CancerCare Manitoba
2013-14 Community Health Assessment

CancerCare Manitoba

COVER ART: PROVIDING SERVICES AND CARE TO ALL MANITOBANS IS BOTH OUR MANDATE AND OUR PRIVILEGE. TO DO SO WITH COMPASSION, CARING, AND SENSITIVITY IS OUR FOCUS. THE SEEDS WE SOW TODAY PROVIDE HOPE FOR TOMORROW AS WE CONTINUALLY ENDEAVOUR TO REDUCE THE IMPACT OF CANCER ON ALL MANITOBANS.

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Introduction

Changing the course of cancer is not a solitary endeavor. Together with our partners, CancerCare Manitoba (CCMB) aims to reduce the impact of cancer throughout the province. CancerCare Manitoba delivers comprehensive care to Manitobans living with cancer and support for their families. We continually strive to do better.

Like other cancer agencies in Canada and those around the world, CCMB is investigating how to best measure and present cancer control indicators for our population. For example, work done to advance the country's national cancer strategy identified over 600 possible indicators. However, a set of this size is too large to produce a meaningful summary of cancer control that would support its management and focus its activities.

Currently there is no single data system in place to answer all our cancer questions, but there is growing consensus regarding specific indicators that describe the cancer system's performance. We first introduced some of these indicators in the 2008-09 Annual Progress Report which included measures of:

› Prevention
› Screening
› Access (diagnosis and treatment)
› Outcomes

These indicators represent the key activities of the cancer system and were developed based on three guiding principles:

1. using reliable data that are already published or are routinely cited, wherever possible

2. using indicator definitions that are used by at least one other partner (provincial or national), wherever possible

3. providing an indication of whether CCMB is improving in a particular cancer-related area by indicating the trend

This set of indicators was used in the 2010 CCMB Community Health Assessment, with summary updates provided in CCMB's Annual Progress Reports every year since then.

To produce the 2013-14 Community Health Assessment, we have extended the application of these principles and expanded the indicator list 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.

The chosen indicators allow assessment of trends over time and by geography. Inspired by work done by colleagues in the United Kingdom, Cancer Care Ontario and the Canadian Partnership Against Cancer, we recognize that indicator development is an ongoing progressive process to be improved and refined as CCMB learns more and as better information and measurement tools become available.

The information contained in this assessment examines cancer risk factors, screening participation rates, access to care and treatment, patient satisfaction and cancer trends over time. Where we present information on time trends, arrows summarize the patterns: increases of 10% or more ↑, little change →, or a drop of 10% or more ↓. Colour shows whether the trend is good (green), neutral (yellow) or needs to improve (red). Where we present information by region, areas that are significantly different from the overall provincial measure are noted. We have also presented regional data using the standard order the Manitoba Centre for Health Policy uses for its reports. It is based on the premature mortality rate – an indicator of the relative health of a population. This allows us to consider gradients of health equity as well as geography.

The information found in this report was carefully developed to reflect the most current, complete data. Data sources for this report include:

› Canadian Community Health Survey (CCHS)
› Manitoba Health
› NRC Picker's Ambulatory Oncology Survey
› CCMB, specifically the Manitoba Cancer Registry, Screening Programs and Radiation Oncology Program

We are grateful for the analysis performed by CCMB staff (Epidemiology Unit, Screening, Patient Navigation) as well as our colleagues at Statistics Canada who analyzed the CCHS data and NRC Picker Institute who analyzed the patient satisfaction survey data.

Measures can be defined and calculated differently, which is why it is important that comparisons be made to similarly-defined and calculated indicators – hence the need to provide the direction and meaning of a trend in the indicators in this report. Often national benchmarks are not readily available, but where possible, we have incorporated information to appropriately compare Manitoba with other provinces. However, until standardized measurements are adopted across provinces (ultimately also international jurisdictions), readers are cautioned that comparisons to data from other sources are not always valid and should be avoided.

In closing, though mandated by Manitoba Health to prepare this report, CCMB also has a moral obligation to measure the performance of the cancer system and share this information openly with partners in order to improve the system and reduce the burden of cancer in Manitoba.

DR. DONNA TURNER, PhD
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CancerCare Manitoba's 2013/14 Indicators: An Overview

CancerCare Manitoba's Community Health Assessment measures the performance of the cancer system in Manitoba by examining over 20 health indicators. The indicators used in this report span the cancer spectrum from prevention to palliation. To be truly meaningful and interpreted appropriately by the reader, health indicators must be clearly defined. The following is an overview of the measures presented in this report; further details are provided in the Glossary and Technical Appendix at the back.

Prevention

Risk factors for cancer include lifestyle, environmental factors and family history. For this report, we have focused on lifestyle, including obesity, smoking, alcohol consumption, poor diet and physical inactivity. These behaviours have been addressed using data from the Canadian Community Health Survey (CCHS) covering years 2007-2008 and 2009-2010.

Readers should note that we have used crude rates of risk factors which are consistent with data presented by Statistics Canada and the Canadian Partnership Against Cancer. While others have used age-adjusted rates (the Manitoba Centre for Health Policy's Manitoba RHA Indicator Atlas for example), we have found that the adjustment made little difference in the rank order and ultimate conclusions. Therefore, for ease of interpretation, we have used the more straightforward crude rates (a simple percent).

Additionally, the measure of physical activity for this report includes leisure time activities only. This is consistent with the definition used by our national partners based on the standard question asked in the CCHS.

Access

Screening

Screening rates for colorectal, cervical and breast cancer are based on information routinely collected by CCMB's screening programs – ColonCheck, CervixCheck, and BreastCheck – supplemented with data collected through Manitoba Health's Medical Claims database. The programs use measures that are consistent with definitions used by national screening networks. The indicators all reflect participation rates in the target populations in a specified timeframe.

Wait times

Two wait time indicators are presented in this report representing two points along the cancer journey – diagnosis (breast assessment after an abnormal screen) and treatment (radiation therapy).

Breast assessment waits

BreastCheck follows national standards and records the time to final diagnosis for women who have an abnormal mammogram. Only participants of the screening program are included in the analysis. This report uses information from the two-year timeframe April 1, 2006-March 31, 2008 as baseline, with current measures based on April 1, 2008-March 31, 2010 data.

Radiation therapy waits

CancerCare Manitoba's Radiation Oncology Program uses national standard definitions from the Canadian Association of Radiation Oncologists to report the time between "ready to treat" to start of radiation therapy. This report uses patient data collected during April 1, 2009-March 31, 2010 timeframe and most recently from April 1, 2011-March 2012.

Treatment utilization

This report used data from the Manitoba Cancer Registry to determine the percentage of patients who underwent surgery (excluding biopsies), radiation therapy and systemic therapy (chemotherapy or hormone therapy) for their cancer. For radiation therapy and radiation therapy after breast conserving surgery, figures show treatment utilization for patients

diagnosed in the three-year timeframe 2005-07 with the most current numbers from 2008-2010. For surgery and systemic therapy, figures include data for patients diagnosed in 2006-2007 and 2008-2010.

The utilization measures shown in this report can be used to aid in the planning for services because they indicate the number of patients who will require specific services. However, the treatment rates do not always indicate appropriateness and should not be over-interpreted (for example, more is not necessarily better). Many factors contribute to treatment including the specific cancer diagnosis, its stage (how far it has spread), a patient's medical fitness and patient choice. Our data may also miss treatment occurring outside of Manitoba.

Radiation therapy after breast conserving surgery in women with early stage breast cancer is considered standard of care, other than in exceptional circumstances, and may be used as a measure of appropriate care: women who do not have radiation therapy after this surgery are at a high risk of recurrence. But as with all treatment measures used in this report, women with early stage breast cancer who have breast conserving surgery without radiation therapy may still be receiving appropriate care due to specific clinical factors or patient choice.

