exam. It saved me driving 3 hours one way." - Screening Participant

CERVICAL CANCER SCREENING IN MANITOBA - CervixCheck

Cervical cancer is the 14th most commonly diagnosed cancer in Canadian women.[3] Approximately 50 Manitobans are diagnosed each year, and 15 die from the disease.[2] Yet, cervical cancer is a preventable disease.[3-6] Since 2007, CervixCheck supports Manitobans in accessing appropriate and timely care through cervical cancer screening registry management, screening promotion and education. CervixCheck also supports healthcare providers in increasing screening access, and monitoring of quality assurances. In 2020, the World Health Organization launched a global strategy to eliminate cervical cancer by setting attainable targets for vaccination, screening, and treatment:[5]

- **HPV vaccination** (90% of eligible Manitobans vaccinated by age 17 years)
- **Cervical Cancer Screening** (80% of eligible Manitobans (21-69) are up-to-date with cervical cancer screening)
- **Treatment** (90% of individuals who had an abnormal screening result receive the appropriate follow-up care)

Figure 13. Cervical cancer screening pathway: Women 21-69 years of age screened, July 1, 2019 to December 31, 2022.



a. ASCUS: atypical squamous cells of undetermined significance.
b. LSIL: low-grade squamous intraepithelial lesion.
c. hrHPV: high-risk human papillomavirus. Pap specimen testing for hrHPV began in March 2022, and therefore results are not available for the timeframe specified.

HPV self-sampling

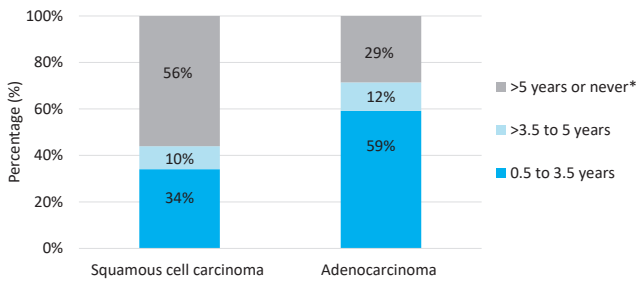
HPV self-sampling was piloted by CervixCheck in 2022-2023 (CPAC grant project). Out of 788 survey participants, **94%** found the swab easy or very easy to use and **94%** would be likely or very likely to recommend the kit to a friend.

HPV vaccination

In 2023, CervixCheck sent invitation letters to women eligible to receive the HPV vaccine (CCMB Foundation funded project). The project results showed an **increase in HPV vaccination rate** by 3.0 times (invite only) and 4.9 times (invite and reminder) when compared to the control group (no invite).

Screening history in cases of invasive cervical cancer (squamous cell carcinoma and adenocarcinoma).

Figure 14. Time since last Pap test by type of invasive cervical cancer diagnosis, January 1, 2018 - December 31, 2020.

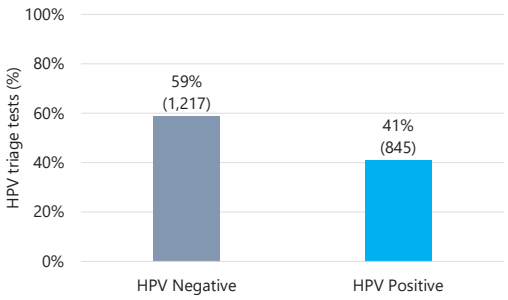


**Includes Manitobans who a) last Pap was >5 years ago, b) never had a Pap test, c) last Pap was within 6 months indicating diagnostic testing, or d) incomplete records.*

Human papillomavirus (HPV) triage testing

Some types of high-risk human papillomarvirus (hrHPV) are known to cause cervical cancer. Since 2022, Manitoba has been testing for hrHPV in eligible patients following an abnormal Pap result. If the associated HPV test is positive, the patient is referred to colposcopy for assessment and treatment.

Figure 15: Human papillomavirus (HPV) triage testing results, April 1, 2023 - March 31, 2024.

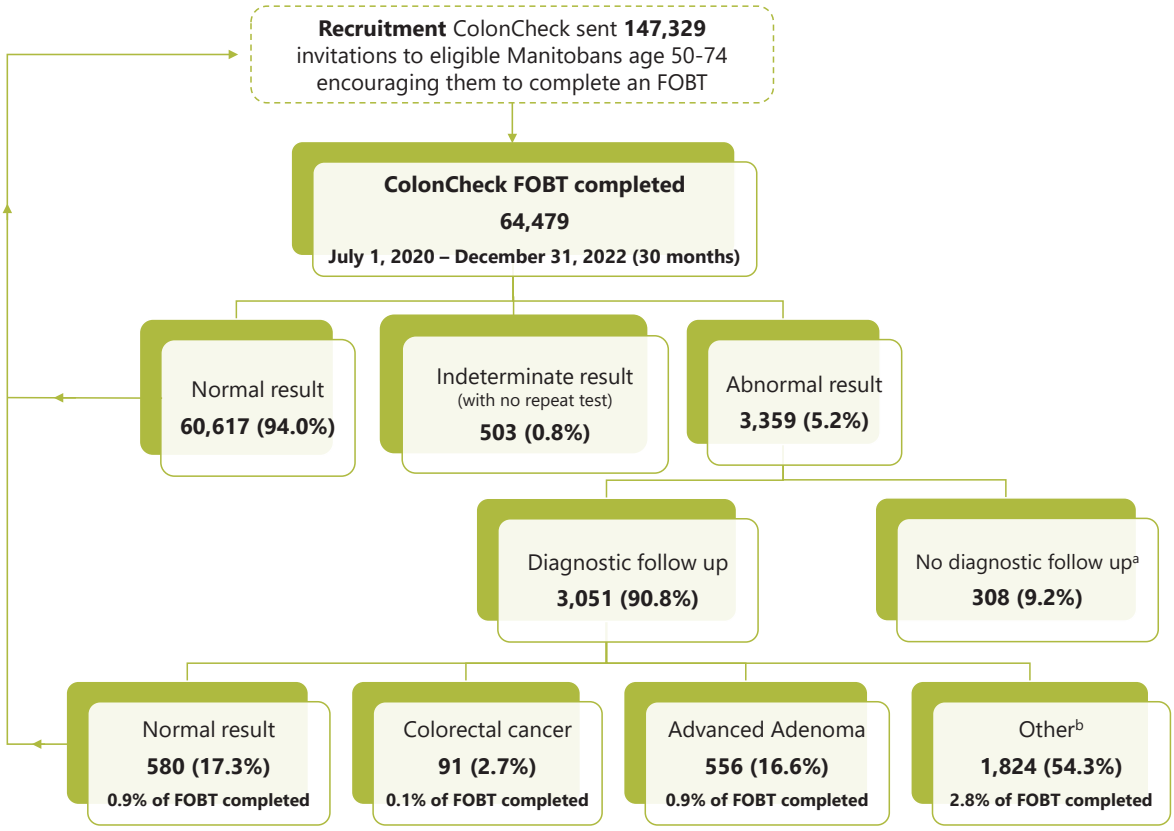


See technical appendix for data sources and methodological details.

COLON CANCER SCREENING IN MANITOBA - ColonCheck

Colorectal cancer (CRC) is one of the leading causes of cancer death in Manitoba, but there is convincing evidence that routine participation in colorectal cancer screening with appropriate abnormal follow-up can significantly reduce deaths from the disease.[7] Since 2007 ColonCheck, Manitoba's population-based colorectal cancer screening program, has been mailing home screening test kits to eligible Manitobans, managing the colorectal cancer screening registry, managing test results, and making colonoscopy referrals for participants with abnormal results. **Since 2007, a total of 356,482 fecal occult blood tests (FOBTs) were completed.**

Figure 16. ColonCheck screening outcomes: Individuals 50-74 years of age screened, July 1, 2020 to December 31, 2022.



[a] *Patients medically unsuitable for colonoscopy, colonoscopy refused by patients, or patient lost to follow-up.*
[b] *Other abnormal results include: adenoma requiring surveillance, other pathology, further tests needed, no final outcome recorded in the ColonCheck registry or the result is pending.*
See technical appendix for data sources and methodological details.

In June 2023, Manitoba transitioned from the FOBT to the fecal immunochemical test (FIT), and centralized distribution and management of results under ColonCheck. This single sample test is better at detecting human colonic blood, and has improved sensitivity for colorectal cancer and advanced adenomas. **Between June 2023 and May 2024, 38,811 FITs completed.**

In September 2022, ColonCheck began collecting colorectal health histories from participants to help assess their personal risk for colorectal cancer. The results are shared in screening test result letters to the participant and their healthcare providers. The goal of this initiative is to reduce the incidence and mortality of colorectal cancer though **appropriate and timely testing.**

In 2021, a pilot project funded by Canadian Partnership Against Cancer (CPAC) sent **14,277** colorectal cancer screening kits to people who had been previously invited but had never participated in colorectal cancer screening. Of those **re-invited for colorectal cancer screening, 18% participated** and are now integrated into routine screening at ColonCheck.

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DETECTION AND DIAGNOSIS OF CANCER

"I credit my family doctor with my Stage I breast cancer diagnosis. When he looked at my mammogram and saw just a shadow, he said, 'I think we should check that out.' how fortunate that was."

- CCMB patient.

For many cancers, early detection can result in more effective treatment and positive outcomes. Often individuals who are diagnosed with a later stage cancer do not have the same chances of cure as those with early-stage disease.

NUMBER OF NEW CANCER CASES

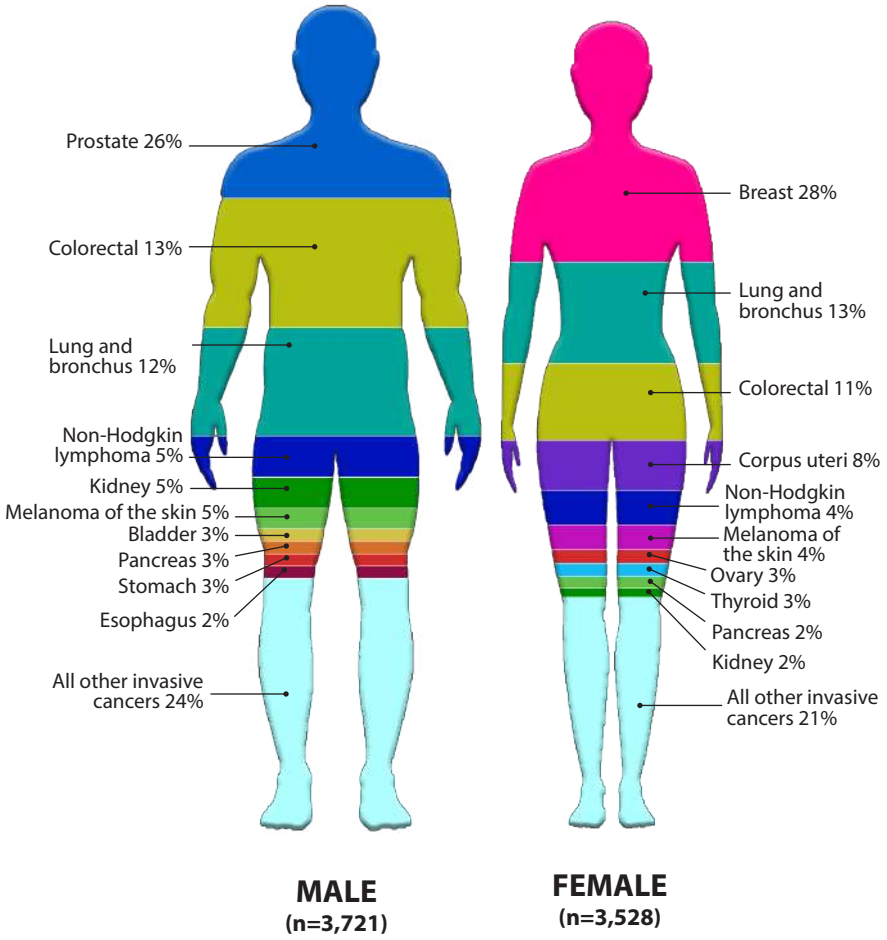
Incidence tells us how many new cases of cancer are diagnosed within a given time frame. The table below shows the number of cancer cases seen 2021, as well as a list of the most common cancers diagnosed. We also show age-standardized incidence rates (ASIR). Age-standardization allows us to compare rates between different populations even if they have different age distributions. This is particularly important because cancer is more common in older adults and one population may appear to have a higher rate of cancer simply because they have more people who are older, not because they are unhealthier or exposed to risk factors more than another population. We select a population to serve as a standard and produce incidence rates for each population. In this way, the ASIR provides a measure of how many new cancers diagnoses we saw out of every 100,000 Manitobans, accounting for age differences.

MOST COMMON CANCER DIAGNOSES IN MANITOBA, 2021

Table 4. Number of new cancer cases and age-standardized incidence rate (per 100,000) for the 20 most common cancer sites, 2021.

MANITOBA		
SITE	NUMBER	RATE (per 100,000)
Total - All invasive	***7,249***	***471.4***
Breast (female only)	999	127.5
Prostate	982	130.6
Lung & bronchus	901	57.1
Colorectal	897	58.6
Melanoma of the skin	315	20.6
Non-Hodgkin lymphoma	314	20.5
Corpus uteri (female only)	278	35.5
Kidney	243	16.1
Pancreas	201	12.9
Thyroid	169	11.8
Bladder	165	10.6
Stomach	145	9.3
Ovary	93	12.2
Multiple myeloma	93	5.8
Brain	91	6.1
Other digestive system	86	5.5
Esophagus	82	5.3
Liver	81	5.1
Acute myeloid leukemia	71	4.6
Chronic lymphocytic leukemia	63	4.1

Figure 17. Distribution of the number of cancer cases for the 10 most common cancer sites by sex, 2021.



The top four cancers account for 52% of all cancers in Manitoba.

Note: *This report highlights female breast cancer only. Please note that male breast cancer occurs at a rate of about 0.3% compared to female breast cancer.*

See technical appendix for data sources and methodological details.

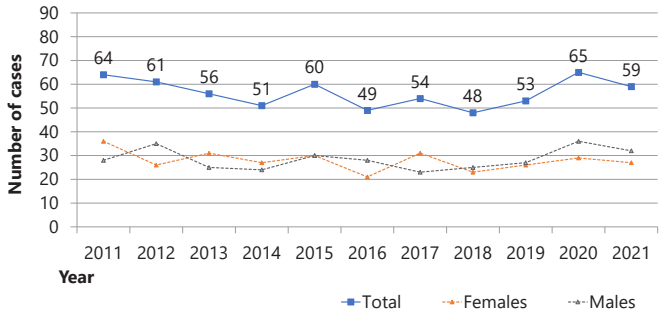
12%

Lung cancer is the most common cancer among all Canadians.[1,2] 12% of Manitobans with cancer have lung cancer.

CHILDHOOD CANCER

Cancer in children is rare; however it is still the second leading cause of death by disease among Canadian children.[3] Each year approximately 1000 children and youth under the age of 15 are diagnosed across Canada, and 100 die from this disease.[4,5] ***Approximately, 84% of children are expected to survive at least 5 years after their cancer diagnosis.***[6,7,21] Pediatric cancers are typically different to those seen in adults. Each case requires specialized high-quality care to improve chances for survival and provide ongoing comprehensive care to reduce life-long morbidity and late effects in survivors.[8,9] The division of pediatric oncology at CancerCare Manitoba provides all aspects of pediatric care to children diagnosed with cancer across Manitoba. This includes all active treatment, comprehensive follow-up care, and enrollment to multi-institutional clinical trials.

Figure 18. Number of pediatric cancer cases (ages 0-16) diagnosed in Manitoba by year, 2011-2021.



On average, 56 children are diagnosed with cancer every year.

Figure 19. Number of pediatric cancer cases (ages 0-16) diagnosed in Manitoba by age, 2019-2021.

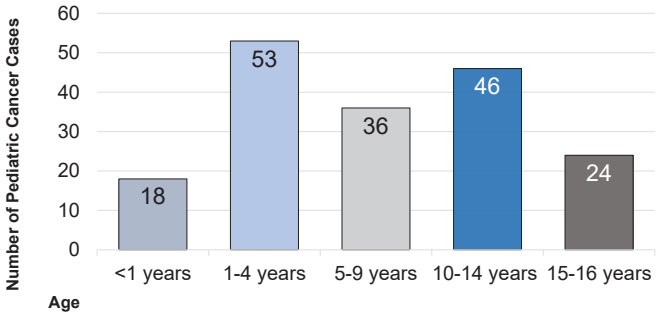


Table 5. Percentage of pediatric cancer cases (ages 0-16) diagnosed in Manitoba by type of cancer, 2019-2021.

- Leukemias (27%)
- CNS tumours (18%)
- Neuroblastomas (7%)
- Lymphomas (7%)
- Soft tissue sarcomas (6%)
- Malignant bone tumours (5%)
- Germ cell tumours (3%)
- Carcinomas (3%)
- Retinoblastoma (3%)
- Renal tumors (2%)
- Hepatic tumours (2%)
- Other (17%)

Childhood Cancers
(Ages 0-16)

Total cases (2019-2021) = 177

See technical appendix for data sources and methodological details.

The Cancer in Young People in Canada (CYP-C) program is a national, population-based surveillance system funded by the Public Health Agency of Canada. In partnership with the C17 Council, a network of the seventeen children's cancer hospitals across Canada, CYP-C studies pediatric cancers. It collects data on diagnosis, treatments, complications, and outcomes with the aim of:

- ✓ *helping us to better understand risk factors*
- ✓ *improving outcomes*
- ✓ *enhancing the quality and accessibility of care*
- ✓ *reducing late effects*

Challenges of facing cancer for children and adolescents and young adults (AYA):

Childhood
0-14 years

Developing:

- Physically
- Emotionally
- Cognitively
- Socially

Adolescence and young adulthood
15-39 years

Developing:

- Identity
- Independence
- Relationships
- Education
- Career

Disconnection from peers and social life

Loss of independence

Adapted from the Canadian Partnership Against Cancer

Cancer diagnosis and treatment early in life

ADOLESCENTS AND YOUNG ADULTS (AYA)

285 adolescents and young adults (AYA) were diagnosed with cancer in Manitoba in 2021.

Approximately 9,000 individuals ages 15-39 were diagnosed with cancer across Canada in 2021.[4] These individuals face cancer diagnoses at a difficult time – a time of self-discovery, education, launching careers, forming adult relationships, and making plans for their future.[10] Many AYA cancer survivors will live another 50-60 years beyond their diagnosis and treatment.[10] In 2004, Statistics Canada estimated that 16,000 potential life-years were lost to cancer in individuals aged 15-29.[11]

Table 6. Invasive cancer diagnoses in Manitoban adolescents and young adults, 2021.

Ages 15-29
Total cases in 2021 = 84

- Hodgkin lymphoma (15%)
- Thyroid (13%)
- Testis (12%)
- Brain (10%)
- Colorectal (8%)
- Non-Hodgkin lymphoma (7%)
- Other (35%)

(Cancer sites with 5 or less cases were combined into "Other". This category represents 15 different cancer types)

Ages 30-39
Total cases in 2021 = 201

- Breast (21%)
- Thyroid (13%)
- Colorectal (8%)
- Melanoma of the skin (7%)
- Cervix uteri (7%)
- Kidney (5%)
- Ovary (4%)
- Testis (4%)
- Hodgkin lymphoma (4%)
- Non-Hodgkin lymphoma (3%)
- Other (21%)

(Cancer sites with 5 or less cases were combined into "Other". This category represents 18 different cancer types)

Improving care of underserved populations, including AYAs living with cancer, is a priority for CCMB. The AYA Program offers tailored, personalized psychosocial support to patients and their caregivers, fertility preservation counselling, sexuality guidance, physical and vocational rehabilitation, dietary advice, and peer connections, and is involved in supporting clinical trial enrollment for AYAs.

Table 7. Three pillars of CancerCare Manitoba's Strategy for Adolescents and Young Adults.

	Psychosocial, Educational, Nutritional, and Physical Rehabilitation	Oncofertility	Clinical Trial Accrual
AIM	To develop a multidisciplinary AYA Program to respond to individuals' unique needs during and after cancer treatment.	To provide timely information and access to fertility preservation services.	To provide increased access to clinical trials and precision oncology.
WHY?	AYAs face distinct challenges requiring specialized and personalized care that includes tailored psychosocial assistance to improve their experience living with cancer.[10]	Fertility after cancer can be affected by many factors (e.g., type of cancer, treatments, age at diagnosis, time since treatment).	Globally, AYA accrual to clinical trials is low, meaning fewer opportunities to access new drugs and better treatment.[12-17]
PROGRESS	The AYA Psychosocial Program began in 2017 with about 300 referrals within the first two years. Capacity of the program was increased in 2022 supporting nearly 800 referrals between July 2022-June 2024. Overall, **1,725** referrals were made since inception.	An oncofertility screening question has been added to our patient-reported outcomes tool, COMPASS, used at every physician visit. This will help us to ensure patients have timely access to oncofertility counselling and fertility clinic referrals.	As of December 31, 2023, **85* clinical trials** were open at CCMB which eligible AYA patients living with different cancers could participate.

**NOTE: 46 clinical trials are available for CCMB patients between 15 - <18 years, and 39 are available for CCMB patients between 18-39 years.*
See technical appendix for data sources and methodological details.

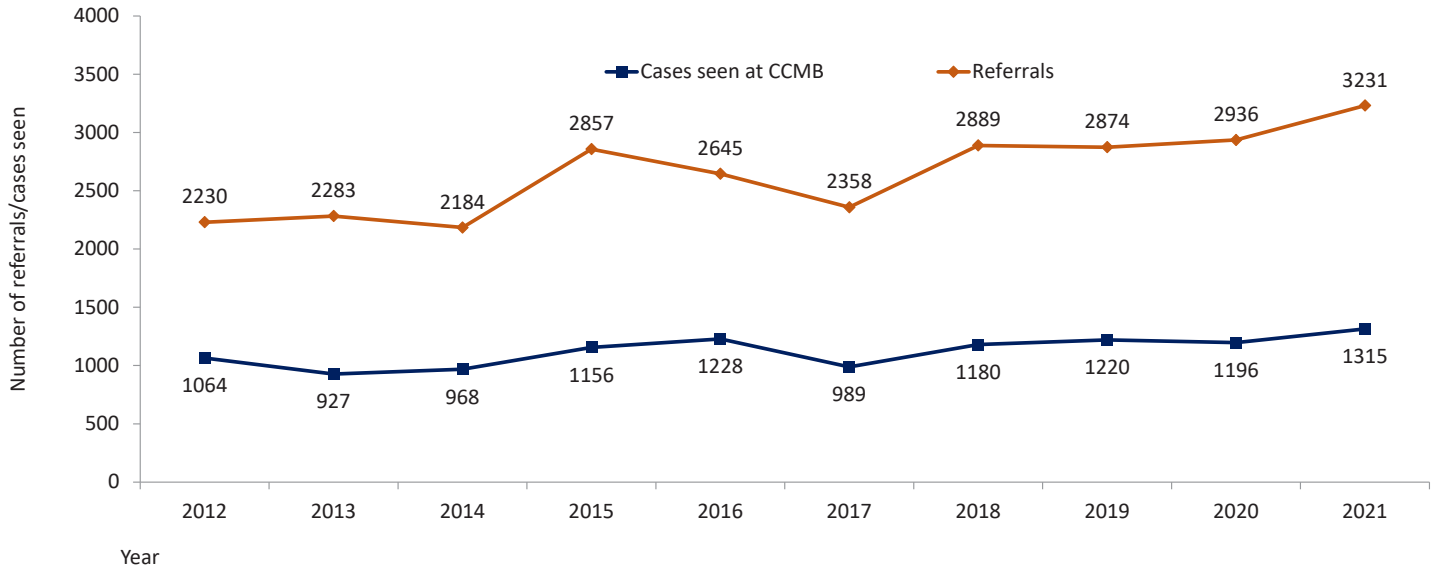
BLOOD DISORDERS

People can be affected by different types of blood conditions and blood cancers. These include anemia, bleeding disorders, blood clots, and blood cancers such as leukemia, lymphoma, and myeloma. A hematologist applies specialized knowledge to treat patients with blood conditions and cancers and often these treatments require specialized multidisciplinary care within oncology. This is why CancerCare Manitoba (CCMB) includes blood disorders within its mandate of care – a unique approach in Canada. An example of this comprehensive multidisciplinary care can be seen in our hemoglobinopathy and hemophilia clinics. The workload associated with referral, diagnosis, and clinical management of blood disorders is significant as these patients require very complex care within the oncology system.

Currently, data on blood disorders are difficult to capture on a population-wide basis. This means we cannot reliably report the number of diagnoses per year or the types of disorders seen most often. Referral data from the Provincial Cancer Referral and Navigation Service provides insight into the number of Manitobans referred to CCMB with signs and symptoms of blood disorders. CCMB hematologists manage care for many of these initial referrals to CCMB. Those referred back to their primary care providers are offered detailed information for clinical management that can occur outside the oncology system.

Weekly hematology referrals increased by nearly 40% between 2017 and 2021.

Figure 20. Number of hematology referrals received and the number of cases seen at CCMB over time, 2012-2021.



**Complete centralization of the hematology triage process through CCMB's Provincial Cancer Referral and Navigation Service for MacCharles and St. Boniface sites was fully implemented in August 2009. The sharp increase in 2015 reflects the retirement of a Community Hematologist and transfer of patients to CCMB Hematology. This occurred during concurrent increase of re-referrals to multiple hematologists.*

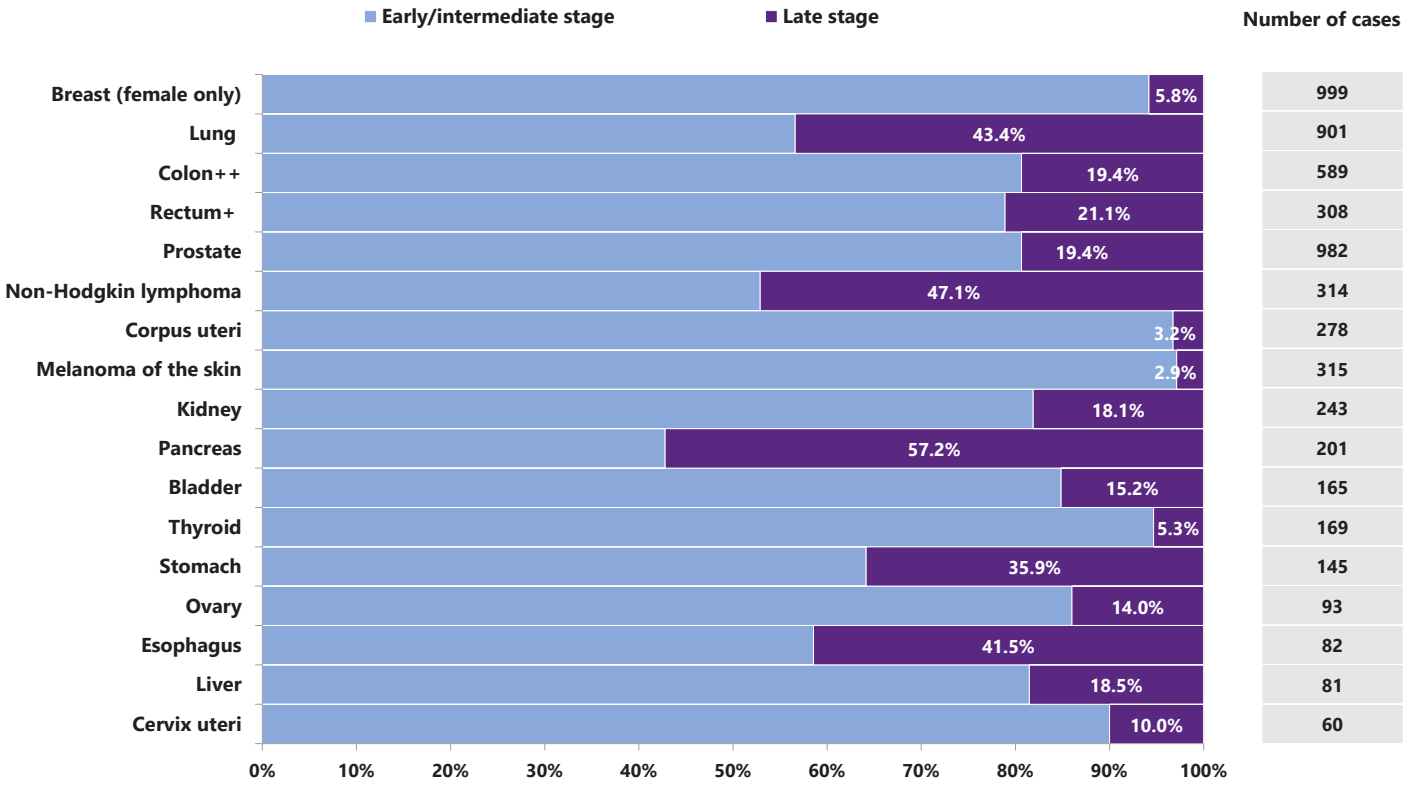
See technical appendix for data sources and methodological details.

The provision of all care related to blood disorders at CCMB is in addition to the 7,249 new cancer cases CCMB oncologists provide care for on an annual basis.

CANCER DIAGNOSIS BY STAGE

For many cancers, early diagnosis can result in more effective treatment and positive outcomes. Often individuals who are diagnosed with a later stage cancer do not have the same chances of cure as those with early-stage disease. The survival rate for those diagnosed with later stage disease is often lower. The percent of late-stage diagnoses (stage IV) are highlighted for each type of cancer in the figure below.

Figure 21. The percent of late-stage diagnoses (stage IV) by cancer site, 2021



Notes:

- *+ includes rectosigmoid; ++Colon excludes rectum.*
- *Staging data is for 2021 with the list of cancers referenced reflecting cancer types with more than 60 cases in that year; in keeping with international coding conventions all invasive brain tumours, multiple myeloma, and leukemia are considered unstageable using the collaborative staging system utilized by all population-based North American Association of Cancer Registries. Non-Hodgkin lymphoma only includes data for the more aggressive subtypes.*
- *Early/Intermediate includes non-metastatic and unknown-stage cancer diagnoses, while late stage includes metastatic cancer diagnoses.*

The percentage of late stage pancreas cancer increased from 46% in 2016 to 57% in 2021.

Recently, pancreas cancer has become the third most common cause of cancer death in Canada.[4]

See technical appendix for data sources and methodological details.

CANCER DIAGNOSIS BY STAGE

HOW CANCER PROGRESSES FROM STAGE TO STAGE

Cancer staging is based on information related to the growth and spread of a cancer. Cancer cells grow and divide without order and control, and do not die when they should. As a result, a mass of tissue, called a tumour, may develop. Tumours usually start out as localized growths limited to a specific organ or body part (Stages 0-I). As a tumour grows, it may invade nearby tissues and organs (Stages II-III). Cancer cells can also break away from the tumour and enter the bloodstream or the lymphatic system. This means that cancer cells can spread from the primary site to lymph nodes or other organs. The spread of cancer is called metastasis (Stage IV).[18]

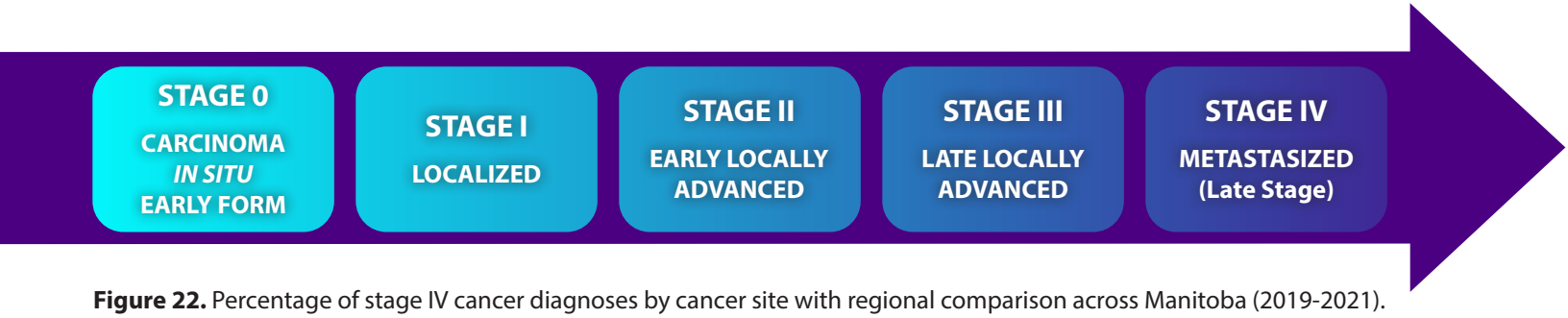


Figure 22. Percentage of stage IV cancer diagnoses by cancer site with regional comparison across Manitoba (2019-2021).

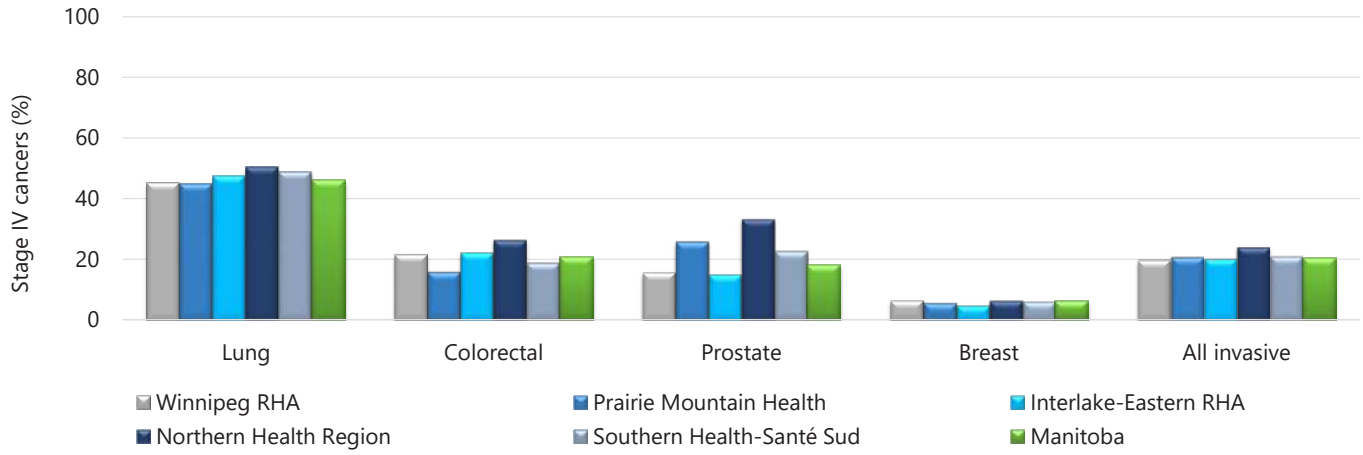
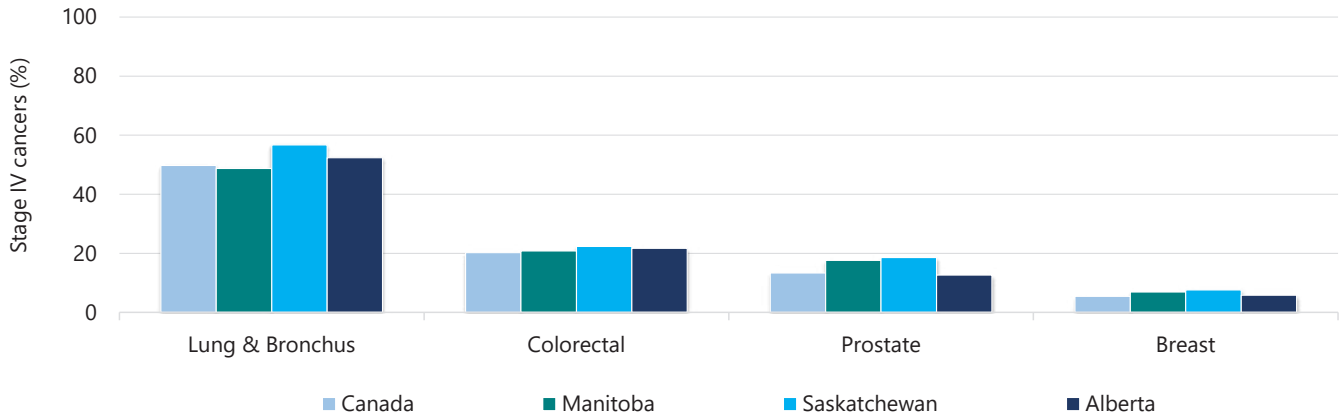


Figure 23. Percentage of stage IV cancer diagnoses by cancer site with comparison to Prairie provinces and Canada overall (2013-2017).[19]



Regardless of region or province, lung cancers were most likely to be diagnosed after they have metastasized (late stage).[1]

**For the 2010-2017 diagnosis years, the staging of the cases was done using the Collaborative Stage (CS) framework as described in the seventh edition of the American Joint Committee on Cancer (AJCC) Cancer Staging Manual, Springer, 2010.*
See technical appendix for data sources and methodological details.

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WAIT TIMES

"Through my twelve year cancer journey I received fabulous care and no worry about cost, or wait times, or doctor availability. I began by accepting I knew nothing about cancer and put my faith in the knowledge of the professionals in charge of my care. I was consulted about the care and treatment, and aware that coordination was required to make it all work. All I had to do was show up."

- CCMB patient.

Waiting for test results can be anxiety provoking and a difficult time for patients. In collaboration with its service delivery partners, CancerCare Manitoba works to monitor wait times to ensure all Manitobans are able to receive timely diagnoses, appointments with oncologists, and timely access to cancer treatment.

WAIT TIMES

CancerCare Manitoba's (CCMB) Wait Times Initiative has been systematically working with clinical and analytical experts to build on existing information technology infrastructure to report comprehensively on wait times between different points of the cancer continuum. Currently, we report on wait times for the following:

- ✓ Screening mammogram abnormal result to final diagnosis
- ✓ Abnormal fecal test result to colonoscopy
- ✓ Pathology specimen collection date to diagnosis
- ✓ Referral received at CCMB to initial consult with medical oncologist
- ✓ Initial consult with medical oncologist to first chemotherapy treatment
- ✓ Ready-to-treat to initiation of radiation therapy

WAIT TIMES: BREAST AND COLON CANCER SCREENING

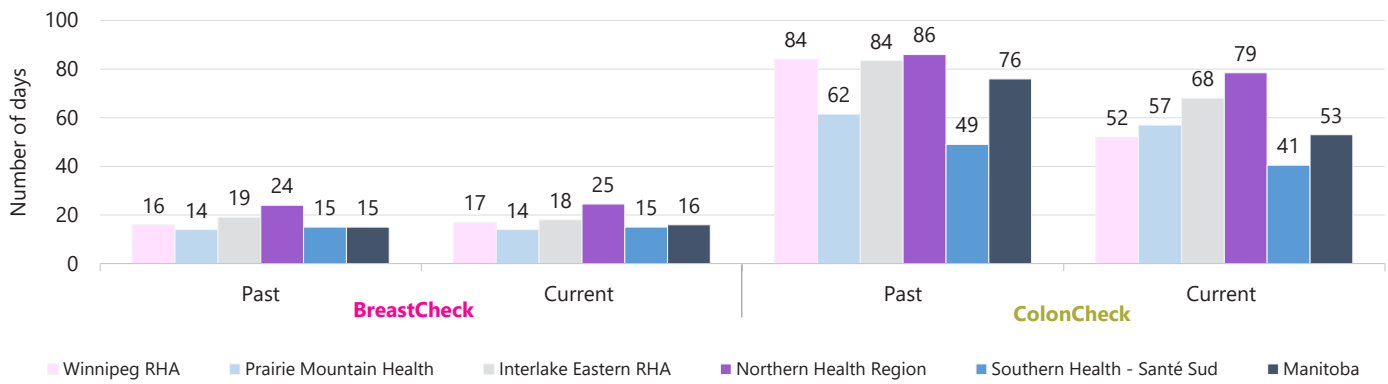
Research shows long waits after abnormal screening results can trigger increased acute anxiety for individuals. Reducing the time people wait to complete all follow-up testing can help to reduce this anxiety.[1] The CancerCare Manitoba Screening Programs (BreastCheck, ColonCheck) coordinate follow-up testing for most individuals following an abnormal screening mammogram or fecal test. BreastCheck and ColonCheck monitor wait times on a continuous basis and alter referral patterns if necessary to shorten wait times. BreastCheck has shown that a facilitated follow-up process results in shorter wait times compared to follow-up coordinated by referral back to a primary care provider.[2]

Table 8. Breast and colon cancer screening wait times.

WAIT TIMES	Past	Current	Direction of Change
Breast Cancer Screening Wait Times - BreastCheck Median wait time (in days) for women (ages 50-74) from an abnormal screening mammogram result to final diagnosis - No tissue biopsy (core or open) performed: Past: 14 days; Current: 14 days - Tissue biopsy (core or open) performed: Past: 36 days; Current: 35 days ***National Targets:*** - No tissue biopsy (core or open) performed: >90% within 5 weeks (35 days) - Tissue biopsy (core or open) performed: >90% within 7 weeks (49 days)	**15.0 days**	**16.0 days**	→
Colon Cancer Screening Wait Times - ColonCheck Median wait time (in days) for individuals (ages 50-74) from an abnormal fecal test result to colonoscopy ***National Target:*** < 60 days from abnormal test for >90% of people.	**76.0 days**	**53.0 days**	↓

Breast Cancer: Past - January 1, 2017 to December 31, 2018; Current: January 1, 2019 to December 31, 2020.
Colon Cancer: Past - January 1, 2016 to December 31, 2017; Current: January 1, 2018 to December 31, 2019.
Trend arrow is based on + or - 10% of the past value with colour showing the direction of change (green = improvement; red = decline; yellow = neutral).

Figure 24. Variation in median waiting time (in days) for breast and colon assessment waits across Manitoba Regional Health Authorities (RHAs).



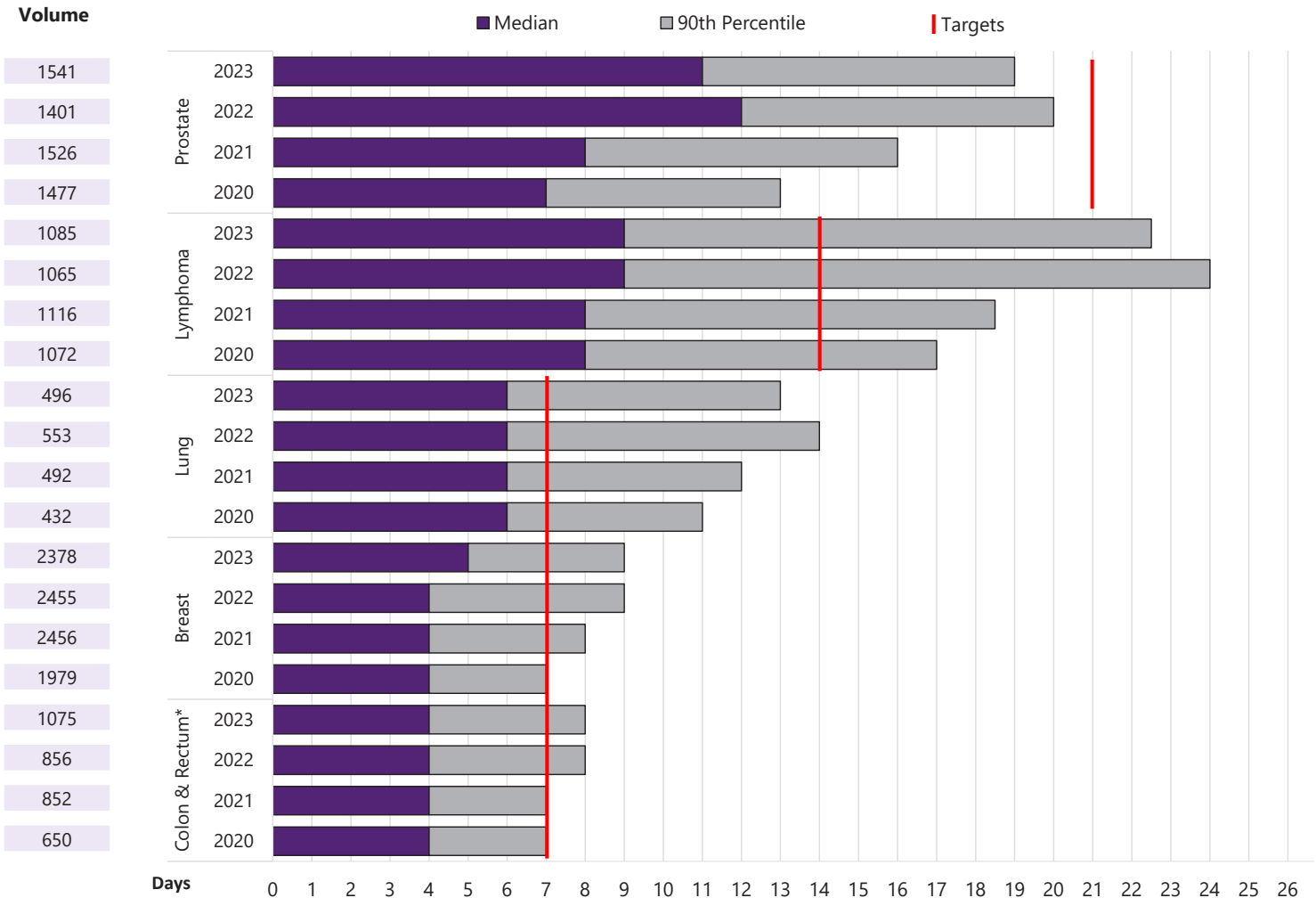
Breast Cancer: Past - January 1, 2017 to December 31, 2018; Current: January 1, 2019 to December 31, 2020. Wait time from abnormal screening mammogram result to final diagnosis.
Colon Cancer: Past - January 1, 2016 to December 31, 2017; Current: January 1, 2018 to December 31, 2019. Wait time from abnormal fecal test result to colonoscopy.

See technical appendix for data sources and methodological details.

PATHOLOGY WAIT TIMES

Figure 25. Pathology wait times, 2020-2023.

Wait times are calculated as the number of days between a) the date of specimen collection to b) the date the result was reported by pathologist.



Note: *All targets were initially identified by the Cancer Patient Journey Initiative (CPJI) and continue to be assessed.*
**flagged as clinical suspicious on the requisition based on guidelines set out in CPJI and ability to identify highly suspicious cancers with endoscopy.*

See technical appendix for data sources and methodological details.

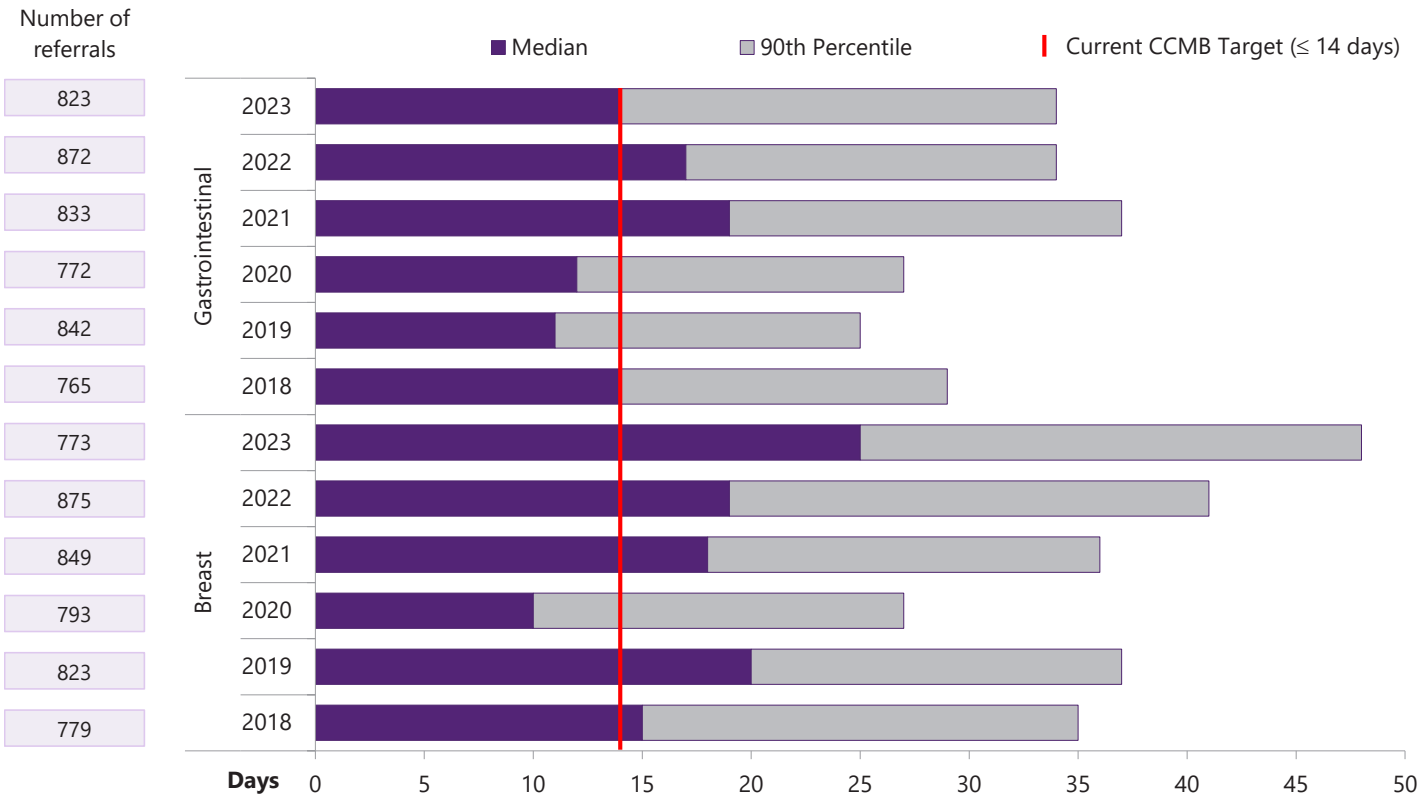
WAIT TIMES: WAITING TO SEE A MEDICAL ONCOLOGIST

Referrals to CancerCare Manitoba (CCMB) are processed by the Provincial Cancer Referral and Navigation Service. This team triages referrals efficiently to minimize the time patients wait before their first consult with a medical oncologist.

REFERRAL WAITS

Figure 26. Referral wait times, 2018-2023.

Wait times are calculated as the number of days patient waited between a) their referral to CCMB and b) their first consultation with a medical oncologist.



Note: *Data excludes delays caused by factors outside the control of CCMB, including delays due to missing documentation, medical delays (e.g., cancer diagnosis confirmation, lab and imaging test results, surgery and recovery time, etc.) or personal decisions to wait (e.g., travel, timing).*

See technical appendix for data sources and methodological details.

We're working hard to report wait times for other cancer types.

Keep watching the CCMB website for new information!

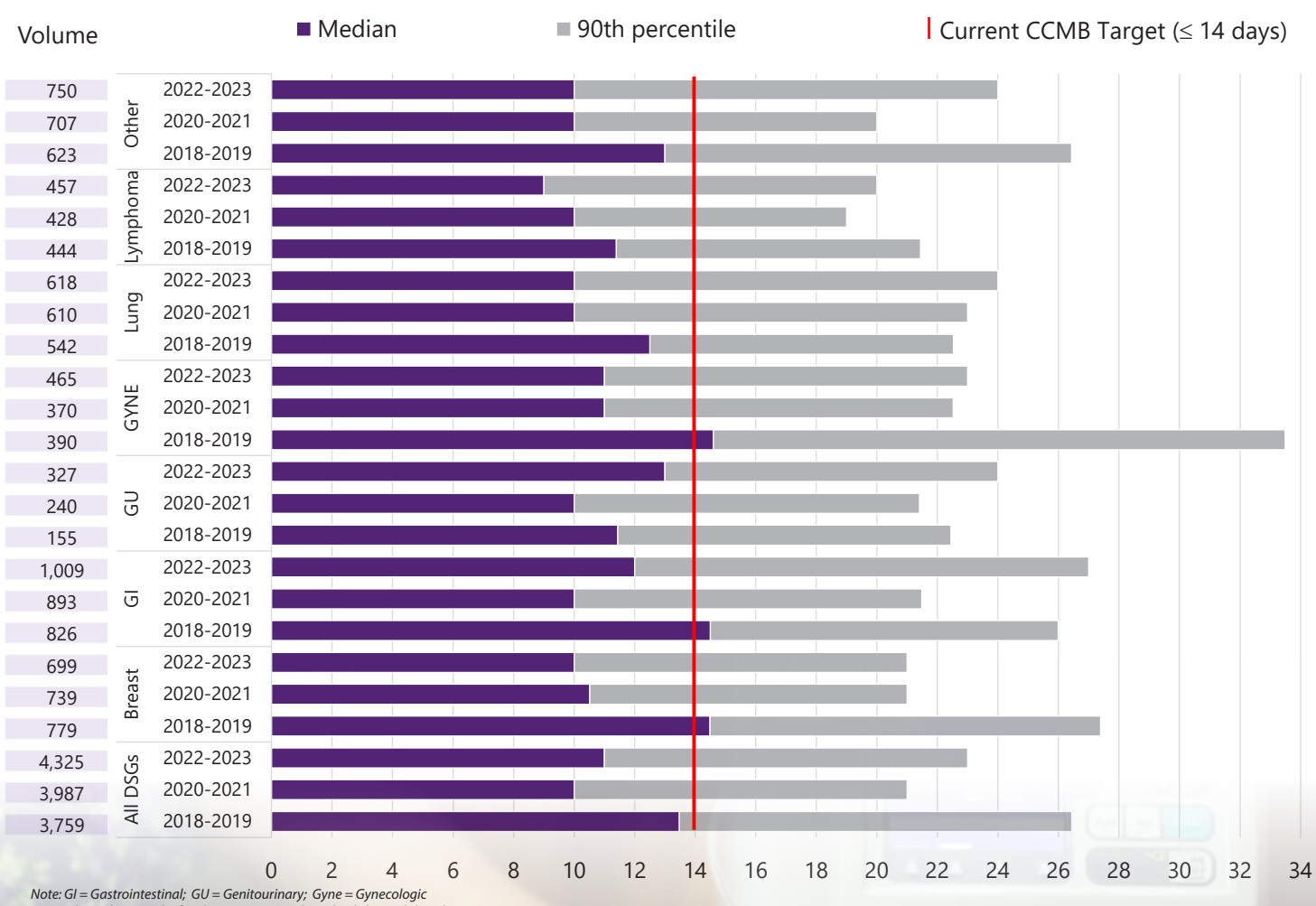
WAIT TIMES: WAITING FOR TREATMENT

INTRAVENOUS (IV) CHEMOTHERAPY WAITS

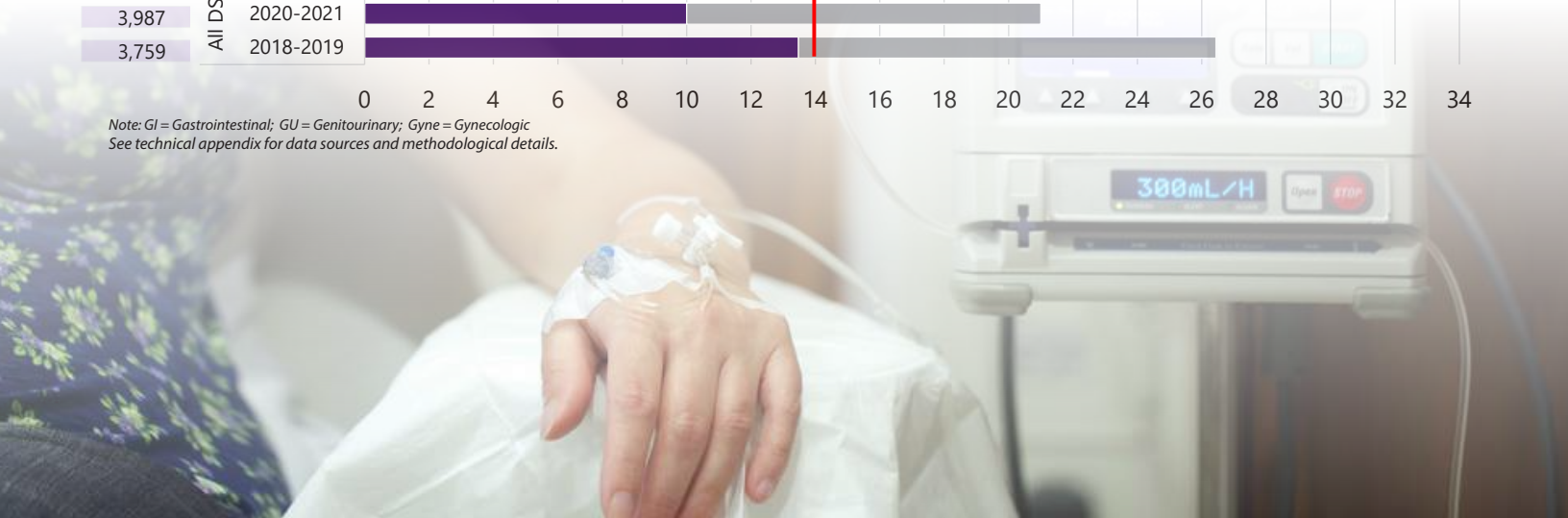
Figure 27. IV chemotherapy wait times, 2018-2019, 2020-2021, and 2022-2023.

Wait times are calculated as the number of days between a) their consult with a medical oncologist where a decision-to-treat was made and b) their first IV chemotherapy treatment.

We continue to implement new and innovative ways to decrease wait times for IV chemotherapy across Manitoba!



Note: GI = Gastrointestinal; GU = Genitourinary; Gyne = Gynecologic
See technical appendix for data sources and methodological details.

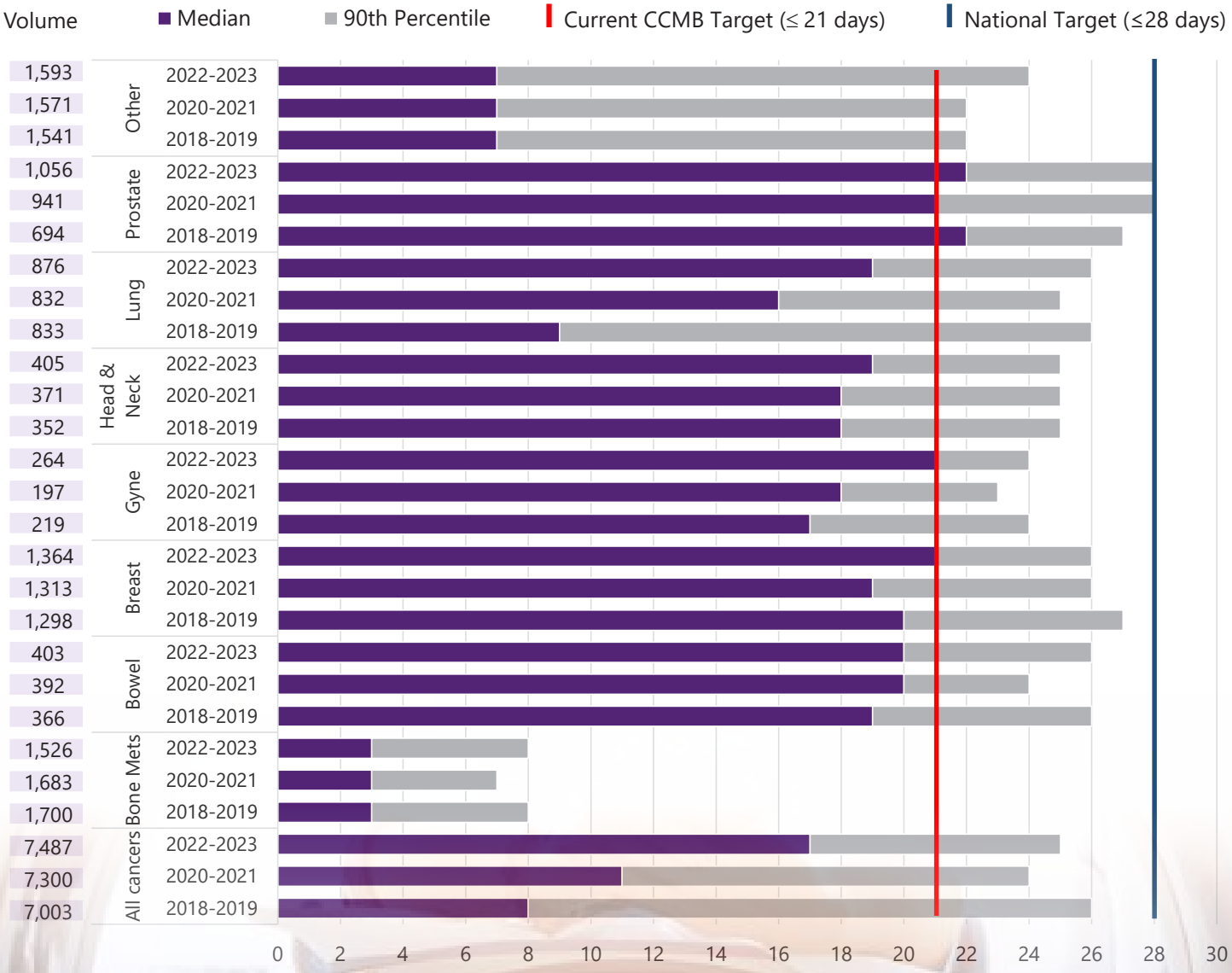


WAIT TIMES: WAITING FOR TREATMENT

RADIATION THERAPY WAITS

Figure 28. Radiation therapy wait times, 2018-2019, 2020-2021, and 2022-2023.

Wait times are calculated as the number of days between a) being identified as ready-to-treat by the radiation oncologist and b) their first radiation treatment.



Note: *Gyne = gynecologic; Mets = Metastases*
See technical appendix for data sources and methodological details.

REFERENCES

1. Olivotto, I. A., Bancej, C., Goel, V., et al. (2001). *Waiting times from abnormal breast screen to diagnosis in 7 Canadian provinces.* CMAJ, 165(3), 277-283.
2. Decker, K.M., Harrison, M., Chateau, D. (2004). *Influence of direct referral on time to diagnosis after an abnormal breast screening result.* Cancer Detection and Prevention, 28(5): 361-367. DOI:10.1016/j.cdp.2004.07.002

CANCER TREATMENT

"The care I received was excellent and the care providers in all departments responsible for my overall health were caring, compassionate, and professional."

- CCMB patient.

Once a patient is diagnosed with cancer the health care team will identify the available treatment choices. The reality is that cancer is not a single disease with a single type of treatment. There are more than 200 different kinds of cancer, each with its own name and treatment. Some people may only have one type of treatment while others will have more than one. Cancer treatment requires careful consideration of the evidence-based options available. This can include more than one of the major therapeutic modalities: surgery, radiotherapy, and systemic therapy (chemotherapy). CancerCare Manitoba staff know receiving treatments brings patients and their families into a world of the unknown. We work to involve patients and their loved ones into treatment decisions to help ease patient anxiety about the care received.

CANCER TREATMENT

2/5

MORE THAN TWO IN FIVE CANCER PATIENTS UNDERWENT SYSTEMIC THERAPY IN MANITOBA.

Table 9. Comparison between past and current estimates for percentage of patients who were treated with systemic therapy, radiation therapy, and surgery, including comparison between Regional Health Authorities (RHA).

	Past	Current	
	2014-2016	2019-2021	RHA Range
SYSTEMIC THERAPY Patients receiving systemic therapy (cancer drugs or chemotherapy), all cancers	39.4% (n=7,662)	42.5% (n=9,150)	40.6% to 45.4%
RADIATION THERAPY Patients receiving radiation therapy, all cancers	27.5% (n=5,338)	28.8% (n=6,201)	27.0% to 29.8%
SURGERY Patients receiving surgery, all cancers	51.9% (n=10,083)	49.6% (n=10,678)	45.7% to 52.1%

See technical appendix for data sources and methodological details.

1/4

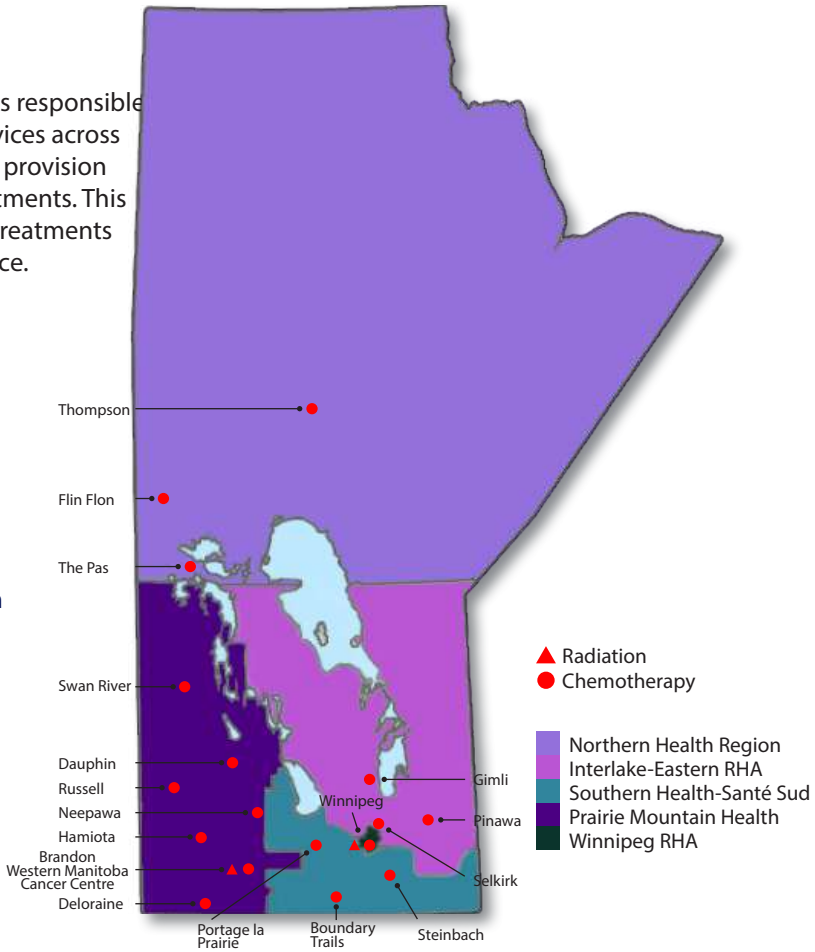
MORE THAN ONE IN FOUR CANCER PATIENTS UNDERWENT RADIATION THERAPY IN MANITOBA.

These data inform the Manitoba cancer control strategy and are used in planning service delivery across the province. However, treatment utilization rates do not necessarily indicate the appropriateness of care, but rather reflect the type and stage of disease, patients' medical fitness for treatment, and patient choice. Patterns in these measures identify both successes and areas for improvement.

1/2

ONE IN TWO CANCER PATIENTS UNDERWENT SURGERY IN MANITOBA.

CancerCare Manitoba (CCMB) is responsible for the provision of cancer services across the province. This includes the provision of locally available cancer treatments. This map highlights where cancer treatments are provided across the province.



78% of all patients in Manitoba are treated with systemic therapy, radiation therapy, or surgery.

A patient's treatment plan is developed with consideration of several factors:

- Type of cancer
- Stage of cancer
- Medical fitness
- Patient preference

SYSTEMIC THERAPY (CHEMOTHERAPY)

Treatment patterns vary by type of cancer and region of residence. Overall, the percent of Manitobans living with cancer who received systemic therapy (chemotherapy drugs including hormonal therapy) has remained stable over time. These data are not routinely reported across Canada.

43% of all Manitobans diagnosed with cancer received systemic therapy.

By Cancer Type

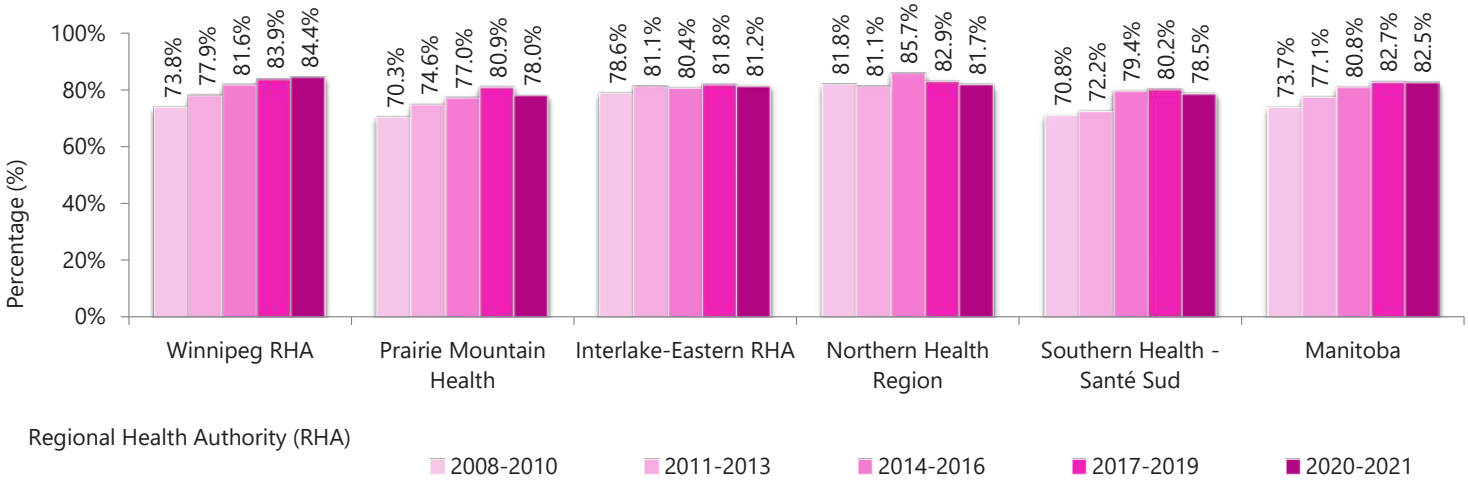
Table 10. Percentage of patients receiving systemic therapy within one year of diagnosis by cancer type.

	2019-2021	% Change from 2014-2016	Mean number of cases receiving systemic therapy in one year
Lung	29.8%	**+15% increase**	283
Colon (excludes rectum)	29.6%	No change	163
Breast (female only)	82.5%	No change	804
Prostate	49.1%	**+23% increase**	468
All invasive cancers	42.5%	No change	3,050

By Region

Figure 29. Percentage of patients diagnosed with breast cancer who received systemic therapy within one year of diagnosis, by Regional Health Authority (RHA).

BREAST CANCER



Systemic therapy is important for the treatment of late-stage cancers.

In general, the more advanced the stage of cancer at diagnosis, the greater the chances of needing systemic therapy.

Waiting for treatment

Waiting for results and treatments can be a difficult time for patients and their loved ones. We hope to minimize stress caused by waiting. In the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) 98% of Manitoban respondents told us they waited 30 minutes or less in the waiting room for their scheduled radiation or chemotherapy treatment appointments. In addition, 87% of respondents who had to wait longer than expected for chemotherapy told us their health care providers did everything they could to make them more comfortable during wait.

See technical appendix for data sources and methodological details.

RADIATION THERAPY

Treatment patterns vary by type of cancer and region. Variations in use of radiation therapy may be due to clinical factors or patient choice. The choice to undergo radiation therapy is also affected by factors including the distance a patient lives from a treatment centre, the length of time away from home and family, and information provided by patients' primary care physicians or surgeons. Manitobans can receive radiation therapy at CancerCare Manitoba (CCMB) in Winnipeg and at the Western Manitoba Cancer Centre in Brandon. **Between April 2020 and March 2021, 44,935 radiation treatments (fractions) were provided to patients at Winnipeg and Brandon sites.**

29% of all Manitobans diagnosed with cancer received radiation therapy.

By Cancer Type

Table 11. Percentage of patients receiving radiation therapy within one year of diagnosis by cancer type.

	2019-2021	% Change from 2014-2016	Mean number of cases receiving radiation therapy in one year
Lung	44.1%	No change	418
Rectum and rectosigmoid	51.9%	No change	147
Breast (female only)	58.0%	No change	565
Prostate	28.8%	**+28% increase**	275
All invasive cancers	28.8%	No change	2,067

By Region

Figure 30. Percentage of patients diagnosed with breast cancer who received radiation therapy within one year of diagnosis, by Regional Health Authority (RHA).

BREAST CANCER

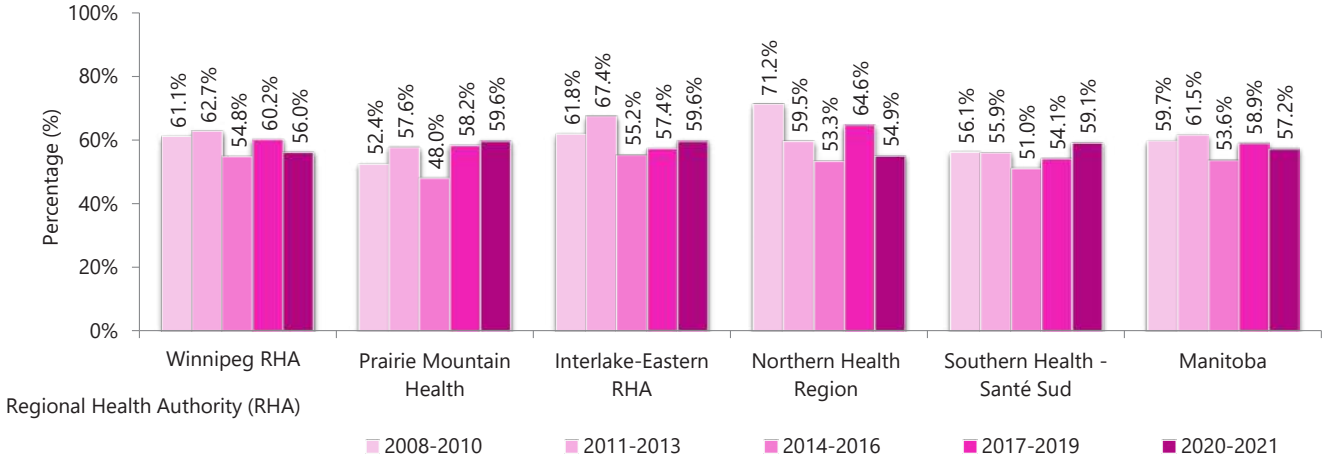
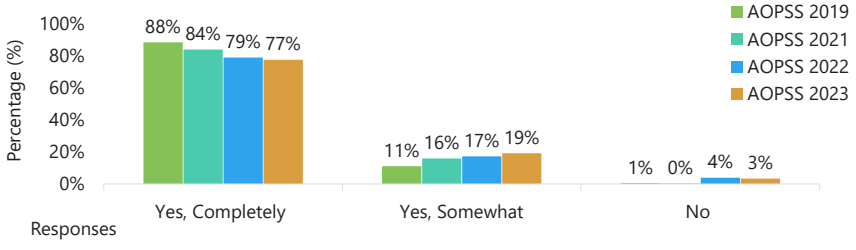


Figure 31. Response breakdown to the question "Did a care provider tell you how to manage any side effects of radiation therapy?" on the Ambulatory Oncology Patient Satisfaction Survey (AOPSS).



See technical appendix for data sources and methodological details.

CancerCare Manitoba aims to provide patients with the information they need. The Radiation Therapy program provides information sessions to every new patient.

SURGERY

The percentage of all cancer patients receiving surgery varies by type of cancer and region. Overall, the percent of Manitoba cancer patients who have received surgery has remained stable over time.

50% of all Manitobans diagnosed with cancer received surgery.

By Cancer Type

Table 12. Percentage of patients receiving surgery within one year of diagnosis by cancer type.

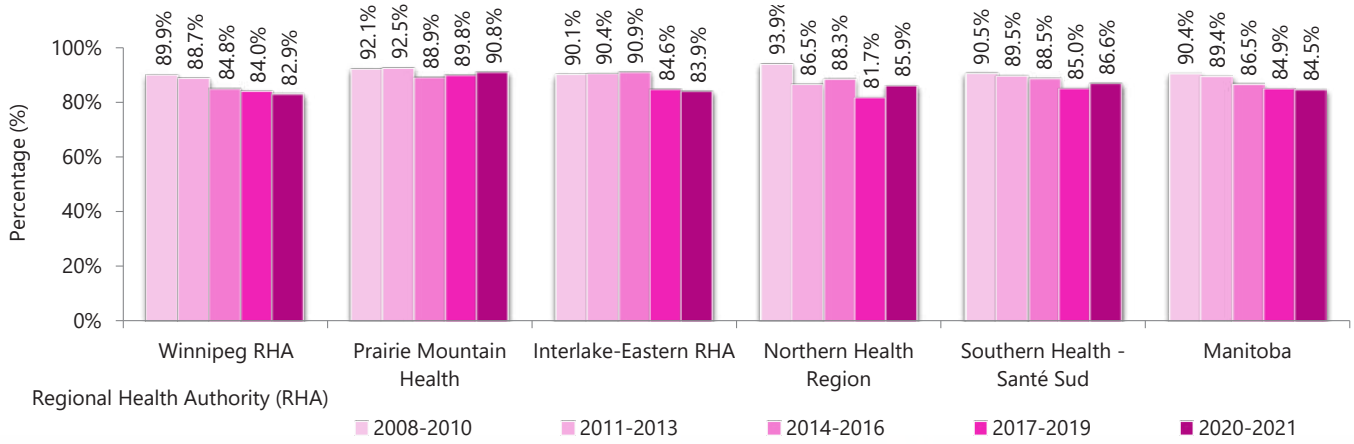
	2019-2021	% Change from 2014-2016	Mean number of cases receiving surgery in one year
Lung	22.3%	**-12% decrease**	212
Colorectal	75.0%	No change	628
Breast (female only)	85.0%	No change	828
Prostate	25.4%	**-23% decrease**	242
All invasive cancers	49.6%	No change	3,559

See technical appendix for data sources and methodological details.

By Region

Figure 32. Percentage of patients diagnosed with breast cancer who received surgery within one year of diagnosis, by Regional Health Authority (RHA).

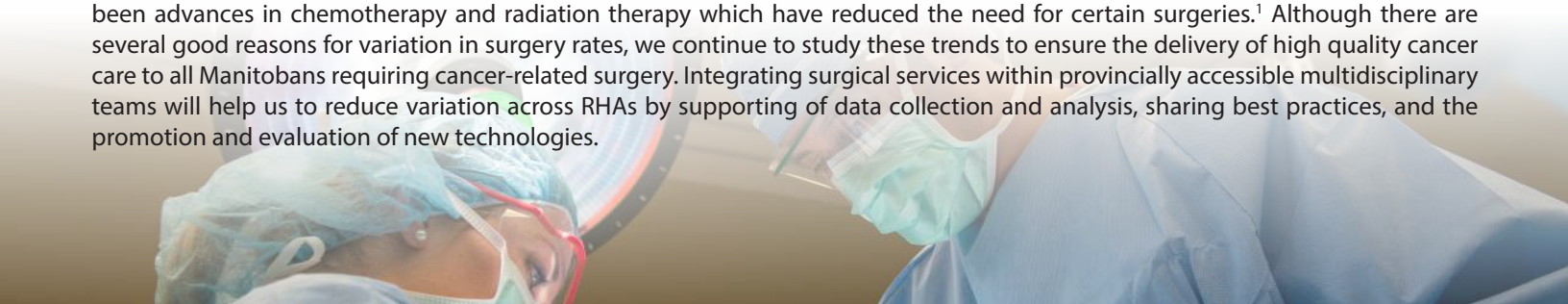
BREAST CANCER



See technical appendix for data sources and methodological details.

Why do we see variations?

Variations in surgery rates for any type of cancer may reflect the type and stage of disease, the patient's medical fitness for treatment, patient choice, and use of treatment outside of Manitoba which may not be recorded in our data sources. In addition, there have been advances in chemotherapy and radiation therapy which have reduced the need for certain surgeries.[1] Although there are several good reasons for variation in surgery rates, we continue to study these trends to ensure the delivery of high quality cancer care to all Manitobans requiring cancer-related surgery. Integrating surgical services within provincially accessible multidisciplinary teams will help us to reduce variation across RHAs by supporting of data collection and analysis, sharing best practices, and the promotion and evaluation of new technologies.



SURGICAL INDICATORS - COLON CANCER

COLON CANCER - SURGICAL APPROACH

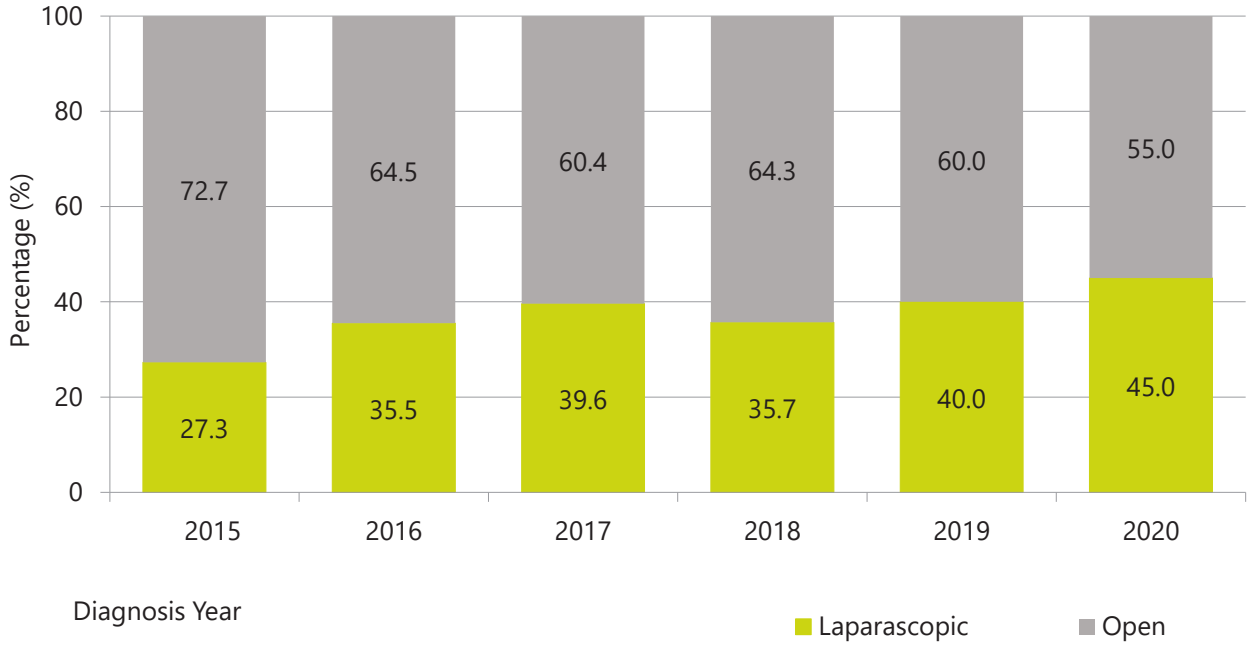
Surgery is the most common treatment in early-stage colon cancer patients. The type of surgery depends on the stage, size, and location of the cancer. A study conducted in Manitoba showed that colon cancer surgeries performed in the province are of high quality and continually improving.[2]

73% of all Manitobans diagnosed with colon cancer received surgical treatment.[3]

Why is this important?

Laparoscopic surgery for colon cancer has proven short-term benefits related to patient recovery and has equivalent long-term outcomes when compared to open surgery.[4-6] Surgeries conducted via a laparoscopic approach provide favorable operative outcomes including a shorter length of stay, a lower rate of complications, and improved quality of life.[7-8]

Figure 33. Percentage of colon cancer patients who had surgery by surgical approach and diagnosis year, Manitoba, 2015-2020.



See technical appendix for data sources and methodological details.

What do the data tell us?

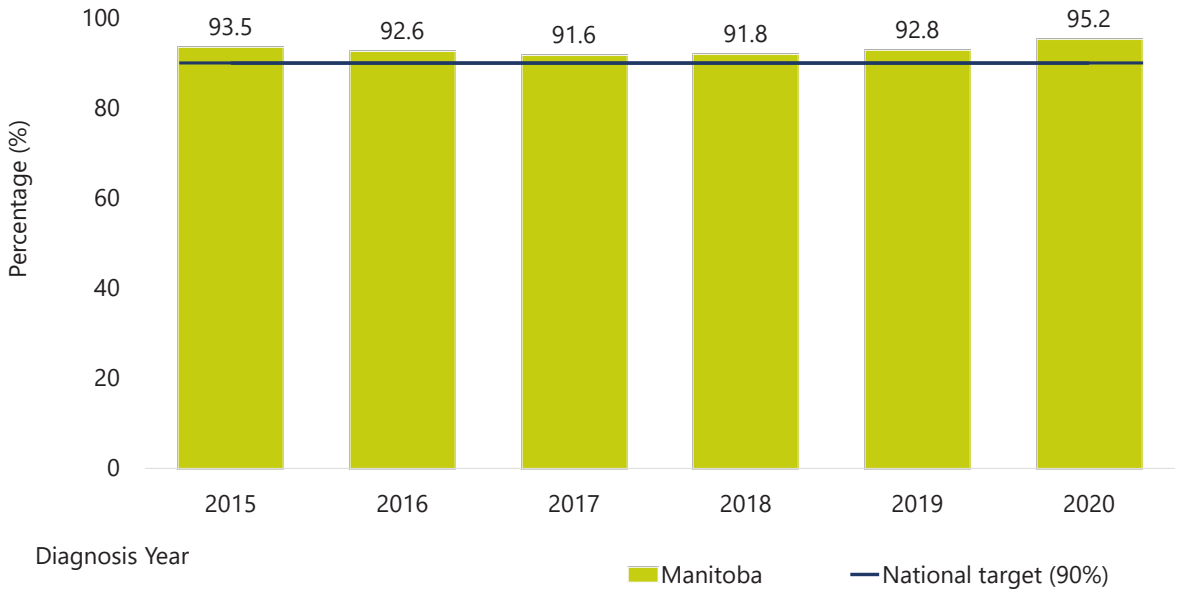
The figure above highlights the shift from the use of an open approach to laparoscopic surgery over time. Between 2015 and 2020, 63.0% of Manitobans who had colon cancer surgery had an open approach and 37.1% had a laparoscopic resection.[3] The use of laparoscopic surgery increased from 27% in 2015 to 45% in 2020.

SURGICAL INDICATORS - COLON CANCER

COLON CANCER RESECTIONS - 12 OR MORE LYMPH NODES REMOVED AND EXAMINED

A lymph node biopsy removes lymph node tissue to be looked at under a microscope for cancer. In some operations, surgeons remove a sampling of lymph nodes and in others they remove a package of lymph nodes called a lymphadenectomy. The removal of an adequate number of lymph nodes during colon cancer surgery is essential to appropriate staging and treatment planning. A high-quality lymphadenectomy is required in colon cancer surgery to reduce the risk of local recurrence and to accurately stage the patient. **The removal of at least 12 lymph nodes provides a threshold at which the chance of false negative nodal staging is reduced.** This indicator reflects current surgical guidelines and is regularly reported as part of the Canadian Partnership Against Cancer's pan-Canadian System Performance Report.[9] A national target stipulates that more than 90% of patients with colon cancer should have at least 12 lymph nodes removed and pathologically examined. Surgery is expected within one year of diagnosis.

Figure 34. Percentage of cases with colon cancer that have a resection within one year of diagnosis and have 12 or more lymph nodes removed and pathologically examined, 2015-2020.



See technical appendix for data sources and methodological details.

What do the data tell us?

The above figure demonstrates that Manitoba consistently performed above the national target between 2015 to 2020. In 2020, 95% of individuals who underwent colon cancer surgery had 12 or more lymph nodes removed and examined. Pan-Canadian data suggests that Manitoba has shown continued improvement over time and is among one of the top performing provinces.[3]

Manitoba is a top performing province.[10]

SURGICAL INDICATORS - LUNG CANCER

VIDEO-ASSISTED THORACOSCOPIC SURGERY

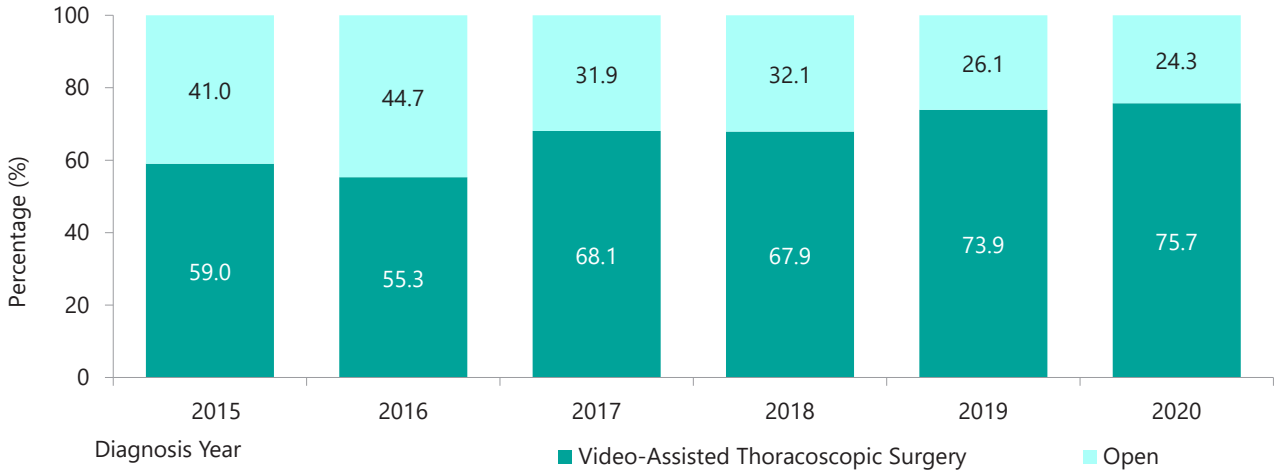
Video-Assisted Thoracoscopic Surgery (VATS) is a minimally invasive surgical technique that can be used to treat lung cancer. In Manitoba between 2015-2020, non-small cell lung cancer was by far the most common type of lung cancer, comprising a majority (85%) of all lung cancer diagnoses.[3] However, for many patients surgery is not recommended due to the stage of cancer, advanced age, and comorbidities.[3]

23%
of Manitobans diagnosed with non-small cell lung cancer received surgical treatment.[3]

Why is this important?

Video-assisted thoracoscopic surgery is a minimally invasive surgical technique.[11-13] Therefore, it can lead to quicker recovery, shorter length of stay, fewer complications, and improved outcomes.[14]

Figure 35. Percentage of non-small cell lung cancer patients who had surgery by surgical approach, Manitoba, 2015 to 2020.



See technical appendix for data sources and methodological details.

What do the data tell us?

The use of Video-Assisted Thoracoscopic Surgery (VATS) in non-small cell lung cancer patients increased from 59.0% in 2015 to 75.7% in 2020.

This System Performance series now includes two spotlight reports on **Cancer Surgery Quality in Manitoba**. You will find the series on the CancerCare Manitoba website!

CLINICAL PRACTICE GUIDELINES

Indicator: Percentage of patients diagnosed with stage I or II breast cancer who received post-operative radiation therapy within 270 days following breast-conserving surgery.

Why measure this?

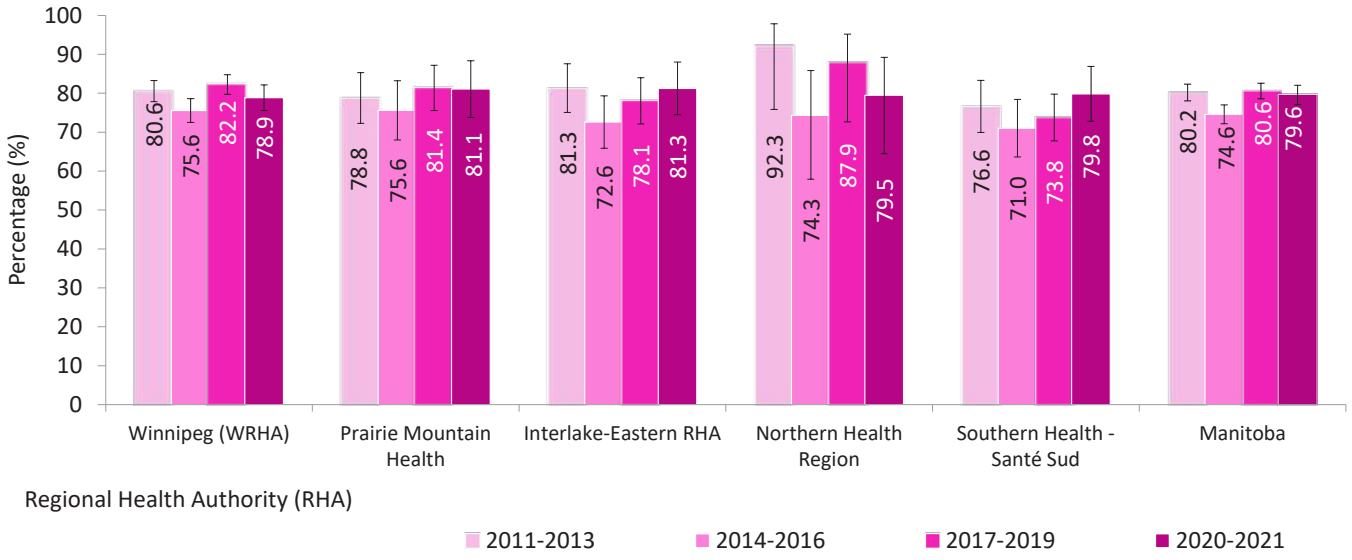
Women diagnosed with stage I and II breast cancers often undergo surgery, but they have two choices:

A. Mastectomy (surgery to remove the entire breast) or
B. Breast Conserving Surgery (surgery to remove the tumour along with a margin of non-cancerous breast tissue, also known as a lumpectomy) followed by whole-breast radiation therapy (breast conservation therapy).[15-16]

Breast conservation therapy is less invasive than mastectomy with evidence showing lower morbidity, improved cosmetic appearance, better psychological outcomes, and similar survival outcomes to mastectomy.[17-22] With comparable outcomes, it is recommended that the choice between mastectomy and breast conservation therapy should be made by the patient based on an informed understanding of risks, benefits, and quality of life for each option.[23]

In some cases women do not receive radiation therapy and therefore may not have an equal survival benefit to women receiving mastectomy. This indicator measures how many women received treatment according to evidence-based clinical practice guideline recommendations. There are many reasons why a patient may not receive radiation therapy after breast-conserving surgery. These include both patient preferences and clinical factors.[23] For example, evidence (2017) suggests radiation after breast conserving surgery may not result in significant survival benefits in older patients with early breast cancer.[24]

Figure 36. Percentage of early stage (stage I or II) breast cancer patients treated with radiation within 270 days of breast conserving surgery, by Regional Health Authority (RHA), 2011-2013, 2014-2016, 2017-2019, and 2020-2021.