Accessing the cancer system

The proportion of patients diagnosed at a late stage (stage IV, when metastasis or distant spread of the cancer has already occurred) is an overall indicator of effectiveness of early detection and access to the cancer system. In the case of breast cancer, where the public is aware of signs and symptoms, and early detection is possible through population-based screening, this percentage is very low and survival is very good. The same circumstances do not exist for most other types of cancer. Data for these measures are available starting in 2004 from the Manitoba Cancer Registry – the first cancer registry in Canada to collect stage at diagnosis for all cancer types on a population-wide basis. For this report, data are shown for patients diagnosed in 2005-2007 and 2008-2010.

End-of-Life Care

The current measure, Manitobans dying of cancer who have an acute care hospital stay in the last two weeks of life, shows that many cancer patients currently need hospitalization near end-of-life. These data are shown for patients dying of cancer in 2005-2007 (baseline) and 2008-2010 (current).

As with the other treatment utilization indicators, this is a helpful measure for planning services, but does not necessarily show appropriateness of care.

Outcomes

Incidence, mortality and survival

Information on the number of new cancers (incidence), mortality and five-year relative survival (a way of comparing survival of people who have cancer with those who don't – it shows how much cancer shortens life*) is based on data from the Manitoba Cancer Registry.

Incidence, mortality and survival are classic cancer surveillance measures. The numbers have been age-standardized to the 2001 Manitoba population to support comparisons with other disease rates calculated by Manitoba sources (Manitoba Health and the Manitoba Centre for Health Policy for example). However, readers are cautioned not to compare these rates to those in other reports such as those produced by Statistics Canada; these reports may use other standard populations which, by definition, mean the statistics are not comparable.

Patient experience

Results recorded in this section come from a standardized patient satisfaction survey used by many Canadian cancer centres administered by NRC Picker. For Manitoba, this survey has been used several times starting in 2004, again in 2008 and most recently in 2011. In the current report, responses to the 2008 survey are compared to answers to the 2011 survey. The survey measures many aspects of patient satisfaction including overall satisfaction, emotional support and pain management.

** From the National Cancer Institute (www.cancer.gov), Dictionary of Cancer Terms, relative survival rate.*

Key Findings

Based on these system indicators, the overall picture of cancer care and control in Manitoba is satisfactory, but has room for improvement. Variations are shown by service, geography, and type of cancer, as well as over time. Some regions show challenges in many aspects of cancer control, particularly those in the North.

Prevention

- Risk factors for cancer (and many other chronic diseases) show considerable variation by region and are frequently higher in the North. If unaddressed, there could be serious implications for cancer rates and need for service delivery in the future.

Access

- Screening is an important part of a healthy lifestyle. Some Manitoba communities have embraced testing more than others. Lower participation rates are found in the North. Colorectal cancer screening is the newest provincial screening program and, not surprisingly has a lower rate of uptake than the more established breast and cervical programs; still, Manitoba's colorectal screening rates are the highest in the country.
- Of the components measured along the cancer journey (wait times from mammogram to final diagnosis and ready to treat to start of radiation therapy), women in some parts of the North wait almost 1.5 times as long for a final diagnosis after an abnormal mammogram. Radiation therapy waits have declined considerably since the late 1990s and have generally reached the national benchmark of 100% treatment within four weeks of being ready to treat.
- Data show CancerCare Manitoba is responsive to updated clinical guidelines and new treatments. For example, radiation and surgical treatment has decreased for prostate cancer, likely due to an increased (and appropriate) use of watch and wait management strategies.
- Radiation therapy use is the lowest in the southwest corner of the province. This is expected to change in future reports given the opening of the Western Manitoba Cancer Centre in Brandon in 2011; data were not mature enough for inclusion in this report.
- BreastCheck is well established and the community is aware of signs and symptoms of breast cancer, though the proportion of breast cancer found at a late stage is low – around 5% – which corresponds with the survival rate approaching 90%.
- The highest proportion of people diagnosed with late stage cancer is seen in the North, which corresponds inversely with cancer mortality rates.

Outcomes

- Outcomes are the ultimate measures of cancer control, and while Manitoba outcomes (incidence, mortality and survival) are remaining fairly stable, overall there is little positive progress.
- Cancer rates in the rural south are relatively low, consistent with lower risk factor prevalence (for example smoking and alcohol consumption rates are low).
- The ultimate measure of overall cancer system success is a lower mortality rate. As an early indicator of success, there is a lower proportion of late stage diagnosis in areas where screening programs, for example colorectal cancer screening, have become part of the population's regular health care routine. Unfortunately, not all cancers can be screened for.
- Overall, patients report they are satisfied with care they receive throughout the province. However, when the components of care are separately categorized, there is room for improvement.

Prevention

As a member of Partners in Planning for Healthy Living, in 2012 CancerCare Manitoba was part of the team that launched a DVD designed to inspire youth and encourage them to make healthy life choices.

Moving Towards Healthier Lifestyles: Stories from the Manitoba Youth Health Survey highlights seven unique initiatives from across the province that were developed in response to the 2009 Youth Health Survey (YHS) data – an exercise that captured information on student health regarding physical activity, sedentary behavior, healthy eating, tobacco, alcohol and substance use, mental and emotional health and safety.

Using their report results, Flin Flon created the Tobacco Tackle program which includes a music video featuring students singing a popular tune with revised lyrics about the effects of smoking. Salad Days in Lundar aimed to increase fruit and vegetable consumption by having students plan and prepare salads to eat and share for lunch at school.

The recently completed 2012 YHS included additional questions (sexual health, work and volunteering, sleep and sun/UV exposure). CancerCare Manitoba is finishing the school, school division and Regional Health Authority reports and a provincial report is in progress.

Partners in Planning for Healthy Living (PPHL) is a group of 17 Manitoba health, education and governmental partners who share a common mandate for the primary prevention of chronic diseases including cancer. As a community of practice, PPHL is working and learning together to build capacity and use evidence to construct an integrated risk factor surveillance system that spans and reflects the unique contexts within Manitoba.

Prevention

INCREASE YOUR RISK	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
 **Obesity** percent of adults (ages 18+) with Body Mass Index classified as "obese". Based on self-reported height and weight.[a]	19.6%	23.4%	↑	21.3% – 32.6%
 **Smoking** percent of daily current or occasional smokers (ages 12+)[a]	23.3%	19.6%	↓	17.6% – 36.8%
 **Alcohol** percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+)[a]	19.2%	18.2%	→	14.9% – 25.3%

REDUCE YOUR RISK	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
 **Fruits and Vegetables:** percent consuming fruits and vegetables five or more times a day (ages 12+)[a]	35.9%	36.5%	→	30.6% – 40.8%
 **Physical Activity** percent of population 12+ who reported a moderate or active level of physical activity during leisure time[a]	52.9%	53.5%	→	45.4% – 55.8%

Source: [a] *Canadian Community Health Survey 2007-2008 (past), 2009-2010 (current).*

Note: Trend arrow is based on + or - 10% of the past value. Colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red).

RHA refers to Regional Health Authority.

What does this tell us?

More can be done to reduce personal risk.

- In Manitoba, obesity rates have risen while smoking rates decreased. Alcohol consumption rates have remained similar over the past few years.
- Similar to alcohol consumption, there has been little change in fruit and vegetable consumption and physical activity over the past few years.

The results tell us that:

- 19.6% of Manitobans 12 years of age and older are smokers.
- Just over half of all Manitobans are active in their leisure time.
- Risk factors vary by region.

Why is this important?

Prevention can help to reduce cancer risk.

- The combination of risk factors including smoking, alcohol consumption and poor eating habits increases the risk of developing some cancers.[1,2]
- Research shows that up to 50% of cancer could be prevented through lifestyle changes.[2,3]

How do we compare?