Note: *Evidence shows clinical benefit is maintained for patients receiving radiation therapy within 270 days of breast conserving surgery. Newfoundland and Labrador was the best performing province in 2012 (89%).*[10]
See technical appendix for data sources and methodological details.

71% of Manitoban women with breast cancer had breast conserving surgery.[3]

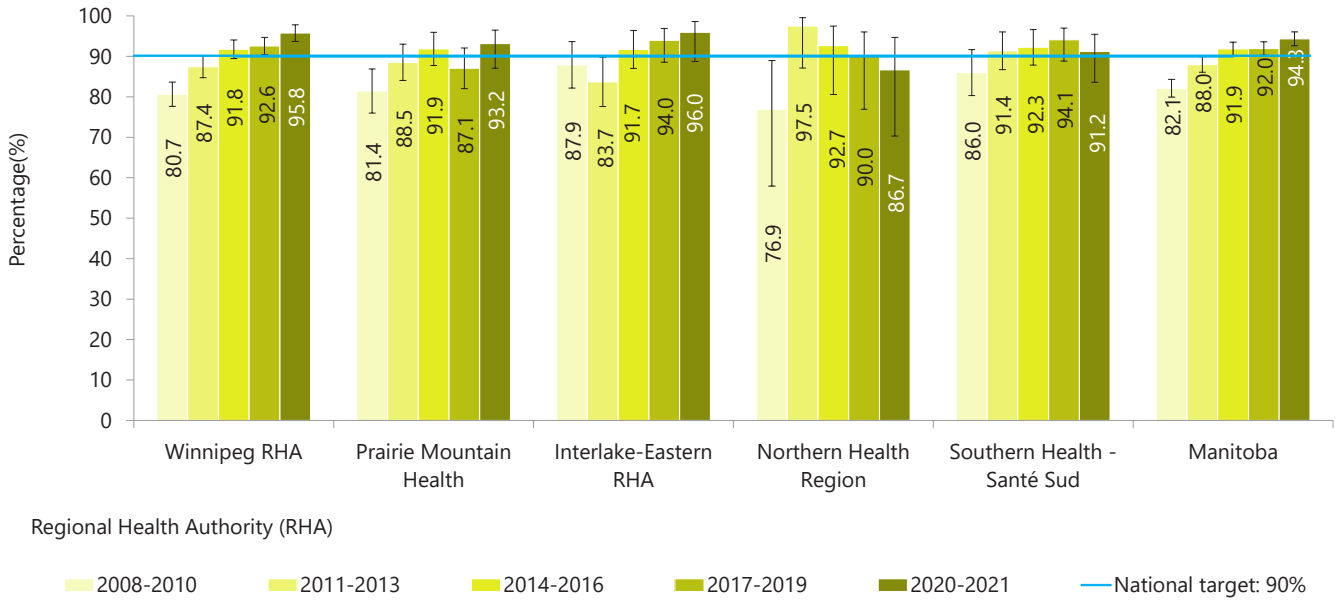
8 of 10 Canadian provinces report on this indicator through The Canadian Partnership Against Cancer.[10]

CLINICAL PRACTICE GUIDELINES

Indicator: Percentage of colon resections with 12 or more lymph nodes removed and examined for cases diagnosed within a specified time period.

Over 92% of colon cancer patients who had surgery within one year of diagnosis and had at least 12 lymph nodes removed and pathologically examined.[3]

Figure 37. Percentage of colon resections with 12 or more lymph nodes removed and examined by Regional Health Authority (RHA), 2008-2010, 2011-2013, 2014-2016, 2017-2019, and 2020-2021.



The most current data available for other provinces is from 2014 and Manitoba is the best performing province (91%).[10]
See technical appendix for data sources and methodological details.

The removal and examination of 12 or more lymph nodes is associated with improved survival as it leads to more accurate staging, and therefore more appropriate treatment planning.[25-31] Most clinical guidelines recommend a minimum of 12 lymph nodes be removed and examined by a pathologist to determine the extent of cancer spread to the lymph nodes.[32,33]

Wait, this looks very familiar…

Yes, you've seen this before. This indicator is one of our surgical quality indicators reported on page 50! The only differences are we report these data by year (2015-2020) in the surgical indicators section. Here we focus on variation across regions and time. Measuring provincial treatment patterns can identify variations and inform opportunities for quality improvement at the provincial level.[9,10] Across Manitoba and Canada we have seen improvements over time. ***Using this example, we can see how measurement can inform clinical practice.***

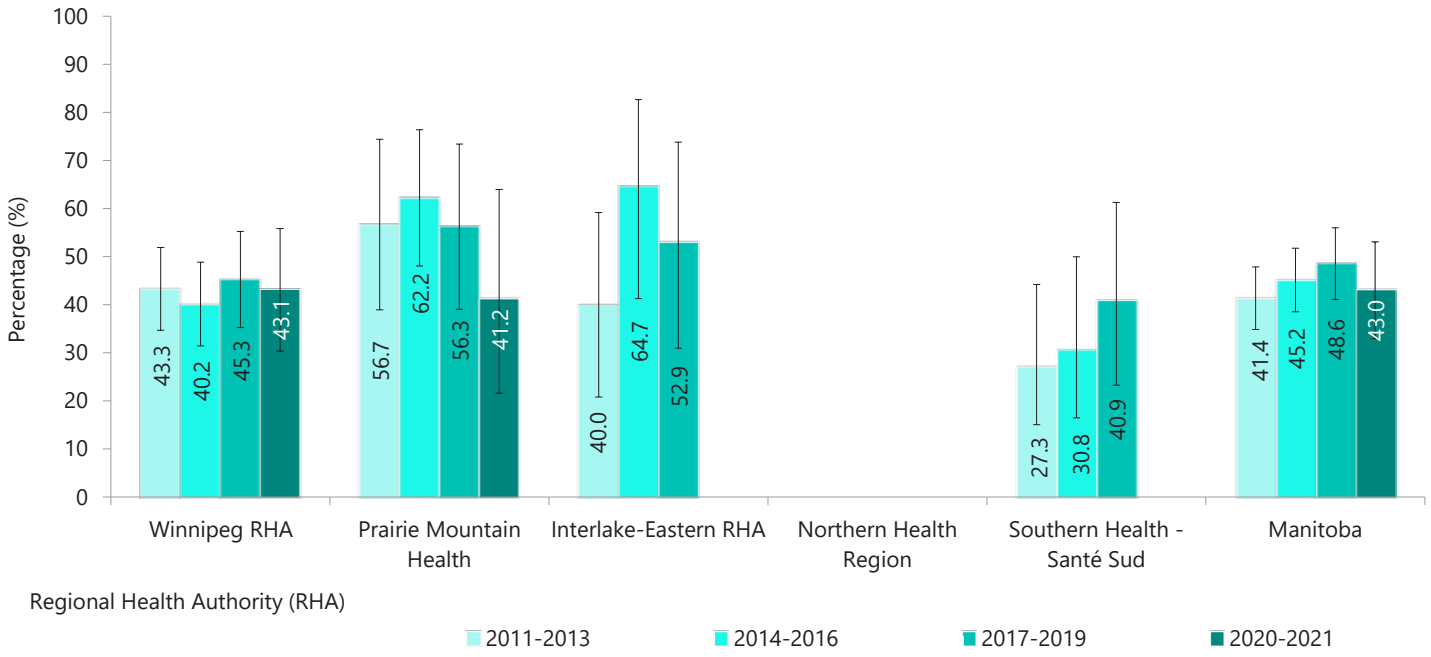
4 of 5
RHAs achieved the 90% target

8 of 10 Canadian provinces report on this indicator through The Canadian Partnership Against Cancer.[10]

CLINICAL PRACTICE GUIDELINES

Indicator: Percentage of patients with stage II or IIIA non-small cell lung cancer (NSCLC) who received guideline-concordant post-operative chemotherapy within 120 days of surgical resection.

Figure 38. Percentage of stage II or IIIA non-small cell lung cancer patients who received chemotherapy following surgical resection, by Regional Health Authority (RHA), 2011-2013, 2014-2016, 2017-2019 and 2020-2021.



Notes: *The most current data available for other provinces is from 2014 and Ontario was the best performing province (51%).*[10]
Data for the Northern Health Region for all timeframes and Southern Health-Santé *Sud and Interlake-Eastern RHA for 2020-2021 are suppressed due to small counts (<5). See technical appendix for data sources and methodological details.*

Why is this important to measure?

Clinical practice guidelines recommend post-operative chemotherapy for patients with stage II or IIIA NSCLC over surgery alone based on evidence of improved outcomes (i.e., disease-free and overall survival) and lower recurrence rates.[34-40] Regional data can be harnessed to identify variations in practice which can be addressed through quality improvement initiatives.[10] In Manitoba, we see variation across provincial RHAs, but in Southern Health-Santé Sud there have been improvements since 2011-2013.

Provincial data from The Canadian Partnership Against Cancer (CPAC) has shown that our reporting is similar to other provinces.[9] CPAC data reported by age group shows that patients aged 18-59 with stage II or IIIA NSCLC were much more likely to receive post-operative chemotherapy than their counterparts aged 70-79. It is known that older patients are more likely to have conditions that make chemotherapy difficult to tolerate, but evidence of improved survival does support post-operative chemotherapy for individuals up to age 80.[9, 41-45]

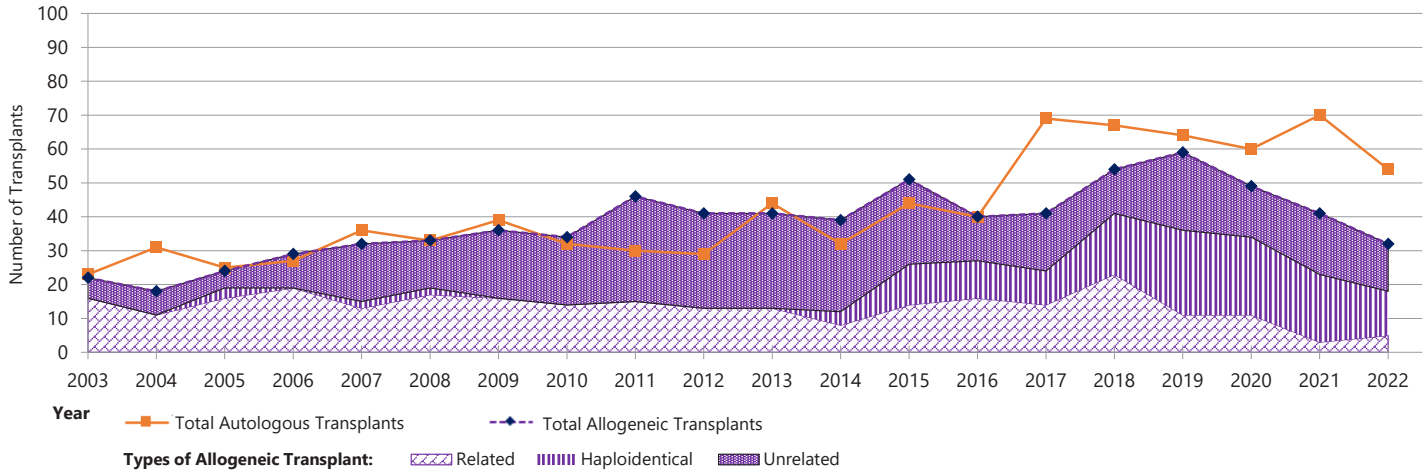
6 of 10 Canadian provinces report on this indicator through The Canadian Partnership Against Cancer.[10]

BLOOD AND MARROW TRANSPLANT

Blood and marrow transplantation is a medical procedure used to treat a variety of oncological and immunological disorders. Stem cells are taken from either the patient living with cancer (autologous) or from a compatible healthy donor (allogeneic). Chemotherapy and/or radiation are then given to the patient to prepare them to receive stem cells. The stem cells are then transplanted back into the patient allowing healthy blood cells to form and boost the patient's defense against infection. Transplants have been used worldwide to treat patients diagnosed with leukemia, aplastic anemias, lymphomas, multiple myeloma, immune deficiency disorders, autoimmune diseases, and some solid tumors. In the past it was necessary for donors and recipients to have closely matching tissue types based on human leukocyte antigens; however over the last decade various centres, including CancerCare Manitoba, have used a new strategy to perform allogeneic transplantation using haploidentical donors. Haploidentical allogeneic stem cell transplantation allows a half-matched healthy first-degree relative to serve as a donor. This has made it much easier to find suitable donors and is much cheaper for the healthcare system compared to using donors that are unrelated to the recipient. The Manitoba Blood and Marrow Transplant (MBMT) Program has provided adult and pediatric residents of Manitoba access to high quality blood and marrow transplant therapy since 1991.

In December 2023, CCMB started providing Chimeric Antigen Receptor-T cells (CAR-T) therapy, a type of cancer immunotherapy that uses patient's immune cells, called T-cells, to enable them to locate and destroy cancer cells in the body.

Figure 39. Number of autologous and allogeneic transplants completed at CancerCare Manitoba (CCMB) by year with breakdown for type of allogeneic transplantation, 2003-2022.



Notes: *Data reflect an upward trend in the number of transplants performed at CCMB over time. We have seen a shift from about 50 transplants per year between 2000-2005 to more than 80 per year between 2010-2015 and further increase to over 110 transplants per year between 2017 - 2022. An increase is expected based on two factors. First, more autologous transplants are being completed for individuals diagnosed with multiple myeloma based on evidence from several randomized-controlled trials showing benefits of up-front transplantation, the use of transplantation in older adults, and more effective induction regimens. Second, an upward trend in the number of allogeneic transplants is being driven by the introduction of protocols for alternative donors (e.g. unrelated donors (2005 onwards); haploidentical donors (2015 onwards)).*

See technical appendix for data sources and methodological details.

2 per week

Since 2017, **about 2 adult patients** received blood or marrow transplants every week.

The total number of transplants have increased by **147%** between 2003-2021.

Total autologous transplants have increased by **119%** between 2014-2021.

Increase is based on evidence supporting benefits of up-front transplantation for Multiple Myeloma, older adults, and more effective induction regimens.

Median wait times for adult autologous lymphoma and myeloma patients from apheresis to stem cell infusion was approximately **24 days** in 2022.

47.1% of pediatric transplants in 2021-2022 were provided to children with non-malignant disease.

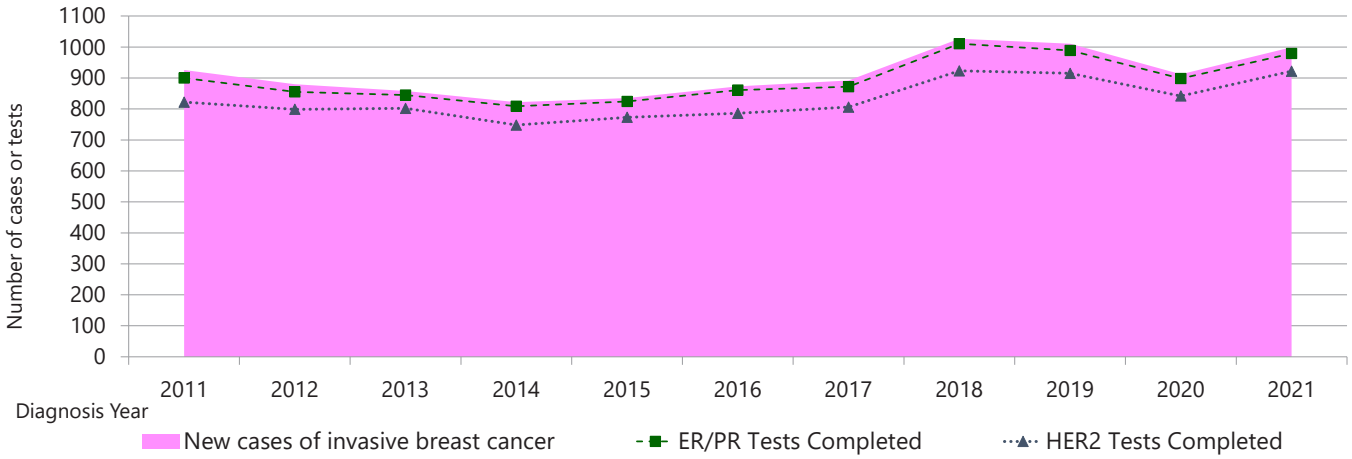
Over 70% of adult transplants in 2021-2022 were provided to those with Multiple Myeloma or Lymphoma.

PREDICTIVE AND PROGNOSTIC MARKERS - BREAST CANCER

Over the last two decades we have made great progress in what we know about the molecular basis of tumour progression and treatment response. Cancer biomarkers, found in the blood or urine, consist of substances produced by cancers or are released by the body when cancer is detected. These markers are useful in clinical management of cancer as they can provide information leading to faster and more accurate cancer detection and inform treatment decisions to ensure a patient receives the most efficacious treatment.[46-48] CancerCare Manitoba (CCMB) oncologists test for various molecular markers depending on the type of cancer diagnosed. We will be adding new and different types of testing over the next few years.

BREAST CANCER: Every woman who receives an invasive breast cancer diagnosis in Manitoba receives molecular testing – estrogen receptor (ER), progesterone receptor (PR), and human epidermal growth factor receptor 2 (HER2). This information is critical for treatment planning at all stages of the disease.

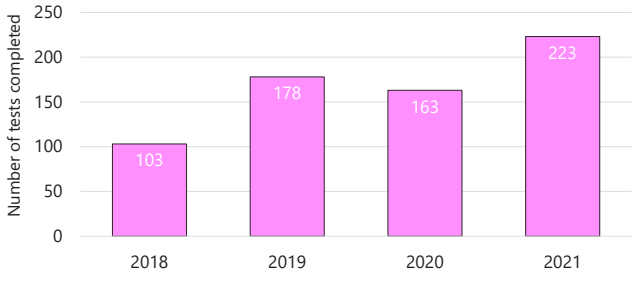
Figure 40. Trends in molecular testing in Manitoba for new cases of invasive breast cancer, 2011-2021.



Note: Molecular testing may not be recommended for all new breast cancer patients. Some reasons for ineligibility may include older age, existing comorbidities, and stage of disease (and related treatment plan).
See technical appendix for data sources and methodological details.

10.5% of all Manitoban women with a breast cancer diagnosis were diagnosed with triple negative breast cancer (2017-2021). Triple negative breast cancer (negative for ER, PR, and HER2) often leads to poorer prognosis, more advanced disease at diagnosis, and patients tend to be younger. The Canadian Partnership Against Cancer's 2015 report on staging compares rates of triple negative breast cancer across Canada for 2010. Across Canada scores ranged from 8.2% in Alberta and 12.8% in New Brunswick.[49] Manitoba's rate of triple negative breast cancer was 12.0% in 2010 and 9.4% between 2014 and 2016.[50]

Figure 41. Trends in OncotypeDx test completed in Manitoba for new cases of invasive breast cancer, 2018-2021.



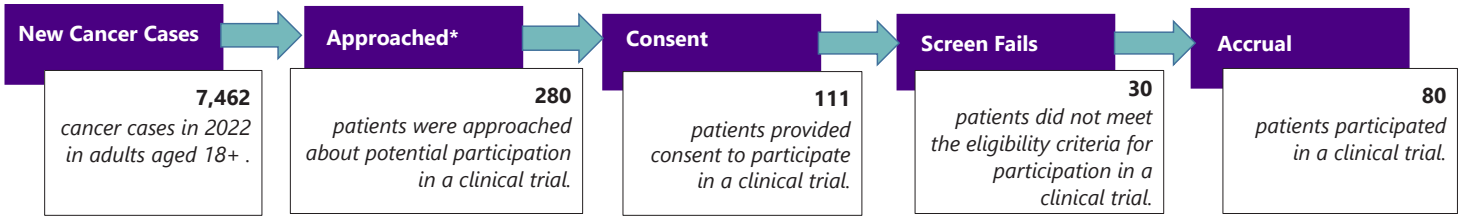
See technical appendix for data sources and methodological details.

OncotypeDx is requested at the oncologist's discretion in some women with a new diagnosis of ER/PR+, HER2- breast cancer treated with surgery who may benefit from additional chemotherapy to prevent disease recurrence. The OncotypeDx test was funded for routine use in the province and the Manitoba Cancer Registry started collecting data starting January 2018. **As of December 2021, 667 OncotypeDx tests were completed. The number of tests completed in 2021 was more than double the first year (2018).**

CLINICAL TRIALS

Clinical trials are building blocks that help cancer researchers find new ways to improve clinical care and quality of life for individuals living with cancer. They provide new insights about the effectiveness and safety of new approaches to manage cancer. Research has established that patients receiving care at centres with clinical trials programs have better health outcomes (e.g. improved survival and quality of life) than those without clinical trials programs. It is likely that this difference is due to the integration of high-quality process and delivery of care, including higher adherence to treatment guidelines.[51-53]

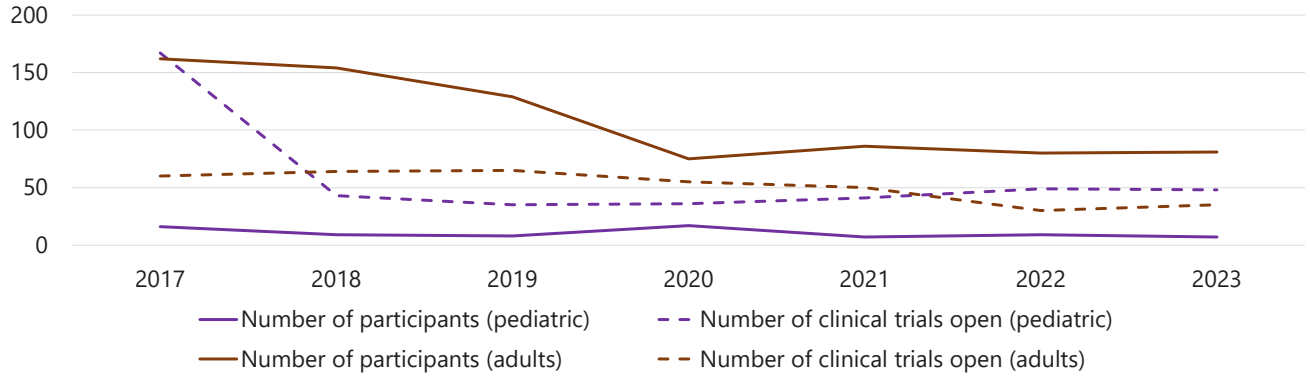
SCREENING PROCESS FOR CLINICAL TRIALS PARTICIPANTS IN ADULTS (2022 DATA)



*This reflects the number of patients who were approached by CancerCare Manitoba Clinical Trials Unit or Manitoba Prostate Centre and does not reflect discussions with a physician or nurse where the clinical trials unit was not informed (i.e., patient is not interested, etc.). All pediatric patients are approached about clinical trials.

Note: *Patients are not always enrolled to clinical trials in the same year as they move through the other screening steps. This means the total number of patients consenting minus screen fails may not equal the number of patients entered on trial that year.*

Figure 42. Number of clinical trials open and number of participants over time, Manitoba, 2017-2023.



CancerCare Manitoba is working towards increasing the number of open trial and accrual to trials, and reducing the delays associated with trial activation.

CLINICAL TRIAL PARTICIPATION RATES:

Table 13. Percentage of patients enrolled into clinical trials to the number of new cancer cases, all cancers, 2022 enrollment year.

Pediatric[a,b]	12.3% (n=9)
Adults[b]	1.1% (n=80)

[a]*Pediatric enrollment only reflects interventional trials;*
[b]*The denominator is the confirmed number of new cancer cases for 2022.*

Note: The pediatric model integrates clinical trials into clinical care for all pediatric patients.

Data from the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) told us that 93% of respondents felt either completely or somewhat comfortable talking to staff about questions they had about new clinical trials or new treatments for their cancer.

What about AYA?

Historically few clinical trials have targeted adolescents and young adults (AYA). A recent paper identified accrual to interventional treatment trials for 18-30 year old individuals in Manitoba was very low – 0.4%.[54] These trials included AYA individuals with a diagnosis of leukemia, lymphoma, melanoma, sarcoma, or brain cancers. Improving access to clinical trials for AYAs is a priority across Canada. CCMB is uniquely situated to improve this rate because it is one of the few cancer centres in Canada that has both pediatric and adult specialists working under one roof.

As of December 31, 2023, there were 85* trials available to adolescents and young adults (AYA). This is a considerable increase from the 14 trials available to AYA in February 2019. We are working hard to expand opportunities to this group.

** 46 clinical trials are available for CCMB patients between 15 - 18 years, and 39 are available for CCMB patients between 18-39 years.*
See technical appendix for data sources and methodological details.

DEVOTED TO HIGH QUALITY CANCER CARE

CancerCare Manitoba (CCMB) wants to provide high quality, safe care to all cancer patients across the province. We aim to establish a just culture of safety where the provision of safe care is a core value for the organization. We accomplish this aim through the measurement of several quality indicators, such as hand hygiene, but also put a large emphasis on patient engagement.

We believe understanding the patient experience is valuable to all planning, care delivery, and the ongoing evaluation of the services we provide to Manitobans. By engaging with patients on all manner of tasks we are enriching our understanding of what matters most to patients and how we can enhance the patient experience.

77.0%

HAND HYGIENE COMPLIANCE, 2023

In 2021 hand hygiene compliance was 88.2%.
Our target is 90% or higher.

Hand hygiene is one of the most important ways to reduce health care-associated infections. However, compliance with accepted hand hygiene practices is often poor. Studies have shown improving hand hygiene compliance can decrease healthcare-associated infections.[55]

99.2%

SAFE SURGICAL CHECKLIST COMPLIANCE, 2023

In 2021 safe surgical checklist compliance was 99.6%.
Our target is 100%.

It is critical that risks associated with surgical procedures are mitigated to avoid harm to patients. The safe surgical checklist helps to improve patient safety by reducing the chances of complications post-surgery and to improve health outcomes.

Patient Engagement

The provision of person-centred care is fundamental to the care we provide. We want to ensure our relationships with patients are nurtured. Accreditation Canada emphasizes the importance of collaboration between patients and the organization to meet all accreditation standards. CancerCare Manitoba invites many patients and their families to engage with us on various projects, discussions, meetings, and strategic planning sessions. To coordinate these efforts the Patient and Family Advisory Volunteer Program was formed in 2014. Here are some examples of how we engage with patients:

We are devoted to patient engagement.
Between January and December 2023, there were
77 patient advisors on 24 new projects.

92% ***of respondents reported feeling completely safe while receiving care at CCMB in the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS).***

There was little variation in "feeling safe" across Regional Health Authorities of residence, gender, or type of treatment received.

In 2023, independent hand hygiene audits identified:

75%
of providers washed their hands before patient contact.

79%
washed their hands afterwards.

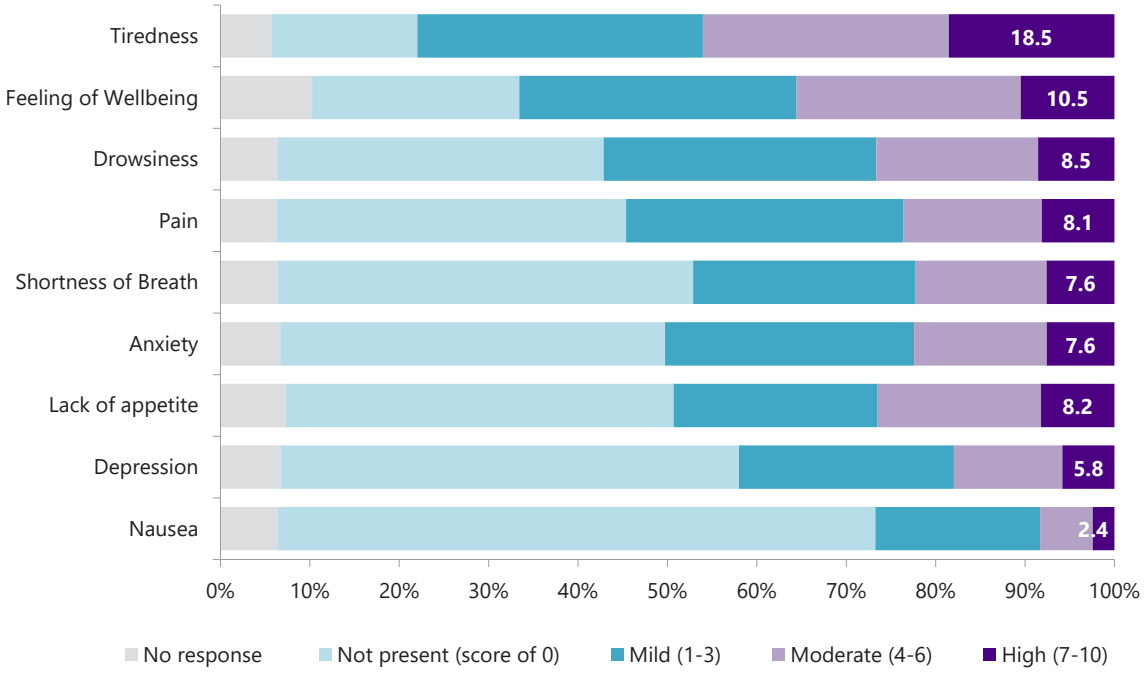
Giving the right care to the right patient at all times is important. CCMB is strongly committed to the safety of patients and their families. We understand that part of providing safe care is correctly identifying patients prior to any treatment or service provision. Soon we will begin inviting patients to complete a survey at their visits to evaluate whether their healthcare providers asked to confirm their identification.

PAIN AND SYMPTOM MANAGEMENT

At CancerCare Manitoba (CCMB) we strive to deliver the best cancer services to our patients and their families. It is important to us that we engage a person-centred approach to caring for our patients' needs. This type of approach intentionally focuses on the specific needs of individuals. To understand our patients' needs we use patient-reported outcome measures. One such tool is the Comprehensive Problem and Symptom Screening (COMPASS) Questionnaire. This screening tool is used routinely across Manitoba's cancer clinics at physician visits. It has become a standard of care for CCMB and helps us to identify key patient concerns so we can respond with appropriate and timely care.

7,578 COMPASS questionnaires were completed by cancer patients across Manitoba from October to December 2023. The following figure identifies the severity of symptoms reported in the Edmonton Symptom Assessment Survey – revised (ESAS-r) portion of the questionnaire.

Figure 43. Scores for ten commonly experienced cancer symptoms experienced by patients living with cancer, self-reported through ESAS-r on the COMPASS patient-reported outcome screening tool, October - December, 2023.



Note: The use of COMPASS was discontinued at the beginning of the COVID-19 pandemic. It was re-introduced in Quarter 4, 2023 with some minor modifications including the addition of a question related to oncofertility and revision to the section on advanced care planning.
See technical appendix for data sources and methodological details.

CCMB's Pain and Symptom Clinic provides a multidisciplinary approach to the assessment and treatment of patients who have cancer or treatment-related symptoms that have proven difficult to resolve. This specialized care for concerning symptoms is available to all cancer patients in the province at any point of their cancer experience. Each week CCMB offers five Pain & Symptom Clinics (including two early palliative care clinics) coordinated by a Clinical Nurse Specialist.

69% of respondents to the 2023 Ambulatory Oncology Patient Satisfaction Survey told us they felt their care providers did everything they could to control their pain or discomfort.

The COMPASS questionnaire includes the Canadian Problem Checklist (CPC) with a section on dignity. A patient can select dignity concerns they experienced within the past week including:

- feeling a burden to others,
- feeling a loss of control,
- losing meaning or purpose in life,
- not feeling respected or understood,
- not feeling valued or worthwhile,
- feeling embarrassment or shame, and
- no longer feeling like the person they once were.

By selecting one or more of the dignity concerns a response is triggered to ensure the patient receives appropriate and timely care they require.

From October to December 2023 1,315 COMPASS questionnaires contained a dignity concern. This made up 17% of all COMPASS questionnaires completed during that timeframe.

Urgent Cancer Care Clinic meets the specialized needs of cancer patients experiencing cancer or treatment-related symptoms or side effects. The clinic reduces the need for patients to go to hospital emergency departments when in need of specialized cancer care. CancerCare Manitoba also hosts a **Cancer Helpline** phone service for cancer patients requiring assistance in managing cancer or treatment related side effects.

Between April 2022 and March 2023 there were 1,813 visits to the Urgent Cancer Care Clinic and 2,492 calls to the Cancer Helpline.

BRINGING CANCER CARE TO COMMUNITIES OUTSIDE WINNIPEG

The Community Oncology Program is a provincial program of CancerCare Manitoba (CCMB) that works to bridge partnerships among primary care, specialists, community, and regional partners. The Community Oncology Program sets standards of care for our 16 Community Cancer Programs (CCPs) to deliver cancer services across the cancer continuum and is responsible for the ongoing training and education of health care providers related to cancer care. Our goal is to build capacity and improve access to quality cancer care for all Manitobans.

Where are treatments completed?

The proportional dot map shows the number of intravenous (IV) chemotherapy treatments that were delivered at Community Cancer Program sites (CCPs) or Regional Cancer Program sites (RCPs) to patients who live within the related Regional Health Authority (RHA) (have an associated postal code). ***Essentially the figure tells us where people went for treatment based on where they live.*** For example, all treatments with the bright red colour received treatment in Thompson. This figure emphasizes the reach of IV chemotherapy delivery in the province which is one example of CancerCare Manitoba's breadth of coverage to rural individuals living with cancer. It highlights that Manitobans often receive their chemotherapy close to home.

Across the province, 74% of patients treated with IV chemotherapy outside of Winnipeg were provided this service within the same RHA they lived.

Figure 44. Proportional dot map showing Community Cancer Program intravenous (IV) chemotherapy delivery outside Winnipeg Regional Health Authority (WRHA), April 2018 - March 2021.

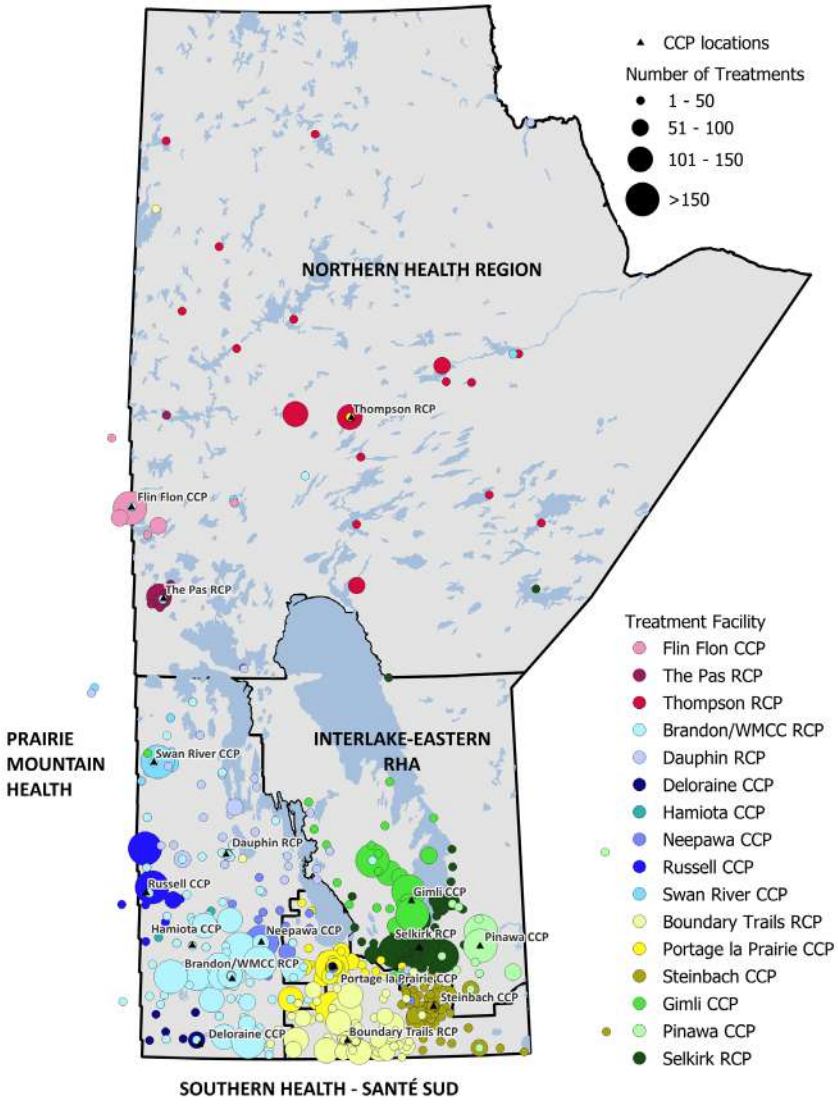


Table 14. Age-standardized incidence rates (2019-2021) and number of new cancers (2021) by Regional Health Authority (RHA).

	Winnipeg RHA	Prairie Mountain Health	Interlake - Eastern RHA	Southern Health - Santé Sud	Northern Health Region	Manitoba
Age-standardized incidence rate, 2019-2021	477 per 100,000	474 per 100,000	517 per 100,000	461 per 100,000	467 per 100,000	479 per 100,000
Number of New Cancer Cases, 2021	4,158	1,003	904	930	254	7,249

MEETING YOUR NEEDS CLOSER TO HOME

Through a strong partnership between the Community Oncology Program and Manitoba's Regional Health Authorities (RHAs), we are able to better meet the needs of individuals living with cancer across Manitoba.

12,161
intravenous (IV) chemotherapy sessions delivered outside Winnipeg in 2022/23.

This makes up **33%** of all provincial IV chemotherapy delivery and is a 18% increase from 2017/18.

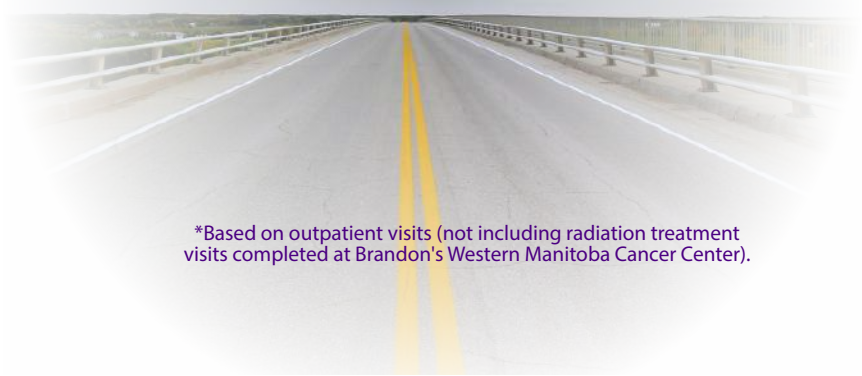
Brandon's Western Manitoba Cancer Centre has been providing radiation treatment to Manitobans since June 2011. Between June 2011 and March 2023 **over 4,700 patients** were able to receive their treatments closer to home. This equates to approximately **63,000 radiation treatments!**

Table 15. Utilization statistics for the Community Oncology Program.

	2022/23	% Change (2021/22)
Total physician visits to community cancer program sites *Excludes radiation oncologist visits*	26,263	No change
Outpatient treatments at community cancer program sites *Outpatient treatments include any anti-cancer treatment including IV chemotherapy, bladder instillation, intramuscular injection, subcutaneous injection, other IV treatment, IV fluid administration only, blood product transfusion, and oral treatment support*	35,842	**14% increase**
New patient referrals to a community cancer program	1,531	**27% increase**

Note: *Percentage changed is identified for any change of + or - 10%. Otherwise 'No change' is identified.*
See technical appendix for data sources and methodological details.

In 2023/24* patients and their families were able to save over 13 million kilometres in travel due to Community Cancer Programs!



*Based on outpatient visits (not including radiation treatment visits completed at Brandon's Western Manitoba Cancer Center).

We hear you and appreciate your feedback. Results from the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) revealed that across Manitoba only **58%** of respondents felt that their care providers had taken their family or living situation into account when planning treatment. This was low across all regions outside Winnipeg with a range of **47%** in the Northern Health Region to **61%** in Prairie Mountain Health.

Only **55%** felt their care providers considered their travel concerns when planning treatment. Regional variation outside Winnipeg ranged between **47%** in Northern Health Region to **64%** in Prairie Mountain Health.

NAVIGATION

The cancer experience is often complex and overwhelming for patients and their families. Every Manitoban living with cancer has access to an expert cancer navigation team through CancerCare Manitoba's (CCMB) Provincial Cancer Referral and Navigation Service. This team includes nurse navigators, referral clerks, referral nurses, and psychosocial oncology clinicians specialized in providing information and support to patients as they navigate through the cancer care system. The goal of this service is to improve the patient experience by connecting patients and their families with compassionate high-quality, and timely cancer care.

2,854

new patient referrals to Rural and Winnipeg Navigation, in 2023/24.

Rural = 1,619 **Winnipeg = 1,235**

This was a 17% increase since 2018/19 reflecting expansion of the provincial service. This rate is expected to continue rising due to a growing program.

Since inception of the Community Oncology Program (2011) there have been

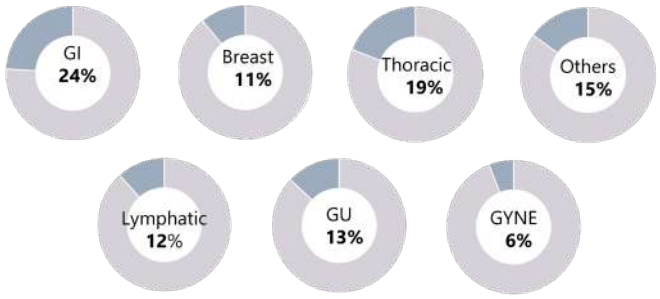
24,141

new patient referrals to Rural and Winnipeg Navigation!

6%

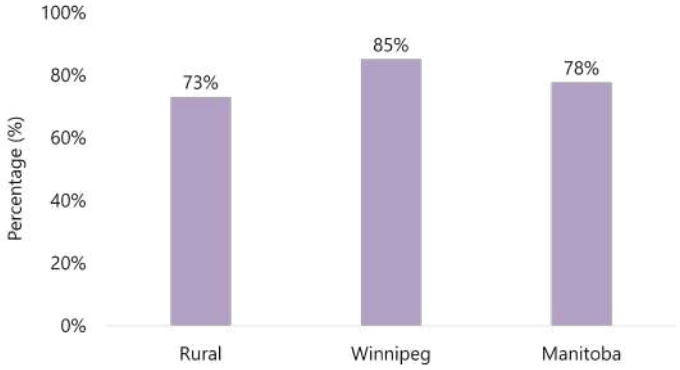
of new patients did not have a primary care provider.

Most common cancers associated with new patient referrals to Rural and Winnipeg Navigation.



Note: *gastrointestinal (GI), genitourinary (GU), gynecological (GYNE)*

Figure 45. Percentage of new referrals that met a target of 48 hours between a) the date the referral was received and b) first contact with patient, 2023/24.



See technical appendix for data sources and methodological details.

Over **90%** of all new patient referrals to Rural and Winnipeg Navigation were at the **beginning of their journey** with cancer.

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OUTCOMES

"From the outset, the treatment and attention I received at CancerCare Manitoba were outstanding. I will always remember a young intern promising me, at the initial check-in while I was retching painfully, that he would ensure I 'didn't slip through the cracks.' I certainly did not. I have been off chemo for twenty-six months now. Blood tests reveal 'no trace!'"

- CCMB patient.

Our mission at CancerCare Manitoba is to reduce, and where possible, eliminate the burden of cancer on the people of Manitoba. We want to see a world free of cancer. Cancer epidemiology, or the study of cancer in a population, helps us to measure changes in cancer trends and allows us to compare ourselves to other cancer agencies. Understanding cancer outcomes such as mortality, survival, and prevalence informs healthcare planning.

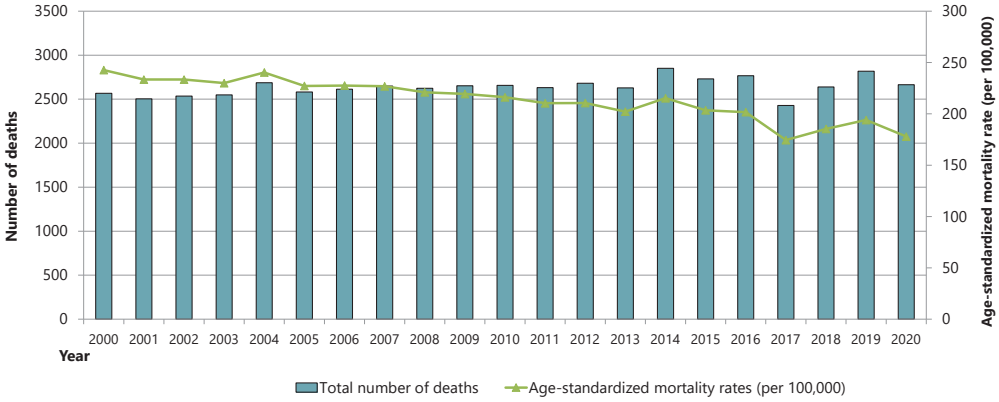
CANCER MORTALITY

Cancer mortality reflects the number or proportion of deaths due to cancer in a population.

The same things that drive cancer incidence (the number of new cases each year) drive cancer mortality (the number of deaths due to cancer each year). Mortality rates can be used to measure success in reducing the burden of cancer on a population. Cancer mortality varies by type of cancer and is typically highest when the disease is found at late stage, or when treatment options are fewer and less effective. We have seen significant decreases in cancer mortality in Manitoba over time. Our mortality rates for lung, colorectal, breast, and prostate cancer are consistent with those reported by other cancer agencies across Canada.[1,2]

Each year cancer kills nearly 2,700 Manitobans.

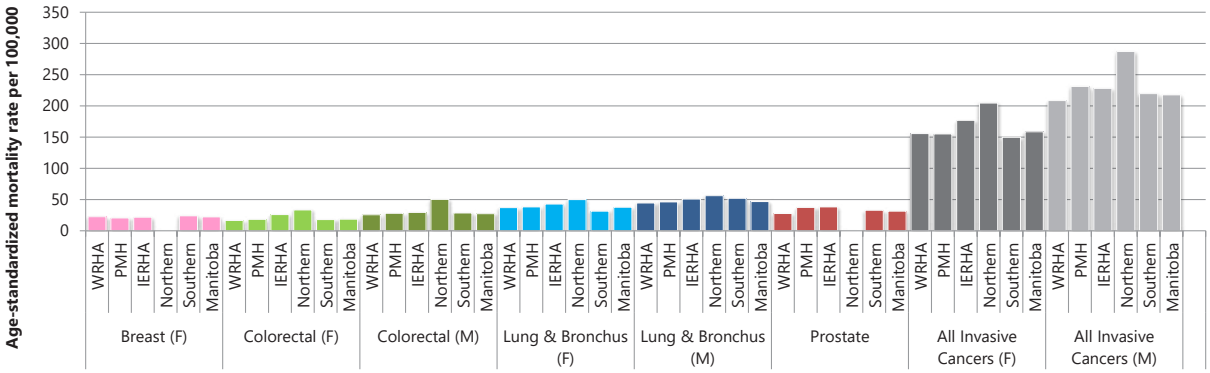
Figure 46. Number of deaths and age-standardized mortality rate, all invasive cancers, 2000-2020.