- ⊗ Obesity and alcohol rates are slightly higher in Manitoba than the Canadian average.[4]
- ⊗ Fruit and vegetable consumption is lower in Manitoba than the Canadian average.[4]
- ⊜ Leisure-time physical activity in Manitoba is similar to the national average.[4]
- ⊜ Smoking rates in Manitoba are similar to the national average.[4]

What is CancerCare Manitoba doing to help prevent cancer?

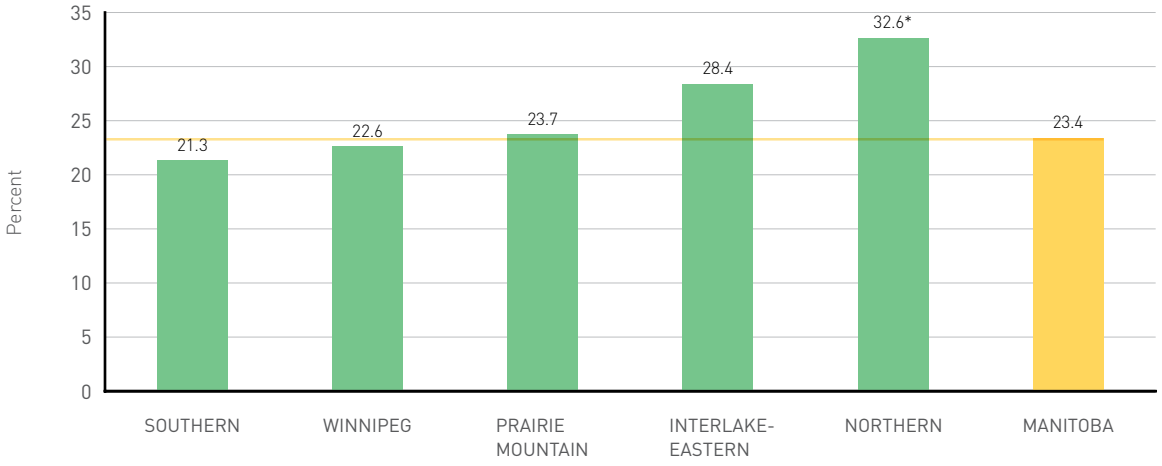
With our partners we are working to raise awareness about healthy living as a way to prevent chronic diseases including cancer.

- CancerCare Manitoba supports healthy living efforts including:
  - working with a variety of partners to fulfill our role of preventing cancer, particularly measuring risk factors at a community level and supporting healthy public policies. Our partners in these efforts include the Alliance for the Prevention of Chronic Disease, Partners in Planning for Healthy Living, the Regional Health Authorities and government departments who share the common mandate of preventing chronic diseases.
  - involvement in special projects working with particular populations and communities, including the Youth Health Survey and efforts by CCMB's First Nations, Metis and Inuit Cancer Control unit.
  - the three provincial screening programs are updating the joint screening and prevention video to reflect current risk reduction information. To ensure the video reaches Manitoba's diverse population, translation and dissemination strategies are being planned.
    - "GetCheckedManitoba" promotes screening education for all Manitobans and features screening messages in a variety of advertising media. Partnering with CancerCare Manitoba Foundation, the screening programs will launch GetCheckedManitoba as a broader campaign and build on the capacity of this already successful initiative.
  - with Partners in Planning for Health Living, CCMB launched a DVD called *Moving Towards Healthier Lifestyles: Stories from the Manitoba Youth Health Survey* featuring unique initiatives intended to inspire youth and encourage them to make healthy choices in life.
  - As part of its Kick Cancer Risk Reduction campaign, CancerCare Manitoba Foundation supports healthy lifestyles through the promotion of five steps everyone can take to reduce their cancer risk – Be Smoke Free, Eat Well, Shape Up, Cover Up, Check Up. This Foundation also sponsors the Challenge for Life fundraising event which encourages participants to set lifestyle goals in addition to fundraising goals.

Obesity

Figure 1.1

Percent of adults (ages 18+) with Body Mass Index classified as "obese", by current Regional Health Authority

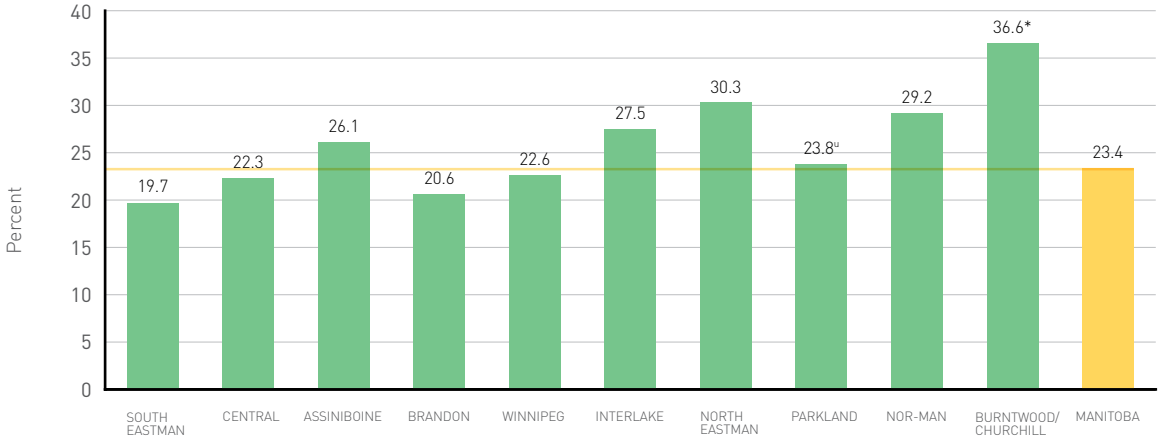


Source: Statistics Canada, Canadian Community Health Survey 2009–2010.

**Significantly different from Manitoba rate (p<0.05).*

Figure 1.2

Percent of adults (ages 18+) with Body Mass Index classified as "obese", by former Regional Health Authority



Source: Statistics Canada, Canadian Community Health Survey 2009–2010.

**Significantly different from Manitoba rate (p<0.05).*

u = potentially unstable values due to low numbers

What does this tell us?

Obesity rates in health regions in Manitoba vary.

- Figure 1.1 shows the highest percentage of obese adults is in the Northern RHA at 32.6% while the lowest percentage is in the Southern RHA at 21.3%.
- Figure 1.2 shows the highest percentage of obesity is in the former Burntwood/ Churchill RHA at 36.6% and the lowest percentage is in the former South Eastman RHA at 19.7%.

What else do we know?

- Obesity rates have risen over the past five years.
- In Manitoba, the prevalence of obesity is similar for men and women.[4]

Why is this important?

Obesity is linked to many health conditions including cancer.

- Obesity is one the leading factors related to cancer development.[1]
- The World Health Organization estimates that diet is directly related to 30% to 40% of cancer cases in men and up to 60% of cancer cases in women.[5]
- Nationally, obesity rates are on the rise and research is linking the rise to an increased risk of cancer.[1,6]

How do we compare?

More improvements could be made in Manitoba.

- Prevalence of obesity in Manitoba is higher than the national average by 2-3%.[4]
- The lowest obesity rate in Canada is in British Columbia. The rate is about 5% lower than in Manitoba.[4]

What is CancerCare Manitoba doing to help reduce obesity?

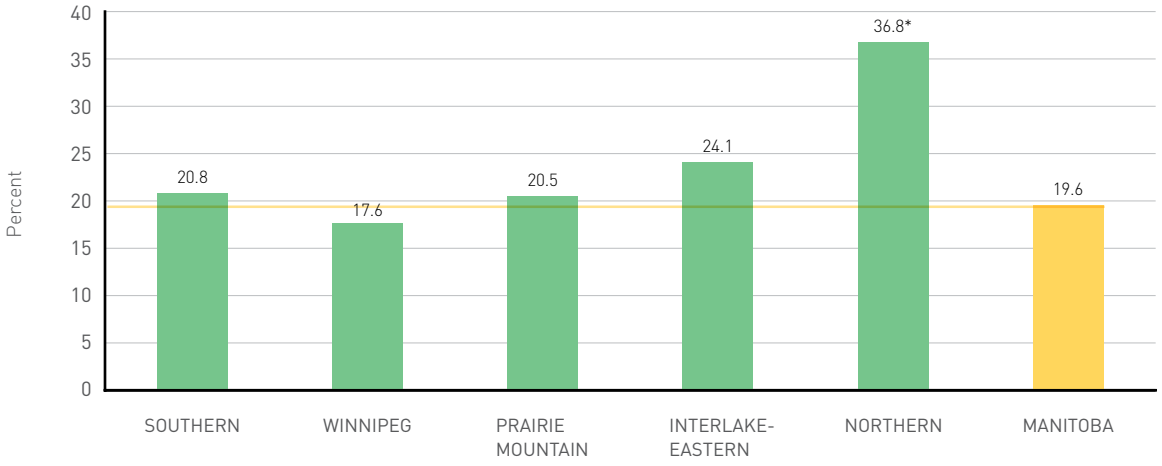
With our partners we are raising the profile of healthy living including maintaining a healthy weight.

- CancerCare Manitoba, in partnership with CancerCare Manitoba Foundation, continues to support the Kick Cancer Risk Reduction campaign highlighting the five steps we can all take to reduce our cancer risk including eating well and shaping up.
- The Foundation has also tied a healthy lifestyle component to the Challenge for Life fundraising event. In addition to raising funds to support all cancers, the Challenge asks participants to set a personal health and fitness goal.
- Patients can access nutritional counselling through Patient and Family Support Services to discuss topics such as unwanted weight gain or general questions about healthy eating or a healthy diet after cancer treatment.
- The Cancer Transitions program for cancer survivors has recently partnered with the Reh-Fit Centre to enhance the physical activity opportunities for patients.

Smoking

Figure 1.3

Percent of current daily or occasional smokers (ages 12+), by current Regional Health Authority

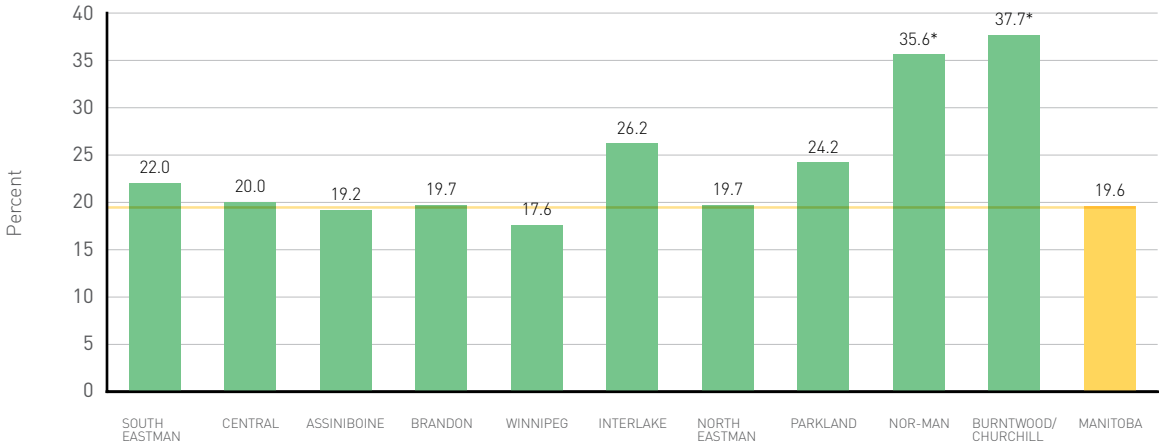


Source: Statistics Canada, Canadian Community Health Survey 2009–2010.

**Significantly different from Manitoba rate (p<0.05).*

Figure 1.4

Percent of current daily or occasional smokers (ages 12+), by former Regional Health Authority



Source: Statistics Canada, Canadian Community Health Survey 2009-2010.

**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Smoking continues to be a health issue in Manitoba.

- Figure 1.3 shows the percentage of people smoking is highest in the Northern RHA at 36.8%.
- Figure 1.4 shows that the highest percentage of smokers is in the former Burntwood/Churchill RHA at 37.7%. The former Winnipeg RHA has the lowest percentage at 17.6%.

What else do we know?

Some groups are smoking more than others.

- Smoking is more common among men than women.[4]
- Adults between 20 and 34 years of age have the highest smoking rates.[4]
- Smoking prevalence has been steadily decreasing.[4]

Why is this important?

Smoking is linked to mortality and chronic diseases.

- One in five deaths in Canada is due to tobacco use. Twenty-two percent of all deaths in Canada are due to smoking.[7,8]
- Smoking causes chronic diseases including cancer, heart disease, emphysema, and ulcers.[9]
- Smoking is linked to cancer of the lung, larynx, and esophagus.[1,5]
- Quitting smoking at any age helps, but the earlier smokers quit, the greater the benefit.
- The incidence and mortality rates of lung cancer decrease to 30-50% of the smokers' rates within 10 years after quitting.[10]

How do we compare?

The smoking rates are average in Manitoba.

- ⊖ The Manitoba smoking rate is similar to the national rate.[4]
- ⊗ The lowest smoking rates in Canada are in British Columbia. The rates are about 5% lower than in Manitoba.[4]

What is CancerCare Manitoba doing to help reduce smoking?

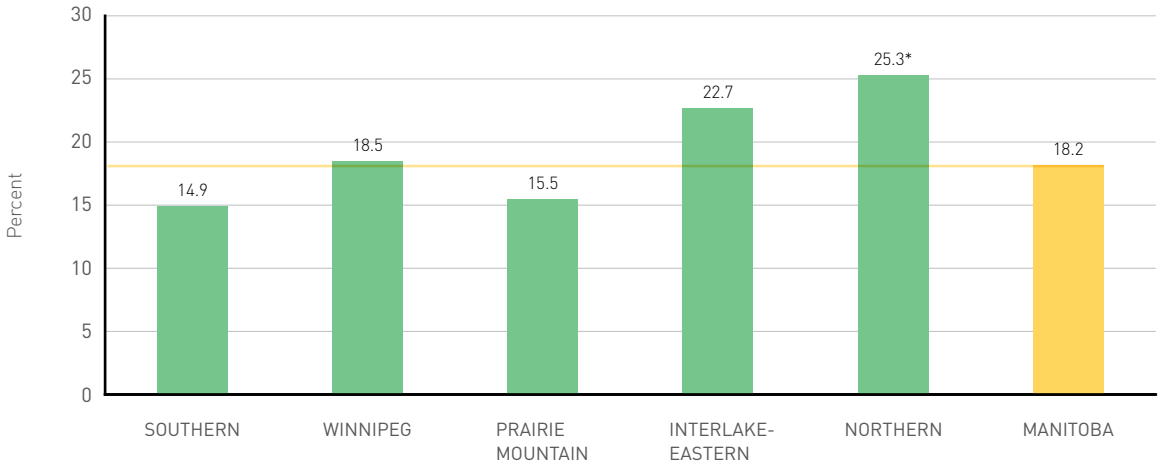
CancerCare Manitoba supports tobacco reduction policies and activities.

- CancerCare Manitoba Foundation is promoting Be Smoke Free as part of the Kick Cancer Risk Reduction campaign.
- To help reduce this risk factor, CCMB partners with a number of organizations including MANTRA (Manitoba Tobacco Reduction Alliance) and the Alliance for the Prevention of Chronic Disease.
- CancerCare Manitoba coordinates the Youth Health Survey (YHS) with the Manitoba RHAs and other partners, government and non-government agencies. The YHS records youth smoking behaviours and trends, providing information for schools, school divisions, RHAs and provincial groups, program managers and policy makers.
- Based on the findings of research studies including work conducted by CCMB on how to help children remain non-smokers, CCMB developed promotional materials to educate the public about the benefits of household and vehicle smoking bans.
- CancerCare Manitoba implemented the Quit Smoking Program in 2012, a comprehensive clinical service offered free of charge to patients living with cancer and their family members. It is also available to CCMB staff.