1 in 4 Canadians is expected to die from cancer.[1]

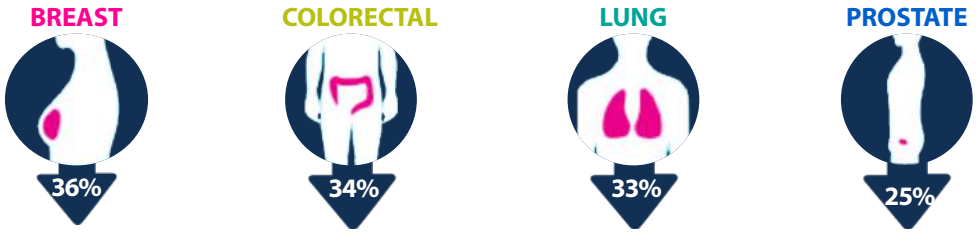
23%of cancer deaths in Manitoba are from lung cancer.

Figure 47. Age-standardized mortality rates by Regional Health Authority for breast (female only), colorectal, lung and bronchus, prostate, and all invasive cancers, 2018-2020.



Note: Winnipeg Regional Health Authority (WRHA); Prairie Mountain Health (PMH); Interlake-Eastern Regional Health Authority (IERHA); Northern Health Region (Northern); Southern Health - Santé Sud (Southern); Female (F); Male (M).
Age standardized mortality rate in breast and prostate cancer patients in Northern Health Region is suppressed due to small observation (n<20 cases).

Since 2000, age-standardized mortality rates have decreased for the most common cancers.



Why are fewer people dying?

- ✓ Improved and earlier detection (screening)
- ✓ Specialist care
- ✓ Better and more effective treatments
- ✓ Risk factor reduction

See technical appendix for data sources and methodological details.

CANCER SURVIVAL

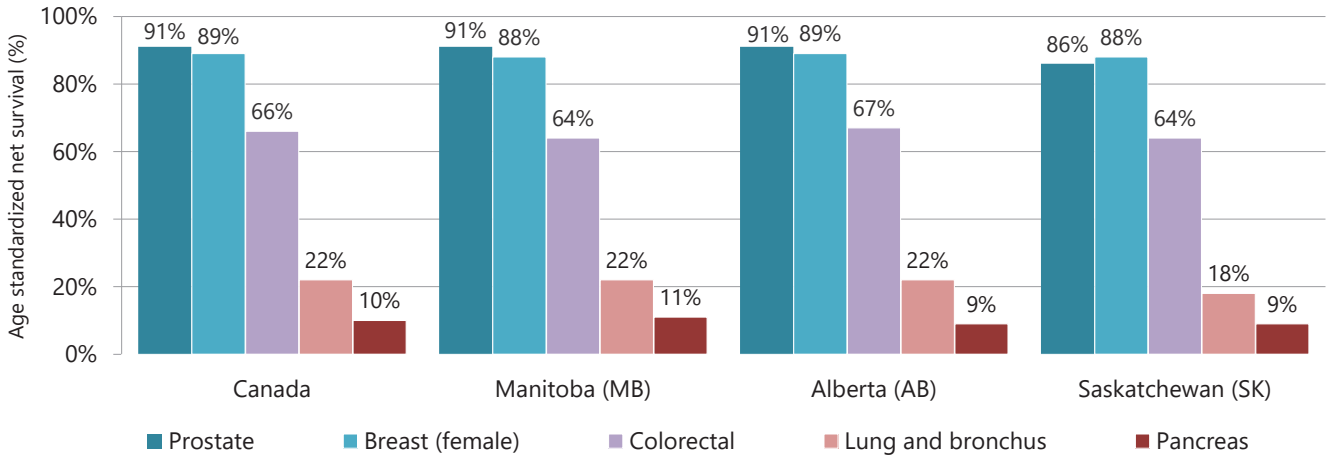
Survival reflects the number or proportion of people living with cancer who have survived for a specified period of time, usually one or five years.

Net survival represents the cumulative probability that cancer patients would have survived to a given period of time after diagnosis, after controlling for the risks of death from other causes. It shows the extent to which cancer shortens life.[3-6] This information is helpful in evaluating effectiveness of healthcare services and understanding how long a person might live after a cancer diagnosis. Table 16 highlights 1-year and 5-year net survival for the most common cancers in Manitoba including regional variations. Data reported by the Canadian Cancer Statistics comparing Manitoba with the national average and Prairie provinces is also highlighted in Figure 48.

One-year net survival for all invasive cancer = 78%

Five-year net survival for all invasive cancer = 63%

Figure 48. Age-standardized five-year net survival by cancer type, comparison of Manitoba with national average and Prairie provinces, 2015-2017.[1]



Canadian Cancer Statistics data, 2015-2017.
See technical appendix for data sources and methodological details.

Table 16. Age-standardized 1-year and 5-year net survival by cancer types 2017-2021.

Cancer sites	1-YEAR NET SURVIVAL [Regional Variation]*	5 -YEAR NET SURVIVAL [Regional Variation]*
All invasive	78% [70% to 79%]	63% [54% to 64%]
Lung	51% [44% to 52%]	25% [21% to 28%]
Colorectal	83% [74% to 85%]	65% [57% to 70%]
Breast (female)	97% [93% to 97%]	89% [86% to 95%]
Prostate	97% [93% to 98%]	89% [79% to 92%]

**Lower and higher net survival rates across Regional Health Authorities (RHA).*
See technical appendix for data sources and methodological details.

WHAT DO WE KNOW?

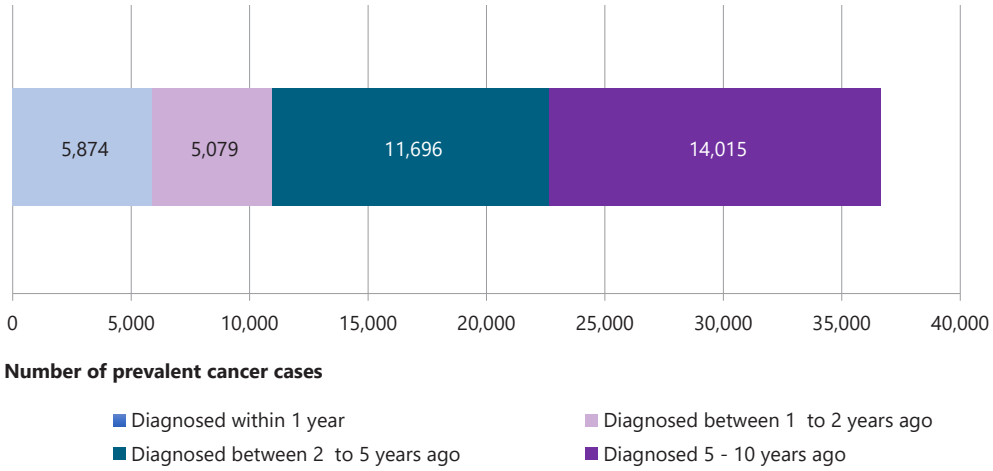
Many complex factors are responsible for influencing cancer survival. These include tumour biology, patient factors (such as smoking), access and utilization of high quality screening, diagnostic, and treatment services, and statistical limitations such as variable data quality and masked effects due to the mix of cancers and disease stages.[3,7] Diagnosing cancer early is the best way to achieve higher survival rates, reduce treatment intensity, and improve quality of life while living with cancer. **Our goal at CancerCare Manitoba is that no Manitobans' life is cut short by cancer and to help ensure that a life with cancer is a life well lived.** By improving survival rates, we are doing just that.

PREVALENCE

Prevalence reflects the number of people who have experienced a cancer diagnosis in Manitoba within a specified period of time. It includes anyone with a new diagnosis, those receiving treatments, those receiving follow-up care, and survivors of the disease.

Cancer prevalence provides an understanding of the number or proportion of individuals who are alive on a specified index date and have previously been diagnosed with cancer. This measure combines incidence (new cases) with survival and reflects the full burden of disease to a healthcare system. Canadian data shows that both the rate of new cancers and survival from cancer is increasing.[1,8,9] Therefore understanding duration-specific prevalence estimates provide a proxy for specific care needs at each point of the cancer experience. This information is vital for strategic cancer care planning, service delivery, and workload management.[8, 10,11] Demands on the cancer care system in Manitoba will increase substantially as more people receive a new cancer diagnosis each year. In addition, many more Canadians will survive cancer but require continuing treatment. This means we will see increases to demands on cancer treatment and workload, but also increases to demands on resources and support for those living longer with the disease. CancerCare Manitoba is readying itself for this growing cancer surge in a sustainable way.

Figure 49. Number of prevalent cancer cases diagnosed between 2011-2020 by number of years since diagnosis (cases alive as of January 1, 2021).



36,664
Manitobans are currently living with cancer.

The number of prevalent cases increased by 12% over 5 years (2016-2021).

Table 17. Manitoba cancer prevalence proportion (per 100,000), by prevalence-duration and type of cancer (cases alive as of January 1, 2021)

	2-year	5-year	10-year
All cancers	789.4	1632.1	2641.9
Lung	69.3	118.0	162.0
Breast (female)	256.9	585.9	1017.1
Colorectal	88.8	195.7	331.5
Colon	57.1	128.0	215.6
Rectum and rectosigmoid	32.5	70.8	121.2
Prostate	255.7	527.1	860.1
Non-Hodgkin lymphoma	34.7	79.4	129.9
Corpus uteri	69.9	167.6	301.0
Melanoma of the skin	37.7	85.7	137.2
Kidney	32.7	67.7	111.8
Pancreas	11.2	17.0	21.8
Bladder	43.8	90.1	137.6
Thyroid	21.3	49.3	96.6
Ovary	19.8	39.4	63.5

See technical appendix for data sources and methodological details.

Prevalence-duration is a proxy for the specific care needs at different points of the cancer continuum. By estimating the number of patients at each point of the continuum we can develop a cancer control strategy specific to our population. For example:

2-YEAR: This timeframe includes individuals who are likely receiving active treatment for their cancers such as chemotherapy, surgery, or radiation therapy.

5-YEAR: Extending to 5-years means we are also including individuals who may have completed treatment and are receiving regular follow-up for recurrence and adverse reactions.

10-YEAR: When we extend to 10-years we also include individuals who may be receiving care related to survivorship.

HOW DO WE COMPARE?

Incidence and mortality data are useful for cancer control planning purposes. These data highlight progress and concerns, can be compared across time, and can be compared across health systems to gain a strong understanding of the fitness of our current cancer care system. Below we compare Manitoba data to regional data (Table 18) and data from an international benchmarking study (Figure 50).

INTRA-PROVINCIAL COMPARISONS

Table 18. Comparison of age-standardized cancer incidence (2019-2021) and mortality (2018-2020) for provincial Regional Health Authorities to overall Manitoba rates per 100,000.

Cancer Sites	Winnipeg RHA		Prairie Mountain Health		Interlake - Eastern RHA		Southern Health - Santé Sud		Northern Health Region		Manitoba	
	I	M	I	M	I	M	I	M	I	M	I	M
All invasive	476.8	177.6	474.2	187.8	517.1	200.4	461.3	180.8	467.3	239.6	478.7	183.6
Lung	61.4	40.2	61.1	41.7	61.6	46.4	59.9	40.7	70.0	51.5	61.4	41.5
Breast	128.6	22.4	113.7	20.4	143.9	21.5	121.4	24.0	132.4	•	127.1	22.1
Colorectal	52.8	20.5	62.4	22.6	60.2	27.7	54.7	22.9	72.5	40.4	56.0	22.5
Prostate	134.9	27.7	118.9	37.3	155.9	38.2	118.1	32.7	84.4	•	131.5	31.5

Incidence (I); Mortality (M). Significance is based on comparison to Manitoba as a whole; all rates are age-standardized. Age-standardized rates by Regional Health Authority are reported for a three-year period (2019-2021 for incidence; 2018-2020 for mortality) to stabilize estimates for smaller populations.

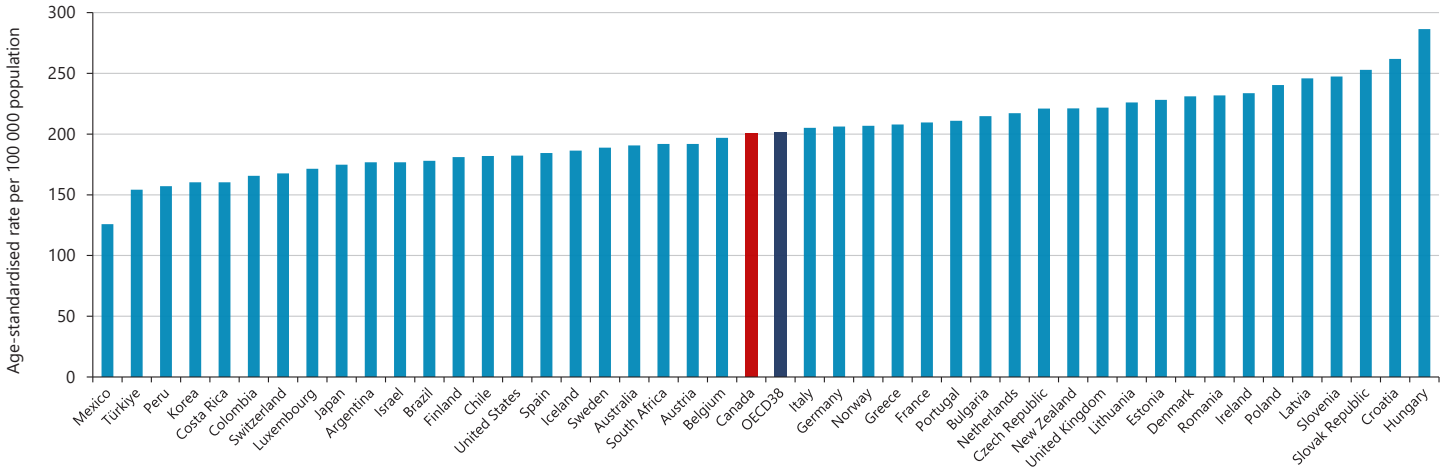
Significantly worse than Manitoba Significantly better than Manitoba • <20 observations No significant difference

See technical appendix for data sources and methodological details.

INTERNATIONAL COMPARISONS

The Organization for Economic Cooperation and Development (OECD) publishes a report known as "Health at a Glance" which presents up-to-date cross-country comparisons of the health status of populations and health system performance in OECD and partner countries. The report includes data on cancer mortality and consistently demonstrates cancer as a major cause of mortality across OECD member countries.[12] Figure 50 shows the age-standardized mortality rates for OECD countries, the overall cancer mortality in Canada is below the average.

Figure 50. Age-standardized cancer mortality rates across OECD member and key emerging economies, 2021 (or nearest year).[12]



See technical appendix for data sources and methodological details.

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SURVIVORSHIP

"The day I was diagnosed with cervical cancer changed my life forever...I remember telling my family that I would never let this disease consume my life. But treatment was a full time job that consumed me, healing and recovery was a full time job that consumed me, it started to define me. And, although I am a 2.5 year cancer survivor, it's a full time job not allowing the fear of this terrible disease consume me. The fear will never go away, but not allowing it to define me helps me live my life to the fullest!"

- CCMB patient.

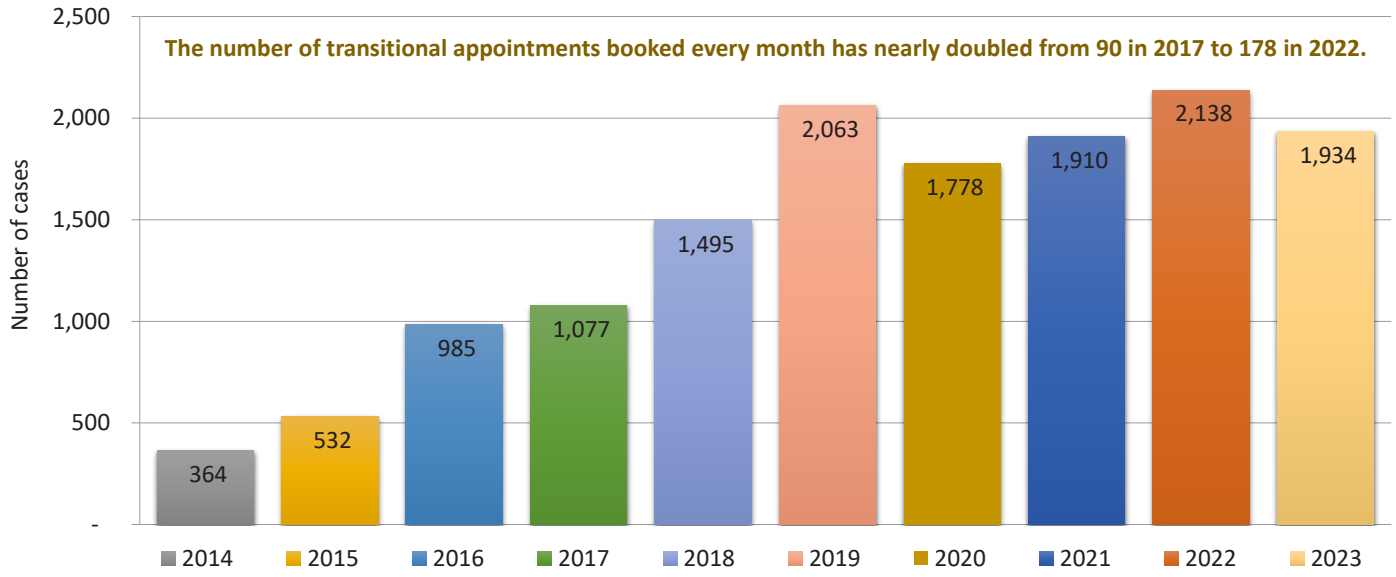
Patients often experience mixed emotions at the end of their cancer treatments. There is a sense of relief, yet also worry about whether there will be a recurrence and concern about the impact of the experience on their everyday lives. CancerCare Manitoba has supports in place for both the physical and psychological care patients may need.

SURVIVORSHIP

"Worry accompanies cancer, even when the cancer is gone." -CCMB Patient.

Family physicians and nurse practitioners play a key role in caring for patients during and after their cancer treatment. CCMB has developed a Moving Forward After Cancer Program, which helps patients and healthcare providers transition towards follow-up care at the end of curative systemic or radiation treatments using recommended follow-up guidelines, standardized care plans, and transition appointments. In addition, patients receive a Moving Forward after Treatment booklet with specific information about treatments they received for their cancer. Although we often consider transitions for patients who have completed their cancer treatments and are moving out of the cancer care system back to their family doctors, CCMB care providers are keen to see the program expand to provide useful information for patients at any point in their experience with cancer – i.e., at diagnosis, treatment changes, care for advanced illness, etc. Transitioning to continuing, follow-up, or palliative care are crucial points in the cancer journey. CCMB's Transition of Care program is working to ensure a consistent approach is used provincially for all patients. The Moving Forward after Cancer project and the Changing Focus: Living with Advanced Cancer project are just two initiatives that have been implemented to support this consistent approach to care.

Figure 51. Number of transitional appointments booked, all cancer sites, 2014-2023.



See technical appendix for data sources and methodological details.

Between 2018 and 2023, 45% of transitional appointments were booked for individuals living with breast cancer.

Nearly 1 out of every 40 Manitobans have survived a cancer they were diagnosed with in the past 10 years. This number is expected to continue growing.

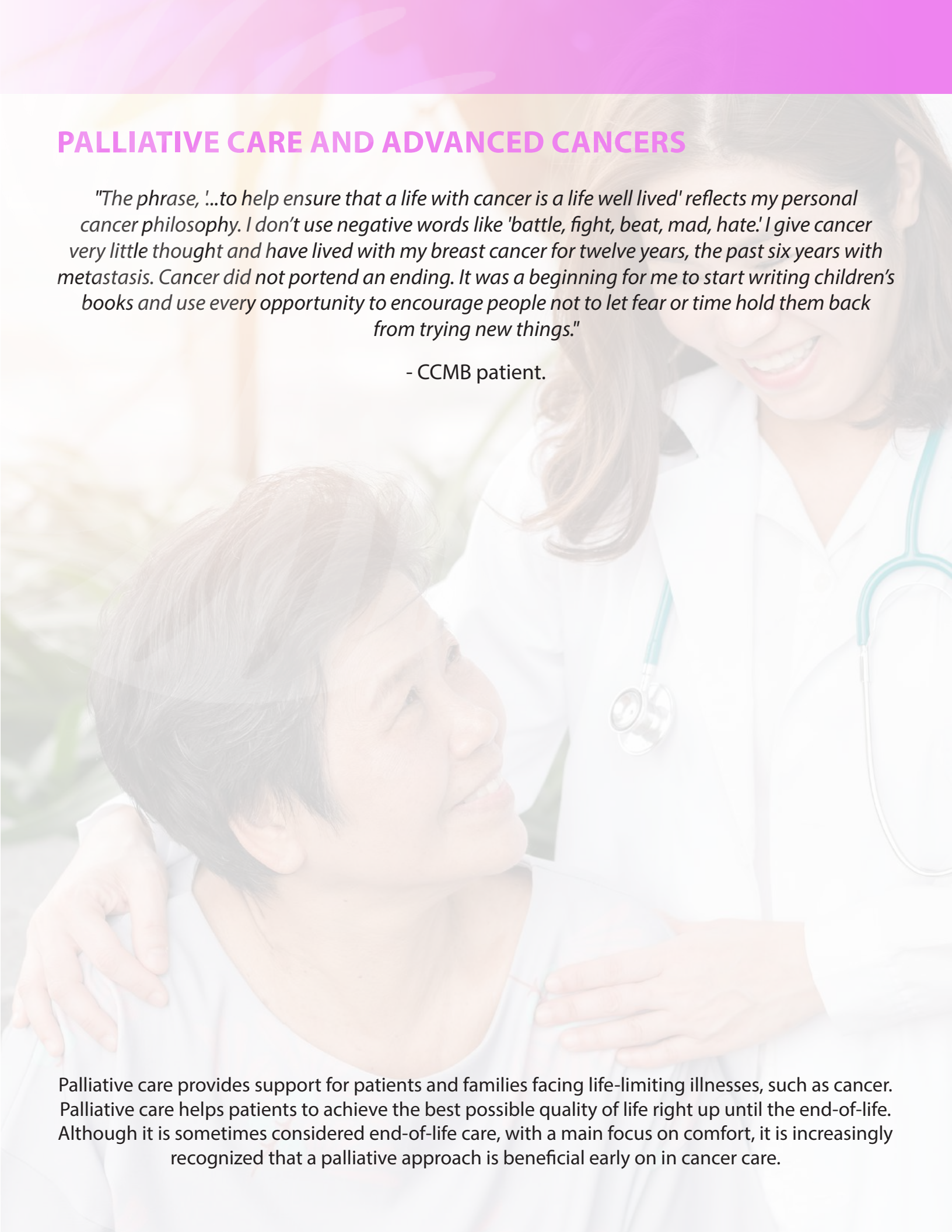
As of January 1, 2021 36,664 individuals were still alive after a cancer diagnosis within the last 10 years.

Many cancer survivors have had a previous diagnosis of prostate or breast cancer.

PALLIATIVE CARE AND ADVANCED CANCERS

"The phrase, '...to help ensure that a life with cancer is a life well lived' reflects my personal cancer philosophy. I don't use negative words like 'battle, fight, beat, mad, hate.' I give cancer very little thought and have lived with my breast cancer for twelve years, the past six years with metastasis. Cancer did not portend an ending. It was a beginning for me to start writing children's books and use every opportunity to encourage people not to let fear or time hold them back from trying new things."

- CCMB patient.



Palliative care provides support for patients and families facing life-limiting illnesses, such as cancer. Palliative care helps patients to achieve the best possible quality of life right up until the end-of-life. Although it is sometimes considered end-of-life care, with a main focus on comfort, it is increasingly recognized that a palliative approach is beneficial early on in cancer care.

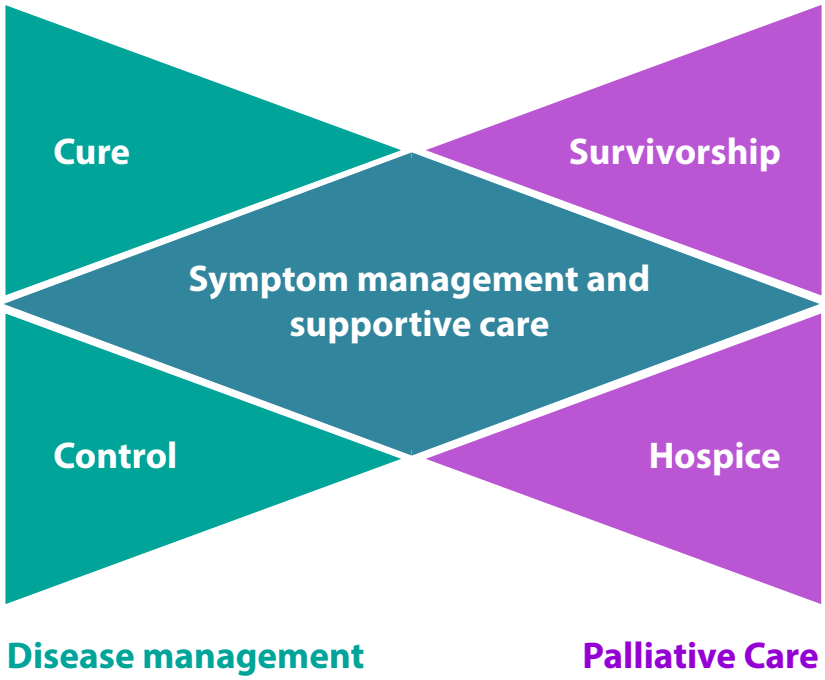
PALLIATIVE CARE AND ADVANCED CANCERS

Palliative care is provided to patients facing life-limiting illnesses, such as cancer, to help them maintain the best possible quality of life until the end-of-life. In essence the palliative care approach aims to provide care that promotes dignity and comfort, rather than cure.[1, 2] Although palliative care is often referred to as end-of-life care it has become increasingly recognized as an approach to benefit serious and chronic disease earlier.[1-3] Evidence shows early palliative care amongst patients with metastatic non-small-cell lung cancer results in longer survival and less aggressive end-of-life treatment, as well as improvements to quality of life and mood.[4] The Canadian Institute for Health Information (CIHI) states that earlier integration of palliative care would be beneficial to both patients and the health care system.[3]

Figure 52. Model of integrated palliative care highlighting how palliative care can be integrated across the patient experience, adapted from the Canadian Virtual Hospice.[5]

"58% of Canadians who died in 2021-2022 received palliative care, an increase from 52% in 2016-2017."

- CIHI Report Access to Palliative Care in Canada, 2023[3]



CANCERCARE MANITOBA

ADVANCE CARE PLANNING OR GOALS OF CARE

Using our patient-reported outcomes tool, COMPASS, we ask patients about advance care planning including three questions related to identifying needs and changes. **Between October and December 2023 nearly 1,700 questionnaires identified that a patient needed information or help with advance care planning. This equates to about 22% of all questionnaires completed.**

PSYCHOSOCIAL SUPPORT

Palliative care does not necessarily end after an individual dies. Loved ones may need support while they grieve. ***Between April 1, 2020 and March 31, 2023, there were 2,432 psychosocial support visits with loved ones and caregivers to help them cope with grieving and bereavement.*** This service is provided through CancerCare Manitoba's Patient and Family Support Services.

RAPID ACCESS TO RADIATION THERAPY

A Rapid Access to Radiation Therapy pilot was launched in 2018 to provide opportunity for same day radiation therapy to improve pain and symptom management and quality of life for eligible patients with terminal cancer or who are receiving palliative care. ***Between November 2020 and December 2023, 285 physician visits were to the Rapid Access Clinic.***

GENERAL HEALTHCARE SYSTEM

HOSPITAL ADMISSIONS WITHIN LAST 28 DAYS

Acute-care hospital visits may be necessary for complex medical needs, however longer or more frequent hospital stays may indicate a service gap. ***In the past 4 years, the percent of patients who died of cancer and had two or more admissions to acute-care hospitals within the last 28 days of life ranged from 22.9% in 2018 to 20.6% in 2021.*** Nationally this value was 23%.[6]

PLACE OF DEATH

We know many patients with terminal cancer would prefer to die at home or in a supportive healthcare setting such as a hospice, palliative care unit, or personal care home.[4,7] The Canadian Institute for Health Information (CIHI) reported that 54.5% of Canadians died at home or in the community in 2020.[3] In Manitoba it is difficult to clearly report the proportion of cancer patients who died in a hospital versus at home as vital statistics data identify any death in a hospice, palliative care unit, or personal care home as a "hospital death" despite the inherent difference between dying in hospital after an unexpected admission and dying in another patient preferred supportive setting.

MAID

In June 2016, the federal government passed legislation legalizing Medical Assistance in Dying (MAID) in Canada for competent adults. ***During the period July 1, 2018 to December 31, 2023, the Manitoba MAID team had 4,119 contacts from patients and received 1,888 written requests resulting in 1,172 assisted deaths. 37% of written requests and 60% of assisted deaths were for individuals with a cancer diagnosis.***

PALLIATIVE CARE PROGRAM

Palliative care services are offered in all Regional Health Authorities in Manitoba focusing on managing physical symptoms as well as providing social, emotional, and spiritual support for individuals and their families throughout the course of the illness, including bereavement support. ***In 2020/2021, there were 2,749 referrals to palliative care programs in Manitoba with the majority of referrals (54%) made to Winnipeg Regional Health Authority.***

As the burden of cancer increases so too does the demand on high-quality palliative care services.

TRENDS IN SELECTED ADVANCED CANCERS IN MANITOBA

Pancreatic, hepatobiliary (liver, gallbladder, and bile ducts), and esophageal cancers are not commonly diagnosed cancers, however, they are usually diagnosed at later stages of disease. In fact, over 50% of pancreatic cancers are diagnosed at stage IV.[8]

Pancreatic, hepatobiliary, and esophageal cancer are the 3rd, 6th, and 11th most common causes of cancer-related deaths in Canada, respectively.[9]

The 5-year net survival rates for these cancers are less than 20% in Canada.[10]

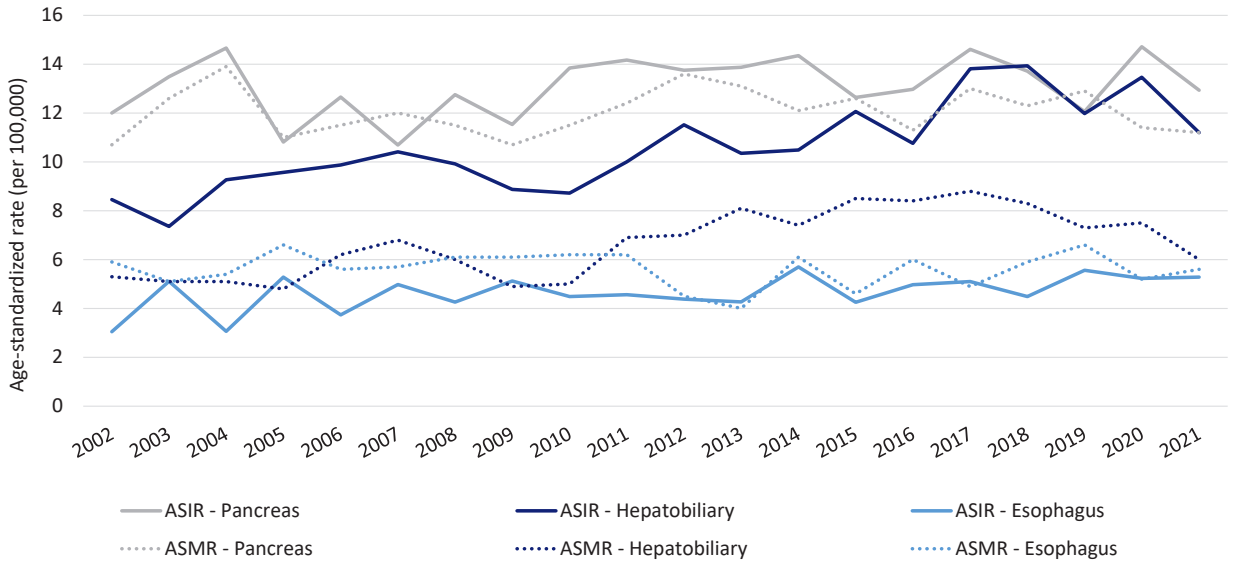
Risk reduction is the best strategy to avoid poor outcomes associated with these cancers.

Table 19. Number of new cancer cases (2021) and deaths (2020), percentage of late stage cancers (2021), and net survival rates (2017-2021) in Manitoba, by cancer type.

	Incidence	Mortality	% Stage IV	1-Year Survival	3- Year Survival
Pancreas	201	160	57.2%	35.3%	20.3%
Hepatobiliary	178	129	25.8%	46.5%	25.9%
Esophagus	82	76	41.4%	42.8%	22.8%

Note: Hepatobiliary includes liver, gallbladder, and bile ducts cancers.

Figure 53. Age-standardized incidence rates (ASIR) and age-standardized mortality rates (ASMR) between 2002 and 2021 in Manitoba, by cancer type.



WHAT IS CANCERCARE MANITOBA DOING?

Research suggests the introduction of early palliative care may result in less aggressive end-of-life treatments and improved quality of life.[3,4] The Early Palliative Care Clinic at CancerCare Manitoba was implemented to offer support to patients and their caregivers in order to make informed decisions about their goals of care. This clinic is available to individuals diagnosed with pancreatic cancer, however, there are opportunities to expand this clinic to other cancer sites where the prognosis is not favourable.

341

Between April 2022 and March 2024, the Early Palliative Care Clinic received 341 referrals to help patients access services aligning with their goals of care.

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PATIENT EXPERIENCE

"I *had excellent care. We wanted to pay back to Cancer Care so both my husband and I are monthly donors. I can't say enough great things about CancerCare Manitoba. THANK YOU FOR SAVING MY LIFE."*

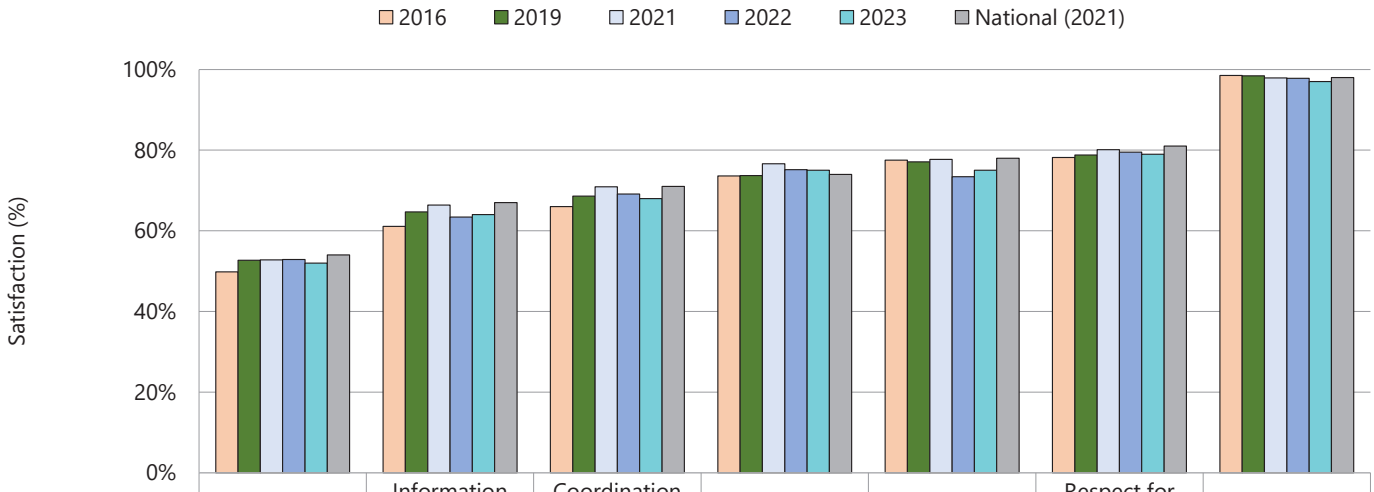
- CCMB patient.

Understanding the patient experience is crucial to the delivery of person-centred care. It explores patient interactions with the health care system and considers factors related to service delivery that are highly valued by patients and their loved ones. Key elements include access to timely and appropriate care, good communication with healthcare providers, safety, satisfaction and meeting expectations, and more. At CancerCare Manitoba, we strive to provide cancer services that are respectful and responsive to individual preferences, needs, and values. We value the feedback we receive from Manitobans.

PATIENT REPORTED EXPERIENCE MEASURES (SATISFACTION)

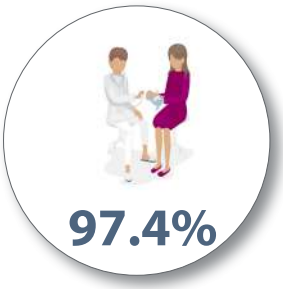
CancerCare Manitoba (CCMB) conducted the Ambulatory Oncology Patient Satisfaction Survey (AOPSS) to evaluate patient satisfaction for care received at CCMB for a three-month period between April and June 2023. Manitoban adult patients were invited to share their experiences by completing the national standardized and validated AOPSS questionnaire. A total of 1,138 patients from across Manitoba completed questionnaires with a ***response rate of 44 percent.*** AOPSS measures overall satisfaction, and satisfaction along six dimensions of person-centred care.

Figure 54. Trends in overall satisfaction and satisfaction across six dimensions of person-centred care for CancerCare Manitoba's 2016, 2019, 2021, 2022, and 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) compared to National scores (2021).

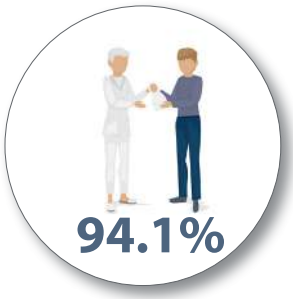


	Emotional Support	Information Communication and Education	Coordination and Integration of Care	Access to Care	Physical Comfort	Respect for Patient Preferences	Overall Satisfaction
2016	50%	61%	66%	74%	78%	78%	99%
2019	53%	65%	69%	74%	77%	79%	98%
2021	53%	66%	71%	77%	78%	80%	98%
2022	53%	63%	69%	75%	73%	79%	98%
2023	52%	64%	68%	75%	75%	79%	97%
National (2021)	54%	67%	71%	74%	78%	81%	98%

Notes: *The national average includes data from Alberta, Ontario and Manitoba.*
See technical appendix for data sources and methodological details.

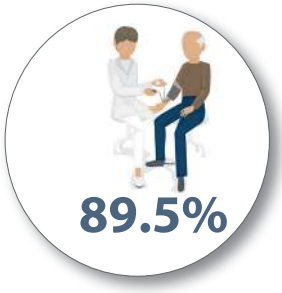


97.4% would rate the quality of care they received at CCMB over the past 6 months as *good, very good, or excellent.*

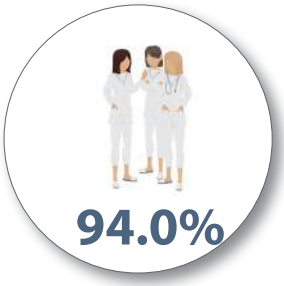


94.1% felt they were treated with dignity and respect.

91.9% felt *completely* safe receiving care at CCMB.



89.5% felt that care providers at CCMB did everything they could to treat their cancer.



94.0% felt that their health care providers were *usually* or *always* aware of their test results.

PATIENT AND CAREGIVER INVOLVEMENT

INVOLVING PATIENTS IN THEIR CANCER CARE

At CancerCare Manitoba (CCMB) patients and their families are at the very heart of our work. We strive to provide patient and family-centered cancer care, using an approach to planning and delivery that recognizes and respects patients and families as partners in the process. In the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) we ask patients whether they were involved in decisions about their care as much as they wanted. ***74% of respondents provided a positive response.***

CAREGIVER INVOLVEMENT

At CCMB we consider someone a "caregiver" if they are helping someone they love during cancer care. There are different types of caregivers. Some are family members. Others are friends. Every situation is different. There are also different ways to provide care. Caregiving can mean helping with day-to-day activities such as attending or driving to doctor visits, or preparing food. But it can also happen long-distance, when you are coordinating care and services by phone or email. Caregiving can also mean giving emotional and spiritual support. It may mean helping your loved one cope and work through the many feelings that come up at this time. Talking, listening, and just being there are some of the most important things you can do. In the 2023 AOPSS, we asked patients to identify how much opportunity their care providers gave to their caregivers to be involved in their care and treatment. ***Over 90% of respondents told us that their care providers involved their caregivers the "right amount" of time - not too little and not too much. Just right.***

IMPACTS OF TRAVEL ON PATIENTS FROM REMOTE OR RURAL MANITOBA:

Area of residence can be a significant barrier for people living in rural areas of Manitoba. We want to ensure that patients across Manitoba receive equitable access to care by working to minimize barriers rural patients face throughout their experience with cancer. The Community Oncology Program is a provincial program of CancerCare Manitoba (CCMB) that works to bridge partnerships between primary care, specialists, community, and regional partners in an effort to provide Manitobans with quality cancer care closer to home. Through this strong partnership, we are able to better meet the needs of Manitobans living with cancer.

The most recent AOPSS highlighted regional differences in satisfaction to the question asking whether they felt their care providers considered their travel concerns during treatment planning. Northern Health Region had the lowest reported satisfaction for this question (47%). Respondents from the Prairie Mountain Health (64%) were the most satisfied of regions outside of Winnipeg.

Figure 55. Percentage of positive responses to question: "Do you think you were involved in decisions about your care as much as you wanted?".

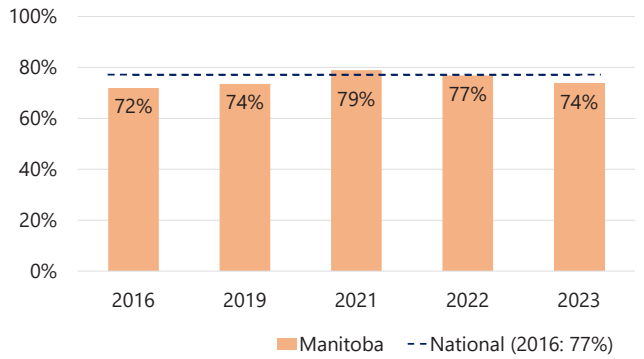


Figure 56. Percentage of AOPSS respondents who responded "*Right Amount*" to the question: "How much opportunity did your care providers give your family or friends to be involved in your care and treatment?".

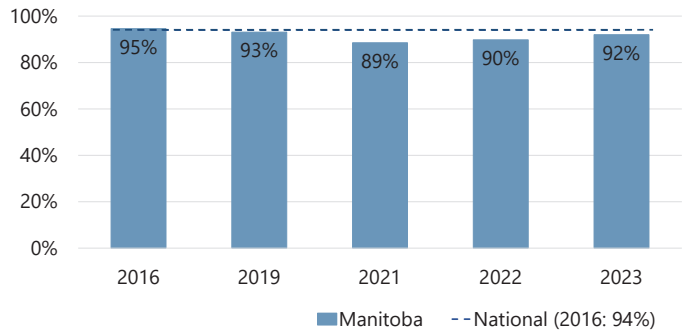
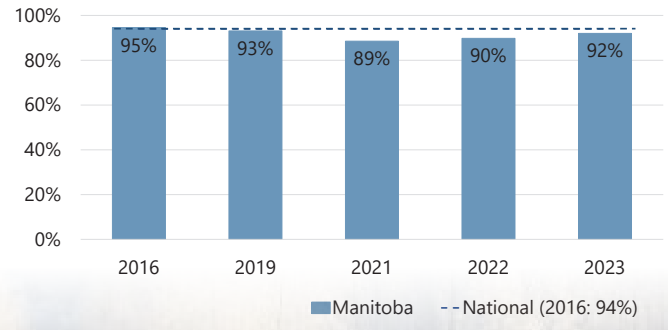


Figure 57. Percentage of 2023 AOPSS respondents providing positive responses to the question: "If you had to travel for any tests or treatments, did your care providers consider your travel concerns when planning for your treatment?".



See technical appendix for data sources and methodological details.

EMOTIONAL HEALTH

"**Cancer is a human experience.** Living with cancer is about dealing with the unknown. It is about trying to grasp the news and starting to understand its life-changing effect. It is about wondering if the treatment is working and whether the side effects will go away soon. It is about questioning whether anything else can be done to overcome this illness. And it is about figuring out what life will be like when treatment is over, while having hope for the future. Sometimes, it is about learning to let go of the possibility of cure."

- Canadian Partnership Against Cancer (CPAC), from *Living with Cancer: A Report on the Patient Experience* (2018)[1]

Scores for the dimension of emotional support in the Ambulatory Oncology Patient Satisfaction Survey (AOPSS)have been low across Canadian jurisdictions, Manitoban regions, and across time. We have seen a slow but consistent increase in Manitoba since 2008. This highlights an opportunity to improve the patient experience in Manitoba.

Figure 58. Satisfaction scores over time for AOPSS Dimension of Emotional Support.

See technical appendix for data sources and methodological details.

AREAS OF CONCERN WITHIN THE DIMENSION OF EMOTIONAL HEALTH IN THE 2023 AMBULATORY ONCOLOGY PATIENT SATISFACTION SURVEY (AOPSS)

52% of Manitoban respondents who had anxieties and fears when they were first told about their illness did NOT receive a referral to a care provider to help them with these anxieties and fears.

TYPE OF INFORMATION NEEDED BUT NOT RECEIVED:

67% did NOT receive all the information they needed on changes to their relationship with their spouse/partner.

60% did NOT receive all the information they needed around changes to their emotions.

53% did NOT receive all the information they needed on changes to their sexual activity.

53% did NOT receive all the information they needed on changes in their work or usual activities.

43% did NOT receive all the information they needed on changes to their physical appearance.

47% did NOT receive all the information they needed about their nutritional needs.

IMPACTS OF FINANCIAL STRESS ASSOCIATED WITH CANCER CARE:

Many individuals experience financial stress after a cancer diagnosis. The 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) revealed that ***50% of respondents never or only sometimes got the help they needed to figure out how to pay for any extra costs for their cancer care.*** This type of response has an impact on the patient experience. In fact, overall satisfaction scores were lower for individuals who provided a negative response to this AOPSS question.

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EQUITY, DIVERSITY AND INCLUSION

"Promoting screening and raising awareness about cancer, all those things need to come from the grassroot level in the communities and the community connector is the perfect person to do that. "

- Indigenous Community Connector.

CancerCare Manitoba is committed to a culture of Equity, Diversity and Inclusion in the delivery of care, and all of the organization's operations, including research and education. We believe that self-determination, collaboration and co-development are important elements to enhance equitable cancer care.

BUILDING AN EQUITABLE CANCER CARE SYSTEM

The provision of equitable service delivery and cancer-related care to all citizens of Manitoba is important to everyone at CancerCare Manitoba (CCMB). Equity has always been central to the fabric of the organization but more recently we have focused on working to further enhance and improve equitable service delivery. The need to work towards improved care for underserved populations was identified as one of six strategic directions for CCMB in the Manitoba Cancer Plan 2016-2021. This strategic direction targets the provision of new and enhanced access to services for First Nations, Métis, and Inuit and new attention to newcomers, older adults, and those living in geographically-isolated areas, as well as the development of a new multidisciplinary care program for adolescents and young adults. Hearing and learning from the experience of patients and their loved ones is valued. Anyone who finds themselves experiencing barriers to care can connect with us to find out more about services we provide to all underserved populations (e.g., gender diverse people, people living with a disability, people living in poverty, etc.). We continue to apply a collaborative province-wide approach to address the needs of underserved populations to ensure equity in service delivery, and ultimately in cancer outcomes.

ADDRESSING BARRIERS TO SCREENING IN FIRST NATIONS, MÉTIS, AND INUIT COMMUNITIES:

The population of Manitoba was 1.34 million at the time of the 2021 census.[1] ***18% of all Manitobans identified as First Nations, Métis, or Inuit.***[1] Winnipeg has the largest population of Indigenous individuals compared to all other urban centres in Canada.[1] It is documented that Indigenous populations in Manitoba experience inequities based on cultural and language differences, geographic and social remoteness, and limited access to basic healthcare services. CCMB is dedicated to improving cancer care for, and with, Indigenous peoples of Manitoba. We recognize and respect that our main service delivery sites are located on Treaty 1 land, the original territories of the Anishinaabeg, Ininiwak, Anishininewak, Dakota-Oyate, and Dene peoples. We acknowledge that Manitoba is also located on the Homeland of the Red River Métis and northern Manitoba includes lands that were and are the ancestral lands of the Inuit. We respect the Treaties made on this land and acknowledge the harms and mistakes of the past. We are committed to building on existing collaborative partnerships with Indigenous communities to reduce inequities in care and access to cancer services for Indigenous people of Manitoba.

Research has described inequities in cancer care provided to First Nations, Métis, and Inuit people across Canada. Local research has identified ***First Nations are more likely than all other Manitobans to be diagnosed with cancer at a later stage.***[2,3] Another study shows that ***First Nations women are more likely to be diagnosed with an invasive cervical cancer than all other Manitoban women.***[4] This research highlights a well-known gap in the provision of cancer screening services – that Indigenous populations experience barriers to access cancer screening consequently leading to a higher rate of late stage of cancer at diagnosis and worse health outcomes. For example, outcomes due to late-stage breast cancer diagnoses are often worse than when a cancer is found early with routine breast cancer screening mammography. In addition, cervical cancer can be avoided by finding early lesions caused by the human papillomavirus (HPV) through routine Pap smears and HPV testing. There are many collaborative solutions to improve cancer screening participation and inform public health education strategies that reduce barriers to screening and promote healthy lifestyles in Indigenous communities.[2,4,5] CCMB's Screening Program works hard to address these barriers and find new ways to deliver cancer screening services to all Manitobans. This includes partnering with clinics, nursing stations and health centres around the province to offer enhanced Pap test services throughout the year and the coordination of BreastCheck mobile mammogram clinics to provide better access to breast cancer screening in rural areas.

COMMUNITY NETWORKING FOR EQUITABLE ACCESS TO CANCER CARE:

CCMB's Community Oncology Program connects with First Nations, Métis, and Inuit communities and our partners in care to build trust, relationships, and sustainable solutions to reduce the burden of cancer. We also work directly with clients who are experiencing racism and barriers in access to health services due to disparities in social and economic conditions. Our goal is to engage with patients, survivors, families, and communities to help improve the cancer journey for Indigenous individuals living with cancer and their communities experiencing cancer. The team of Provincial Nurse Navigators support individuals from point of suspicion of cancer to navigate the health system, including healthcare gaps and barriers, increase cancer awareness, prevention, screening, and other cancer-related services. In early 2024, CCMB developed a new Indigenous designated role within Provincial Cancer Navigation services, the Indigenous Nurse Navigator. The Indigenous Nurse Navigator, along with Navigation teams across the province aim to provide culturally safe, trauma-informed, and person-centred care. The Indigenous Nurse Navigator provides enhanced support for Indigenous peoples who may require the support of a nurse navigator and the safety of shared identity and culture. Connecting to the Indigenous Nurse Navigator can occur directly through self-referral or through referral from health care providers across the health system. Through established partnerships with Indigenous health partners this role will continue to develop, to enhance experience, care and outcomes across the cancer continuum for First Nations, Métis and Inuit Peoples. These collaborations help to improve system-wide equity in care and provide navigation for clients experiencing significant barriers leading to an inability or difficulty in accessing the system.

We are working with First Nations, Métis, and Inuit communities to ensure all Manitobans have equitable access to cancer care.

ADVANCING HEALTH EQUITY IN FIRST NATIONS, MÉTIS, AND INUIT COMMUNITIES

CancerCare Manitoba's pledge is to provide evidence-based, high quality, and equitable care for all people in our richly diverse province. CancerCare Manitoba (CCMB) has a commitment to health equity to enable the best cancer outcomes and experience for all. This means that ethnicity, culture, socioeconomic status, age, identity, and gender are respected and factored into cancer planning. The following are examples of important activities toward advancing health equity:

Jordan's Principle Coordinator Referrals

Since July 2022, First Nations pediatric oncology patients at CCMB have access to Children's Hospital Jordan's Principle Coordinator. **In the past two years, the coordinator has assisted 13 patients and responded to 44 referrals** with various needs, including transportation, meals, accommodations, advocacy, and medical supplies.

Culturally-Appropriate Emotional Support

Beaded earrings created by a Webinar Participant.

During the COVID-19 pandemic, CCMB engaged with First Nations partners to offer the first Patient Support Webinar Series from a First Nations' perspective. A First Nations working group developed these webinars with facilitation by a First Nations Knowledge Keeper. Topics included Breathing, Gratitude, Transformation and Palliative Care, Medicine Wheel Teachings, Family Structure, and Beading. A second webinar series was offered in 2024, led by First Nations Partners, Knowledge Keepers, and Elders. **In total, 13 culturally-appropriate emotional support webinars were hosted from a First Nations' perspective - each hosting an average of 80 participants!** Topics included Grief and Loss, the Medicine Wheel, Traditional Ways of Healing, and Art-based Healing. Métis-led and Inuit-led planning committees are currently being formed.

"When my son went through treatment I wish we had more Indigenous support while watching him go through that." - Webinar Participant.

"I gained more knowledge after every session and I always take faith with me after leaving the sessions. I will continue to pray, smudge and use the medicines that the land has to offer me and my family." - Webinar Participant.

Community Connectors Initiative

Indigenous Patients and Families are supported by Indigenous Community Connectors throughout their cancer journey. Launched in 2019, the Community Connector Initiative is based on a strong and growing collaboration of stakeholders and Elders, including partners from the Manitoba Métis Federation, Southern Chiefs Organization, Manitoba Keewatinowi Okimakanak, Keewatinohk Inniniw Minoayawin Inc., Government of Nunavut, Kivalliq Inuit Services, and health leaders in the Kivalliq region - just to name a few. Guided by a diverse and inclusive Steering Committee, the program **trained 71 Indigenous Community Connectors** to bridge gaps experienced by Indigenous individuals and communities, and to address barriers to cancer care. Community Connectors continue to leverage their relationships and knowledge to enhance care quality within their communities, offering guidance and resources to patients and families throughout the cancer journey. CCMB is creating a sustainability framework to support these positions, with plans to expand training in Manitoba and launch in Nunavut's Kivalliq region. Learning exchanges were hosted in Fall 2024, and more are planned for 2025.

She [the Community Connector] helped with everything. She helped me to understand. Nobody else had the time for me. It's good to have someone who helps with this." - Person with cancer who received Community Connector's support.

Indigenous Community Profile Website

19,496

CCMB and Indigenous partners developed the Indigenous Community Profiles website to assist health care providers in creating safer and more comprehensive care plans for patients returning to communities. The Indigenous Community Profiles website serves as a valuable resource beyond cancer care, offering geographical and travel information, as well as details on health care.[6] **As of June 2024, the website had 19,496 views.** CCMB will work to expand the resources available through the website, ensuring continued support and accessibility for Indigenous communities in Manitoba and Nunavut's Kivalliq region.

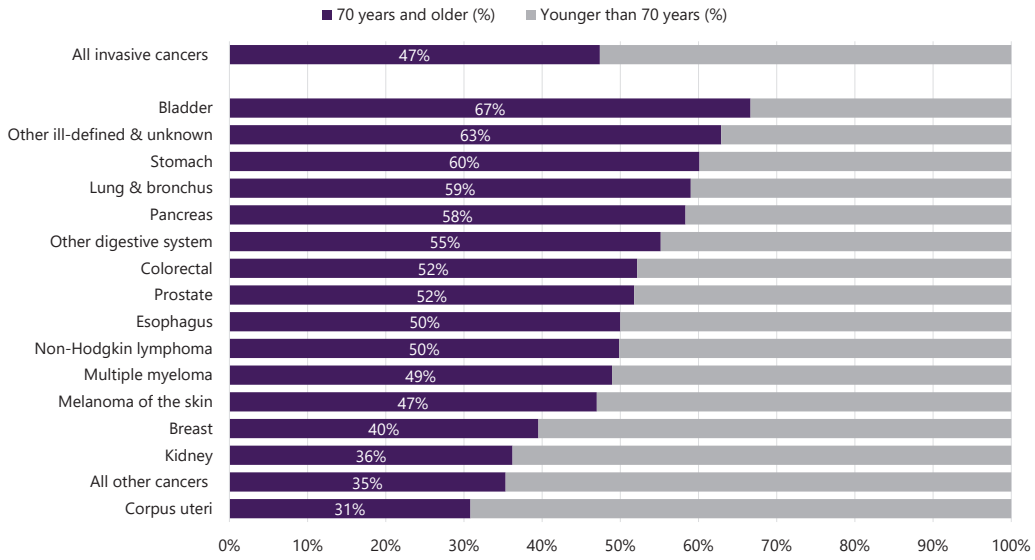
IMPROVING ACCESS AND SUPPORT TO OLDER ADULTS WITH CANCER

11.2% of Manitobans were over the age of 70 in the 2021 census.[1]

The proportion of older adults in Manitoba is estimated to reach 13% -17% by 2043.[7]

Annual cancer cases are expected to rise consistently over the next few decades. This is largely an effect of our aging population. With the population increasingly aging, the cancer burden amongst older adults is growing rapidly. In 2021, ***47% of Manitobans diagnosed with invasive cancer are over the age of 70 years.*** By 2035, over 5,000 new cancer cases will be diagnosed in this age group each year. Older patients with cancer have unique needs that are not present in younger patients, many of which can be attributed to typical physiologic changes related to aging, as well as the differences with psychosocial care and support. With this in mind, CCMB aims to improve the experience and outcomes of older Manitobans with cancer by taking a more holistic view of individuals and their health, understanding their experience and implementing best practices.

Figure 59. Proportion of new cancer diagnoses which occured in older adults (ages 70 years and older), 2021.



A spotlight report focusing on Older Adults living with cancer in Manitoba was released in 2024.

ADVANCING HEALTH EQUITY FOR GENDER-DIVERSE PEOPLE WITH CANCER

In 2024, the CCMB Health Equity Collective hosted guest speaker, Tristan Bilash, a transgender man and ovarian cancer survivor, for a virtual event with over 150 participants. This included a workshop with Tristan and organizational leaders to discuss advancing health equity for gender-diverse people with cancer, identifying actionable opportunities. CCMB's annual Health Equity Week offers staff and clinicians in Manitoba virtual learning opportunities to advance health equity.

ENGAGING WITH NEWCOMERS TO UNDERSTAND CANCER-RELATED NEEDS OF NEW CANADIANS

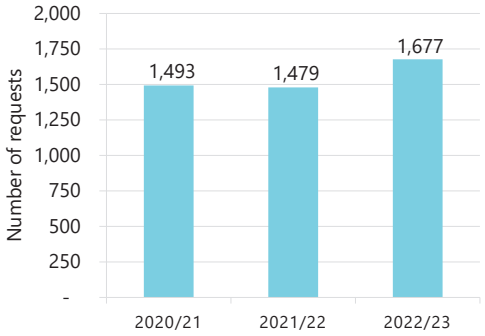
At the time of the 2021 Census, 257,620 Manitobans identified being born outside Canada. ***Over 58,000 individuals recently immigrated to Manitoba between 2016 and 2021.***[2] During this time, the top 5 countries of origin included India, Philippines, Nigeria, China, and Syria.[2] CCMB works with newcomers to ensure they are aware of how to access screening, cancer information, and cancer care support. We have a team available to help newcomers navigate the cancer care and healthcare system in an effort to remove barriers to care at any point of the cancer experience. In addition, we have formed a Newcomer Advisory Committee to help us to better address the needs of these populations. In 2023, CancerCare Manitoba engaged with Newcomers to understand their cancer care needs and barriers. Barriers identified included language barriers, lack of education on accessing the health system, and misinformation about cancer screening. This engagement continues to inform future co-developed approaches to addressing these barriers.

SUPPORTING MANITOBANS WITH CANCER THROUGH THE LANGUAGE ACCESS PROGRAM

The provision of language services is an important quality service provided in collaboration with the Shared Health Language Access program, Winnipeg Regional Health Authority (WRHA) Language Access program, Winnipeg RHA Indigenous Health, and the E-Quality Communication Centre of Excellence (ECCOE). ***Over a one-year period there were 1,677 interpreter requests through CCMB across 33 languages.*** The most common language requests were:

1. Mandarin (13%)
2. Cantonese (12%)
3. Vietnamese (10%)
4. Russian (9%)
5. Punjabi (7%)
6. Tagalog (7%)
7. American Sign Language (ASL) (6%)
8. Cree, Oji Cree, and Ojibway (5%)
9. Ukrainian (5%)
10. Spanish (4%)
11. Arabic (4%)
12. Korean (4%)
13. Tigrinya (2%)
14. Portuguese (2%)
15. Swahili (1%)
16. Other (9%)

Figure 60. Number of interpreter requests through CancerCare Manitoba.



See technical appendix for data sources and methodological details.

We continue to work together to improve patient and healthcare provider awareness of available language services.

ENHANCED ACCESS TO CANCER CARE AND SUPPORT THROUGH VIRTUAL SPACE

Individual Counselling and Group Sessions

Patients and Families are now able to access individual counselling and support group sessions virtually. **Compared to 2020, there was a 25% increase in individual counseling appointments and 30% increase in the number of participants who accessed group sessions in 2021 as a result of offering virtual appointment. This number increased to 54% in 2022.**

"The psychosocial has all been online and she [counsellor] has been a really good guide. I don't think I would have attended my appointment if I had to go in person. Very convenient to have a Zoom or phone appointment. I don't have to make another trip. If you are sick at home you may go in to get seen but may not do the same for psychosocial discomfort." - CCMB Patient Advisor

Education and Information Sessions

Cancer education and information sessions are available to patients and family virtually. Sessions are facilitated by cancer care experts on a variety of general topics such as nutrition, managing anxiety, fatigue, exercise, treatment, and research. **Between 2020 and 2023, 22 webinars have been offered to over 1,780 patients and families. Since 2022, 419 participants from across Manitoba have joined the virtual Patient and Family Conference.** CCMB also offers virtual information and education session specific to cancer type. For instance, **Between April 2023 and March 2024, a total of 99 participants joined sessions on Anti-hormonal Therapy for Breast Cancer.** The sessions help patients to understand the meaning of being on this therapy, what to expect, and to feel empowered to make informed decisions about their care.

"The online option was effective... and means it's easier to access for people from across the province." - Session Participant.

Wig and Headwear Services

CCMB provides virtual wig or headwear fittings for patients. **Between 2021 and 2023, 883 patients had a virtual fitting appointment using virtual wig catalog.** Once patients select a wig, it is sent to them by mail.

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1. Statistics Canada. (2023). *Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001*. Ottawa. Released November 15, 2023. Available at: https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Manitoba&DGUIDlist=2021A000246&GENDERlist=1,2,3&STATISTIClist=1,4&HEADERlist=0 (accessed [29 January 2024]).
2. Decker, K.M., Kliewer, E.V., Demers, A.A., et al. (2016). *Cancer incidence, mortality, and stage at diagnosis in First Nations living in Manitoba.* Curr Oncol. Aug 2016;23(4):225-32. doi:10.3747/co.23.2906.
3. Horrill TC, Dahl L, Sanderson E, et al. (2019). *Comparing cancer incidence, stage at diagnosis and outcomes of First Nations and all other Manitobans: A retrospective analysis.* BMC Cancer. Nov 6 2019;19(1):1055. doi:10.1186/s12885-019-6296-7.
4. Decker, K.M., Demers, A.A., Kliewer, E.V., et al. (2015). *Pap test use and cervical cancer incidence in First Nations women living in Manitoba.* Cancer Prev Res (Phila), 8(1), 49-55. Curr Oncol. Aug 2016;23(4):225-32. doi:10.3747/co.23.2906.
5. Horrill TC, Dahl L, Sanderson E, et al. (2019). *Cancer incidence, stage at diagnosis and outcomes among Manitoba First Nations people living on and off reserve: A retrospective population-based analysis.* CMAJ Open. Oct-Dec 2019;7(4):E754-e760. doi:10.9778/cmajo.20190176.
6. CCMB Communications & Public Affairs. (2023). *News Release: CancerCare Manitoba Launches New Indigenous Community Profiles Website.* Winnipeg, MB. CancerCare Manitoba: Available at: https://www.cancercare.mb.ca/About-Us/communications-and-public-affairs/news-archive/News-Release-CancerCare-Manitoba-Launches-New-Indigenous-Community-Profiles-Website (accessed: [23 February 2024]).
7. Statistics Canada. (2019). *Population Projections for Canada (2018 to 2068), Provinces and Territories (2018 to 2043).* Ottowa, ON: Statistics Canada. Available at: https://www150.statcan.gc.ca/n1/pub/91-520-x/91-520-x2019001-eng.htm. [Accessed: February 9, 2024].

APPENDICES

"I remember getting my diagnosis over the phone. It was my entry into "Cancerland". I felt I had entered an emotional, medical and technological space. I had to learn to accept strong emotions and process all the new and bewildering language of medicine. I had to learn to advocate for myself along with my partner's help. The crucial thing for me was to develop compassion for myself and for others around me. The need to cultivate compassion has become a transformative and a guiding value as I get on with the rest of my life. I am grateful to those who work in the medical profession who helped in giving me more life, a life transfigured by this experience."

- CCMB patient.

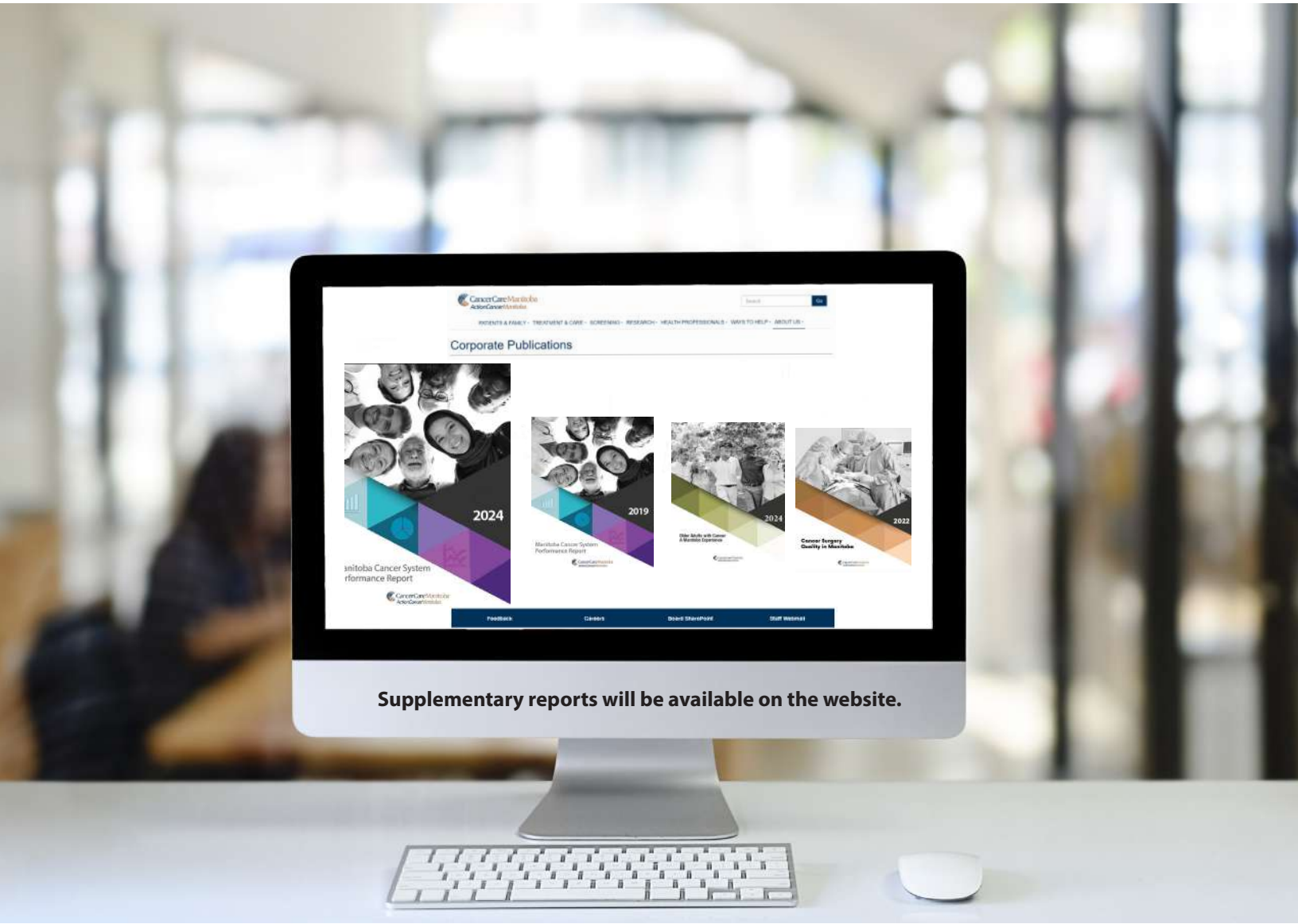
ORDER OF APPENDICES:

CONNECTING TO THE WEB

MANITOBA CANCER SYSTEM PERFORMANCE SERIES

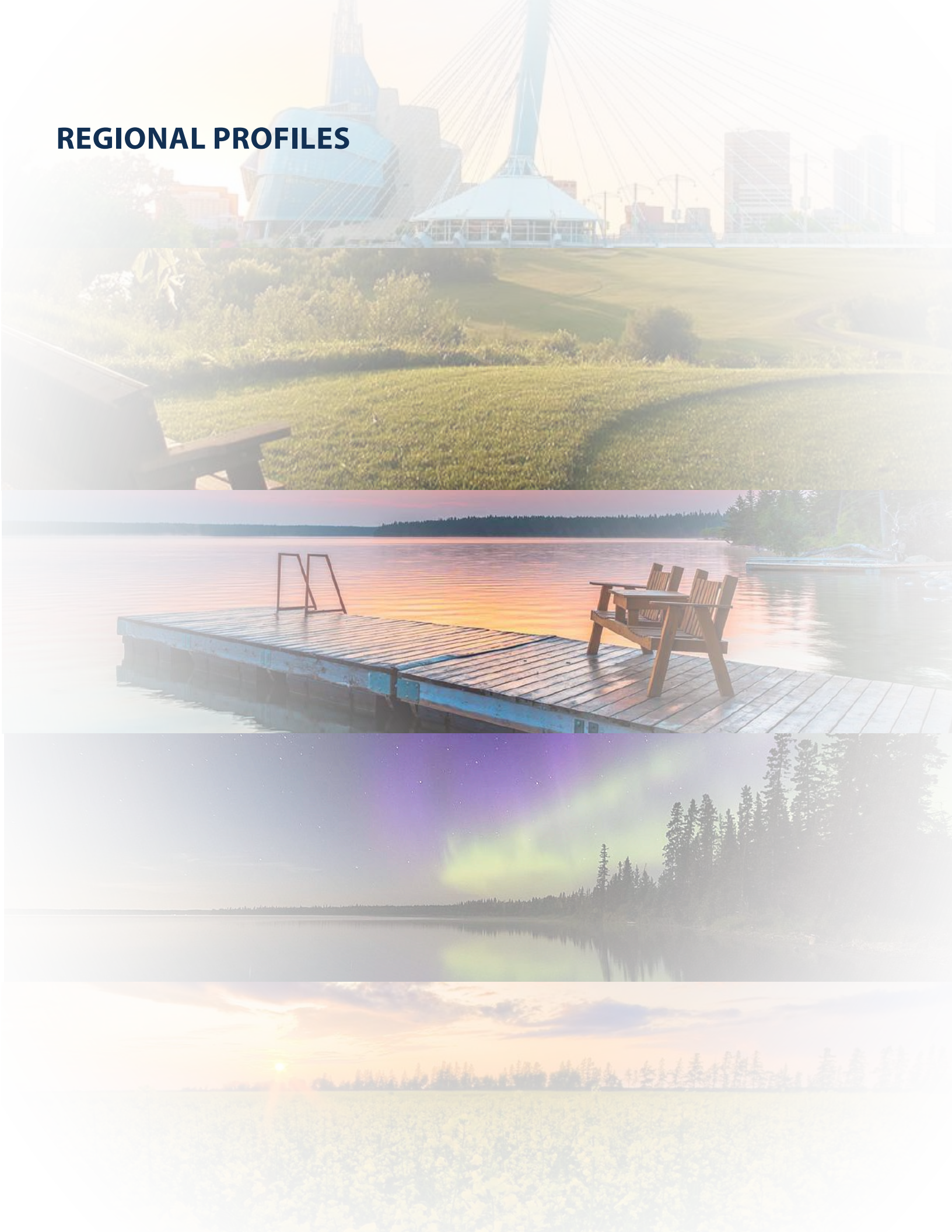
Find us on the Web

https://www.cancercare.mb.ca/About-Us/corporate-publications



This **Manitoba Cancer System Performance Report** is the second omnibus report in a series of reports highlighting a wide range of metrics measured at CancerCare Manitoba. System Performance series includes reports on **Cancer Surgery Quality in Manitoba** and a spotlight report on **Older Adults with Cancer.** We plan to release new and exciting spotlight reports on a regular basis. Watch our website for these reports as they are released!

REGIONAL PROFILES



REGIONAL PROFILE: 2024 MANITOBA CANCER SYSTEM PERFORMANCE REPORT

Winnipeg Regional Health Authority

The **Winnipeg Regional Health Authority** (WRHA) serves residents of the city of Winnipeg, as well as the northern community of Churchill, and the rural municipalities of East and West St. Paul. The RHA also provides healthcare support and specialty referral services to nearly half a million Manitobans who live beyond these boundaries, as well as residents of Northwestern Ontario and Nunavut.

Demographics[1]:

- **Population:** 766,884 people (Manitoba 1,342,153 people)
- **Land Area[2]:** 648 km^2 (Manitoba: 552,000 km^2)
- **Density:** 1,183 people per km^2 (Manitoba: 2.4 people per km^2)
- **Median Age:** 38.8 years (Manitoba: 38.4 years)

CancerCare Manitoba sites:

- 675 McDermot Avenue including Urgent Cancer Care Clinic
- 409 Taché Avenue (at St. Boniface General Hospital)

Community Hospital Cancer Clinics:

- Grace Hospital
- Victoria General Hospital

In 2021, 7,249 Manitobans received a new cancer diagnosis. → 4,157 of these cancer cases resided within the Winnipeg RHA.

The number of new cancer cases is expected to continue rising.

By 2040, about 11,000 new cancer cases will be diagnosed every year. → Over 6,300 new cases of cancer can be expected in the Winnipeg RHA in 2040.

[1]Statistics Canada. (2023). Census Profile. 2021 Census of Population. Ottawa. Released November 15, 2023. Available at: https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed August 27, 2024).
[2]Statistics Canada. (2016). Data product, 2016 Census. Available at: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E (accessed [5 April 2019]).

Every year cancer kills nearly 2,700 Manitobans.

Mortality rate:
184 per 100,000 people
(age-standardized mortality rate, 2018-2020)

1,538 people from Winnipeg RHA die of cancer each year.
(average, 2018-2020)

Mortality rate:
178 per 100,000
(age-standardized mortality rate, 2018-2020)

Strengths of Winnipeg RHA

26% of adults in Winnipeg RHA reported a Body Mass Index classified as "obese" (based on self-reported height and weight). **This is lower than any other health region or Manitoba overall.**

RHA range: 26%-40%
Manitoba: 30%

Only 15% of individuals (ages 12 years and over) reported consuming more than 5 alcoholic drinks on one occasion within the past week. **This is one of the lowest rates in the province.**

RHA range: 15%-25%
Manitoba: 16%

Age-standardized incidence rate for colorectal cancer is significantly lower in Winnipeg RHA than Manitoba **(53 per 100,000)**.

RHA range: 53-73 per 100,000;
Manitoba: 56 per 100,000

The five-year net survival rate for all invasive cancers is higher than Manitoba overall **(64%)**.

RHA range: 54% - 64%
Manitoba: 63%

The five-year net survival rate for prostate cancer is significantly **higher in Winnipeg RHA than Manitoba overall (92%).**
RHA range: 79% – 92%
Manitoba: 89%

Age-standardized mortality rate for all invasive cancers is significantly lower than Manitoba overall **(178 per 100,000)**.

RHA range: 178 - 240 per 100,000
Manitoba: 184 per 100,000

Areas for Improvement

Winnipeg RHA 2023 AOPSS* respondents had the lowest score **(50%)** for the **Emotional Support dimension of person-centred care**.

RHA range: 50%-58%
Manitoba: 52%

Winnipeg RHA had the greatest proportion of 2023 AOPSS respondents who said they **did NOT receive all the information they needed** on the following changes:

With their spouse/partner: 71%
RHA range: 55%-71%; Manitoba: 67%

To their emotions: 62%
RHA range: 54%-62%; Manitoba: 60%

To their sexual activity: 59%
RHA range: 42%-59%; Manitoba: 53%

The **2024 Manitoba Cancer System Performance Report** belongs to a series of reports which highlight a wide range of metrics measured at CancerCare Manitoba. The System Performance series includes Cancer Surgery Quality in Manitoba, and spotlight reports for different departments and populations. Older Adults with Cancer: Manitoba Experience Report, the first in a series, has been released this year. Exciting spotlight reports on Cancer Screening and Cancer Prevention and Risk Factors are coming up. Watch our website for these reports as they are released!

Visit www.cancercare.mb.ca for more information.

See the 2024 Manitoba Cancer System Performance Report and related technical appendix for more information on these indicators, including their data sources and methodological details.
* AOPSS = Ambulatory Oncology Patient Satisfaction Survey (AOPSS 2023 cycle)

REGIONAL PROFILE: 2024 MANITOBA CANCER SYSTEM PERFORMANCE REPORT

Prairie Mountain Health

Prairie Mountain Health (PMH) is the governing body for healthcare regulation in south-western Manitoba. Prairie Mountain Health was officially formed in June 2012, following the Manitoba government amalgamation of the former Regional Health Authorities of Assiniboine, Brandon and Parkland.

Demographics[1]:

- **Population:** 168,800 people (Manitoba: 1,342,153 people)
- **Land Area[2]:** 64,800 km^2 (Manitoba: 552,000 km^2)
- **Density:** 2.6 people per km^2 (Manitoba: 2.4 people per km^2)
- **Median Age:** 40.0 years (Manitoba: 38.4 years)

CancerCare Manitoba sites:

- Deloraine
- Hamiota
- Neepawa
- Russell
- Swan River

Regional Cancer Program sites:

- Brandon Western Manitoba Cancer Centre
- Dauphin

In 2021, 7,249 Manitobans received a new cancer diagnosis.

1,004 of these cancer cases resided within Prairie Mountain Health.

The number of new cancer cases is expected to continue rising.

By 2040, about 11,000 new cancer cases will be diagnosed every year.

Over 1,280 new cases of cancer can be expected in Prairie Mountain Health in 2040.

[1]Statistics Canada. (2023). Census Profile. 2021 Census of Population. Ottawa. Released November 15, 2023. Available at: https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed August 27, 2024).

[2] Statistics Canada. (2016). Data product, 2016 Census. Available at: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E (accessed [5 April 2019]).

Every year cancer kills nearly 2,700 Manitobans.

Mortality rate:
184 per 100,000 people
(age-standardized mortality rate, 2018-2020)

411 people from Prairie Mountain Health die of cancer each year.
(average, 2018-2020)

Mortality rate:
188 per 100,000
(age-standardized mortality rate, 2018-2020)

Strengths of Prairie Mountain Health

63% of women 50-74 years of age were screened for breast cancer within the last 30 months in PMH. **This is the highest rate in the province.**

RHA range: 47%-63%
Manitoba: 59%

53% of individuals 50-74 years of age were screened for colon cancer within the last 42 months. **This is the highest rate in the province.**
RHA range: 37% - 53%
Manitoba: 51%

Five-year net survival rates for lung cancer is the highest in the province.
Five-Year (28%)

RHA range: 21% - 28%
Manitoba: 25%

Age-standardized incidence rate for prostate cancer is significantly lower in PMH than Manitoba **(119 per 100,000)**.

RHA range: 84-156 per 100,000
Manitoba: 131 per 100,000

Age-standardized incidence rate for breast cancer is significantly lower in PMH than Manitoba **(114 per 100,000).**

RHA range: 114 -144 per 100,000
Manitoba: 127 per 100,000

Only **16%** of patients with colorectal cancer were **diagnosed at late stage (stage IV).**

RHA range: 16% - 27%
Manitoba: 21%

Five-year net survival rate for colorectal cancer is significantly higher than Manitoba overall **(70%)**.

RHA range: 57% - 70%
Manitoba: 65%

45% of patients with lung and bronchus cancer were **diagnosed at late stage (stage IV).**

RHA range: 45% - 51%
Manitoba: 46%

Highest possible AOPSS* score for overall patient satisfaction (100%)

RHA range: 94%-100%
Manitoba: 97%

Areas for Improvement

One-year and five-year net survival rates for prostate cancer are significantly lower in PMH than Manitoba overall.

One-Year (94%)
Five-Year (79%)

One-year: RHA range: 93% - 98%; Manioba: 97%
Five-year: RHA range: 79% - 92%; Manioba: 89%

40% of adults in PMH reported a Body Mass Index classified as "obese" (based on self-reported height and weight). **This is higher than any other health region or Manitoba overall.**

RHA range: 26%-40%
Manitoba: 30%

The **2024 Manitoba Cancer System Performance Report** belongs to a series of reports which highlight a wide range of metrics measured at CancerCare Manitoba. The System Performance series includes Cancer Surgery Quality in Manitoba, and spotlight reports for different departments and populations. Older Adults with Cancer: Manitoba Experience Report, the first in a series, has been released this year. Exciting spotlight reports on Cancer Screening and Cancer Prevention and Risk Factors are coming up. Watch our website for these reports as they are released!

Visit www.cancercare.mb.ca for more information.

See the 2024 Manitoba Cancer System Performance Report and related technical appendix for more information on these indicators, including their data sources and methodological details.
* AOPSS = Ambulatory Oncology Patient Satisfaction Survey (AOPSS 2023 cycle)

REGIONAL PROFILE: 2024 MANITOBA CANCER SYSTEM PERFORMANCE REPORT

Interlake-Eastern Regional Health Authority

The **Interlake-Eastern Regional Health Authority (IERHA)** is the governing body for healthcare regulation in the Interlake and eastern regions of Manitoba. IERHA was officially formed in June 2012, following the Manitoba government amalgamation of the former Regional Health Authorities of Interlake and North Eastman.

Demographics[1]:
- **Population:** 133,890 people (Manitoba: 1,342,153 people)
- **Land Area[2]:** 81,350 km^2 (Manitoba: 552,000 km^2)
- **Density:** 1.7 people per km^2 (Manitoba: 2.4 people per km^2)
- **Median Age:** 44.8 years (Manitoba: 38.4 years)

CancerCare Manitoba sites:
- Gimli
- Pinawa

Regional Cancer Program sites:
- Selkirk

In 2021, 7,249 Manitobans received a new cancer diagnosis.

904 of these cancer cases resided within the Interlake-Eastern RHA.

The number of new cancer cases is expected to continue rising.

By 2040, about 11,000 new cancer cases will be diagnosed every year.

Nearly 1,220 new cases of cancer can be expected in the Interlake-Eastern RHA in 2040.

[1]Statistics Canada. (2023). Census Profile. 2021 Census of Population. Ottawa. Released November 15, 2023. Available at: https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed August 27, 2024).
[2]Statistics Canada. (2016). Data product, 2016 Census. Available at: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E (accessed [5 April 2019]).

Every year cancer kills nearly 2,700 Manitobans.

Mortality rate:
184 per 100,000 people
(age-standardized mortality rate, 2018-2020)

297 people from Interlake-Eastern RHA die of cancer each year.
(average, 2018-2020)

Mortality rate:
200 per 100,000
(age-standardized mortality rate, 2018-2020)

Strengths of Interlake-Eastern Regional Health Authority (IERHA)

64% of women 21-69 years of age had a Pap test within the last 3 years in IERHA. **This is the highest cervical cancer screening rate in the province.**

RHA range: 46%-64%
Manitoba: 61%

Only 15% of individuals diagnosed with prostate cancer were **diagnosed at late stage (stage IV). This is the lowest in the province.**

RHA range: 15% - 33%
Manitoba: 18%

81% of women with stage I or II breast cancer received guideline-concordant post-operative radiation within 270 days of breast conserving surgery (lumpectomy). **This has increased since 2014-2016 (73%).**

RHA region: 79% - 81%
Manitoba: 80%

96% of colon resections include the removal and examination of 12 or more lymph nodes. **This is one of the highest in the province and has increased from the lowest rate in 2011-2013 (84%).**

RHA region: 87% - 96%
Manitoba: 94%

Areas for Improvement

Age-standardized incidence rate for prostate cancer is significantly higher in IERHA than Manitoba overall **(156 per 100,000).**

RHA range: 84 -156 per 100,000;
Manitoba: 131 per 100,000

Age-standardized incidence rate for all invasive cancers is significantly higher than Manitoba overall **(517 per 100,000)**.

RHA range: 461 - 517 per 100,000
Manitoba: 479 per 100,000

Age-standardized mortality rate for all invasive cancers is significantly higher than Manitoba overall **(200 per 100,000).**

RHA range: 178 - 240 per 100,000
Manitoba: 184 per 100,000

Age-standardized incidence rate for breast cancer is significantly higher in IERHA than Manitoba overall **(144 per 100,000).**

RHA range: 114 -144 per 100,000
Manitoba: 127 per 100,000

The **2024 Manitoba Cancer System Performance Report** belongs to a series of reports which highlight a wide range of metrics measured at CancerCare Manitoba. The System Performance series includes Cancer Surgery Quality in Manitoba, and spotlight reports for different departments and populations. Older Adults with Cancer: Manitoba Experience Report, the first in a series, has been released this year. Exciting spotlight reports on Cancer Screening and Cancer Prevention and Risk Factors are coming up. Watch our website for these reports as they are released!

Visit www.cancercare.mb.ca for more information.

See the 2024 Manitoba Cancer System Performance Report and related technical appendix for more information on these indicators, including their data sources and methodological details.

REGIONAL PROFILE: 2024 MANITOBA CANCER SYSTEM PERFORMANCE REPORT

Southern Health - Santé Sud

Southern Health-Santé Sud (SH-SS) is the governing body for healthcare regulation in the southeastern and south-central regions of Manitoba. Southern Health-Santé Sud was officially formed in June 2012, following the Manitoba government amalgamation of the former Regional Health Authorities of Central and South Eastman Health/Santé Sud-Est.

Demographics[1]:
- **Population:** 204,586 people (Manitoba: 1,342,153 people)
- **Land Area[2]:** 26,984 km^2 (Manitoba: 552,000 km^2)
- **Density:** 7.6 people per km^2 (Manitoba: 2.4 people per km^2)
- **Median Age:** 35.6 years (Manitoba: 38.4 years)

CancerCare Manitoba sites:
- Portage la Prairie
- Steinbach

Regional Cancer Program sites:
- Boundary Trails

In 2021, 7,249 Manitobans received a new cancer diagnosis.

930 of these cancer cases resided within Southern Health - Santé Sud.

The number of new cancer cases is expected to continue rising.

By 2040, about 11,000 new cancer cases will be diagnosed every year.

Over 1,600 new cases of cancer can be expected in Southern Health - Santé Sud in 2040.

[1]Statistics Canada. (2023). Census Profile. 2021 Census of Population. Ottawa. Released November 15, 2023. Available at: https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed August 27, 2024).
[2] Statistics Canada. (2016). Data product, 2016 Census. Available at: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E (accessed [5 April 2019]).

Every year cancer kills nearly 2,700 Manitobans.

Mortality rate:
184 per 100,000 people
(age-standardized mortality rate, 2018-2020)

288 people from Southern Health - Santé Sud die of cancer each year.
(average, 2018-2020)

Mortality rate:
181 per 100,000
(age-standardized mortality rate, 2018-2020)

Strengths of Southern Health - Santé Sud

Current smoking rates are the **lowest in the province at 15%.**

RHA range: 15% - 29%
Manitoba: 17%

Only 15% of individuals (age 12 years and over) reported consuming more than 5 alcoholic drinks on one occasion within the past week. **This is one of the lowest rates in the province.**

RHA range: 15%-25%
Manitoba: 16%

Age-standardized incidence rate for all invasive cancers is significantly lower than Manitoba overall **(461 per 100,000)**.

RHA range: 461-517 per 100,000
Manitoba: 479 per 100,000

Age-standardized incidence rate for prostate cancer is significantly lower than Manitoba overall **(118 per 100,000)**.

RHA range: 84-156 per 100,000
Manitoba: 131 per 100,000

Age-standardized mortality rate for all invasive cancers in females is lowest compared to other health regions **(150 per 100,000).**

RHA range: 150 - 205 per 100,000
Manitoba: 158 per 100,000

Age-standardized mortality rate for lung cancer in females is lowest in the province **(31 per 100,000).**

RHA range: 31 - 50 per 100,000
Manitoba: 38 per 100,000

Areas for Improvement

41% of patients with stage II or IIIA non-small cell lung cancer received guideline-concordant post-operative chemotherapy within 120 days of a surgical resection. **This is lower than any other health region (2017-2019).**
Note: The region has shown improvements since 2011-2013 (27%).

RHA region: 41% - 56%
Manitoba: 49%

Only 50% of individuals aged 18+ years are physically active compared to other regions. **This is the lowest in the province.**

RHA range: 50% - 58%
Manitoba: 54%

Southern Health – Santé Sud had the lowest AOPSS* score for **Overall satisfaction (94%),** **Physical Comfort (72%),** and **Coordination and Integration of Care (64%)** dimensions of person-centred care compared to other health regions.

Overall satisfaction: RHA range: 94% - 100%; Manitoba: 97%
Physical Comfort: RHA range: 72% - 84%; Manitoba: 75%
Coordination and Integration of Care : RHA range: 64% - 69%; Manitoba: 68%

The **2024 Manitoba Cancer System Performance Report** belongs to a series of reports which highlight a wide range of metrics measured at CancerCare Manitoba. The System Performance series includes Cancer Surgery Quality in Manitoba, and spotlight reports for different departments and populations. Older Adults with Cancer: Manitoba Experience Report, the first in a series, has been released this year. Exciting spotlight reports on Cancer Screening and Cancer Prevention and Risk Factors are coming up. Watch our website for these reports as they are released!

Visit www.cancercare.mb.ca for more information.

CancerCare Manitoba
ActionCancerManitoba

See the 2024 Manitoba Cancer System Performance Report and related technical appendix for more information on these indicators, including their data sources and methodological details.

* AOPSS = Ambulatory Oncology Patient Satisfaction Survey (AOPSS 2023 cycle)

REGIONAL PROFILE: 2024 MANITOBA CANCER SYSTEM PERFORMANCE REPORT

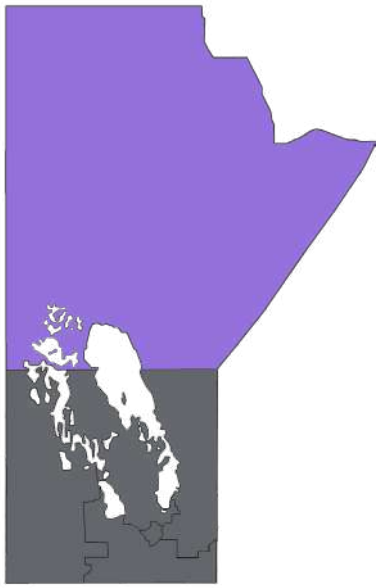
Northern Health Region

The **Northern Health Region** (NHR) is the governing body for healthcare regulation in northern Manitoba, excluding Churchill. The Northern Health Region was officially formed in June 2012, following the Manitoba government amalgamation of the former Regional Health Authorities of Burntwood and Nor-Man. This region is geographically the largest of the five Regional Health Authorities (RHAs) in the province of Manitoba.

Demographics[1]:
- **Population:** 67,917 people (Manitoba: 1,278,378 people)
- **Land Area[2]:** 379,000 km^2 (Manitoba: 552,000 km^2)
- **Density:** 0.2 people per km^2 (Manitoba: 2.4 people per km^2)
- **Median Age:** 28.4 years (Manitoba: 38.4 years)

CancerCare Manitoba sites:
- Flin Flon

Regional Cancer Program sites:
- The Pas
- Thompson



In 2021, 7,249 Manitobans received a new cancer diagnosis.

254 of these cancer cases resided within the NHR.

The number of new cancer cases is expected to continue rising.

By 2040, about 11,000 new cancer cases will be diagnosed every year.

Nearly 351 new cases of cancer can be expected in NHR in 2040.

[1]Statistics Canada. (2023). Census Profile. 2021 Census of Population. Ottawa. Released November 15, 2023. Available at: https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed August 27, 2024).
[2] Statistics Canada. (2016). Data product, 2016 Census. Available at: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E (accessed [5 April 2019]).

Every year cancer kills nearly 2,700 Manitobans.

Mortality rate:
184 per 100,000 people
(age-standardized mortality rate, 2018-2020)

89 people from NHR die of cancer each year.
(average, 2018-2020)

Mortality rate:
240 per 100,000
(age-standardized mortality rate, 2018-2020)

Strengths of Northern Health Region

An overall score of **87%** was reported by patients from the NHR for the AOPSS* dimension of **Access to Care.**

RHA range: 75% - 87%
Manitoba: 75%

An overall score of **84%** was reported by patients from the NHR for the AOPSS* dimension of **Physical Comfort.**

RHA range: 72% - 84%
Manitoba: 75%

95% of NHR 2023 AOPSS* respondents reported that they felt safe while receiving care.

RHA range: 91%-95%
Manitoba: 92%

58% of individuals age 18 years and over in NHR are physically active compared to other regions. **This is the highest in the province.**

RHA range: 50% - 58%
Manitoba: 54%

Age-standardized incidence rate for prostate cancer is significantly lower in NHR than Manitoba overall **(84 per 100,000)**.