Alcohol

Figure 1.5

Percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+), by current Regional Health Authority

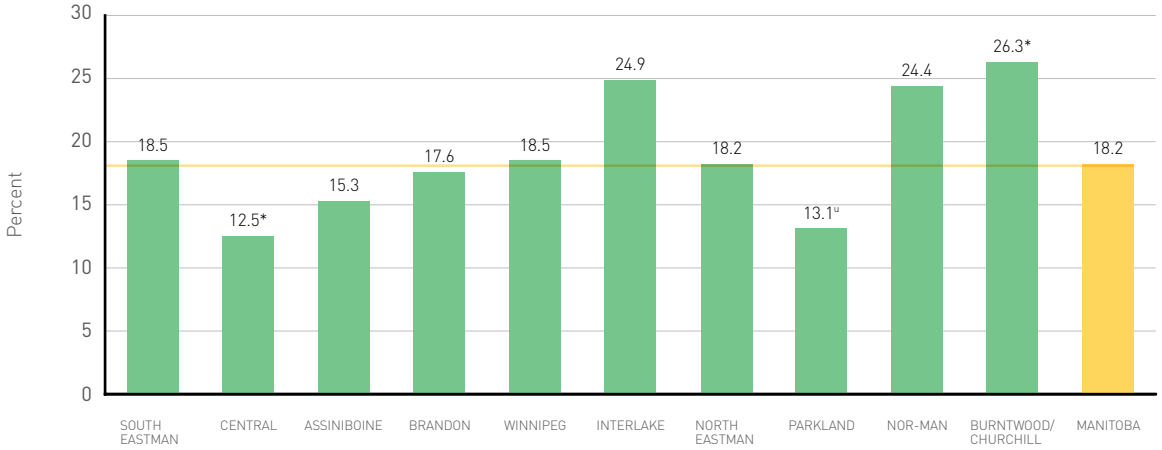


Source: Statistics Canada, Canadian Community Health Survey 2009-2010.

**Significantly different from Manitoba rate (p<0.05).*

Figure 1.6

Percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+), by former Regional Health Authority



Source: Statistics Canada, Canadian Community Health Survey 2009-2010.

**Significantly different from Manitoba rate (p<0.05).*

u = potentially unstable values due to low numbers

What does this tell us?

Excessive alcohol consumption, described as five or more drinks on one occasion at least once a month in the past year, has slightly decreased in Manitoba.

- Figure 1.5 shows excessive alcohol consumption rates are highest in the Northern and Interlake-Eastern RHAs at 25.3% and 22.7%, respectively.
- Figure 1.6 shows the highest rate of excessive alcohol consumption is in the former Burntwood/Churchill RHA at 26.3% and the lowest rate is in the former Central RHA at 12.5%.

What else do we know?

- In Manitoba, excessive alcohol consumption among men occurs at twice the rate as for women.[4]
- Excessive alcohol consumption is highest in 20 to 34 year olds.[4]

Why is this important?

Excessive alcohol consumption leads to increased risk for cancer.

- Drinking alcohol causes cancers of the oral cavity, pharynx, larynx, esophagus, and liver.[1, 11]
- Research now shows that alcohol consumption is also linked to breast cancer and colorectal cancer.[12, 13]
- According to the results from the Million Women Study in the United Kingdom, even low to moderate alcohol consumption increases risk for cancer.[14]
- Alcoholic drinks are now classified as a Group 1 carcinogen by the International Agency for Research on Cancer.

How do we compare?

Excessive alcohol consumption is higher in Manitoba than in other parts of Canada.

- Data from national surveys show that the excessive drinking rate in Manitoba is slightly higher than the national rate by 2-3%.[4]
- Ontario and British Columbia generally have the lowest rates of excessive alcohol consumption in Canada, about 4-5% lower than found in Manitoba.[4]

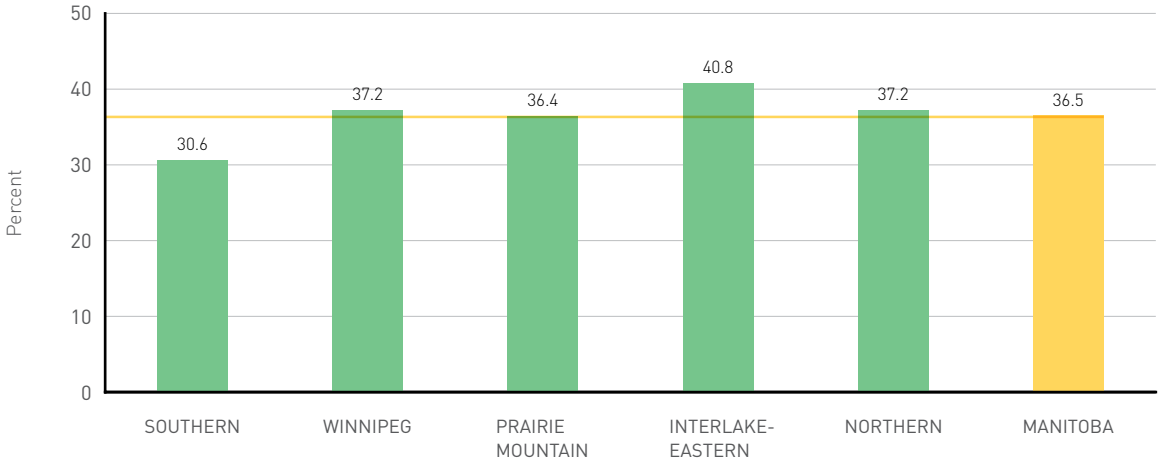
What does CancerCare Manitoba do to help reduce excessive alcohol consumption?

- In Manitoba, our understanding of the scientific literature on the effects of alcohol, including its role in increasing cancer risk, needs to be communicated to target populations.
- More strategies with a wider range of organizations and community partners are needed to reduce excessive alcohol intake among younger age groups and high risk populations.
- CCMB coordinates the Manitoba Youth Health Survey which determines drinking rates and patterns among students in grades 7-12 to inform effective targeted programs and policies to determine youth drinking behaviours.

Fruits and Vegetables

Figure 1.7

Percent consuming fruits and vegetables five or more times a day (ages 12+), by current Regional Health Authority

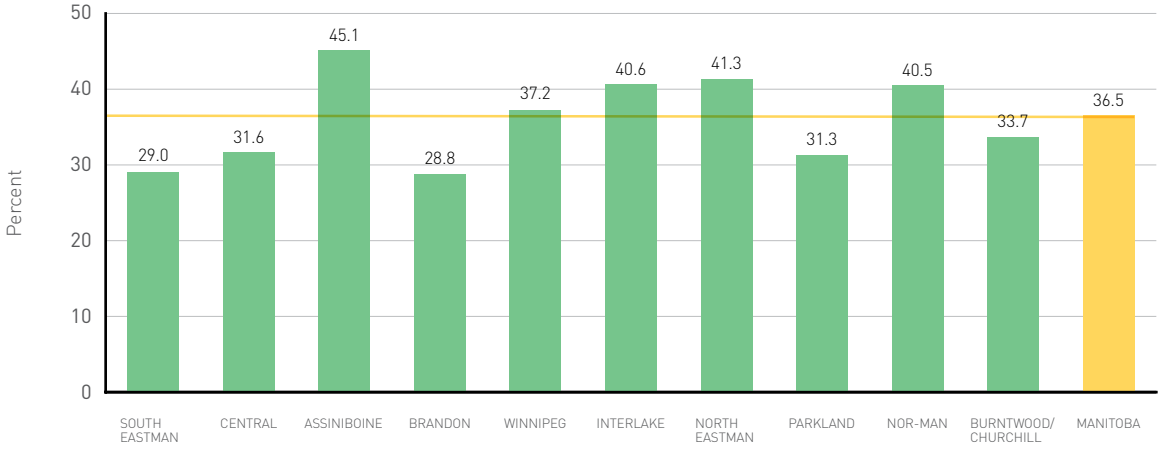


Source: Statistics Canada, Canadian Community Health Survey 2009–2010.

**Significantly different from Manitoba rate (p<0.05).*

Figure 1.8

Percent consuming fruits and vegetables five or more times a day (ages 12+), by former Regional Health Authority



Source: Statistics Canada, Canadian Community Health Survey 2009–2010.

**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

In Manitoba, the majority of the population does not eat the recommended number of fruit and vegetable servings.

- Figure 1.7 shows the lowest fruit and vegetable consumption is in the Southern RHA at 30.6%.
- Figure 1.8 shows the former Brandon RHA has the lowest percentage of fruit and vegetable consumption at 28.8%, while the highest was reported in the former Assiniboine RHA at 45.1%.

What else do we know?

- Women eat more fruits and vegetables daily than men. Almost half of Manitoba women eat the recommended number of servings compared to less than 30% of men.[4]
- Vegetable and fruit consumption does not differ much by age in Manitoba.[4]
- Vegetable and fruit consumption has remained relatively stable over the past five years.[4]

Why is this important?

Eating well can reduce overall cancer risk.

- A high intake of green and yellow vegetables and fruits is linked to a reduced risk for lung, colon, esophagus and stomach cancers.[5, 15]
- Diets high in plant foods can protect against cancers of the endometrium and colon.[15]

How do we compare?

More could be done to encourage good eating habits.

- Fruit and vegetable intake in Manitoba is about 3-4% lower than the national average.[4]
- Quebec has the highest fruit and vegetable consumption in Canada. The rates are about 10% higher than in Manitoba.[4]

What is CancerCare Manitoba doing to encourage vegetable and fruit intake?

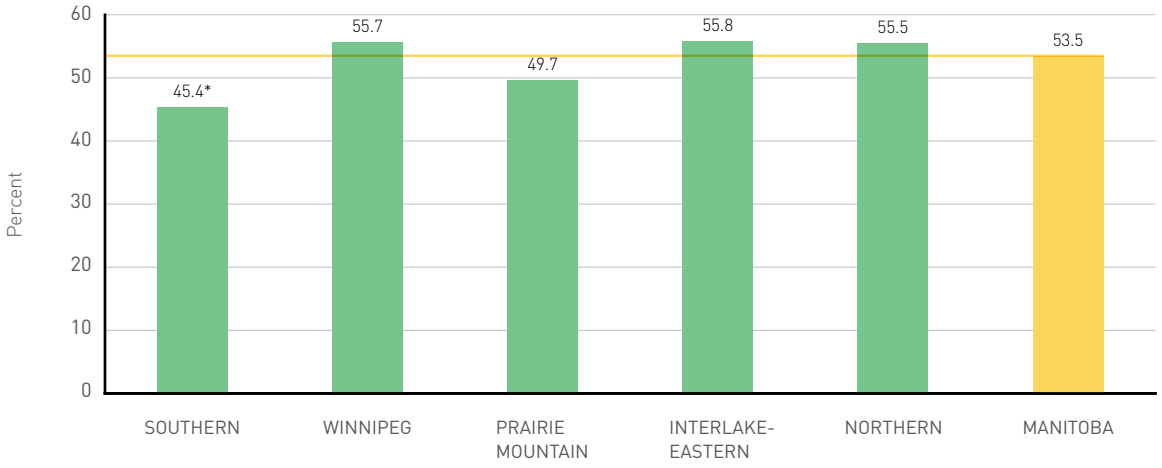
CancerCare Manitoba supports policies and messaging advocating a good diet as part of a healthy lifestyle.

- Many health organizations including CCMB have come together under Healthy Together Now, an ongoing initiative supporting communities across Manitoba in chronic disease prevention efforts including encouraging healthy eating.
- CancerCare Manitoba has partnered with other chronic disease-focused organizations as part of the Alliance for the Prevention of Chronic Disease to promote healthy eating.
- CancerCare Manitoba Foundation actively encourages Manitobans to Eat Well as part of its Kick Cancer Risk Reduction campaign – "It's as easy as following Canada's Food Guide to Healthy Eating!"

Physical Activity

Figure 1.9

Percent of residents reporting moderate or active physical activity during leisure time (ages 12+), by current Regional Health Authority

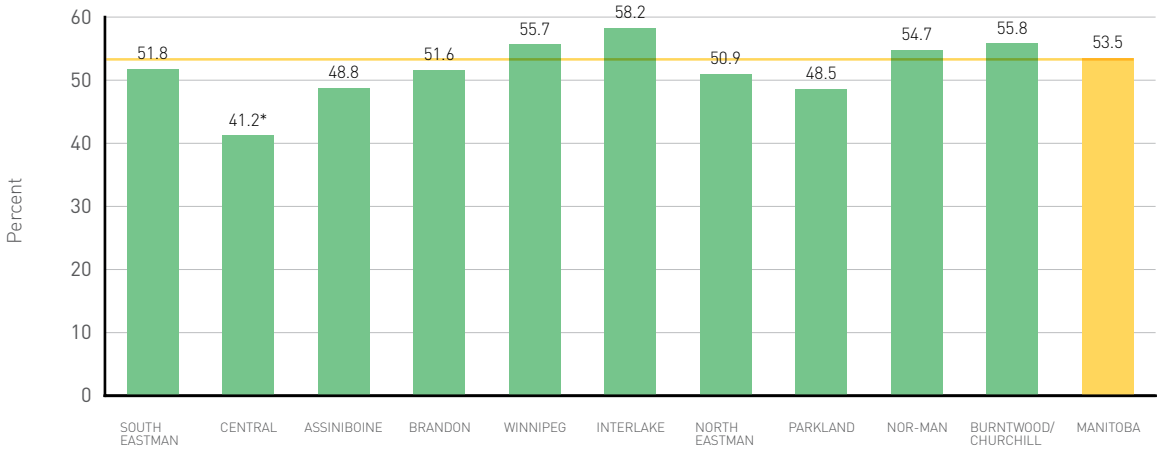


Source: Statistics Canada, Canadian Community Health Survey 2009–2010.

**Significantly different from Manitoba rate (p<0.05).*

Figure 1.10

Percent of residents reporting moderate or active physical activity during leisure time (ages 12+), by former Regional Health Authority



Source: Statistics Canada, Canadian Community Health Survey 2009–2010.

**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Over half of Manitobans are physically active.

- Figure 1.9 shows physical activity rates are lowest in the Southern RHA at 45.4%.
- Figure 1.10 shows the highest rate of physical activity is in the former Interlake RHA at 58.2%, while the lowest rate is in the former Central RHA at 41.2%.

What else do we know?

- Most population-based reports of "physical activity" (including data shown here) have focused only on leisure time activity. This does not include exercise rates among people whose work is physically labour-intensive.
- Even using these measures, the majority of men and women are physically active during their leisure time.
- Physical activity rates have gradually increased in Manitoba over the past five years.[4]

Why is this important?

Regular exercise can decrease the risk of developing cancer.

- Physical activity lowers the risk of developing colon cancer and may lower the risk for breast, prostate and endometrial cancers.[16]
- Some research suggests that moderate to high levels of activity have been found to lower the risk for stomach, lung and liver cancers.[17,18,19]

How do we compare?

Manitobans are fairly active, similar to other Canadians.