RHA range: 84-156 per 100,000
Manitoba: 131 per 100,000

Areas for Improvement

Reported current smoking rates are the **highest in the province at 29%.**

RHA range: 15%-29%
Manitoba: 17%

25% of individuals (ages 12 years and over) reported consuming more than 5 alcoholic drinks on one occasion within the past week. **This is the highest in the province.**
RHA range: 15%-25%
Manitoba: 16%

Northern RHA has the **lowest** breast, cervix, and colon cancer screening rates in Manitoba.

Breast: 47%
(RHA range: 47%-63%; MB: 59%)
Cervix: 46%
(RHA range: 46%-64%; MB: 61%)
Colon: 37%
(RHA range: 37%-53%; MB: 51%)

87% of colon resections include the removal and examination of 12 or more lymph nodes. **This is the lowest rate in the province and below the national target of 90%.**

RHA range: 87% - 96%;
Manitoba: 94%

One-year and five-year net survival rates for all invasive cancers in NHR are significantly lower than Manitoba overall.

One Year (70%)
Five-Year (54%)

One - year:
RHA range: 70%-79%; MB: 78%

Five-year:
RHA range: 54%-64%; MB: 63%

33% of prostate cancer patients were **diagnosed at late stage** (stage IV). **This is higher than any other region.**
RHA range: 15% - 33%
Manitoba: 18%

27% of individuals diagnosed with colorectal cancer were **diagnosed at late stage** (stage IV). **This is higher than any other region.**
RHA range: 16% - 27%
Manitoba: 21%

The **2024 Manitoba Cancer System Performance Report** belongs to a series of reports which highlight a wide range of metrics measured at CancerCare Manitoba. The System Performance series includes Cancer Surgery Quality in Manitoba, and spotlight reports for different departments and populations. Older Adults with Cancer: Manitoba Experience Report, the first in a series, has been released this year. Exciting spotlight reports on Cancer Screening and Cancer Prevention and Risk Factors are coming up. Watch our website for these reports as they are released!

Visit www.cancercare.mb.ca for more information.

See the 2024 Manitoba Cancer System Performance Report and related technical appendix for more information on these indicators, including their data sources and methodological details.

* AOPSS = Ambulatory Oncology Patient Satisfaction Survey (AOPSS 2023 cycle)

LIST OF REPORT TABLES

LIST OF REPORT FIGURES

PAGE	TITLE

TECHNICAL APPENDIX

OVERVIEW OF CANCER SYSTEM

Page 9

TABLE 1

Indicator: Number of New Cancer Cases

Definition: Annual number of new cancer cases (invasive cases, all ages, excludes in situ bladder cancers and non-melanoma skin cancers). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource needs.
Timeframe: January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Indicator: Crude Cancer Incidence Rate

Definition: Annual incident rate per 100,000 people (all ages). This indicator represents the actual cancer incidence rate. This helps planners describe the frequency of disease in a population. Although it does not allow for comparisons between rates from different populations it can help in resource planning and allocation.
Numerator: All patients diagnosed with invasive cancer (invasive cases, all ages, excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry, Manitoba Health Population Registry (for denominator).

Indicator: Age-Standardized Incidence Rate

Definition: Annual age-standardized cancer incidence rate per 100,000 people (all ages). Allows the reader to compare cancer incidence rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer incidence. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients diagnosed with invasive cancer (invasive cases, all ages, excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2021.
Additional Notes: Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry, Manitoba Health Population Registry (for denominator).

Indicator: Number of Cancer Deaths

Definition: Annual number of deaths due to cancer (invasive cases, all ages, excludes in situ bladder cancers and non-melanoma skin cancers). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource allocation.
Timeframe: January 1 - December 31, 2020.
Data Source: Manitoba Cancer Registry and Manitoba Vital Statistics Death database.

Indicator: Crude Cancer Mortality Rate

Definition: Annual cancer mortality rate per 100,000 people. This indicator represents the actual cancer mortality rate. This helps planners describe the burden of disease in a population. Although it does not allow for comparisons between rates from different populations it can help in resource planning and allocation.
Numerator: All patients dying of invasive cancer (invasive cases, all ages, excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 – December 31, 2020.
Data Source: Manitoba Cancer Registry, Manitoba Health Death database, and Manitoba Health Population Registry (for denominator).

Indicator: Age-Standardized Mortality Rate

Definition: Annual age-standardized cancer mortality rate per 100,000 people. Allows the reader to compare cancer mortality rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer mortality. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients dying of invasive cancer (invasive cases, all ages, excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2020.
Additional Notes: Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry, Manitoba Health Death database, and Manitoba Health Population Registry (for denominator).

Indicator: 10-year Prevalence

Definition: Number of people diagnosed with an invasive cancer (all ages; includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols) within the last 10-year period, still alive as of January 1, 2021.
Timeframe: January 1, 2011 - December 31, 2020.
Data Source: Manitoba Cancer Registry.

Indicator: One-Year Net Survival

Definition: Age-standardized one-year net survival for cancer (ages 15-99) represents the cumulative probability that the cancer patients would have survived 1 year after diagnosis, after controlling for the risks of death from other causes. It can be interpreted as the proportion of cancer patients who survive up to one year, after eliminating other causes of death. It is a way of comparing survival of people who have cancer with those who do not and identifies how much cancer shortens life (www.thelancet.com Vol 385 March 14, 2015 pp 980).
Numerator: Observed survival probability (one year after diagnosis) for all patients who are diagnosed with invasive cancer (includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols).
Denominator: Expected survival probability of Manitobans of a similar age and sex, based on life tables from Statistics Canada.
Timeframe: January 1, 2017 - December 31, 2021.
Additional Notes: Period methodology applied using international weights.
Data Source: Manitoba Cancer Registry; Statistics Canada Life Tables Lifetables, Canada, Provinces and Territories (catalogue no. 84-537-X) [Web resource]. Ottawa, ON: Statistics Canada; 2021 Available at: Life Tables, Canada, Provinces and Territories (statcan.gc.ca) (accessed [February 26, 2024]).

Indicator: Five-Year Net Survival

Definition: Age-standardized five-year net survival for cancer (ages 15-99) represents the cumulative probability that the cancer patients would have survived 5 years after diagnosis, after controlling for the risks of death from other causes. It can be interpreted as the proportion of cancer patients who survive up to five years, after eliminating other causes of death. It is a way of comparing survival of people who have cancer with those who do not and identifies how much cancer shortens life (www.thelancet.com Vol 385 March 14, 2015 pp 980).
Numerator: Observed survival probability (five years after diagnosis) for all patients who are diagnosed with invasive cancer (includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols).
Denominator: Expected survival probability of Manitobans of a similar age and sex, based on life tables from Statistics Canada.
Timeframe: January 1, 2017 - December 31, 2021.
Additional Notes: Period methodology applied using international weights.
Data Source: Manitoba Cancer Registry; Statistics Canada Life Tables Lifetables, Canada, Provinces and Territories (catalogue no. 84-537-X) [Web resource]. Ottawa, ON: Statistics Canada; 2021 Available at: Life Tables, Canada, Provinces and Territories (statcan.gc.ca) (accessed [February 26, 2024]).

Page 10

TABLE 2

Indicator: Number of New Cancer Cases

Definition: Annual number of new cancer cases. This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource needs.
Timeframe: January 1 - December 31, 2001 and January 1 - December 31, 2021.
Additional Notes: Stratified by type of cancer (lung, colorectal, breast (female), prostate, and pancreas). All invasive cancer cases excludes in situ bladder cancers and non-melanoma skin cancers. Percentage point change is reflected in red for negative change of more than 10% (i.e., 10% or more increase in new cancer cases) or green for positive change of more than 10% (i.e.,

10% or more decrease in new cancer cases).
Data Source: Manitoba Cancer Registry.

Indicator: Crude Cancer Incidence Rate

Definition: Annual incident rate per 100,000 people (all ages). This indicator represents the actual cancer incidence rate. This helps planners describe the frequency of disease in a population. Although it does not allow for comparisons between rates from different populations it can help in resource planning and allocation.
Numerator: All patients diagnosed with invasive cancer.
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2001 and January 1 - December 31, 2021.
Additional Notes: Stratified by type of cancer (lung, colorectal, breast (female), prostate, and pancreas). All invasive cases excludes in situ bladder cancers and non-melanoma skin cancers. Percentage point change is reflected in red for negative change of more than 10% (i.e., 10% or more increase in crude incidence rate) or green for positive change of more than 10% (i.e., 10% or more decrease in crude incidence rate).
Data Source: Manitoba Cancer Registry, Manitoba Health Population Registry (for denominator).

Indicator: Age-Standardized Incidence Rate

Definition: Annual age-standardized cancer incidence rate per 100,000 people. Allows the reader to compare cancer incidence rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer incidence. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients diagnosed with invasive cancer.
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2001 and January 1 - December 31, 2021.
Additional Notes: Stratified by type of cancer (lung, colorectal, breast (female), prostate, and pancreas). All invasive cancer cases excludes in situ bladder cancers and non-melanoma skin cancers. Rates are age-standardized (using the direct method) to the 2011 Manitoba population. Percentage point change is reflected in red for negative change of more than 10% (i.e., 10% or more increase in age-standardized incidence rate) or green for positive change of more than 10% (i.e., 10% or more decrease in age-standardized incidence rate).
Data Source: Manitoba Cancer Registry, Manitoba Health Population Registry (for denominator).

Indicator: Number of Cancer Deaths

Definition: Annual number of deaths due to invasive cancer (all ages). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource allocation.
Timeframe: January 1 - December 31, 2000 and January 1 - December 31, 2020.
Additional Notes: Stratified by type of cancer (lung, colorectal, breast (female), prostate, and pancreas). All invasive cancer cases excludes in situ bladder cancers and non-melanoma skin cancers. Percentage point change is reflected in red for negative change of more than 10% (i.e., 10% or more increase in cancer-related deaths) or green for positive change of more than 10% (i.e., 10% or more decrease in cancer-related deaths).
Data Source: Manitoba Cancer Registry and Manitoba Vital Statistics Death database.

Indicator: Crude Mortality Rate

Definition: Annual cancer mortality rate per 100,000 people. This indicator represents the actual cancer mortality rate. This helps planners describe the burden of disease in a population. Although it does not allow for comparisons between rates from different populations it can help in resource planning and allocation.
Numerator: All patients dying of invasive cancer.
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2000 and January 1 - December 31, 2020.
Additional Notes: Stratified by type of cancer (lung, colorectal, breast (female), prostate, and pancreas). All invasive cancer cases excludes in situ bladder cancers and non-melanoma skin cancers. Percentage point change is reflected in red for negative change of more than 10% (i.e., 10% or more increase in crude mortality rate) or green for positive change of more than 10% (i.e., 10% or more decrease in crude mortality rate).
Data Source: Manitoba Cancer Registry and Manitoba Vital Statistics Death database. Manitoba Health Population Registry (for denominator).

Indicator: Age-Standardized Mortality Rate

Definition: Annual age-standardized cancer mortality rate per 100,000 people. Allows the reader to compare cancer mortality rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer mortality. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients dying of invasive cancer.
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2000 and January 1 - December 31, 2020.
Additional Notes: Stratified by type of cancer (lung, colorectal, breast (female), prostate, and pancreas). All invasive cancer cases excludes in situ bladder cancers and non-melanoma skin cancers. Rates are age-standardized (using the direct method) to the 2011 Manitoba population. Percentage point change is reflected in red for negative change of more than 10% (i.e., 10% or more increase in age-standardized mortality rate) or green for positive change of more than 10% (i.e., 10% or more decrease in age-standardized mortality rate).
Data Source: Manitoba Cancer Registry and Manitoba Vital Statistics Death database. Manitoba Health Population Registry (for denominator).

Page 11

FIGURE 1

Indicator: Number of New Cancer Cases and Projected Estimates

Definition: Annual number of new cancer cases (all ages; all invasive cases excluding in situ bladder cancers and non-melanoma skin cancers). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource needs.
Timeframe: January 1, 1988 - December 31, 2021 (observed); January 1, 2022 - December 31, 2046 (projected).
Additional Notes: Case counts followed the Surveillance, Epidemiology, and End Results (SEER) multiple primary and histology coding rules (https://seer.cancer.gov/tools/mphrules/). The projected numbers of new cases were estimated using the CanProj Package [Qiu Z, Hatcher J, Team C-PW. Canproj - The *R* package of cancer projection methods based on generalized linear models for age, period, and/or cohort. Alberta Health Services: Technique Report for Cancer Projections Network (C-Proj) Alberta, 2011].
Data Source: Manitoba Cancer Registry.

Indicator: Age-Standardized Incidence Rate and Projected Estimates

Definition: Annual age-standardized cancer incidence rate per 100,000 people (all ages, all invasive cancers excluding in situ bladder cancers and non-melanoma skin cancers). Allows the reader to compare cancer incidence rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer incidence. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1, 1988 - December 31, 2021 (observed); January 1, 2022 - December 31, 2046 (projected).
Additional Notes: Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population. The projected numbers of new cases were estimated using the CanProj Package [Qiu Z, Hatcher J, Team C-PW. Canproj - The *R* package of cancer projection methods based on generalized linear models for age, period, and/or cohort. Alberta Health Services: Technique Report for Cancer Projections Network (C-Proj) Alberta, 2011] developed with funding from the Canadian Partnership Against Cancer (CPAC). This *R* package estimates the projected number of cases and incidence rates from a variety of different model that include and exclude age, period, cohort, drift and potential overdispersion effects before recommending a best fitting model. The models use incident counts together with observed and projected populations to generate the projected counts and rates.
Data Source: Manitoba Cancer Registry, Manitoba Health Population Registry (for denominator).

Page 12

FIGURE 2

Indicator: Number of New Cancer Cases and Projected Estimates

Definition: Annual number of new cancer cases (all ages; invasive cases excluding in situ bladder cancers and non-melanoma skin cancers). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource needs.
Timeframe: January 1 - December 31, 2021 (observed); January 1 - December 31, 2040 (projected).
Additional Notes: Stratified by sex (male/female) and Regional Health Authorities (Winnipeg Regional Health Authority, Prairie Mountain Health, Interlake-Eastern Regional Health Authority, Northern Regional Health Authority, and Southern Health - Santé Sud). Case counts followed the Surveillance, Epidemiology, and End Results (SEER) multiple primary and histology coding rules (https://seer.cancer.gov/tools/mphrules/). The projected numbers of new cases were estimated using the CanProj Package [Qiu Z, Hatcher J, Team C-PW. Canproj - The *R* package of cancer projection methods based on generalized linear models for age, period, and/or cohort. Alberta Health Services: Technique Report for Cancer Projections Network (C-Proj) Alberta, 2011] developed with funding from the Canadian Partnership Against Cancer (CPAC). This *R* package estimates the projected number of cases and incidence rates from a variety of different model that include and exclude age, period, cohort, drift and potential overdispersion effects before recommending a best fitting model. The models use incident counts together with observed and projected populations to generate the projected counts and rates.
Data Source: Manitoba Cancer Registry.

COVID-19 PANDEMIC

Page 15

FIGURE 3

Indicator: Cancer Screening Volume.

Definition: Number of individuals screened for cancer by screening program (BreastCheck - number of screening mammograms; ColonCheck – number of FOBTs; and CervixCheck – number of Pap tests).
Timeframe: July 1, 2017 – June 30, 2022.
Additional Note: The BreastCheck program resumed with a limited capacity in June 2020, resulting in a lower number of screening mammograms, but returned back to expected numbers in December 2020. A decrease in the number of Pap tests was observed in April 2020, but returned back to expected numbers in 2021. The number of fecal occult blood tests (FOBTs) was lower in April 2020, but returned back to expected numbers in September 2020.
Data Source: CCMB's BreastCheck Registry, CervixCheck Registry, and ColonCheck Registry.

FIGURE 4

Indicator: Number of Physician Visits.

Definition: The number of physician visits (Medical oncology or/and Radiation Oncology) by patients at CancerCare Manitoba. The visits could be new patient, on treatment, follow-up or transitions, or examination visits.
Timeframe: March 1, 2020 – September 30, 2024.
Additional Notes: Virtual visits include phone and video. In person visits include telehealth visits.
New Patients - New patient visits are longer and include a full workup and evaluation of current testing. This includes new patients visits in medical oncology, radiation oncologist visit, telehealth and rapid access assessment.
On treatment - On-treatment visits occur when a patient is receiving any anti-cancer treatment and provide an opportunity to check in to see how treatments are working and how the patient is managing them. Visits include medical oncology, radiation oncology, TeleHealth patients on treatment, patients on smoking cessation, consult, and exam.
Follow- up or transition visits - Follow-up visits occur after treatments are completed and follow the patient forward for regular monitoring and until they are discharged from the cancer system. Visits in medical oncology follow-up and telehealth follow-up. Transition visits are used to prepare patients for their transition out of cancer care to their family doctor.
Exam - Non-compliant booking reflecting nonconcordant booked visits without subevent selection and therefore represent incomplete data. These bookings were place in the most appropriate category - follow-up.
Data Source: Electronic Medical Record (ARIA).

Indicator: Percentage of Physician Visits by Type.

Definition: Percentage of physician visits attended virtually or in person of the total patient visits (Medical oncology and/or Radiation Oncology) by patients at CancerCare Manitoba. The visits could be new patient, on treatment, follow-up or transitions, or examination visits.
Numerator: Number of virtual/ in-person visits attended.
Denominator: Total number of visits.
Timeframe: March 1, 2020 – September 30, 2024.
Additional Notes: Stratified by type of visit (in-person and virtual) and overall visits. Virtual visits include phone and video. In person visits include telehealth visits.
New Patients - New patient visits are longer and include a full workup and evaluation of current testing. This includes new patients visits in medical oncology, radiation oncologist visit, telehealth and rapid access assessment.
On treatment - On-treatment visits occur when a patient is receiving any anti-cancer treatment and provide an opportunity to check in to see how treatments are working and how the patient is managing them. Visits include medical oncology, radiation oncology, TeleHealth patients on treatment, patients on smoking cessation, consult, and exam.
Follow- up or transition visits - Follow-up visits occur after treatments are completed and follow the patient forward for regular monitoring and until they are discharged from the cancer system. Visits in medical oncology follow-up and telehealth follow-up. Transition visits are used to prepare patients for their transition out of cancer care to their family doctor.
Exam - Non-compliant booking reflecting non-concordant booked visits without subevent selection and therefore represent incomplete data. These bookings were place in the most appropriate category - follow-up.
Data Source: Electronic Medical Record (ARIA).

Page 16

FIGURE 5

Indicator: Expected Cancer Incidence

Definition: The expected (or counterfactual) number of invasive cancers diagnosed in the absence of the COVID-19 excludes in situ bladder cancers and non-melanoma skin cancers.
Timeframe: January 1, 2020 - December 31, 2022.
Additional Note: CCMB's evaluation study applied an interrupted time series analysis with a linear model to estimate the impact of COVID-19 on cancer incidence. Incidence data from January 1, 2015 to June 30 2023 were used to fit the model with the COVID-19 period from April 2020 to February 2022 and post-COVID-19 period March 2022 to June 2023.
Data Source: Manitoba Cancer Registry.

Indicator: Observed Cancer Incidence

Definition: The observed/actual number of individuals diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1, 2020 - December 31, 2022.
Additional Note: CCMB's evaluation study applied an interrupted time series analysis with a linear model to estimate the impact of COVID-19 on cancer incidence. Incidence data from January 1, 2015 to June 30 2023 were used to fit the model with the COVID-19 period from April 2020 to February 2022 and post-COVID-19 period March 2022 to June 2023.
Data Source: Manitoba Cancer Registry.

Indicator: Percent Difference

Definition: Percent difference between expected incidence and observed incidence over a period of time.
Numerator: The difference between observed and expected (counterfactual value) cancer incidence.
Denominator: Expected (counterfactual) value: estimated cancer incidence with the assumption that COVID-19 did not occur.
Timeframe: January 1, 2020 - December 31, 2022.
Additional Note: CCMB's evaluation study applied an interrupted time series analysis with a linear model to estimate the impact of COVID-19 on cancer incidence. Incidence data from January 1, 2015 to June 30 2023 were used to fit the model with the COVID-19 period from April 2020 to February 2022 and post-COVID-19 period March 2022 to June 2023.
Data Source: Manitoba Cancer Registry.

FIGURE 6

Indicator: Percent of Deaths by Cause of Death

Definition: Percentage of deaths by underlying cause certified and completed by medical practitioner or coroner if an investigation or enquiry was held.
Numerator: Number of deaths.
Denominator: All deaths occurred in Canada.

Timeframe: January 1 - December 31, 2020.
Additional Notes: Stratified by cause of death. Surveys and statistical programs - Statistics Canada, Canadian Vital Statistics - Death database (CVSD) (statcan.gc.ca). This is an administrative survey that collects demographic and medical (cause of death) information annually and monthly from all provincial and territorial vital statistics registries on all deaths in Canada. The data are used to calculate basic indicators (such as counts and rates) on deaths of residents of Canada. Information from this database is also used in the calculation of statistics, such as cause-specific death rates and life expectancy. The target population of the monthly provisional Death database is deaths occurring in Canada of Canadian residents and non-residents.
Data Source: Statistics Canada, Canadian Vital Statistics - Death Database.

PREVENTION

Page 19 and 20
TABLE 3, FIGURE 7

Indicator: Obesity
Definition: The percent of adults (ages 18+) with Body Mass Index (BMI) classified as "obese" (30+). Based on self-reported height and weight. BMI is a common (and international standard) measure used to determine if an individual's weight is in a healthy range based on their height. BMI = (weight in kilograms) / (height in metres). The index is: under 18.5 (underweight), 18.5-24.9 (acceptable weight), 25-29.9 (overweight) 30-34.9 (obese-class I), 35.0-39.9 (obese-class II), and 40.0 or higher (obese class III).
Numerator: Number of adults who are obese based on self-reported height and weight responses in survey data.
Denominator: Total number of adults with valid height and weight responses in the survey, ages 18 and over excluding pregnant women and people less than 0.91 metres tall or greater than 2.11 metres.
Timeframe: January 1 – December 31, 2017 (past); January 1 – December 31, 2021 (current) (Table 3) and January 1, 2017–December 31, 2018 (Figure 7).
Additional Notes: Stratified by region (Figure 7). Crude rate of obesity (not age-standardized) is shown using standard Statistics Canada calculation methods. Trend arrow is based on a percentage point change of + or - 10% with colors indicating whether the trend is negative (red), positive (green), or neutral (yellow).
Data Source: Statistics Canada, Canadian Community Health Survey.

Indicator: Smoking
Definition: The percent of teens and adults (age 12 and older) who are current daily or occasional cigarette smokers. Based on self-reported current smoking habits.
Numerator: Number of current daily or occasional smokers, ages 12 and older, based on survey data.
Denominator: Total number of survey participants ages 12 years and older.
Timeframe: January 1 – December 31, 2017 (past); January 1–December 31, 2021 (current) (Table 3) and January 1, 2017–December 31, 2018 (Figure 7).
Additional Notes: Stratified by region (Figure 7). Crude rate of smoking (not age-standardized) is shown using standard Statistics Canada calculation methods. Trend arrow is based on a percentage point change of + or - 10% with colors indicating whether the trend is negative (red), positive (green), or neutral (yellow). The rate reflects classification as current smoker based on self-reported current smoking habits. Daily smoker refers to those who reported smoking cigarettes every day. Occasional smoker refers to those who reported smoking cigarettes occasionally. This includes former daily smokers who now smoke occasionally.
Data Source: Statistics Canada, Canadian Community Health Survey.

Indicator: Alcohol Use
Definition: Heavy alcohol drinking refers to males (ages 12 and older) who reported having five or more drinks, or females (ages 12 and older) who reported having four or more drinks, on one occasion, at least once a month in the past year. Standard "binge-drinking" measure based on self-reported drinking habits.
Numerator: Number of males consuming five or more drinks, or women who reported having four or more drinks, on one occasion, at least once a month in the past year, ages 12+, based on survey data.
Denominator: Total number of surveys participants, ages 12 and older, including non-drinkers.
Timeframe: January 1 – December 31, 2017 (past); January 1–December 31, 2021 (current) (Table 3) and January 1, 2017–December 31, 2018 (Figure 7).
Additional Notes: Stratified by region (Figure 7). Crude rate of alcohol use (not age-standardized) is shown using standard Statistics Canada calculation methods. Trend arrow is based on a percentage point change of + or - 10% with colors indicating whether the trend is negative (red), positive (green), or neutral (yellow).
Data Source: Statistics Canada, Canadian Community Health Survey.

Indicator: Fruit and Vegetable Consumption
Definition: The percent of teens and adults who consume fruits and vegetables at least five times per day. Based on self-reported dietary habits.
Numerator: Number of individuals consuming vegetables and fruit at least five times per day, ages 12 and older, based on survey data.
Denominator: Total survey participants, ages 12 and older.
Timeframe: January 1 – December 31, 2017 (past); January 1 – December 31, 2021 (current) (Table 3) and January 1, 2017–December 31, 2018 (Figure 7).
Additional Notes: Crude rate of fruit and vegetable consumption (not age-standardized) is shown as per standard Statistics Canada calculation methods. Trend arrow is based on a percentage point change of + or - 10% with colors indicating whether the trend is negative (red), positive (green), or neutral (yellow). Canadian Community Health Survey data on fruit and vegetable consumption was collected in Yukon, Northwest Territories, and Nunavut for 2017/2018. This indicator is not available for the provinces or Canada level for the 2017/2018 period. Estimates were only available for Prince Edward Island, Nova Scotia, Saskatchewan, Alberta & the Northwest Territories for 2019/2020. This indicator is not available for the provinces or territories or Canada level for the 2019/2020 period.
Data Source: Statistics Canada, Canadian Community Health Survey.

Indicator: Physical Activity
Definition: Percent of adults (ages 18 and over) who are physically active, meaning that they participate in at least 150 minutes of moderate to vigorous intensity aerobic physical activity per week, in bouts of 10 minutes or more. Moderate exercise is defined as an activity that causes a person to breathe harder and sweat at least a little.
Numerator: Number of survey respondents ages 18+ who self-reported participating in at least 150 minutes of moderate to vigorous intensity aerobic physical activity per week, in bouts of 10 minutes or more.
Denominator: Population (18 year of age or older) who reported a level of physical activity during leisure time.
Timeframe: January 1 – December 31, 2017 (past) and January 1 – December 31, 2021 (current) (Table 3) and January 1, 2017 – December 31, 2018 (Figure 7).
Additional Notes: Stratified by region (Figure 7). Crude rate of physical activity (not age standardized) is shown as per standard Statistics Canada calculation methods.
Data Source: Statistics Canada, Canadian Community Health Survey.

Indicator: HPV Vaccination coverage at age 17 for girls
Definition: Percent of 17-year-old females who completed the full course of HPV vaccinations
Numerator: The number of 17-year-old Manitoba females who have received the full course of HPV vaccination by December 31 of the reporting year.
Denominator: The number of all Manitoba females who turned 17-years-old between January 1 and December 31 of the reporting year.
Timeframe: January 1 – December 31, 2017 (past) and January 1 – December 31, 2021 (current) (2000 and 2004 birth cohort)
Additional Notes: Trend arrow is based on a percentage point change of + or - 10% with colors indicating whether the trend is negative (red), positive (green), or neutral (yellow). Comparison between provinces is difficult due to variation in data quality and collection of uptake rates. Important to note, Manitoba has a once eligible, always eligible policy that allows those who miss the school vaccination program to still get immunized.
Data Source: Manitoba Health, Annual Report of Immunization Surveillance.

CCMB SCREENING PROGRAMS

Page 25
FIGURE 8

Indicator: Breast Cancer Screening Rates (All Mammograms)
Definition: The percent of Manitoban women 50-74 years of age who had a mammogram (screening or bilateral diagnostic) within 30 months.

Numerator: Number of women ages 50-74 with a diagnostic or screening mammogram within 30 months.
Denominator: All Manitoban women ages 50-74 (excludes those with previous diagnosis of breast cancer).
Timeframe: July 1, 2020 - December 31, 2022.
Additional Notes: Stratified by region. This is a 30-month screening rate. Breast cancer screening rates are often reported over 30 months (2 years plus 6 months) to allow time for appointment booking and wait time. Significantly different from Manitoba rate ($p < 0.05$).
Data Source: BreastCheck Registry; Manitoba Health Medical Claims and Manitoba Health Population Registry.

FIGURE 9

Indicator: Cervical Cancer Screening Rates
Definition: The percent of women ages 21-69, who had a Papanicolaou (Pap) test within 42 months.
Numerator: Number of women ages 21-69 with a Pap test over a three year period.
Denominator: All women ages 21-69 in the CervixCheck registry (excludes those with previous diagnosis of cervical cancer and hysterectomy).
Timeframe: July 1, 2019 - December 31, 2022.
Additional Notes: Stratified by region. This is a 42 month screening rate. Cervical cancer screening rates are often reported over 42 months (3 years plus 6 months) to allow time for appointment booking and wait time. Significantly different from Manitoba rate ($p < 0.05$).
Data Source: CervixCheck Registry and Manitoba Health.

FIGURE 10

Indicator: Colon Cancer Screening Rates
Definition: The percent of the population ages 50-74 who are up-to-date on colon cancer screening. Up-to-date describes individuals 50-74 years of age who completed a fecal test within 30 months, or a colonoscopy or flexible sigmoidoscopy in the last five and half years.
Numerator: The number of individuals ages 50-74 who completed a fecal test within 30 months, or a colonoscopy or flexible sigmoidoscopy within the last five and half years.
Denominator: All Manitobans 50-74 years of age (excludes those with previous diagnosis of colorectal cancer).
Timeframe: July 1, 2020- December 31, 2022.
Additional Notes: Stratified by region. Significantly different from Manitoba rate ($p < 0.05$). Fecal test completed between July 1, 2020 and December 31, 2022 and/or a colonoscopy/ flexible sigmoidoscopy completed between July 1, 2017 and December 31, 2022. A fecal test may include a fecal occult blood test (FOBT) or fecal immunochemical test (FIT). Colon cancer screening rates are often reported over 30 months (2 years plus 6 months) to allow time for appointment booking and wait time.
Data Source: ColonCheck Registry; Manitoba Health Medical Claims and Manitoba Health Population Registry.

Page 26

FIGURE 11

Indicator: Number of invitations sent
Definition: The number of invitations sent by BreastCheck to eligible Manitobans age 50-74 to make an appointment for a screening mammogram.
Timeframe: July 1, 2020 – December 31, 2022.
Data Source: BreastCheck Registry.

Indicator: Number of screening mammograms completed
Definition: The number of screening mammograms completed by women 50 – 74 years over a 30-month period.
Timeframe: July 1, 2020 – December 31, 2022.
Data Source: BreastCheck Registry.

Indicator: Number of screening mammograms results
Definition: The number of women (50 – 74 years of age) who had a screening mammogram result that was normal or abnormal.
Timeframe: July 1, 2020 – December 31, 2022.
Data Source: BreastCheck Registry.

Indicator: Percentage of screening mammograms results
Definition: The percent of women (50 – 74 years of age) who had a screening mammogram result that was normal or abnormal.
Numerator: The number of women (50 – 74 years of age) who had a screening mammogram result that was normal or abnormal.
Denominator: The number of screening mammograms completed by women 50 – 74 years over a 30-month period.
Timeframe: July 1, 2020 – December 31, 2022.
Data Source: BreastCheck Registry

Indicator: Number of Abnormal Results with a Diagnostic Follow-up
Definition: The number of women (50 – 74 years of age) with an abnormal screening mammogram result who had a diagnostic follow-up.
Timeframe: July 1, 2020 – December 31, 2022.
Data Source: BreastCheck Registry

Indicator: Percentage of Abnormal Results with a Diagnostic Follow-up
Definition: The percent of women (50 – 74 years of age) with an abnormal screening mammogram result who had a diagnostic follow-up.
Numerator: The number of women (50 – 74 years of age) with an abnormal screening mammogram result who had a diagnostic follow-up.
Denominator: The number of women (50 – 74 years of age) who had a screening mammogram result that was abnormal.
Timeframe: July 1, 2020 – December 31, 2022.
Data Source: BreastCheck Registry.

Indicator: Number of diagnostic follow-up Results
Definition: The number of women (50 – 74 years of age) who had a diagnostic follow-up after an abnormal screening mammogram where a final diagnosis was available.
Timeframe: July 1, 2020 – December 31, 2022.
Additional Notes: Stratified by diagnosis (benign result, in situ cancer or invasive cancer).
Data Source: BreastCheck Registry.

Indicator: Percentage of Diagnostic Follow-up Results
Definition: The percent of women (50-74 years of age) who had a diagnostic follow-up after an abnormal screening mammogram result where a final diagnosis was available.
Numerator: The number of women (50 – 74 years of age) who had a diagnostic follow-up after an abnormal screening mammogram where a final diagnosis was benign result, in situ cancer or invasive cancer.
Denominator: The number of women (50 – 74 years of age) with an abnormal screening mammogram result.
Timeframe: July 1, 2020 – December 31, 2022.
Additional Notes: Stratified by diagnosis (benign, in situ cancer or invasive cancer).
Data Source: BreastCheck Registry.

FIGURE 12

Indicator: Number of Breast Imaging Reporting and Data System (BI-RADS) breast density results
Definition: The number of women (50 – 74 years of age) who had a BI-RADS breast density result that was reported as category A, B, C or D.
Timeframe: January 1, 2022 - December 31, 2023.
Additional Notes: A. Almost all fatty tissue; B. Mainly fatty tissue with some scattered areas of dense tissue; C. A mixture of fatty and dense tissue; or D. Almost entirely dense tissue.
Data Source: BreastCheck Registry.

Indicator: Percentage of Breast Imaging Reporting and Data System (BI-RADS) breast density results
Definition: The number of women (50 – 74 years of age) who had a BI-RADS breast density result that was reported as category A, B, C or D.
Numerator: The number of women (50 – 74 years of age) who had a BI-RADS breast density result that was reported as category A, B, C or D.
Denominator: All women (50 – 74 years of age) who had a BI-RADS breast density result.
Timeframe: January 1, 2022 - December 31, 2023.
Additional Notes: A. Almost all fatty tissue; B. Mainly fatty tissue with some scattered areas of dense tissue; C. A mixture of fatty and dense tissue; or D. Almost entirely dense tissue.
Data Source: BreastCheck Registry.

Page 27

FIGURE 13

Indicator: Cervical Cancer Screening Pap Tests completed
Definition: Women ages 21-69 in the CervixCheck registry who had a Pap test.
Timeframe: July 1, 2019 - December 31, 2022.
Data Source: CervixCheck Registry.

Indicator: Number of Cervical Cancer Screening Results
Definition: The number of Manitoban women (21-69 years of age) who had a screening Pap test result that was normal, unsatisfactory, atypical squamous cells of undetermined significance

(ASCUS), low-grade squamous intraepithelial lesion (LSIL) or high-grade.
Timeframe: July, 2019 - December 31, 2022.
Additional Notes: ASCUS results are stratified by (1) age under 30; (2) age 30 and over. LSIL results are stratified by (1) age under 50; (2) age 50 and over.
Data Source: CervixCheck Registry.

Indicator: Percentage of Cervical Cancer Screening Results

Definition: The percent of Manitoban women (21-69 years of age) who had a screening Pap test result that was negative, unsatisfactory, atypical squamous cells of undetermined significance (ASCUS), low-grade squamous intraepithelial lesion (LSIL) or high-grade.
Numerator: The number of Manitoban women (21-69 years of age) who had a screening Pap test result that was negative, unsatisfactory, atypical squamous cells of undetermined significance (ASCUS), low-grade squamous intraepithelial lesion (LSIL) or high-grade.
Denominator: All women ages 21-69 in the CervixCheck registry who had a Pap test.
Timeframe: July, 2019 - December 31, 2022.
Data Source: CervixCheck Registry.

FIGURE 14

Indicator: Cervical Cancer by Time since Last Pap Test

Definition: The percent of Manitobans (21-69 years of age) diagnosed with an invasive cervical cancer (squamous cell carcinoma or adenocarcinoma of the cervix) by time since last Pap test (0.5 to 3.5 years; 3.5-5 years; > 5 years or never).
Numerator: Number of women (21-69 years of age) diagnosed with an invasive cervical cancer by time since last Pap test (0.5 to 3.5 years; 3.5-5 years; > 5 years or never).
Denominator: All women (21-69 years of age) diagnosed with an invasive cervical cancer.
Timeframe: January 1, 2018- December 31, 2020.
Additional Notes: Stratified by type of invasive cervix cancer (squamous cell carcinoma or adenocarcinoma) The category for > 5 years or never includes Manitobans who a) had their last Pap test more than 5 years ago; b) had never had a Pap test; c) had a Pap test during the 6 months prior to diagnosis which is indicative of screening for diagnostic rather than screening purposes; or d) incomplete records.
Data Source: CervixCheck Registry.

FIGURE 15

Indicator: Number of Human Papillomavirus (HPV) Triage Testing Results

Definition: The number of Manitoban women who had an HPV triage result that was negative or positive.
Timeframe: April 1, 2023 – March 31, 2024.
Additional notes: The HPV triage testing is automatically performed on the Pap test specimens of Manitoban women: (1) 30 years of age and older with atypical squamous cells of undetermined significance (ASCUS) Pap test interpretation, or (2) 50 years of age and older with low-grade squamous intraepithelial lesion (LSIL) Pap test interpretation.
Data Source: CervixCheck Registry, Manitoba Health.

Indicator: Percentage of Human Papillomavirus (HPV) Triage Testing Results

Definition: The percent of Manitoban women who had an HPV triage result that was negative or positive.
Numerator: The number of Manitoban women who had an HPV triage result that was negative or positive.
Denominator: The number of HPV triage testing performed.
Timeframe: April 1, 2023 – March 31, 2024.
Additional notes: The HPV triage testing is automatically performed on the Pap test specimens of Manitoban women: (1) 30 years of age and older with atypical squamous cells of undetermined significance (ASCUS) Pap test interpretation, or (2) 50 years of age and older with low-grade squamous intraepithelial lesion (LSIL) Pap test interpretation.
Data Source: CervixCheck Registry.

Page 28

FIGURE 16

Indicator: ColonCheck Invitations

Definition: The number of invitations sent by ColonCheck to eligible Manitobans age 50-74 to complete an FOBT.
Timeframe: July 1, 2020 - December 31, 2022.
Data Source: ColonCheck Registry.

Indicator: Fecal Testing Uptake

Definition: The number of Manitobans (50-74 years of age) who completed a fecal test.
Timeframe: July 1, 2020 - December 31, 2022.
Additional Notes: Fecal test was completed through ColonCheck Screening program. The fecal test includes the fecal occult blood test (FOBT) only.
Data Source: ColonCheck Registry.

Indicator: Number of Fecal Testing Results

Definition: The number of Manitobans (50-74 years of age) who had a fecal test result that was normal(negative), indeterminate or abnormal (positive).
Timeframe: July 1, 2020 - December 31, 2022.
Additional Notes: Stratified by fecal testing results (Normal, Intermediate and Abnormal). The fecal test includes the fecal occult blood test (FOBT) only.
Data Source: ColonCheck Registry.

Indicator: Percentage of Fecal Testing Results

Definition: The percent of Manitobans (50-74 years of age) who had a fecal test result that was normal(negative), indeterminate or abnormal (positive).
Numerator: The number of Manitobans (50-74 years of age) who had a fecal test result that was normal(negative), indeterminate or abnormal (positive).
Denominator: The number of Manitobans (50-74 years of age) who completed a fecal test.
Timeframe: July 1, 2020 - December 31, 2022.
Additional Notes: Stratified by fecal testing results (Normal, Intermediate and Abnormal). The fecal test includes the fecal occult blood test (FOBT) only.
Data Source: ColonCheck Registry.

Indicator: Number of Colonoscopy Uptake

Definition: The number of Manitobans (50-74 years of age) with a positive fecal test result who had a subsequent colonoscopy completed.
Timeframe: July 1, 2020 - December 31, 2022.
Additional Notes: The fecal test includes the fecal occult blood test (FOBT) only.
Data Source: ColonCheck Registry.

Indicator: Percentage of Colonoscopy Uptake

Definition: The percent of Manitobans (50-74 years of age) with a positive fecal test result who had a subsequent colonoscopy completed.
Numerator: The number of Manitobans (50-74 years of age) with a positive fecal test result who had a subsequent colonoscopy completed.
Denominator: The number of Manitobans (50-74 years of age) who had a fecal test result that was abnormal (positive).
Timeframe: July 1, 2020 - December 31, 2022.
Additional Notes: The fecal test includes the fecal occult blood test (FOBT) only.
Data Source: ColonCheck Registry.

Indicator: Number of Colonoscopy Results

Definition: The number of Manitobans (50-74 years of age) who had a colonoscopy after a positive fecal test where a final diagnosis was available.
Timeframe: July 1, 2020 - December 31, 2022.
Additional Notes: Results are stratified by normal, colorectal cancer, advanced adenoma, and other. Other abnormal results include other adenoma requiring surveillance; other pathology; further tests needed; other; no final outcome recorded in the ColonCheck registry or where the result is pending.
Data Source: ColonCheck Registry.

Indicator: Percentage of Colonoscopy Results

Definition: The percent of Manitobans (50-74 years of age) who had a colonoscopy after a positive fecal test where a final diagnosis was available.
Numerator: The number of Manitobans (50-74 years of age) who had a colonoscopy after a positive fecal test where a final diagnosis was available.
Denominator: The number of Manitobans (50-74 years of age) with a positive fecal test result.
Timeframe: July 1, 2020 - December 31, 2022.
Data Source: ColonCheck Registry.

DETECTION AND DIAGNOSIS OF CANCER

Page 31

TABLE 4

Indicator: Number of New Cancer Cases

Definition: Annual number of new cancer cases (all ages; invasive cases excluding in situ bladder

cancers and non-melanoma skin cancers). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource needs.
Timeframe: January 1 - December 31, 2021.
Additional Notes: Stratified by cancer diagnosis (20 most common cancer diagnoses).
Data Source: Manitoba Cancer Registry.

Indicator: Age-Standardized Incidence Rate

Definition: Annual age-standardized cancer incidence rate per 100,000 people (all ages). Allows the reader to compare cancer incidence rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer incidence. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1 - December 31, 2021.
Additional Notes: Stratified by cancer diagnosis (20 most common cancer diagnoses). Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry; Manitoba Health Population Registry (for denominator).

FIGURE 17

Indicator: Number of New Cancer Cases by Cancer Type and Sex

Definition: Proportion of new cancer cases (all ages; invasive cases excluding in situ bladder cancers and non-melanoma skin cancers) by cancer type and sex.
Numerator: The number of new cancer cases diagnosed for each cancer type in males and females.
Denominator: The total number of invasive cancer cases diagnosed in males and females.
Timeframe: January 1 - December 31, 2021.
Additional Notes: Stratified by sex (male/female) and cancer type.
Data Source: Manitoba Cancer Registry.

Page 32

FIGURE 18

Indicator: Number of New Pediatric Cancer Cases

Definition: The number of new pediatric cancer cases (16 years and younger) over time.
Timeframe: January 1, 2011 - December 31, 2021.
Additional Notes: Stratified by sex (male/female). Cancers not classified by International Classification of Childhood Cancers and in situs are included.
Data Source: Manitoba Cancer Registry.

TABLE 5

Indicator: Proportion of New Pediatric Cancer Cases by Type of Cancer

Definition: The proportion of new pediatric cancer cases (16 years and younger) for each type of cancer. Cancers not classified by International Classification of Childhood Cancers and in situs are included.
Numerator: The number of pediatric cancer cases for each type of cancer.
Denominator: All Manitoba pediatric cancer cases (16 years of age or younger).
Timeframe: January 1, 2019- December 31, 2021.
Additional Notes: Stratified by type of cancer based on the International Classification of Childhood Cancers. Cancers identified as in situ, or those not classified according to international coding rules were combined into Other.
Data Source: Manitoba Cancer Registry.

FIGURE 19

Indicator: Number of New Pediatric Cancer Cases by Age Category

Definition: The percent of new pediatric cancer cases (16 years of age of younger) by age group.
Numerator: The number of pediatric cancer cases within each age group (less than 1 year, 1-4 years, 5-9 years, 10-14 years, 15-16 years).
Denominator: All Manitoba pediatric cancer cases (16 years of age or younger).
Timeframe: January 1, 2019 - December 31, 2021.
Additional Notes: Stratified by age group (less than 1 year, 1-4 years, 5-9 years, 10-14 years, and 15-16 years).
Data Source: Manitoba Cancer Registry.

Page 33

TABLE 6

Indicator: Proportion of New Invasive Cancer Cases in Adolescents and Young Adults (AYA) by Type of Cancer

Definition: The proportion of new AYA invasive cancer cases (ages 15-29 and 30-39, respectively) for each type of cancer.
Numerator: The number of AYA invasive cancer cases for each type of cancer (ages 15-29 and 30-39, respectively).
Denominator: All Manitoba AYA invasive cancer cases (ages 15-29 and 30-39, respectively).
Timeframe: January 1 - December 31, 2021.
Additional Notes: Stratified by AYA age category (15-29 and 30-39) and cancer type. Cancer sites with 5 or fewer cases are combined into Other.
Data Source: Manitoba Cancer Registry.

TABLE 7

Indicator: Three Pillars of CancerCare Manitoba's Strategy for Adolescents and Young Adults (AYA).

Definition: A) Psychosocial, Educational, Nutritional, and Physical Rehabilitation: The number of referrals made to the AYA Psychosocial Program. B) Oncofertility Preservation: Oncofertility screening question has been added to COMPASS tool. C) Clinical Trial Accrual: The number of clinical trials open at CancerCare Manitoba eligible to AYA patients.
Numerator: A) Psychosocial, Educational, Nutritional, and Physical Rehabilitation: The number of referrals made to the AYA Psychosocial Program. C) Clinical Trial Accrual: The number of clinical trials open at CancerCare Manitoba eligible to AYA patients.
Timeframe: A) February 1, 2017 – June 30, 2024; B) any clinical trial open as of December 31, 2023.
Additional Note: An oncofertility screening question has been added to our patient-reported outcomes tool, COMPASS used at every physician visit. This will help us to ensure patients have timely access to oncofertility counselling and fertility clinic referrals.
Data Source: A) CancerCare Manitoba Patient and Family Support Services; C) CancerCare Manitoba Clinical Trials Unit.

Page 34

FIGURE 20

Indicator: Referrals for Blood Disorders

Definition: The number of hematology referrals received by CancerCare Manitoba's Provincial Cancer Referral and Navigation Service.
Timeframe: August 1, 2012- December 31, 2021.
Data Source: CancerCare Manitoba Provincial Cancer Referral and Navigation Service.

Indicator: Number of cases seen at CCMB for Blood Disorders

Definition: The number of hematology cases seen at CancerCare Manitoba.
Timeframe: January 1, 2012 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 35

FIGURE 21

Indicator: Incidence: Late-Stage Diagnoses

Definition: Percent of invasive cancer cases diagnosed at each stage of disease - early/intermediate (the standard stage I-III and unknown combined) and late stage (stage IV).
Numerator: The number of cancer cases identified for each stage of disease early/intermediate and late stage (stage IV)
Denominator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1- December 31, 2021.
Additional Notes: Stratified by type of cancer. Cancer diagnoses with more than 60 invasive cases in 2021 are shown. In keeping with international coding conventions all invasive brain tumours, multiple myeloma, and leukemia are considered unstageable using the collaborative staging system utilized by all population-based North American Cancer Registries. Multiple myeloma, chronic lymphocytic leukemia, brain, and acute myeloid leukemia are unstageable according to staging guidelines and therefore excluded. Testis cancer is excluded as it does not have stage IV diagnoses. In addition, the diagnoses "other digestive system" and "other female genital system" were excluded.
Early/Intermediate includes non-metastatic and unknown-stage cancer diagnoses, while Late stage includes metastatic cancer diagnoses.
Data Source: Manitoba Cancer Registry.

Indicator: Number of New Cancer Cases

Definition: Annual number of new cancer cases (all ages; invasive cases excluding in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1 - December 31, 2021.
Additional Notes: Stratified by cancer diagnosis
Data Source: Manitoba Cancer Registry.

Page 36
FIGURES 22 and 23
Indicator: Incidence: Late-Stage Diagnosis by Region
Definition: Percent of invasive cancer cases diagnosed with late stage (IV), indicating advanced cancer with distant spread (metastases) at diagnosis.
Numerator: The number of patients diagnosed with stage IV cancer.
Denominator: All patients diagnosed with invasive cancer (excludes non-melanoma skin cancers as per standard national and international protocols).
Timeframe: January 1, 2019- December 31, 2021(Figure 22); January 1, 2013 - December 31, 2017 (Figure 23).
Additional Notes: Stratified by region and type of cancer (breast, lung and bronchus, colorectal, prostate). Data for other Canadian provinces come from the Statistics Canada (timeframe January 1, 2013 - December 31, 2017). Cancer incidence by cancer stage for Canada excluding Quebec were produced in this table. The Collaborative Stage (CS) framework was used in the staging of the cases for the 2010-2017 diagnosis years as described in the seventh edition of the American Joint Committee on Cancer (AJCC) Cancer Staging Manual, Springer, 2010. Stage has been captured by the Manitoba Cancer Registry for all patients diagnosed since 2004. Stage IV cancers have the poorest prognosis (chance of survival): the disease is wide spread and treatment is least effective. The level of this indicator varies by specific cancer diagnosis. Existence and availability of technology to detect cancer early, uptake of effective cancer screening, and rapid response (by patients and the health care system) to symptoms may reduce the proportion of patients who are diagnosed with stage IV cancer.
Data Source: Manitoba Cancer Registry; Canadian Cancer Registry (statcan.gc.ca)

WAIT TIMES

Page 39
TABLE 8, FIGURE 24
Indicator: Breast Cancer Screening Wait Times
Definition: Median wait time (in days) for women ages 50-74 from an abnormal mammogram screening result to final diagnosis, for BreastCheck participants.
Population: Women 50-74 years of age who participated in the BreastCheck Breast Cancer Screening Program with an abnormal screening result.
Timeframe: January 1, 2017 - December 31, 2018 (past) and January 1, 2019 - December 31, 2020 (current).
Additional Notes: Stratified by region. The wait time from abnormal result to final diagnosis for no tissue biopsy (core or open) procedure is 14 days for both past and current timeframes (3,003 abnormal results in 2017-2018; and 2,772 in 2019-2020). For tissue biopsy (core or open) the median wait time was 36 days in 2017-2018 (966 abnormal results and 35 days in 2019-2020 (906 abnormal results).
Data Source: BreastCheck Registry.

Indicator: Colon Cancer Screening Wait Times
Definition: Median wait time (in days) for Manitobans ages 50-74 from an abnormal fecal screening result to colonoscopy.
Population: Manitobans 50-74 years of age who completed a ColonCheck fecal screening test with an abnormal screening result.
Timeframe: January 1, 2016 - December 31, 2017 (past) and January 1, 2018 - December 31, 2019 (current).
Additional Notes: Stratified by region. A fecal test may include a fecal occult blood test (FOBT) or fecal immunochemical test (FIT).
Data Source: ColonCheck Registry.

Page 40
FIGURE 25
Indicator: Pathology Wait Times
Definition: Median and 90th percentile pathology wait time (in days) between the date of specimen collection and the date the result was reported by pathologist.
Population: Manitobans over the age of 18 who have been sent for pathology due to a suspicion of cancer.
Timeframe: January 1 - 2020 - December 31, 2023
Additional Notes: Data also show the number of patients included in each timeframe. Stratified by type of cancer [prostate, lymphoma, lung, breast, and colon/rectum]. Wait time is calculated as the number of days between the date of specimen collection and the date the result was reported by pathologist. This indicator was originally defined by the Cancer Patient Journey Initiative.
Data Source: Shared Health; CancerCare Manitoba System Performance

Page 41
FIGURE 26
Indicator: Referral to Medical Oncologist Wait Times
Definition: Median and 90th percentile wait time (in days) between a referral to CancerCare Manitoba to their first consultation with a medical oncologist.
Population: Manitobans over the age of 18 who have been referred to CancerCare Manitoba.
Timeframe: January 1, 2018 - December 31, 2023.
Additional Notes: Data also show the number of patients included in each timeframe. Stratified by type of cancer (breast and gastrointestinal). Wait time is calculated as the number of days between a referral to CancerCare Manitoba to their first consultation with a medical oncologist. Data exclude delays caused by factors outside the control of CancerCare Manitoba, including delays due to missing documentation, medical delays (e.g., cancer diagnosis confirmation, lab and imaging test results, surgery and recovery time, etc.) or personal decisions to wait (e.g., travel or timing).
Data Source: CancerCare Manitoba's Provincial Cancer Referral and Navigation Service and System Performance.

Page 42
FIGURE 27
Indicator: Intravenous (IV) Chemotherapy Wait Times
Definition: Median and 90th percentile wait time (in days) between a patient consult with a medical oncologist and the first IV chemotherapy treatment.
Population: CancerCare Manitoba patients (over the age of 18) who underwent IV chemotherapy.
Timeframe: January 1, 2018 - December 31, 2019; January 1, 2020 - December 31, 2021, and January 1, 2022 - December 31, 2023.
Additional Notes: Data also show the number of patients included in each timeframe. Stratified by all cancers and type of cancer (breast, lymphoma, lung, gynecologic, genitourinary, gastrointestinal, other). Wait time is calculated as the number of days between a patient consult with a medical oncologist and the first chemotherapy treatment.
Data Source: CancerCare Manitoba's Provincial Cancer Referral and Navigation Service, Electronic Medical Record (ARIA), and System Performance.

Page 43
FIGURE 28
Indicator: Wait Times, Radiation Treatment
Definition: Median and 90th percentile wait time (in days) between a patient being identified as ready-to-treat by the radiation oncologist and the first radiation therapy treatment.
Population: CancerCare Manitoba patients (over the age of 18) where the patient has been identified as ready-to-treat
Timeframe: January 1, 2018 - December 31, 2019; January 1, 2020 - December 31, 2021, and January 1, 2022 - December 31, 2023.
Additional Notes: Data also show the number of patients included in each timeframe. Stratified by all cancers and type of cancer (breast, bone metastases, bowel, gynecologic, head and neck, lung, prostate, other). Wait time is calculated as the number of days between a patient being identified as ready-to-treat by the radiation oncologist and the first radiation therapy treatment.
Data Source: CancerCare Manitoba's Radiation Oncology Program and System Performance.

CANCER TREATMENT

Page 45
TABLE 9
Indicator: Systemic Therapy (Utilization)
Definition: Percent of patients treated with systemic therapy (chemotherapy or hormone therapy or immunotherapy) within one year of diagnosis.
Numerator: Number of cancer patients who undergo systemic therapy for their malignancy within one year of diagnosis.
Denominator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1, 2014 - December 31, 2016 (past); January 1, 2019 - December 31, 2021 (current).
Additional Notes: Includes regional variation.

This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of systemic therapy varies depending on the specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive systemic therapy for their cancer may still be receiving appropriate care. Also, systemic therapy provided outside of Manitoba may not be captured in our data sources; similarly, oral systemic therapy provided outside of cancer clinics (i.e., by prescription) may also not be captured in our data sources. Thus, this indicator relates primarily to "intense" systemic therapy that requires cancer clinic admission.
Data Source: Manitoba Cancer Registry.

Indicator: Radiation Therapy (Utilization)
Definition: Percent of patients treated with radiation therapy within one year of diagnosis.
Numerator: Number of cancer patients who undergo radiation therapy for their malignancy within one year of diagnosis.
Denominator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1, 2014 - December 31, 2016 (past); January 1, 2019 - December 31, 2021 (current).
Additional Notes: Includes regional variation. This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of radiation therapy varies depending on the specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive radiation therapy for their cancer may still be receiving appropriate care. Also, radiation therapy provided outside of Manitoba may not be captured in our data sources.
Data Source: Manitoba Cancer Registry.

Indicator: Surgery (Utilization)
Definition: Percent of patients treated with surgery within one year of diagnosis.
Numerator: Number of cancer patients who undergo surgery for their malignancy within one year of diagnosis.
Denominator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1, 2014 - December 31, 2016 (past); January 1, 2019 - December 31, 2021 (current).
Additional Notes: Includes regional variation. This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of cancer surgery varies depending on the specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive surgery for their cancer may still be receiving appropriate care. Also, surgery performed outside of Manitoba may not be captured in our data sources.
Data Source: Manitoba Cancer Registry.

Page 46
TABLE 10
Indicator: Systemic Therapy (Utilization)
Definition: Percent of patients treated with systemic therapy (chemotherapy or hormone therapy or immunotherapy) within one year of diagnosis.
Numerator: Number of cancer patients who underwent systemic therapy for their malignancy within one year of diagnosis.
Denominator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1, 2014 - December 31, 2016 (past); January 1, 2019 - December 31, 2021 (current)
Additional Notes: Stratified by type of cancer (lung, colon (excluding rectum), breast (female only), and prostate). This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of systemic therapy varies depending on the specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive systemic therapy for their cancer may still be receiving appropriate care. Also, systemic therapy provided outside of Manitoba may not be captured in our data sources; similarly, oral systemic therapy provided outside of cancer clinics (i.e., by prescription) may also not be captured in our data sources. Thus, this indicator relates primarily to "intense" systemic therapy that requires cancer clinic admission.
Data Source: Manitoba Cancer Registry.

Indicator: Systemic Therapy (Utilization)
Definition: Annual mean number of patients treated with systemic therapy (chemotherapy or hormone therapy) within one year of diagnosis.
Numerator: Total number of cancer patients (over a three year period) who underwent systemic therapy for their malignancy within one year of their diagnosis.
Timeframe: January 1, 2019 - December 31, 2021.
Additional Notes: Stratified by type of cancer (lung, colon (excluding rectum), breast (female only), and prostate).
Data Source: Manitoba Cancer Registry.

FIGURE 29
Indicator: Systemic Therapy (Utilization)
Definition: Percent of women diagnosed with breast cancer treated with systemic therapy (chemotherapy or hormone therapy or immunotherapy) within one year of diagnosis.
Numerator: Number of women diagnosed with breast cancer who underwent systemic therapy for their malignancy within one year of diagnosis.
Denominator: All women diagnosed with invasive breast cancer.
Timeframe: January 1, 2008 – December 31, 2010 (past); January 1, 2011 - December 31, 2013 (past); January 1, 2014 - December 31, 2016 (past); January 1, 2017 - December 31, 2019 (past); January 1, 2020 - December 31, 2021 (current).
Additional Notes: Breast cancer only. Stratified by region.
Data Source: Manitoba Cancer Registry.

Page 47
TABLE 11
Indicator: Radiation Therapy (Utilization)
Definition: Percent of patients treated with radiation therapy within one year of diagnosis.
Numerator: Number of cancer patients who underwent radiation therapy for their malignancy within one year of diagnosis.
Denominator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1, 2014 - December 31, 2016 (past); January 1, 2019 - December 31, 2021 (current)
Additional Notes: Stratified by type of cancer [lung, rectum and rectosigmoid (excludes colon), breast (female only), prostate]. This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of radiation therapy varies depending on specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive radiation therapy for their cancer may still be receiving appropriate care. Also, radiation therapy provided outside of Manitoba may not be captured in our data sources.
Data Source: Manitoba Cancer Registry.

Indicator: Radiation Therapy (Utilization)
Definition: Annual mean number of patients treated with radiation therapy within one year of diagnosis.
Numerator: Total number of cancer patients (over a three year period) who underwent radiation therapy for their malignancy within one year of their diagnosis.
Timeframe: January 1, 2019 - December 31, 2021.
Additional Notes: Stratified by type of cancer (lung, rectum & rectosigmoid (excludes colon), breast (female only), prostate). This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of radiation therapy varies depending on specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive radiation therapy for their cancer may still be receiving appropriate care. Also, radiation therapy provided outside of Manitoba may not be captured in our data sources.
Data Source: Manitoba Cancer Registry.

FIGURE 30
Indicator: Radiation Therapy (Utilization)
Definition: Percent of women diagnosed with breast cancer treated with radiation therapy within one year of diagnosis.
Numerator: Number of women diagnosed with breast cancer who underwent radiation therapy for their malignancy within one year of diagnosis.
Denominator: All women diagnosed with invasive breast cancer.
Timeframe: January 1, 2008 – December 31, 2010 (past); January 1, 2011 - December 31, 2013 (past); January 1, 2014 - December 31, 2016 (past); January 1, 2017 - December 31, 2019 (past); January 1, 2020 - December 31, 2021 (current).
Additional Notes: Breast cancer only. Stratified

by region.
Data Source: Manitoba Cancer Registry.

FIGURE 31
Indicator: Patient Satisfaction: Managing Side Effects of Radiation Therapy
Definition: Patient satisfaction regarding whether care providers told patients how to manage side effects of radiation therapy.
Numerator: Number of survey respondents who reported 'Yes, completely", "Yes, somewhat", or "No" when asked "Did a care provider tell you how to manage any side effects of radiation therapy?"
Denominator: All respondents who provided a response to this question. Excludes respondents who identified that they didn't need an explanation on side-effects of radiation therapy.
Timeframe: July 1 - December 31, 2018 (2019), September 1, 2020 – August 31, 2021 (2021), October 1 – December 31, 2022 (2022), and April 1 – June 30, 2023 (2023).
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba.
Data Source: CCMB, Ambulatory Oncology Patient Satisfaction Survey (2019, 2021, 2022, and 2023).

Page 48
TABLE 12
Indicator: Surgery (Utilization)
Definition: Percent of patients treated with surgery within one year of diagnosis.
Numerator: Number of cancer patients who underwent surgery for their malignancy within one year of diagnosis.
Denominator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Timeframe: January 1, 2014 - December 31, 2016 (past); January 1, 2019 - December 31, 2021 (current)
Additional Notes: Stratified by type of cancer [lung, colorectal, breast (female only), and prostate]. This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of cancer surgery varies depending on specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive surgery for their cancer may still be receiving appropriate care. Also, surgery performed outside of Manitoba may not be captured in our data sources.
Data Source: Manitoba Cancer Registry.

Indicator: Surgery (Utilization)
Definition: Annual mean number of patients treated with surgery within one year of diagnosis.
Numerator: Total number of cancer patients (over a three year period) who underwent surgery for their malignancy within one year of diagnosis.
Timeframe: January 1, 2019 - December 31, 2021.
Additional Notes: Stratified by type of cancer [lung, colorectal, breast (female only), and prostate]. This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of cancer surgery varies depending on specific cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference. As a result of these factors, patients who do not receive surgery for their cancer may still be receiving appropriate care. Also, surgery performed outside of Manitoba may not be captured in our data sources.
Data Source: Manitoba Cancer Registry.

FIGURE 32
Indicator: Surgery (Utilization)
Definition: Percent of women diagnosed with breast cancer treated with surgery within one year of diagnosis.
Numerator: Number of women diagnosed with breast cancer who underwent surgery for their malignancy.
Denominator: All women diagnosed with invasive breast cancer.
Timeframe: January 1, 2008 – December 31, 2010 (past); January 1, 2011 - December 31, 2013 (past); January 1, 2014 - December 31, 2016 (past); January 1, 2017 - December 31, 2019 (past); January 1, 2020 - December 31, 2021 (current).
Additional Notes: Breast cancer only. Stratified by region.
Data Source: Manitoba Cancer Registry.

Page 49
FIGURE 33
Indicator: Surgical Indicators: Colon Cancer Resections
Definition: Percentage of colon cancer patients who had surgery and at least 12 lymph nodes removed and examined by diagnosis year.
Numerator: Number of individuals diagnosed with colon cancer who had a resection within one year of diagnosis and have ≥12 lymph nodes removed and examined.
Denominator: Total number of individuals diagnosed with colon cancer who have a resection within one year of diagnosis.
Timeframe: Diagnosis: January 1, 2015 – December 31, 2020; Treatment: January 1, 2015 – March 31, 2021
Additional Notes: Exclusion Criteria – Non-Manitoba residents and individuals not covered under provincial health insurance at time of diagnosis, individuals aged <20, surgeries performed outside Manitoba, non-invasive/ in situ cancers, lymphomas, sarcomas, and neuroendocrine tumours.
Data Source: Manitoba Cancer Registry.

Page 50
FIGURE 34
Indicator: Surgical Indicators: Colon Cancer - Surgical Approach
Definition: Percentage of colon cancer patients who had laparoscopic surgery by diagnosis year.
Numerator: Number of individuals who had colon cancer surgery via a laparoscopic or open approach.
Denominator: Total number of individuals who had colon cancer surgery.
Timeframe: Diagnosis period: January 1, 2015 – December 31, 2020; Treatment period: January 1, 2015 – March 31, 2021
Additional Notes: Exclusion Criteria – Non-Manitoba residents and individuals not covered under provincial health insurance at time of diagnosis, individuals aged <20, surgeries performed outside Manitoba, non-invasive/ in situ cancers, lymphomas, sarcomas, and neuroendocrine tumours.
Data Source: Manitoba Cancer Registry.

Page 51
FIGURE 35
Indicator: Surgical Quality Indicator - Lung Cancer
Definition: Percentage of non-small cell lung cancer patients who had video-assisted thoracoscopic surgery by diagnosis year.
Numerator: Number of individuals who had lung cancer surgery via a video-assisted thoracoscopic surgical approach.
Denominator: Total number of individuals who had lung cancer surgery.
Timeframe: Diagnosis period: January 2015 – December 2020 Treatment period: January 2015 – March 2021
Additional Notes: Exclusion Criteria –Individuals aged <20 and ≥75 years, Non-Manitoba residents and individuals not covered under provincial health insurance at time of diagnosis, surgeries performed outside Manitoba, non-invasive/in situ cancers, rare tumours, lymphomas, sarcomas, ill-defined tumours, and small cell lung cancer (SCLC).
Data Source: Manitoba Cancer Registry.

Page 52
FIGURE 36
Indicator: Clinical Practice Guidelines: Radiation After Breast Conserving Surgery
Definition: Percent of stage I and stage II breast cancer patients treated with radiation therapy within one year of breast conserving surgery (lumpectomy).
Numerator: Number of early stage (I/II) breast cancer patients who underwent radiation therapy within one year of breast conserving surgery.
Denominator: All patients diagnosed with early stage (I/II) breast cancer who underwent breast conserving surgery.
Timeframe: January 1, 2011 - December 31, 2013 (past); January 1, 2014 - December 31, 2016 (past); January 1, 2017 - December 31, 2019 (past); January 1, 2020 - December 31, 2021 (current).
Additional Notes: Stratified by region. Women with early stage breast cancer have a treatment choice with equivalent outcomes: mastectomy (which requires no radiation therapy), or breast conserving surgery followed by radiation therapy. However, use of radiation therapy after breast conserving surgery may or may not occur depending on specific features of the cancer, the use of other treatments such as anti-estrogens in cancer patients with very good prognosis (e.g., older age, small tumour size, very early stage), the patient's medical fitness for treatment and the patient's preference. As a result of these factors, women with early stage breast cancer who do not receive radiation therapy after breast conserving surgery may still be receiving appropriate care. Also, radiation therapy provided outside of Manitoba may not be captured in our data sources.
Data Source: Manitoba Cancer Registry.

Page 53
FIGURE 37
Indicator: Clinical Practice Guidelines: Colon Resections with 12 or More Lymph Nodes Removed and Examined
Definition: Percent of colon cancer cases that had a resection within one year of diagnosis and had 12 or more lymph nodes removed and pathologically examined.
Numerator: Number of colon cancer cases that had a resection within one year of diagnosis and had 12 or more lymph nodes removed and pathologically examined.
Denominator: All patients diagnosed with colon cancer who had a resection within one year of diagnosis.
Timeframe: January 1, 2008 - December 31, 2010 (past); January 1, 2011 - December 31, 2013 (past); January 1, 2014 - December 31, 2016 (past); January 1, 2017 - December 31, 2019 (past); January 1, 2020 - December 31, 2021 (current).
Additional Notes: Stratified by region.
Data Source: Manitoba Cancer Registry.

Page 54
FIGURE 38
Indicator: Clinical Practice Guidelines: Stage II or IIIA NSCLC Receiving Chemotherapy following Surgical Resection
Definition: Percent of stage II or IIIA non-small cell lung cancer patients who received chemotherapy following surgical resection.
Numerator: Number of stage II or IIIA non-small cell lung cancer patients who received chemotherapy following surgical resection.
Denominator: All patients diagnosed with stage II or IIIA non-small cell lung cancer who received chemotherapy following surgical resection.
Timeframe: January 1, 2011 - December 31, 2013 (past); January 1, 2014 - December 31, 2016 (past); January 1, 2017 - December 31, 2019 (past); January 1, 2020 - December 31, 2021 (current).
Additional Notes: Stratified by region.
Data Source: Manitoba Cancer Registry.

Page 55
FIGURE 39
Indicator: Blood and Marrow Transplants by Type of Transplant
Definition: Number of autologous and allogeneic (related, haploidentical, unrelated) transplants completed at CancerCare Manitoba.
Timeframe: January 1, 2003 - December 31, 2022.
Additional Notes: Allogeneic transplants stratified by type of transplant (related, haploidentical, unrelated).
Data Source: CancerCare Manitoba Blood and Marrow Transplant Program.

Page 56
FIGURE 40
Indicator: Predictive and Prognostic Markers: Breast Cancer
Definition: Number of invasive breast cancer cases (female only) and number of estrogen receptor (ER), progesterone receptor (PR), and HER2 molecular tests completed.
Timeframe: January 1, 2011 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

FIGURE 41
Indicator: OncotypeDx test completed for new breast cancers
Definition: Number of OncotypeDx tests completed for women with new breast cancer diagnosis of ER/PR+, and HER2- molecular.
Timeframe: January 1, 2018 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 57
FIGURE 42
Indicator: Clinical Trials Open
Definition: The number of clinical trials open for participation.
Timeframe: January 1, 2017 - December 31, 2023.
Additional Note: Stratified by age group. Pediatric group refers children age 0-17 years old and adult group refers to ages18 years and over groups. The number of trials open for participation includes interventional trials for adults and interventional and treatment for pediatric.
Data Source: CancerCare Manitoba Clinical Trials Unit and Dr. Ernest W. Ramsey Manitoba Prostate Centre.

Indicator: Clinical Trials Accrual
Definition: The number of cancer patients participated in clinical trials.
Timeframe: January 1, 2017 - December 31, 2023.
Additional Note: Stratified by age group. Pediatric enrollment reflects interventional trials only. The pediatric model integrates clinical trials into clinical care for all pediatric patients. Pediatric group refers children age 0-17 years old and adult group refers to ages18 years and over groups. Includes patients who participated in interventional clinical trials.
Data Source: CancerCare Manitoba Clinical Trials Unit and Dr. Ernest W. Ramsey Manitoba Prostate Centre.

TABLE 13
Indicator: Clinical Trial Participation Rates
Definition: Percentage of adult and pediatric patients enrolled into clinical trials to the number of new cancer cases (all cancers), 2022 enrollment year.
Timeframe: January 1 - December 31, 2022.
References: See *Cancer Treatment - References (9)*, pages 63-65.
Additional Notes: Pediatric enrollment only reflect interventional trials. The pediatric model integrates clinical trials into clinical care for all pediatric patients. Pediatric group refers children age 0-17 years old and adult group refers to ages18 years and over groups. The denominator is the confirmed number of new cancer cases for 2022.
Research has always been inextricably linked to the clinical care of pediatric patients. All members of a child's clinical care team play a role in operationalizing a pediatric clinical trial. In addition, there are relatively few children diagnosed with cancer each year (compared to adults), so clinical teams can spend more time working with the specific needs of each patient. The system uses a different model for adult patients. The adult model does not integrate clinical trials into clinical care at the same level. Although more adult clinical trials are open now than ever before the ratio of adults participating in these is low in Manitoba and across the country.[9]
Data Source: CancerCare Manitoba Clinical Trials Unit and Dr. Ernest W. Ramsey Manitoba Prostate Centre.

Page 59
FIGURE 43
Indicator: Symptom Management: Edmonton Symptom Assessment Survey–revised (ESAS-r)
Definition: Severity of symptoms experienced by patients diagnosed with cancer, self-reported through the ESAS-r patient-reported outcome tool.
Numerator: Number of responses to ESAS-r questionnaires identifying a score for severity of ten commonly experienced symptoms.
Denominator: All ESAS-r questionnaires completed by patients at CancerCare Manitoba.
Timeframe: October 1 - December 31, 2023.
Additional Notes: Stratified by score category (0 = not present; 1-3 = mild; 4-6 = moderate; 7-10 = high). The Comprehensive Problem and Symptom Screening (COMPASS) questionnaire is completed by patients at every physician visit. The ESAS-r is part of this COMPASS questionnaire.
Data Source: Electronic Medical Record (ARIA), COMPASS and ESAS-r.

Page 60
FIGURE 44
Indicator: Rural Intravenous (IV) Chemotherapy Delivery
Definition: Proportional dot map highlighting the number of IV chemotherapy treatments that were delivered at Community Cancer Program sites (CCPs) or Regional Cancer Program sites (RCPs) to patients who live within each Regional Health Authority.
Population: Manitobans diagnosed with invasive cancer that have received IV chemotherapy at CCPs or RCPs outside Winnipeg.
Colour: The colour of each circle corresponds to the location of the CCPs or RCPs outside Winnipeg that delivered the IV chemotherapy treatment.
Timeframe: April 1, 2018 - March 31, 2021.
Data Source: CancerCare Manitoba Community Oncology Programs; Manitoba Cancer Registry.

TABLE 14
Indicator: Age-Standardized Incidence Rate
Definition: Annual age-standardized cancer incidence rate per 100,000 people (all ages). Allows the reader to compare cancer incidence rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer incidence. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-

melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1, 2019 - December 31, 2021.
Additional Notes: Stratified by region. Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry; Manitoba Health Population Registry (for denominator).

Indicator: Number of New Cancer Cases
Definition: Annual number of new cancer cases (all ages, invasive cases excluding in situ bladder cancers and non-melanoma skin cancers). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource needs.
Timeframe: January 1 - December 31, 2021.
Additional Notes: Stratified by region.
Data Source: Manitoba Cancer Registry.

Page 61
TABLE 15
Indicator: Community Oncology Program: Physician Visits
Definition: Total number of physician visits to a Community Cancer Program site.
Timeframe: April 1, 2021 – March 31, 2022 (past); April 1, 2022 - March 31, 2023 (current).
Additional Notes: Excludes radiation oncology visits.
Data Source: CancerCare Manitoba Community Oncology Programs.

Indicator: Community Oncology Program: Outpatient Treatment Visits
Definition: Total number of outpatient treatment visits at a Community Cancer Program site.
Timeframe: April 1, 2021 – March 31, 2022 (past); April 1, 2022 - March 31, 2023 (current).
Additional Notes: Outpatient treatments include any anti-cancer treatment including intravenous (IV) chemotherapy, bladder instillation, intramuscular injection, subcutaneous injection, other IV treatment, IV fluid administration only, blood product transfusion, and oral treatment support.
Data Source: CancerCare Manitoba Community Oncology Programs.

Indicator: Community Oncology Program: New Patient Referrals
Definition: Total number of new patients' referrals to a Community Cancer Program site.
Timeframe: April 1, 2021 – March 31, 2022 (past); April 1, 2022 - March 31, 2023 (current).
Data Source: CancerCare Manitoba Community Oncology Programs.

Page 62
FIGURE 45
Indicator: Wait Times: Navigation
Definition: Percent of new referrals that met the target of 48 hours between the date the referral was received and first contact with patient. Population: All new referrals received by the Provincial Cancer Referral and Navigation Service.
Timeframe: April 1, 2023 - March 31, 2024.
Data Source: CancerCare Manitoba Community Oncology Programs.

OUTCOMES

Page 67
FIGURE 46
Indicator: Number of Cancer-Related Deaths
Definition: Annual number of deaths due to invasive cancer (all ages, excluding in situ bladder cancers and non-melanoma skin cancers). This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource allocation.
Timeframe: January 1, 2000 - December 31, 2020.
Data Source: Manitoba Cancer Registry; Manitoba Vital Statistics Death database.

Indicator: Age-Standardized Mortality Rates
Definition: Annual age-standardized cancer mortality rate per 100,000 people (all ages). Allows the reader to compare cancer mortality rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer mortality. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients dying of invasive cancer (excluding in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1, 2000 - December 31, 2020.
Additional Notes: Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry; Manitoba Vital Statistics Death database; Manitoba Health Population Registry (for denominator).

FIGURE 47
Indicator: Age-Standardized Mortality Rates by Region and Type of Cancer
Definition: Annual age-standardized cancer mortality rate per 100,000 people (all ages). Allows the reader to compare cancer mortality rates in different regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer mortality. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients dying of invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1, 2018 - December 31, 2020
Additional Notes: Stratified by region, sex, and type of cancer (breast (female only), prostate, colorectal, lung and bronchus). All invasive cancers exclude in situ bladder cancers and non-melanoma skin cancers. Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry; Manitoba Vital Statistics Death database; Manitoba Health Population Registry (for denominator).

Page 68
FIGURE 48
Indicator: Age-standardized 5-Year Net Survival
Definition: Age-standardized five-year net survival for cancer (ages 15 - 99) represents the cumulative probability that the cancer patients would have survived 5 years after diagnosis, after controlling for the risks of death from other causes. It can be interpreted as the proportion of cancer patients who survive up to five years, after eliminating other causes of death. It is a way of comparing survival of people who have cancer with those who do not and identifies how much cancer shortens life (www.thelancet.com Vol 385 March 14, 2015 pp 980).
Numerator: Observed survival probability (five years after diagnosis) for all patients who are diagnosed with invasive cancer (includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols).
Denominator: Expected survival probability population of a similar age and sex, based on national and provincial life tables from Statistics Canada.
Timeframe: January 1, 2015 - December 31, 2017.
Additional Notes: Stratified by geographic region (Prairie provinces and national) and cancer type (prostate, colorectal, breast (female only), lung and pancreas). Period methodology applied using international weights. Stratified by type of cancer and prairie provinces and national. Estimates were calculated using the Canadian Cancer Survival Standard weights.
Data source: Canadian cancer registry death linked file (1992-2017) and life tables from Statistics Canada.

TABLE 16
Indicator: Age-standardized 1-Year Net Survival
Definition: Age-standardized one-year net survival for cancer (ages 15-99) represents the cumulative probability that the cancer patients would have survived 1 year after diagnosis, after controlling for the risks of death from other causes. It can be interpreted as the proportion of cancer patients who survive up to one year, after eliminating other causes of death. It is a way of comparing survival of people who have cancer with those who do not and identifies how much cancer shortens life (www.thelancet.com Vol 385 March 14, 2015 pp 980).
Numerator: Observed survival probability (one year after diagnosis) for all patients who are diagnosed with invasive cancer (includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols).

Denominator: Expected survival probability of Manitobans of a similar age and sex, based on life tables from Statistics Canada.
Timeframe: Using observed cases 2012-2021; period 2017-2021.
Reference: See *Outcomes - References (1)*, page 71.
Additional Notes: Period methodology applied using international weights. Stratified by cancer site (lung, colorectal, breast (female only), and prostate). Regional variation showing the highest and lowest percentage in regional health authority.
Data Source: Manitoba Cancer Registry; Statistics Canada Life Tables Lifetables, Canada, Provinces and Territories (catalogue no. 84-537-X) [Web resource]. Ottawa, ON: Statistics Canada; 2021 Available at: Life Tables, Canada, Provinces and Territories (statcan.gc.ca) (accessed [26 February 2024]).

Indicator: Age-standardized 5-Year Net Survival

Definition: Age-standardized five-year net survival for cancer (ages 15-99) represents the cumulative probability that the cancer patients would have survived 5 years after diagnosis, after controlling for the risks of death from other causes. It can be interpreted as the proportion of cancer patients who survive up to five years, after eliminating other causes of death. It is a way of comparing survival of people who have cancer with those who do not and identifies how much cancer shortens life (www.thelancet.com Vol 385 March 14, 2015 pp 980).
Numerator: Observed survival probability (five years after diagnosis) for all patients who are diagnosed with invasive cancer (includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols).
Denominator: Expected survival probability of Manitobans of a similar age and sex, based on life tables from Statistics Canada.
Timeframe: Using observed cases 2012-2021; period 2017-2021.
Reference: See *Outcomes - References (1)*, page 71.
Additional Notes: Period methodology applied using international weights. Stratified by type of cancer (lung, colorectal, breast, and prostate cancer) and higher and lower percent in regional health authority.
Data Source: Manitoba Cancer Registry; Statistics Canada Life Tables Lifetables, Canada, Provinces and Territories (catalogue no. 84-537-X) [Web resource]. Ottawa, ON: Statistics Canada; 2021 Available at: Life Tables, Canada, Provinces and Territories (statcan.gc.ca) (accessed [February 26, 2024]).

Page 69

FIGURE 49

Indicator: Number of Prevalent Cancer Cases

Definition: Number of people alive on January 1, 2021 who have been diagnosed with an invasive cancer (all ages, includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols).
Timeframe: January 1, 2011 - December 31, 2020.
Additional Notes: Includes individuals diagnosed between 2011 and 2020. Stratified by the time since diagnosis (1-year, 1-2 years, 2-5 years, and 5 or more years).
Data Source: Manitoba Cancer Registry.

TABLE 17

Indicator: Cancer Prevalence Proportion

Definition: Cancer prevalence proportion (per 100,000) by prevalence-duration (2-year, 5-year, 10-year).
Numerator: All patients alive on January 1, 2021 who were diagnosed with an invasive cancer (includes in situ bladder cancer; excludes non-melanoma skin cancers as per standard national and international protocols).
Denominator: Average between the 2020 and 2021 midpoint (July 1st) Manitoban population.
Timeframe: January 1, 2011 - December 31, 2020.
Additional Notes: Includes individuals diagnosed with cancer between 2011 and 2020. Stratified by type of cancer. Prevalence-duration is a proxy for the specific care needs at different points of the cancer continuum. By estimating the number of patients at each point of the continuum we can develop a cancer control strategy specific to our population. For example: 2-year: This timeframe includes individuals who are likely receiving active treatment for their cancers such as chemotherapy, surgery, or radiation therapy; 5-year: Extending to 5-years means we are also including individuals who may have completed treatment and are receiving regular follow-up for recurrence and adverse reactions; 10-year: When we extend to 10-years we also include individuals who may be receiving care related to survivorship.
Data Source: Manitoba Cancer Registry; Manitoba Health Population Registry (for denominator).

Page 70

TABLE 18

Indicator: Age-Standardized Incidence Rate by Region and Type of Cancer

Definition: Annual age-standardized cancer incidence rate per 100,000 people (all ages). Allows the reader to compare cancer incidence rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer incidence. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients diagnosed with invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1, 2019 - December 31, 2021.
Additional Notes: Stratified by region and type of cancer (breast (female only), prostate, colorectal, lung and bronchus). Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry; Manitoba Health Population Registry (for denominator).

Indicator: Age-standardized Mortality Rate by Region and Type of Cancer

Definition: Annual age-standardized cancer mortality rate per 100,000 people (all ages). Allows the reader to compare cancer mortality rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer mortality. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients dying of invasive cancer (excludes in situ bladder cancers and non-melanoma skin cancers).
Denominator: All Manitoba residents, from Manitoba Health Population Registry.
Timeframe: January 1, 2018 - December 31, 2020.
Additional Notes: Stratified by region and type of cancer (breast (female only), prostate, colorectal, lung and bronchus). Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population.
Data Source: Manitoba Cancer Registry; Manitoba Vital Statistics Death database; Manitoba Health Population Registry (for denominator).

FIGURE 50

Indicator: International Benchmarks on Cancer Mortality

Definition: Age-standardized cancer mortality rate per 100,000 people (all ages) across Organisation for Economic Cooperation and Development (OECD) countries.
Numerator: All patients dying of invasive cancer (excludes non-melanoma skin cancers as per standard national and international protocols).
Denominator: All residents, from OECD country databases, as identified by the International Agency for Research on Cancer (IARC), GLOBOCAN 2023.
Timeframe: January 1 - December 31, 2021 (or nearest year).
References: See *Outcomes - References (12)*, page 71.
Additional Notes: Mortality rates are based on numbers of deaths registered in a country in a year divided by the size of the corresponding population. The rates have been directly age-standardized to the 2015 OECD population (available at http://oe.cd/mortality) to remove variations arising from differences in age structures across countries and over time. The source is the World Health Organization (WHO) Mortality Database. Deaths from all cancers are classified to ICD-10 codes C00-C97. The international comparability of cancer mortality data can be affected by differences in medical training and practices as well as in death certification across countries. The Manitoba age-standardized rate (using the direct standardization method) to the 2011 Manitoba population is not directly comparable to the rates estimated for the OECD countries.
Data Source: OECD Health Statistics 2023; GLOBOCAN 2023. https://stat.link/b79oz8

SURVIVORSHIP

Page 73
FIGURE 51
Indicator: Transitional Appointments
Definition: Number of transitional appointments booked each year.
Numerator: Number of transitional appointments booked each year at CancerCare Manitoba.
Timeframe: January 1, 2014 - December 31, 2023.
Data Source: CancerCare Manitoba Transitions Program.

PALLIATIVE CARE AND ADVANCED CANCERS

Page 75
FIGURE 52
Indicator: Model of Palliative Care
Definition: Model of integrated palliative care highlighting how palliative care can be part of integrated across the patient experience, adapted.
Reference: See *Palliative and Advanced Cancers - References (5),* page 78.
Source: Canadian Virtual Hospice; Pippa Hawley. The bow tie model of 21st century palliative care, 2015. Available at: www.virtualhospice.ca (accessed 16 October 2024).

Page 77
TABLE 19
Indicator: Number of New Cancer Cases
Definition: Annual number of new pancreas, hepatobiliary and esophagus cancer cases. This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource needs.
Timeframe: January 1 - December 31, 2021.
Additional Note: Stratified by type of cancer (pancreas, hepatobiliary and esophagus cancer). Hepatobiliary cancers include liver, gallbladder, and bile ducts cancers.
Data Source: Manitoba Cancer Registry.

Indicator: Number of Cancer Deaths
Definition: Annual number of deaths due to pancreas, hepatobiliary and esophagus cancers. This number is used by healthcare planners as it estimates direct need for cancer services in a population and associated resource allocation.
Timeframe: January 1 - December 31, 2020.
Additional Note: Hepatobiliary cancers include liver, gallbladder, and bile ducts cancers.
Data Source: Manitoba Cancer Registry and Manitoba Vital Statistics Death database.

Indicator: Incidence: Late-Stage Diagnoses
Definition: Percent of cancers diagnosed at late stage of disease (stage IV) by cancer site (pancreas, hepatobiliary and esophagus).
Numerator: The number of cancer cases diagnosed at late stage (stage IV).
Denominator: All patients diagnosed with cancer.
Timeframe: January 1 - December 31, 2021.
Additional Notes: Stratified by type of cancer (pancreas, hepatobiliary and esophagus cancer). Hepatobiliary cancers include liver, gallbladder, and bile ducts cancers.
Data Source: Manitoba Cancer Registry

Indicator: One-Year Net Survival
Definition: Age-standardized one-year net survival for cancer (ages 15-99) represents the cumulative probability that the cancer patients would have survived 1 year after diagnosis, after controlling for the risks of death from other causes. It can be interpreted as the proportion of cancer patients who survive up to one year, after eliminating other causes of death. It is a way of comparing survival of people who have cancer with those who do not and identifies how much cancer shortens life (www.thelancet.com Vol 385 March 14, 2015 pp 980).
Numerator: Observed survival probability (one year after diagnosis) for all patients who are diagnosed with cancer.
Denominator: Expected survival probability of Manitobans of a similar age and sex, based on life tables from Statistics Canada.
Timeframe: January 1, 2017 - December 31, 2021.
Additional Notes: Stratified by type of cancer (pancreas, hepatobiliary and esophagus cancer). Hepatobiliary cancers include liver, gallbladder, and bile ducts cancers. Period methodology applied using international weights. Observed years are 2012-2021.
Data Source: Manitoba Cancer Registry; Statistics Canada Life Tables Lifetables, Canada, Provinces and Territories (catalogue no. 84-537-X) [Web resource]. Ottawa, ON: Statistics Canada; 2021 Available at: Life Tables, Canada, Provinces and Territories (statcan.gc.ca) (accessed [February 26, 2024]).

Indicator: Three-Year Net Survival
Definition: Age-standardized three-year net survival for cancer (ages 15-99) represents the cumulative probability that the cancer patients would have survived 3 years after diagnosis, after controlling for the risks of death from other causes. It can be interpreted as the proportion of cancer patients who survive up to three years, after eliminating other causes of death. It is a way of comparing survival of people who have cancer with those who do not and identifies how much cancer shortens life (www.thelancet.com Vol 385 March 14, 2015 pp 980).
Numerator: Observed survival probability (three years after diagnosis) for all patients who are diagnosed with cancer.
Denominator: Expected survival probability of Manitobans of a similar age and sex, based on life tables from Statistics Canada.
Timeframe: January 1, 2017 - December 31, 2021.
Additional Notes: Stratified by type of cancer (pancreas, hepatobiliary and esophagus cancer). Hepatobiliary cancers include liver, gallbladder, and bile ducts cancers. Period methodology applied using international weights. Observed years are 2012-2021.
Data Source: Manitoba Cancer Registry; Statistics Canada Life Tables Lifetables, Canada, Provinces and Territories (catalogue no. 84-537-X) [Web resource]. Ottawa, ON: Statistics Canada; 2021 Available at: Life Tables, Canada, Provinces and Territories (statcan.gc.ca) (accessed [February 26, 2024]).

FIGURE 53
Indicator: Age-Standardized Incidence Rate
Definition: Annual age-standardized cancer incidence rate per 100,000 people (invasive cases, all ages). Allows the reader to compare cancer incidence rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer incidence. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients diagnosed with invasive cancer.
Denominator: All Manitoba residents, from Manitoba Health's population database.
Timeframe: January 1, 2002 - December 31, 2021.
Additional Notes: Rates are age-standardized (using the direct standardization method) to the 2011 Manitoba population. Stratified by type of cancer (pancreas, hepatobiliary and esophagus cancer). Hepatobiliary cancers include liver, gallbladder, and bile ducts cancers.
Data Source: Manitoba Cancer Registry, Manitoba Health Population Registry (for denominator).

Indicator: Age-Standardized Mortality Rate
Definition: Annual age-standardized cancer mortality rate per 100,000 people (all ages). Allows the reader to compare cancer mortality rates between regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account). This is done because age is closely associated with cancer mortality. By removing the effect of age, we can make more representative comparisons between populations.
Numerator: All patients dying of invasive cancer.
Denominator: All Manitoba residents, from Manitoba Health's population database.
Timeframe: January 1, 2002 - December 31, 2021.
Additional Notes: Rates are age-standardized to the age structure of the 2011 Canadian standard population. Stratified by type of cancer (pancreas, hepatobiliary and esophagus cancer). Hepatobiliary cancers include liver and intrahepatic bile duct cancers.
Data Source: Statistics Canada.

PATIENT EXPERIENCE

Page 80
FIGURE 54
Indicator: Patient Satisfaction
Definition: Overall patient satisfaction scores and patient satisfaction scores across six dimensions of person-centred care (physical comfort; respect for patient preferences; access to care; coordination and integration of care; information, communication, and education; emotional support) for outpatient cancer care.

Numerator: Number of patients who are satisfied with outpatient cancer care (composite measure) they received; based on self-reported survey data.
Denominator: All patients who participated in the survey (a sample of all patients who visited CancerCare Manitoba during a specified window of time and who were still alive at the time of the survey mailout date).
Timeframe: July 1 – December 31, 2015 (2016), July 1 - December 31 2018 (2019), September 1, 2020 – August 31, 2021 (2021), October 1 – December 31, 2022 (2022), and April 1 – June 30, 2023 (2023).
Additional Notes: Compared to national benchmarks provided by NRC Health in 2021. The national average includes data from Alberta, Ontario and Manitoba. In the 2016, 2019 and 2021 surveys, a sample of patients who were seen at CancerCare Manitoba within the six-month period preceding survey launch were sampled. In the 2022 and 2023 surveys, all patients who were seen within the three-month period were selected.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2016, 2019, 2021, 2022, and 2023).

Page 81

FIGURE 55

Indicator: Patient Involvement in Care

Definition: Patient satisfaction regarding whether patients felt they were involved in decisions about their care as much as they wanted.
Numerator: Number of survey respondents who provided a positive response ('Yes, completely" or "Yes, somewhat") when asked "Were you involved in decisions about your care as much as you wanted?"
Denominator: All respondents who provided a response to this question.
Timeframe: July 1 – December 31, 2015 (2016), July 1 - December 31 2018 (2019), September 1, 2020 – August 31, 2021 (2021), October 1 – December 31, 2022 (2022), and April 1 – June 30, 2023 (2023).
Additional Notes: Compared to national benchmark provided by NRC Health in 2016.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2016, 2019, 2021, 2022, and 2023).

FIGURE 56

Indicator: Caregiver Involvement

Definition: Patient satisfaction regarding whether patients felt their care providers gave their family or friends enough opportunity to be involved in their care or treatment. **Numerator:** Number of survey respondents who provided a positive response ("Right Amount") when asked "How much opportunity did your care providers give your family or friends to be involved in your care and treatment?"
Denominator: All respondents who provided a response to this question.
Timeframe: July 1 – December 31, 2015 (2016), July 1 - December 31 2018 (2019), September 1, 2020 – August 31, 2021 (2021), October 1 – December 31, 2022 (2022), and April 1 – June 30, 2023 (2023).
Additional Notes: Compared to national benchmark provided by NRC Health in 2016.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2016, 2019, 2021, 2022, and 2023).