- ⊖ The proportion of Manitobans who are physically active in their leisure time is similar to the national rate.[4]
- ⊗ British Columbia and the Yukon have the most active populations in Canada. Their leisure-time physical activity rates are over 5% higher than Manitoba's.[4]

What is CancerCare Manitoba doing to encourage active living?

CancerCare Manitoba supports policies and messaging emphasizing physical activity as an important part of a healthy lifestyle and supports chronic disease prevention policy.

- CancerCare Manitoba partners with the Physical Activity Coalition of Manitoba, Recreation Connections, the Reh-Fit Centre and Alliance for the Prevention of Chronic Disease to encourage active living.
- CancerCare Manitoba Foundation actively promotes exercise through its Kick Cancer Risk Reduction campaign and the Shape Up message – just 10 minutes 3 times a day can help protect against colon and breast cancer.
- The Foundation supports physical activity through the Challenge for Life fundraising event which encourages participants to set lifestyle goals as well as fundraising goals.

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Access

The June 2011 opening of the Western Manitoba Cancer Centre (WMCC) brought cancer care closer to home for those in the southwestern part of the province.

Developed through a partnership between the former Brandon Regional Health Authority (now Prairie Mountain Regional Health Authority) and CancerCare Manitoba, the $24 million WMCC offers chemotherapy, support services, outpatient care, and for the first time, radiation therapy services outside of Winnipeg. The WMCC has already proven to be of enormous benefit by reducing travel and related expenses for patients and enabling many to return to the comfort of their homes following treatment, rather than travelling to Winnipeg for treatment. In 2011-12, 3,130 CancerCare Manitoba patients received radiation therapy – a 5.4% increase in the number of people undergoing radiation therapy in the province. In its first year of operation, the WMCC has taken on almost 10% of total radiation treatments.

Another important step in bringing care closer was the December 2011 announcement of the first rural cancer hub at Boundary Trails Health Centre. The hub expands on chemotherapy services currently available through the community cancer programs, and facilitates access to expanded services like cancer screening and early detection services, cancer risk reduction programs and palliative care. More hubs will be strategically developed at existing community cancer program sites as part of the transformation of all 16 existing sites.

Screening

SCREENING RATES

	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
 **Colorectal Cancer** *NEW* Percent of men and women (ages 50 – 74) who completed a FOBT in the last two years.[b]	25.3%	31.9%	↑	1.5% - 40.4%
NEW Percent of men and women (ages 50 – 74) who completed a FOBT in the last two years or a colonoscopy or flexible sigmoidoscopy in the past five years.[c]	36.6%	45.2%	↑	12.9% - 51.9%
 **Cervical Cancer** percent of women (ages 20 – 69) who had a Pap test in the last three years.[d]	69.4%	66.8%	→	61.9% - 71.0%
 **Breast Cancer** percent of women (ages 50 – 69) who had a mammogram within the last two years.[e]	62.5%	63.7%	→	55.0% - 66.1%
percent of women (ages 50 – 69) who had a routine screening mammogram within the last two years through BreastCheck.[f]	52.1%	56.2%	→	50.8% - 59.6%

Source:

[b] *Manitoba Health Medical Claims data and ColonCheck Registry*
January 1, 2007 – December 31, 2008 (past),
January 1, 2009 – December 31, 2010 (current).

[c] *Manitoba Health Medical Claims data and ColonCheck Registry*
January 1, 2004 – December 31, 2008 (past),
January 1, 2006 – December 31, 2010 (current).

[d] *CervixCheck Registry*
April 1, 2006 – March 31, 2009 (ages 20-69) (past),
April 1, 2009 – March 31, 2012 (ages 20-69) (current).

[e] *Manitoba Health Medical Claims data for mammography, women (ages 50 – 69)*
April 1, 2006 – March 31, 2008 (past),
April 1, 2008 – March 31, 2010 (current).

[f] *BreastCheck Registry, women (ages 50 – 69) screened*
April 1, 2006 – March 31, 2008 (past),
April 1, 2008 – March 31, 2010 (current).

Note: Trend arrow is based on + or - 10% of the past value. Colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red).

RHA refers to Regional Health Authority.

What does this tell us?

Screening rates are high but could still be improved.

- Colorectal cancer screening has increased from past years.
- Cervical cancer screening rates have dropped slightly in recent years.
- Breast cancer screening rates have remained about the same over the past few years, although the number of women screened through BreastCheck has increased slightly.

Why is this important?

Colorectal, cervical, and breast cancer screening aims to find cancers early in people *without any symptoms.*

By detecting cancer at an early stage, screening programs improve the likelihood of successful treatment ultimately saving lives.

- Screening using the Fecal Occult Blood Test (FOBT), along with recommended follow-up, can reduce the chance of dying from colorectal cancer by up to 25% for men and women 50 to 74 years of age.[1]
- Regular screening with Pap tests can prevent up to 80% of cervical cancer.[2]
- Regular screening mammograms can lower deaths from breast cancer by up to 25% in women 50 to 69 years of age.[3]

How do we compare?

Cancer screening rates in Manitoba are as good as or higher than rates across the country.

- ✓ Manitoba has the highest colorectal cancer screening rates in Canada.[4]
- ⊖ Recent data on cervical screening for the provinces show that Manitoba's screening rate is consistent with the national average.[5]
- ⊖ Breast screening rates are also similar to the majority of other provinces.[6]

What is CancerCare Manitoba doing to encourage screening?

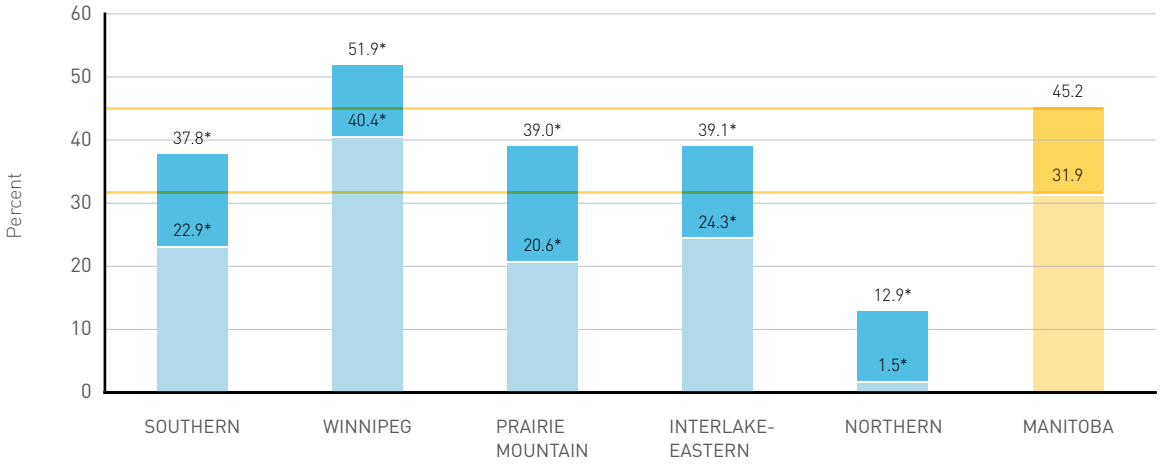
CancerCare Manitoba operates three screening programs (breast, cervical, and colorectal) designed to detect cancer at its earliest stage.

- CancerCare Manitoba's provincial screening programs help to fulfill our commitment to provide public education and promote early detection.
- All programs use a community-based approach to provide valuable links between CCMB, other organizations, and the public as we work together to achieve greater cancer control and cancer care excellence.
- In 2011, the screening programs changed their names to BreastCheck, CervixCheck and ColonCheck. Along with new names and coordinated logos, the programs have facilitated joint campaigns. *GetCheckedManitoba.ca* provides direct access to screening information on CCMB's website.
- The programs developed *It Matters to Them* for primary care providers. The campaign highlighted the importance of physician recommendation for screening. Several continuing medical opportunities were offered and new guidelines were developed. This initiative built on the public advertising campaign (*It Matters to You*) that was developed in partnership with CancerCare Manitoba Foundation.