FIGURE 57

Indicator: Consideration of Travel Concerns When Planning Treatment

Definition: Patient satisfaction regarding whether patients felt care providers considered their travel concerns when planning for tests and treatments.
Numerator: Number of survey respondents who provided a positive response ('Yes, completely" or "Yes, somewhat") when asked "If you had to travel for any tests or treatments, did your care providers consider your travel concerns when planning for your treatment?"
Denominator: All respondents who provided a response to this question.
Timeframe: April 1 – June 30, 2023.
Additional Notes: Stratified by region.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Page 82

FIGURE 58

Indicator: Satisfaction scores over time for AOPSS' Dimension of Emotional Support

Definition: Satisfaction across the person-centred care dimension of emotional health.
Numerator: All respondents who provided a positive response to the series of questions that roll up into this dimension of person-centred care.
Denominator: All respondents who provided any response to the series of questions that roll up into this dimension of person-centred care.
Timeframe: July 1 – December 31, 2015 (2016), July 1 - December 31 2018 (2019), September 1, 2020 – August 31, 2021 (2021), October 1 – December 31, 2022 (2022), and April 1 – June 30, 2023 (2023).
Additional Notes: All core questions in the Ambulatory Oncology Patient Satisfaction Survey (AOPSS) are rolled up into six dimensions of care. Here we highlight the dimension of emotional support. Core questions rolled up into the dimension of emotional support include:

- Were you told of your diagnosis in a sensitive manner?
- When you were first told of your illness, were you referred to a care provider who could help you with anxieties and fears?
- Did you get enough information about possible changes in your emotions?
- Did you get enough information about possible changes in your sexual activity?
- Did you get enough information about possible changes in your relationship with your spouse or partner?
- In the past 6 months, has someone at CancerCare Manitoba put you in touch with other care providers who could help you with anxieties and fears?
- Did you get as much help as you wanted in figuring out how to pay for any extra costs for your cancer care?
- Did a care provider go out of his or her way to help you or make you feel better?

Data Source: Ambulatory Oncology Patient Satisfaction Survey (2008, 2011, 2016, 2019, 2021, 2022 and 2023).

EQUITY, DIVERSITY AND INCLUSION

Page 86

FIGURE 59

Indicator: Proportion of New Cancer Diagnoses in Older Adults (70 years and over)

Definition: The proportion of new cancer diagnoses in older adults (over the age of 70).
Numerator: Number of patients over the age of 70 diagnosed with invasive cancer (excluding in situ bladder cancers and non-malenoma skin cancer).
Denominator: All patients diagnosed with invasive cancer.
Timeframe: January 1-December 31, 2021.
Additional Notes: Stratified by type of cancer and age group. Other digestive cancers include other unspecified parts of biliary tract (extrahepatic bile duct, ampulla of vater, overlapping malignant lesion of biliary tract, malignant lesion biliary tract unspecified), intrahepatic bile duct, retroperitoneum and peritoneum, overlapping malignant lesion of digestive system, malignant neoplasms of other & ill-defined sites within the digestive system. Other ill-defined grouping is cancer diagnosis that are unknown or poorly defined.
Data Source: Manitoba Cancer Registry.

Page 87

FIGURE 60

Indicator: Number of Language Interpreter Requests

Definition: The total request of interpretation from CancerCare Manitoba to the language service providers including Shared Health Language Access program, Winnipeg Regional Health Authority Indigenous Health, and the E-Quality Communication Centre of Excellent.
Timeframe: April 1 2020 – March 31, 2021; April 1 2021 – March 31, 2022; and April 1 2022 – March 31, 2023.
Data Source: Shared Health Language Access program, Winnipeg Regional Health Authority (WRHA) Indigenous Health, and the E-Quality Communication Centre of Excellent.

FAST FACTS APPENDIX

OVERVIEW OF CANCER SYSTEM

Page 9

Fast Fact: Up to 40% of adult cancer cases can be attributed to preventable risk factors.
Timeframe: January 1 - December 31, 2015 (The Canadian Population Attributable Risk of Cancer (ComPARe) study); January 1 - December 31, 2010 (Parkin, Boyd and Walker, 2011).
Reference: See *Overview of Cancer System - References (1-3),* page 13.

Fast Fact: 2 in 5 Canadians will develop cancer in their life time.
Timeframe: 2023.
Reference: See *Overview of Cancer System - References (4),* page 13.
Data Source: Canadian Cancer Society, 2023.

Fast Fact: The five-year net survival rate in Manitoba has improved from 58% (1998-2002) to 63% in (2017-2021).
Timeframe: January 1, 1998 - December 31, 2002 (past); January 1, 2017 - December 31, 2021 (current).
Additional Notes: Direct comparison of these two survival estimates is not recommended due to change in methodology over time. Past estimates (1998-2002) used a cohort methodology. Current estimates (2017-2021) were based on a period methodology. Still, this fast fact highlights improvements to cancer survival over the past 20 years.
Data Source: Manitoba Cancer Registry.

Fast Fact: 5 cancer types cause 54% of cancer deaths in Manitoba in 2020.
Timeframe: January 1 - December 31, 2020.
Additional Note: These cancers include lung, colorectal, prostate, breast (female only) and pancreas.
Data Source: Manitoba Cancer Registry and Manitoba Vital Statistics Death database.

Fast Fact: Four cancer types make up over 1/2 of all cancers in Manitoba.
Timeframe: January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: 7,249 new cases of invasive cancer in Manitoba.
Timeframe: January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: Nearly 2,700 cancer-related deaths every year in Manitoba.
Timeframe: January 1 - December 31, 2020.
Data Source: Manitoba Cancer Registry and Manitoba Vital Statistics Death database.

Page 11

Fast Fact: 2 in 5 Canadians will develop cancer in their life time.
Timeframe: 2023.
Reference: See *Overview of Cancer System - References (4),* page 13.
Data Source: Canadian Cancer Society, 2023.

Fast Fact: 1 in 4 Canadians is expected to die from cancer.
Timeframe: January 1 – December 31, 2023.
Reference: See *Overview of Cancer System - References (4),* page 13.
Data Source: Canadian Cancer Society, 2023.

Fast Fact: We expect the number of invasive cancer cases in Manitoba to increase by over 50% by 2040 (compared to 2021).
Timeframe: January 1 - December 31, 2021 (current) and January 1 - December 31, 2040 (future).
Data Source: Manitoba Cancer Registry.

COVID-19 PANDEMIC

Fast Fact: The total number of physician visits did not change between April 2020 and June 2021 reflecting a switch from in-person visits (which decreased by 52%) to the introduction of virtual visits.
Timeframe: April 1, 2020 - June 30, 2021.
Reference: See *Cancer System During COVID-19 Pandemic - References (3),* page 17.
Additional Note: A quasi-experimental study design using an interrupted time series analysis was used to examine the system level impact of the COVID-19 pandemic using the pre-COVID-19 period (January 1, 2015 – February 29, 2020) and the COVID-19 period (April 1, 2020 – June 30, 2021) visit counts. Telehealth visits are combined with in-person visit includes because of the requirement of patients to visit telehealth locations to videoconference with their health care providers.
Data Source: CancerCare Manitoba's electronic medical record.

Fast Fact: Virtual visits saved significant time spent travelling between April 2020 and December 2022. From 420,000 to 750,000 kms per month saved! From 5,500 - 9,600 hours of driving per month saved! This equates to 87-155 metric tons of CO_2 emissions saved per month.
Reference: See *Cancer System During COVID-19 Pandemic - References (3),* page 17.
Timeframe: April 1, 2020 - December 31, 2022.
Additional Note: CCMB's impact evaluation study applied a quasi-experimental study design using interrupted time series analysis. The study compared pre-COVID-19 (January 1, 2015 – February 29, 2020) service volume with volume during the COVID-19 period (April 1, 2020 – June 30, 2021).
Data Source: Manitoba Cancer Registry and CancerCare Manitoba's electronic medical record.

Fast Fact: We asked patients about their care during the COVID-19 pandemic in the 2021 Ambulatory Oncology Patient Satisfaction Survey. Over 75% of patients who had a virtual visit rated their experience as *easy or very easy*. Over 95% were satisfied with the quality of care they received during the COVID-19 pandemic. Almost 92% felt *very safe* receiving care at CCMB.
Timeframe: September 1, 2020 – August 31, 2021.
Additional Note: Sample of patients who were seen at CancerCare Manitoba within the six-month period preceding survey launch were sampled to complete the survey.
Data Source: 2021 AOPSS.

Fast Fact: Survival rate at one year was not different during the pandemic compared to before the pandemic for all cancer sites except for individuals aged 50-74 years who were diagnosed with lung cancer from April to June 2021.
Timeframe: April 1, 2020 - September 30, 2021.
Reference: See *Cancer System During COVID-19 Pandemic - References (10),* page 17.
Additional Note: A retrospective cohort study with an interrupted time series analysis was used to examine cancer survival rates prior to COVID-19 (January 2015 to December 2019) and after the start of the COVID-19 (April 2020 to September 2021).
Data Source: Manitoba Cancer Registry.

PREVENTION

Page 17

Fast Fact: On CancerCare Manitoba's website, the prevention messaging is viewed by over 9,000 people (over 16,000 views) in a year.
Timeframe: September 19, 2023 - September 19, 2024.
Data Source: CancerCare Manitoba Prevention Program.

CCMB SCREENING PROGRAMS

Page 24

Fast Fact: BreastCheck sent nearly 320,000 invitation and recall letters to eligible Manitobans.
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: BreastCheck Registry.

Fast Fact: Over 198,000 mammograms were completed at BreastCheck sites and on the mobile.
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: BreastCheck Registry.

Fast Fact: 1,009 breast cancers detected.
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: BreastCheck Registry.

Fast Fact: CervixCheck sent 270,000 invitation and recall letters to eligible Manitobans.
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: CervixCheck Registry.

Fast Fact: CervixCheck sent nearly 21,000 fail-safe letters to Manitobans and their healthcare providers.
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: CervixCheck Registry.

Fast Fact: Approximately 505,000 Pap tests and 48,000 colposcopies were registered in the CervixCheck Registry.
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: CervixCheck Registry.

Fast Fact: ColonCheck sent over 281,000 fecal test kits to eligible Manitobans.
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: ColonCheck Registry.

Fast Fact: Nearly **134,000 fecal test kits were completed by Manitobans.**
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: ColonCheck Registry.

Fast Fact: Nearly **5,500 Manitobans were referred for follow-up testing after an abnormal fecal test.**
Timeframe: January 1, 2019 - December 31, 2023.
Data Source: ColonCheck Registry.

Page 26
Fast Fact: Over 2,300 mammograms were completed in 2022-2023 for women under age 50 and over age 75 (over 74,000 in age 50-74).
Timeframe: January 1, 2022 - December 31, 2023.
Data Source: BreastCheck Registry.

Fast Fact: There were over 18,000 mobile appointments in 2022-2023.
Timeframe: January 1, 2022 - December 31, 2023.
Data Source: BreastCheck Registry.

Page 27
Fast Fact: HPV self-sampling was piloted by CervixCheck in 2022-2023 (CPAC grant project). Out of 788 survey participants, 94% found the swab easy or very easy to use and 94% would be likely or very likely to recommend the kit to a friend.
Timeframe: 2022-2023.
Data Source: "CervixCheck At-Home Kit Patient Survey" distributed by CervixCheck to HPV self-sampling participants (Survey Monkey); Manitoba Health.

Fast Fact: In 2023, CervixCheck sent invitation letters to women eligible to receive the HPV vaccine (CCMB Foundation funded project). The project results showed an increase in HPV vaccination rate by 3.0 times (invite only) and 4.9 times (invite and reminder) when compared to the control group (no invite).
Timeframe: 2023
Data Source: CervixCheck, Manitoba Health.

Page 28
Fast Fact: Since 2007, a total of 356,482 fecal occult blood tests (FOBTs) were completed.
Timeframe: 2007 to 2023
Data Source: ColonCheck Registry.

Fast Fact: In June 2023, Manitoba transitioned from the FOBT to the fecal immunochemical test (FIT). Between June and May 2024, 38,811 FITs were completed.
Timeframe: June 1, 2023 – May 31, 2024.
Data Source: ColonCheck Registry.

DETECTION AND DIAGNOSIS OF CANCER

Page 31
Fast Fact: Lung cancer is the most common cancer among all Canadians. 12% of Manitobans with cancer have lung cancer.
Timeframe: January 1 - December 31, 2021.
Reference: See *Detection and Diagnosis of Cancer - References (1,2),* page 37.
Data Source: Manitoba Cancer Registry; Canadian Cancer Statistics, special report on lung cancer, 2020.

Fast Fact: The top four cancers account for 52% of all cancers in Manitoba.
Timeframe: January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 32
Fast Fact: On average, 56 children are diagnosed with cancer every year.
Timeframe: January 1, 2011 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 33
Fast Fact: 285 adolescents and young adults (AYA) were diagnosed with cancer in Manitoba in 2021.
Timeframe: January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 34
Fast Fact: Weekly hematology referrals increased by nearly 40% between 2017 and 2021.
Timeframe: January 1, 2017 - December 31, 2021.
Data Source: CancerCare Manitoba Provincial Cancer Referral and Navigation Service; Manitoba Cancer Registry.

Fast Fact: The provision of all care related to blood disorders at CCMB is in addition to the 7,249 new cancer cases CCMB oncologists provide care for on an annual basis.
Timeframe: January 1 - December 31, 2021.
Data Source: CancerCare Manitoba Provincial Cancer Referral and Navigation Service; Manitoba Cancer Registry.

Page 35
Fast Fact: The percentage of late stage pancreas cancer increased from 46% in 2016 to 57% in 2021.
Timeframe: January 1 - December 31, 2016; January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: Recently, pancreas cancer has become the third most common cause of cancer death in Canada.
Reference: See *Detection and Diagnosis of Cancer - References (4),* page 37.
Data Source: Canadian Cancer Statistics, 2023.

Page 36
Fast Fact: Regardless of region or province, lung cancers were most likely to be diagnosed after they have metastasized (stage IV).
Timeframe: January 1, 2019 - December 31, 2021; January 1, 2013 – December 31, 2017.
Reference: See *Detection and Diagnosis of Cancer - References (1),* page 37.
Data Source: Manitoba Cancer Registry and Canadian Cancer Statistics, Special Report on Lung Cancer, 2020.

CANCER TREATMENT

Page 45
Fast Fact: More than two in five patients underwent systemic therapy in Manitoba.
Timeframe: January 1, 2019 - December 31, 2021
Data Source: Manitoba Cancer Registry.

Fast Fact: More than one in four patients underwent radiation therapy in Manitoba.
Timeframe: January 1, 2019 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: One in two patients underwent surgery in Manitoba.
Timeframe: January 1, 2019 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: 78% of all patients in Manitoba are treated with systemic therapy, radiation therapy, or surgery.
Timeframe: January 1, 2019 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 46

Fast Fact: 43% of all Manitobans diagnosed with cancer received systemic therapy.
Timeframe: January 1, 2019 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: Waiting for results and treatments can be a difficult time for patients and their loved ones. We hope to minimize stress caused by waiting. In the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) 98% of Manitoban respondents told us they waited 30 minutes or less in the waiting room for their scheduled radiation or chemotherapy treatment appointments.
Timeframe: April 1 - June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who received chemotherapy or radiation therapy.
Data Source: CancerCare Manitoba, Ambulatory Oncology Patient Satisfaction Survey 2023.

Fast Fact: In addition, 87% of respondents who had to wait longer than expected for chemotherapy told us their health care providers did everything they could to make them more comfortable during wait.
Timeframe: April 1 - June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who received chemotherapy or radiation therapy.
Data Source: CancerCare Manitoba, Ambulatory Oncology Patient Satisfaction Survey 2023.

Page 47

Fast Fact: Between April 2020 and March 2021, 44,935 radiation treatments (fractions) were provided to patients at Winnipeg and Brandon sites.
Timeframe: April 1, 2020 - March 31, 2021.
Data Source: CancerCare Manitoba Radiation Oncology Program.

Fast Fact: 29% of all Manitobans diagnosed with cancer received radiation therapy.
Timeframe: January 1, 2019 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 48

Fast Fact: 50% of all Manitobans diagnosed with cancer receive surgery.
Timeframe: January 1, 2019 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Page 49

Fast Fact: 73% of all Manitobans diagnosed with colon cancer received surgical treatment
Timeframe: Diagnosis period: January 1, 2015 – December 31, 2020 and Treatment period: January 1, 2015 – March 31, 2021.
Reference: See *Cancer Treatment - References (3),* pages 63-65.
Data Source: Manitoba Cancer Registry.

Page 51

Fast Fact: 23% of Manitobans diagnosed with non-small cell lung cancer received surgical treatment.
Timeframe: Diagnosis period: January 1, 2015 – December 31, 2020 and Treatment period: January 1, 2015 – March 31, 2021.
Reference: See *Cancer Treatment - References (3),* pages 63-65.
Data Source: Manitoba Cancer Registry.

Page 52

Fast Fact: 71% of Manitoban women with breast cancer had breast conserving surgery.
Timeframe: Diagnosis period: January 1, 2015 – December 31, 2020 and Treatment period: January 1, 2015 – March 31, 2021.
Reference: See *Cancer Treatment - References (3)* - page 63-65.
Data Source: Manitoba Cancer Registry.

Page 53

Fast Fact: Over 92% of colon cancer patients who had surgery within one year of diagnosis and had at least 12 lymph nodes removed and pathologically examined.
Timeframe: Diagnosis period: January 1, 2015 – December 31, 2020 and Treatment period: January 1, 2015 – March 31, 2021.
Reference: See *Cancer Treatment - References (3),* pages 63-65.
Data Source: Manitoba Cancer Registry.

Fast Fact: 4 of 5 RHAs achieved the 90% target.
Timeframe: January 1, 2017-December 31, 2019; January 1, 2020 - December 31, 2021.
Additional Note: Indicator: Percentage of colon resections with 12 or more lymph nodes removed and examined for cases diagnosed within a specified time period.
Data Source: Manitoba Cancer Registry.

Fast Fact: 8 of 10 Canadian provinces report on this indicator through the Canadian Partnership Against Cancer.
Reference: See *Cancer Treatment - References (10),* pages 63-65.
Additional Note: Indicator: Percentage of colon resections with 12 or more lymph nodes removed and examined for cases diagnosed within a specified time period.
Data Source: Manitoba Cancer Registry; Canadian Partnership Against Cancer System Performance Report, 2016.

Page 54

Fast Fact: 6 of 10 Canadian provinces report on this indicator through the Canadian Partnership Against Cancer.
Reference: See *Cancer Treatment- References (10),* pages 63-65.
Additional Note: Indicator: Percentage of patients with stage II or IIIA non-small cell lung cancer (NSCLC) who received guideline-concordant post-operative chemotherapy within 120 days of surgical resection.
Data Source: Manitoba Cancer Registry; Canadian Partnership Against Cancer System Performance Report, 2016.

Page 55

Fast Fact: Since 2017, about 2 adult patients received blood or marrow transplants every week.
Timeframe: January 1, 2017 - December 31, 2022.
Data Source: Manitoba Blood and Marrow Transplant Program.

Fast Fact: The total number of transplants have increased by 147% between 2003-2021.
Timeframe: January 1 - December 31, 2003 (past); January 1 - December 31, 2021 (current).
Data Source: Manitoba Blood and Marrow Transplant Program.

Fast Fact: Total autologous transplants have increased by 119% between 2014-2021. Increase is based on evidence supporting benefits of up-front transplantation for Multiple Myeloma, older adults, and more effective induction regimens.
Timeframe: January 1 - December 31, 2014 (past); January 1 - December 31, 2022 (current).
Data Source: Manitoba Blood and Marrow Transplant Program.

Fast Fact: Median wait times for adult autologous lymphoma and myeloma patients from apheresis to stem cell infusion was approximately 24 days for in 2022.
Timeframe: January 1 - December 31, 2022.
Data Source: Manitoba Blood and Marrow Transplant Program.

Fast Fact: 47.1% of pediatric transplants in 2021-2022 were provided to children with non-malignant disease.
Timeframe: January 1, 2021 - December 31, 2022.
Data Source: Manitoba Blood and Marrow Transplant Program.

Fast Fact: Over 70% of adult transplants in 2021-2022 were provided to those with Multiple Myeloma or Lymphoma.
Timeframe: January 1, 2021 - December 31, 2022.
Data Source: Manitoba Blood and Marrow Transplant Program.

Page 56

Fast Fact: **10.5% of all Manitoban women with a breast cancer diagnosis were diagnosed with triple negative breast cancer (2017-2021).**
Timeframe: January 1, 2017 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: **As of December 2021, 667 OncotypeDx tests were completed. The number of tests completed in 2021 was more than double the first year (2018).**
Timeframe: January 1, 2018 – December 31, 2021.
Additional Note: The oncotype dx was being captured as of January 1, 2018 and a lot may be coded as unknown because that test is not done regularly.
Data Source: Manitoba Cancer Registry.

Page 57

Fast Fact: **Data from the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) told us that 93% of respondents felt either completely or somewhat comfortable talking to staff about questions they had about new clinical trials or new treatments for their cancer.**
Timeframe: April 1 - June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Excludes respondents who identified that this question was not applicable to them.
Data Source: CancerCare Manitoba, Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: **As of December 31, 2023, there were 85* trials available to adolescents and young adults (AYA). This is a considerable increase from the 14 trials available to AYA in February 2019. We are working hard to expand opportunities to this group.**
Timeframe: As of December 31, 2023.
Additional Note: Of the 85 clinical trials 46 clinical trials are available for CCMB patients between 15 - 18 years, and 39 are available for CCMB patients between 18-39 years.
Data Source: CancerCare Manitoba Clinical Trials Unit.

Page 58

Fast Fact: **77.0% Hand Hygiene Compliance, 2023. In 2021 hand hygiene compliance was 88.2%. Our target is 90% or higher.**
Timeframe: January 1 - December 31, 2021 (past); January 1 - December 31, 2023 (current).
Additional Note: Hand hygiene compliance rates dropped between 2021 and 2022. CCMB investigated and found the method of auditing performed was highly subjective. As a result, auditing practices have been reviewed and a new auditing tool will be introduced in 2025.
Data Source: CancerCare Manitoba Quality, Patient Safety, and Risk.

Fast Fact: **99.2% Safe Surgical Checklist Compliance, 2022. In 2021 safe surgical checklist compliance was 99.6%. Our target is 100% or higher.**
Timeframe: January 1 - December 31, 2021 (past); January 1 - December 31, 2023 (current).
Data Source: CancerCare Manitoba Quality, Patient Safety, and Risk.

Fast Fact: **We are devoted to patient engagement. Between January and December 2023, there were 77 patient advisors on 24 new projects.**
Timeframe: January 1 - December 31, 2023.
Data Source: CancerCare Manitoba Quality, Patient Safety, and Risk.

Fast Fact: **92% of respondents reported feeling completely safe while receiving care at CCMB in the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS).**
Timeframe: April 1 - June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Data excludes respondents who did not respond to this question.
Data Source: CancerCare Manitoba's Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: **75% of providers washed their hands before patient contact. 79% washed their hands afterwards.**
Timeframe: January 1 - December 31, 2023.
Data Source: CancerCare Manitoba Infection Control

Page 59

Fast Fact: **7,578 COMPASS questionnaires were completed by cancer patients across Manitoba from October to December 2023.**
Timeframe: October 1 - December 31, 2023.
Data Source: Electronic Medical Record (ARIA).

Fast Fact: **From October to December 2023 1,315 COMPASS questionnaires contained a dignity concern. This made up 17% of all COMPASS questionnaires completed during that timeframe.**
Timeframe: October 1 - December 31, 2023.
Data Source: Electronic Medical Record (ARIA).

Fast Fact: **Between April 2022 and March 2023 there were 1,813 visits to the Urgent Cancer Care Clinic and 2,492 calls to the Cancer Helpline.**
Timeframe: April 1, 2022 - March 31, 2023.
Data Source: CancerCare Manitoba's Electronic Medical Record (ARIA).

Fast Fact: **69% of respondents to the 2023 Ambulatory Oncology Patient Satisfaction Survey told us they felt their care providers did everything they could to control their pain or discomfort.**
Timeframe: April 1 - June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023.) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Data exclude respondents who identified that they did not experience any pain and those who did not respond to this question.
Data Source: CancerCare Manitoba, Ambulatory Oncology Patient Satisfaction Survey (2023).

Page 60

Fast Fact: **Across the province, 74% of patients treated with IV chemotherapy outside of Winnipeg were provided this service within the same RHA they lived.**
Timeframe: April 1, 2022 - March 31, 2023.
Data Source: CancerCare Manitoba's Community Oncology Program and Electronic Medical Record (ARIA).

Page 61

Fast Fact: **12,161 intravenous (IV) chemotherapy sessions were delivered outside Winnipeg in 2022/23. This makes up 33% of all provincial IV chemotherapy delivery and is a 18% increase from 2017/18.**
Timeframe: April 1, 2017 - March 31, 2018 (past); April 1, 2022 - March 31, 2023 (current).
Data Source: CancerCare Manitoba's Community Oncology Program and Electronic Medical Record (ARIA).

Fast Fact: **Brandon's Western Manitoba Cancer Centre has been providing radiation treatment to Manitobans since June 2011. Between June 2011 and March 2023 over 4,700 patients were able to receive their treatments closer to home. This equates to approximately 63,000 radiation treatments!**
Timeframe: June 1, 2011 - March 31, 2023.
Data Source: CancerCare Manitoba's Community Oncology Program; Western Manitoba Cancer Centre.

Fast Fact: **In 2023/24 patients and their families were able to save over 13.3 million kilometers in travel due to Community Cancer Programs!**
Timeframe: April 1, 2023 - March 31, 2024.
Data Source: CancerCare Manitoba's Community Oncology Program and Electronic Medical Record (ARIA).

Fast Fact: We hear you and appreciate your feedback. Results from the 2023 Ambulatory Oncology Patient Satisfaction Survey (AOPSS) revealed that across Manitoba only 58% of respondents felt that their care providers had taken their family or living situation into account when planning treatment. This was low across all regions outside Winnipeg with a range of 47% in the Northern Health Region to 61% in Prairie Mountain Health.
Timeframe: April 1 - June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023.) and who were still alive as of November 1, 2023. The denominator includes all respondents who provided a response to this question.
Data Source: CancerCare Manitoba, Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: Only 55% felt their care providers considered their travel concerns when planning treatment. Regional variation outside Winnipeg ranged between 47% in Northern Health Region to 64% in Prairie Mountain Health.
Timeframe: April 1 - June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023.) and who were still alive as of November 1, 2023. The denominator includes all respondents who provided a response to this question.
Data Source: CancerCare Manitoba, Ambulatory Oncology Patient Satisfaction Survey (2023).

Page 62
Fast Fact: 2,854 new patient referrals to Rural (1,619) and Winnipeg (1,235) Navigation in 2023/24. This was an 17% increase since 2018/19 reflecting expansion of the provincial service. This rate is expected to continue rising due to a growing program.
Timeframe: April 1, 2018 - March 31, 2019 (past); April 1, 2023 - March 31, 2024 (current).
Data Source: CancerCare Manitoba Community Oncology Program and the Provincial Cancer Referral and Navigation Service.

Fast Fact: Since inception of the Community Oncology Program (2011) there have been 24,141 new patient referrals to Rural and Winnipeg Navigation!
Timeframe: April 1, 2011 - March 31, 2024.
Data Source: CancerCare Manitoba Community Oncology Program and the Provincial Cancer Referral and Navigation Service.

Fast Fact: 6% of new patients did not have a primary care provider.
Timeframe: April 1, 2023 - March 31, 2024.
Data Source: CancerCare Manitoba Community Oncology Program and the Provincial Cancer Referral and Navigation Service.

Fast Fact: Most common cancers associated with new patient referrals to Rural and Winnipeg Navigation.
Timeframe: April 1, 2023 - March 31, 2024.
Additional Notes: Stratified by disease site grouping: 24% gastrointestinal (GI), 11% breast, 19% thoracic, 12% lymphatic, 13% genitourinary (GU), 6% gynecological (GYNE), and 15% other).
Data Source: CancerCare Manitoba Community Oncology Program and the Provincial Cancer Referral and Navigation Service.

Fast Fact: Over 90% of all new patient referrals to Rural and Winnipeg Navigation were at the beginning of their journey with cancer.
Timeframe: April 1, 2023 - March 31, 2024.
Data Source: CancerCare Manitoba Community Oncology Program and the Provincial Cancer Referral and Navigation Service.

OUTCOMES

Page 67
Fast Fact: Each year cancer kills nearly 2,700 Manitobans.
Timeframe: January 1 - December 31, 2020.
Data Source: Manitoba Cancer Registry; Manitoba Vital Statistics Death database.

Fast Fact: 1 in 4 Canadians is expected to die from cancer.
Reference: See *Outcomes - References (1),* page 71.
Data Source: Canadian cancer Statistics, 2023

Fast Fact: 23% of cancer deaths in Manitoba are from lung cancer.
Timeframe: January 1, 2018 - December 31, 2020.
Data Source: Manitoba Cancer Registry; Manitoba Vital Statistics Death database.

Fast Fact: Since 2000, age-standardized mortality rates have decreased for the most common cancers: breast: 36% decrease; colorectal: 34% decrease; lung: 33% decrease; prostate: 25% decrease.
Timeframe: January 1 - December 31, 2000 (past); January 1 - December 31, 2020 (current).
Data Source: Manitoba Cancer Registry; Manitoba Vital Statistics Death database, Manitoba Health Population Registry (for denominator).

Page 68
Fast Fact: One-year net survival for all invasive cancers = 78%. Five-year net survival for all invasive cancer = 63%.
Timeframe: Using observed cases 2012-2021; Period: January 1, 2017 - December 31, 2021.
Data Source: Manitoba Cancer Registry; Statistics Cancer Life Tables, Canada, Provinces and Territories (84-537-X) [Web resource]. Ottawa, ON: Statistics Canada; 2018 [Available at: statcan.gc.ca): Accessed [26 February 2024].

Page 69
Fast Fact: 36,664 Manitobans are currently living with cancer.
Timeframe: Diagnosed: January 1, 2011 - December 31, 2020.
Data source: Manitoba cancer Registry.

Fast Fact: The number of prevalent cases increased by 12% over 5 years (2016 to 2021).
Timeframe: Diagnosed: January 1, 2006 - December 31, 2015; January 1, 2011 - December 31, 2020.
Data source: Manitoba cancer Registry.

SURVIVORSHIP

Page 73
Fast Fact: The number of transitional appointments booked every month has nearly doubled from 90 in 2017 to 178 in 2022.
Timeframe: January 1, 2014 - December 31, 2023.
Data Source: CancerCare Manitoba Transitions Program.

Fast Fact: Between 2018 and 2023, 45% of transitional appointments were booked for individuals living with breast cancer.
Timeframe: January 1, 2018 - December 31, 2023.
Data Source: CancerCare Manitoba Transitions Program.

Fast Fact: Nearly 1 out of every 40 Manitobans have survived a cancer they were diagnosed with in the past 10 years. This number is expected to continue growing.
Timeframe: January 1, 2011 - December 31, 2020.
Additional Notes: This includes all patients diagnosed with invasive cancer since January 1, 2011 and who were still alive as of January 1, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: As of January 1, 2021, 36,664 individuals were still alive after a cancer diagnosis within the last 10 years.
Timeframe: January 1, 2011 - December 31, 2020.
Additional Notes: This includes all patients diagnosed with invasive cancer since January 1, 2011 (includes in situ bladder cancers; excludes non-melanoma skin cancers) and who were still alive as of January 1, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: Many cancer survivors have had a previous diagnosis of prostate or breast cancer.
Timeframe: January 1, 2011 - December 31, 2020.
Data Source: Manitoba Cancer Registry.

PALLIATIVE CARE AND ADVANCED CANCERS

Page 75

Fast Fact: 58% of Canadians who died in 2021-2022 received palliative care, an increase from 52% in 2016-2017.
Timeframe: 2021-2022 (current); 2016-2017 (past).
Reference: See *Palliative and Advanced Cancers - References (3),* page 78.
Additional Notes: The report by CIHI examines patients in jurisdictions where there is information on inpatient, home care and long-term care are Ontario, Alberta, British Columbia and Yukon. The sources of data are Discharge Abstract Database, National Ambulatory Care Reporting System, Continuing Care Reporting System and Home Care Reporting System, 2015–2016 to 2016–2017 (Ontario and Alberta) and 2020–2021 to 2021–2022, (Ontario, Alberta, British Columbia and Yukon).
Data Source: Canadian Institute for Health Information Report, Access to Palliative Care in Canada (2023).

Fast Fact: Between October and December 2023 nearly 1,700 questionnaires identified that a patient needed information or help with advance care planning. This equates to about 22% of all questionnaires completed.
Timeframe: October 1 - December 31, 2023.
Additional Notes: This fast fact is related to advance care planning or goals of care. the questions are: Do you need information and resources on Advanced care planning?, Do you want to discuss Advance care planning at you appointment today?, and Has there been a change in your Advanced care plan since your last visit?
Data Source: CancerCare Manitoba's Electronic Patient Record (ARIA).

Fast Fact: Between April 1, 2020 and December 31, 2023, there were a total of 2,432 psychosocial support visits with loved ones and caregivers to help them cope with grieving and bereavement.
Timeframe: April 1, 2020 - December 31, 2023.
Data Source: CancerCare Manitoba Patient and Family Support Services.

Fast Fact: Between November 2020 and December 2023, 285 physician visits were to the Rapid Access Clinic.
Timeframe: November 1- December 31, 2023.
Additional Note: The number of Rapid Access Assessments scheduled representing physician visits to Rapid Access clinic for bone metastasis in CancerCare Manitoba MacCharles location. It includes treatment provided to adults only.
Data Source: CancerCare Manitoba Radiation Treatment Program.

Page 76

Fast Fact: In the past 4 years, the percent of patients who died of cancer and had two or more admissions to acute-care hospitals in the last 28 days of life ranged from a high of 22.9% in 2018 to a low of 20.6% in 2021. Nationally this value is higher at 23%.
Timeframe: January 1, 2018 - December 31, 2021.
Reference: See *Palliative and Advanced Cancers - References (6),* page 78.
Additional Notes: The percentage shows a downward trend between 2018 and 2021 (i.e. 2018: 22.9%; 2019: 22.7%; 2020: 20.7% and 2021: 20.6%).
Data Source: Manitoba Cancer Registry.

Fast Fact: During the period July 1, 2018 to December 31, 2023, the Manitoba MAID team had 4,119 contacts from patients and received 1,888 written requests resulting in 1,172 assisted deaths. 37% of written requests and 60% of assisted deaths were for individuals with a cancer diagnosis.
Timeframe: July 1, 2018 to December 31, 2023.
Data Source: Manitoba Medical Assistance in Dying (MAID) Program.

Fast Fact: In 2020/2021, there were 2,749 referrals to palliative care programs in Manitoba with the majority of referrals (54%) made to Winnipeg Regional Health Authority.
Timeframe: April 1, 2020 to March 31, 2021.
Data Source: Shared Health Palliative Care.

Page 77

Fast Fact: Pancreatic, hepatobiliary, and esophageal cancer are the 3rd, 6th, and 11th most common causes of cancer related deaths in Canada, respectively.
Timeframe: 2024 [estimated].
Reference: See *Palliative and Advanced Cancers - References (9),* page 78.
Data Source: Canadian Cancer Statistics 2024.

Fast Fact: The 5-year survival rates for these cancers (pancreatic, hepatobiliary, and esophageal) are less than 20% in Canada.
Reference: See *Palliative and Advanced Cancers - References (10),* page 78.
Data Source: Canadian Cancer Statistics 2023.

Fast Fact: Between April 2022 and March 2024, the Early Palliative Care Clinic received 341 referrals to help patients access services aligning their goals of care.
Timeframe: April 1, 2022 – March 31, 2024.
Data Source: CancerCare Manitoba Community Oncology Program.

PATIENT EXPERIENCE

Page 80

Fast Fact: 97.4% would rate the quality of care they received at CCMB over the past 6 months as good, very good, or excellent.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey invited all patients who had been seen at CancerCare Manitoba within the three-month period (April 1 – June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Data exclude non-response.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 94.1% felt they were treated with dignity and respect.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Data exclude non-response.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 91.9% felt completely safe receiving care at CCMB.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Data exclude non-response.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 89.5% felt that care providers at CCMB did everything they could to treat their cancer.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Data exclude non-response.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 94.0% felt that their health care providers were usually or always aware of their test results.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. Data

exclude non-response.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Page 82

Fast Fact: 52% of Manitoban respondents who had anxiety and fears when they were first told about their illness did NOT receive a referral to a care provider to help them with these anxieties and fears.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. The numerator includes responses for 'No' as this indicates gaps in information provision. Data exclude respondents who identified that they had no anxiety or fears and where no response was provided.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 67% did NOT receive all the information they needed on changes to their relationship with their spouse/ partner.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. The numerator includes responses for 'No' and "Yes, somewhat", as these indicate gaps in information provision. Data exclude respondents who identified that this question did not apply to them and where no response was provided.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 60% did NOT receive all the information they needed around changes to their emotions.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. The numerator includes responses for 'No' and "Yes, somewhat", as these indicate gaps in information provision. Data exclude respondents who identified that this question did not apply to them and where no response was provided.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 53% did NOT receive all the information they needed on changes to their sexual activity.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. The numerator includes responses for 'No' and "Yes, somewhat", as these indicate gaps in information provision. Data exclude respondents who identified that this question did not apply to them and where no response was provided.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 53% did NOT receive all the information they needed on changes in their work or usual activities.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. The numerator includes responses for 'No' and "Yes, somewhat", as these indicate gaps in information provision. Data exclude respondents who identified that this question did not apply to them and where no response was provided.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 43% did NOT receive all the information they needed on changes to their physical appearance.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. The numerator includes responses for 'No' and "Yes, somewhat", as these indicate gaps in information provision. Data exclude respondents who identified that this question did not apply to them and where no response was provided.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: 47% did NOT receive all the information they needed about their nutritional needs.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. The denominator is all respondents who provided a response to this question. The numerator includes responses for 'No' and "Yes, somewhat", as these indicate gaps in information provision. Data exclude respondents who identified that this question did not apply to them and where no response was provided.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

Fast Fact: The 2023 Ambulatory Oncology Patient Satisfaction Survey revealed that nearly 50% of respondents never or only sometimes got the help they needed to figure out how to pay for any extra costs their cancer care.
Timeframe: April 1 – June 30, 2023.
Additional Notes: This survey sampled patients who had been seen at CancerCare Manitoba within the three-month period (April 1 - June 30, 2023) and who were still alive as of November 1, 2023. Data exclude respondents who identified that this question was not applicable to them and those who did not respond to the question.
Data Source: Ambulatory Oncology Patient Satisfaction Survey (2023).

EQUITY, DIVERSITY AND INCLUSION

Page 84

Fast Fact: The population of Manitoba was 1.34 million at the time of the 2021 census. 18% of all Manitobans identified as First Nations, Métis, or Inuit.
Timeframe: January 1 - December 31, 2021.
Reference: See *Equity, Diversity and Inclusion - References (1),* page 88.
Data Source: Statistics Canada.

Fast Fact: First Nations women were more likely than all other Manitoban women to be diagnosed with breast cancer at a later stage.
References: See *Equity, Diversity and Inclusion - References (3,4),* page 88.
Data Source: Federal Indian Register, Manitoba Health Medical Claims, Manitoba Health Population Registry, and Manitoba Cancer Registry.

Fast Fact: First Nations women were more likely to be diagnosed with an invasive cervical cancer than all other Manitoban women.
Reference: See *Equity, Diversity and Inclusion - References (5),* page 88.
Data Source: Federal Indian Register, CervixCheck Registry, Manitoba Health Medical Claims, Manitoba Health Population Registry, and Manitoba Cancer Registry.

Page 85

Fast Facts: 13 culturally-appropriate emotional support webinars were hosted from a First Nations' perspective -each hosting an average of 80 participants!
Timeframe: 2021,2024.
Additional Note: Two different series were offered. The first was in 2021 and the second in 2024.
Data Source: CCMB's Community Oncology Program.

Fast Facts: The Indigenous Community Profiles website had 19,496 views as of June 2024.
Time frame: November 2023 – June 2024.
Data Source: CCMB's Community Oncology Program.

Page 86

Fast Fact: 11% of Manitobans were over the age of 70 in the 2021 census.[1] The proportion of older adults in Manitoba is estimated to reach 13% -17% by 2043.[7]
Timeframe: January 1 - December 31, 2021.
References: See *Equity, Diversity and Inclusion - References (1,7),* page 88.
Data Source: Statistics Canada.

Fast Fact: 47% of Manitobans diagnosed with invasive cancer are over the age of 70.
Timeframe: January 1 - December 31, 2021.
Data Source: Manitoba Cancer Registry.

Fast Fact: In 2024, the CCMB Health Equity Collective hosted guest speaker, Tristan Bilash, a transgender man and ovarian cancer survivor, for a virtual event with over 150 participants.
Timeframe: 2024.
Data Source: CCMB's Community Oncology Program.

Fast Fact: At the 2021 census, 257,620 Manitobans identified being born outside Canada.
Timeframe: January 1 - December 31, 2021.
Reference: See *Equity, Diversity and Inclusion - References (1),* page 88.
Data Source: Statistics Canada.

Fast Fact: Over 58,000 individuals recently immigrated to Manitoba between 2016 and 2021.
Timeframe: January 1, 2016 - December 31, 2021.
Reference: See *Equity, Diversity and Inclusion - References (1),* page 88.
Data Source: Statistics Canada.

Page 87

Fast Fact: Over a one-year period there were 1,677 interpreter requests through CCMB across 33 languages.
Timeframe: April 1, 2022 - March 31, 2023.
Data Source: Shared Health Language Access Program; Winnipeg Regional Health Authority Indigenous Health; E-Quality Communication Centre of Excellent.

Fast Fact: The most common language requests in 2022/23 were:

1. **Mandarin (13%)**
2. **Cantonese (12%)**
3. **Vietnamese (10%)**
4. **Russian (9%)**
5. **Punjabi (7%)**
6. **Tagalog (7%)**
7. **American Sign Language (ASL) (6%)**
8. **Cree, Oji-Cree, and Ojibway (5%)**
9. **Ukrainian (5%)**
10. **Spanish (4%)**
11. **Arabic (4%)**
12. **Korean (4%)**
13. **Tigrinya (2%)**
14. **Portuguese (2%)**
15. **Swahili (1%)**
16. **Other (9%)**

Timeframe: April 1, 2022 - March 31, 2023.
Data Source: Shared Health Language Access Program; Winnipeg Regional Health Authority Indigenous Health; E-Quality Communication Centre of Excellent.

Fast Fact: Compared to 2020, there was a 25% increase in individual counseling appointments and 30% increase in the number of participants who accessed group sessions in 2021 as a result of offering virtual appointment.
Time frame: January 1 – December 31, 2020 (past); January 1 – December 31, 2021 (current).
Data source: CancerCare Manitoba's Electronic Medical Record (ARIA) (for individual counseling appointments) and Patient and Family Support Services Program record (for group sessions).

Fast Fact: Between 2020 and 2023, 22 information and education webinars have been offered with over 1,780 patients and families in attendance.
Time frame: April 1, 2020 – March 31, 2023.
Data source: CCMB's Patient and Family Support Services Program and attendance report generated by Zoom for Healthcare.

Fast Fact: Since 2022, 419 participants from across Manitoba joined the virtual Family and Patients Conference.
Time frame: 2022-2023.
Additional Note: Family and Patient conference is an annual event. CCMB has offered 2 times since 2022, one in Fall of 2022 and one in Fall of 2023.
Data source: CCMB's Patient and Family Support Services Program.

Fast Fact: Between April 2023 and March 2024, a total of 99 participants joined virtual information and education sessions on Anti-hormonal Therapy for Breast Cancer.
Time frame: April 1, 2023 – March 31, 2024.
Data source: CancerCare Manitoba's Electronic Medical Record (ARIA).

Fast Fact: Between 2021 and 2023, 883 patients had virtual fitting appointment using virtual wig catalog.
Time frame: April 1, 2021 – March 31, 2023.
Data source: CCMB's Patient and Family Support Services Program.

GENERAL TERMS AND DEFINITIONS

Cancer: Codes, Classifications and Categories

Cancer is a term used to describe a group of 200+ diseases. The common features of these diseases are abnormal cells dividing without (i.e., not responding to) our bodies' usual biological growth control mechanisms. These abnormal cells are then able to invade surrounding tissue and spread to other parts of the body (metastasize) though our blood and lymph systems. Most types of cancer are name for the organ they start in, and /or the type of cell that is involved. For example, if a cancer starts in the breast it is called "breast cancer" even though it may have spread to other organs such as the liver, bone or brain – these are secondary or metastatic sites. In this report, national standards for coding and classifying cancer information have been used. The Manitoba Cancer Registry uses the International Classification of Diseases for Oncology, 3rd edition (ICDO-3), which includes the anatomic location of the tumor as well as a pathologic classification (known as "morphology"); deaths are coded in the International Classification of Diseases, 9th edition (ICD 9) up to 2001 and the 10the edition (ICD-10) from 2002 to present.

Cancer Category	Incidence (ICD 0-3)	Mortality (ICD-10)
All invasive cancers	C00 – C97 with invasive morphology (/3), excluding non – melanoma skin cancers (C44 with morphology outside of 8720-8790)	C00 – C97, excluding non-melanoma skin cancers (C44)
Lung	C34 with invasive morphology (/3)	C34
Colorectal	C18 – C20, C26.0 with invasive morphology (/3)	C18-C20, C26.0
Breast *(females only)*	C50 with invasive morphology (/3)	C50
Prostate	C61 with invasive morphology (/3)	C61
Pancreas	C25 with invasive morphology (/3)	C25
Esophagus	C15 with invasive morphology (/3)	C15
Hepatobiliary	- Liver: C22.0 with invasive morphology (/3) - Gallbladder: C23 with invasive morphology (/3) - Other hepatobiliary: C22.1, C24 with invasive morphology (/3)	- Liver: C22.0 - Gallbladder: C23 - Other hepatobiliary: C22.1, C24

Notes: *Lymphomas, which may be found in various organs (but with morphology code 9590-9989), are assigned to the lymphoma category instead of the anatomic site where they arise. Stage at diagnosis was assigned using the collaborative staging system (CS, version 2), which can be translated to American Joint Commission on Cancer (AJCC) TNM categories. Please see the National Cancer Institute's online dictionary of terms, www.cancer.gov/directionary, for more information on other cancer terms.*

Geography: Categories

Only Manitoba residents are included in the analysis. Regional Health Authorities (RHAs) are defined by the Manitoba government, and are responsible within the context of broad provincial policy direction, for assessing and prioritizing needs and health goals, and developing and managing an integrated approach to their own health care system. For brevity, a short-hand form is used to denote the RHAs throughout this report:

- Northern - Northern Health Region
- Southern – Southern Health – Santé Sud
- Prairie Mountain RHA - Prairie Mountain Health
- Winnipeg RHA - Winnipeg Regional Health Authority (includes Churchill)
- Interlake-Eastern RHA - Interlake-Eastern Regional Health Authority

ACKNOWLEDGMENTS

Led by CancerCare Manitoba's System Performance team, our dedicated staff and partners created the 2024 Manitoba Cancer System Performance Report – a high quality and comprehensive report providing insight into the cancer care system in Manitoba.

Our System Performance Indicators Working Groups include a Management Advisory Forum and Data Specialists Forum. These multidisciplinary groups help to identify indicators and metrics of interest, and are consulted at different points along the indicator development process (from definition to implementation). The System Performance team works closely with CCMB clinical and program staff, as well as external partners, to make this report a success. We are grateful for the analysis, advice, and clinical interpretation provided by everyone who participated in its development. A very special thanks for report production goes to:

Munayie Wakie
System Performance Programmer Analyst
System Performance

Diane Lawless
Publications Coordinator
Communications

Madeline Kells
Administrative Officer
Population Oncology

Manitobans who shared their stories and images.

All the people who collect and manage cancer-related data.

CancerCare Manitoba
ActionCancerManitoba