Colorectal Cancer

Figure 2.1

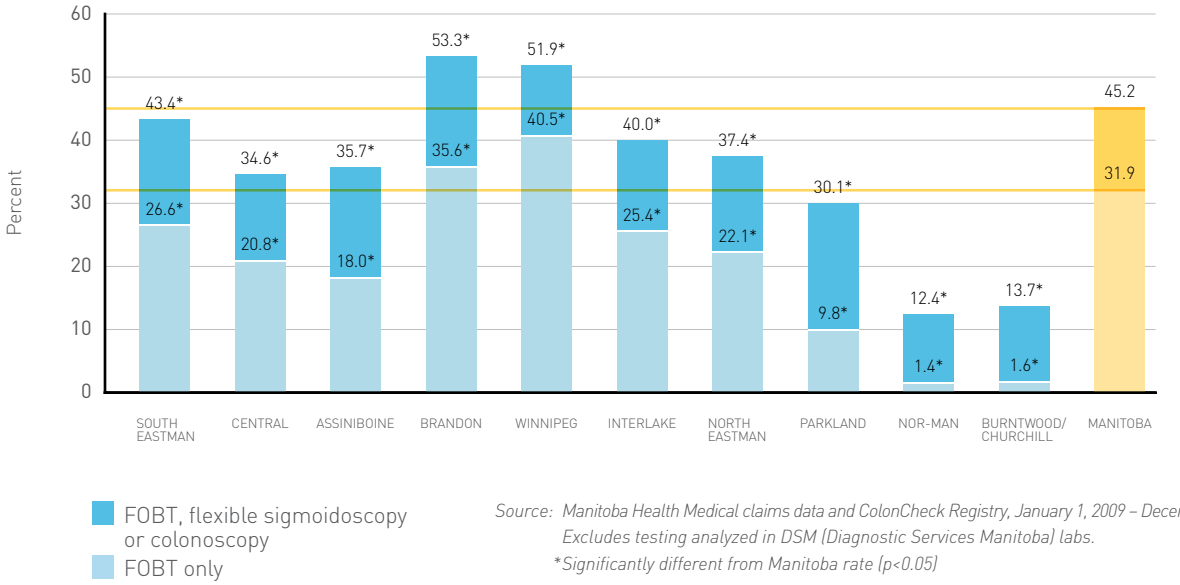
Percent of men and women (ages 50 – 74) who had a Fecal Occult Blood Text (FOBT) in the last two years, or a flexible sigmoidoscopy or colonoscopy in the last five years, by current Regional Health Authority



Source: Manitoba Health Medical claims data and ColonCheck Registry, January 1, 2009 – December 31, 2010
Excludes testing analyzed in DSM (Diagnostic Services Manitoba) labs.
**Significantly different from Manitoba rate (p<0.05)*

Figure 2.2

Percent of men and women (ages 50 – 74) who had a Fecal Occult Blood Text (FOBT) in the last two years, or a flexible sigmoidoscopy or colonoscopy in the last five years, by former Regional Health Authority



Source: Manitoba Health Medical claims data and ColonCheck Registry, January 1, 2009 – December 31, 2010
Excludes testing analyzed in DSM (Diagnostic Services Manitoba) labs.
**Significantly different from Manitoba rate (p<0.05)*

What does this tell us?

Colorectal screening rates are much lower in some regions and could be improved in all regions.

- Figures 2.1 and 2.2 show that the use of the Fecal Occult Blood Test (FOBT) varies across regions. The lowest rates are in the Northern RHA (1.5%) and the highest rates are in the Winnipeg RHA (40.4%).
- Based on the former RHA groupings, the Winnipeg RHA had the highest percentage of people with an FOBT test in the past two years (40.5%) while the former Nor-Man RHA had the lowest (1.4%).
  - Screening rates in rural and northern areas appear low in part because FOBTs analyzed through Diagnostic Services Manitoba are not captured in billing data. However, ColonCheck will be obtaining this information in the future.
- These figures also show that individuals who have had an FOBT, colonoscopy, or sigmoidoscopy (a broader definition of colorectal screening) also vary across regions. The lowest rates are in the Northern RHA (12.9%) and the highest rates are in the Winnipeg RHA (51.9%).
- Based on the former RHA groupings, the RHA of Brandon had the highest percentage of people with a recent FOBT, colonoscopy, or sigmoidoscopy (53.3%) while the former Nor-Man RHA had the lowest (12.4%).

What else do we know?

- The 2011 survey by the Canadian Partnership Against Cancer found that 64% of average risk Manitobans reported that they were up-to-date for colorectal cancer screening, an increase of 10% from the 2009 survey.[7]

Why is this important?

Colorectal cancer is the second leading cause of cancer death.

- In 2013, it is estimated that over 900 Manitobans were diagnosed with colorectal cancer and about 340 died from the disease.[8]
- Screening using the FOBT, along with recommended follow-up, can reduce the chance of dying from colorectal cancer by up to 25%.[1]
- Colorectal cancer is treated successfully up to 90% of the time when detected early.[9]

How do we compare?

- The 2011 Canadian Partnership Against Cancer Survey found that 43% of average risk Canadians reported that they were up to date for colorectal cancer screening, compared to 64% of average risk Manitobans.[7]
- Colorectal cancer screening rates are lower than breast and cervical screening rates in Manitoba.

What is CancerCare Manitoba doing to help improve FOBT screening rates?

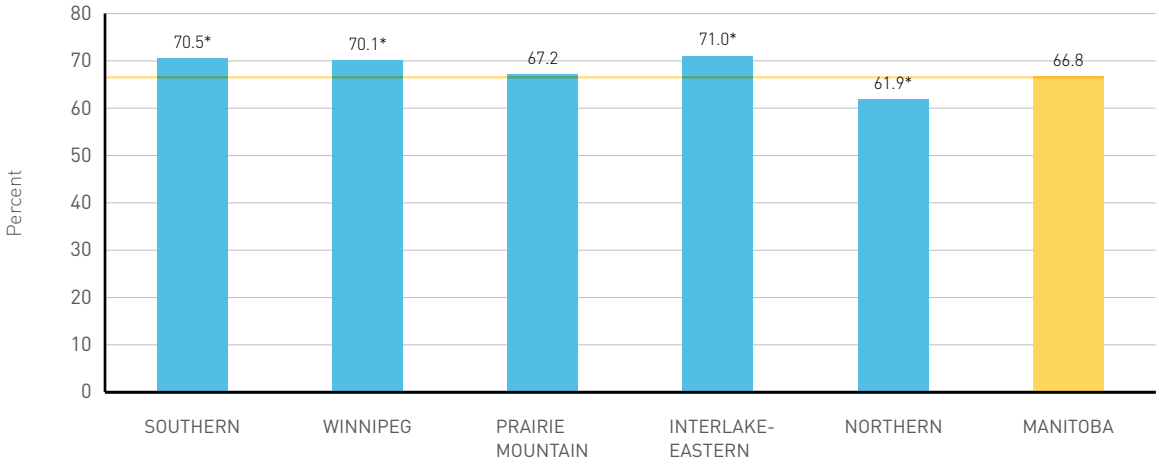
Since 2009, ColonCheck has operated a province-wide colorectal cancer screening program.

- ColonCheck has implemented various recruitment and outreach strategies designed to increase screening rates and ensure access for vulnerable populations including:
  - collaborating with primary care providers to distribute FOBT kits.
  - utilizing electronic medical records to facilitate FOBT kit distribution in clinics.
  - partnering with northern and rural communities to implement tailored education and recruitment strategies.
  - offering continuing medical education for health professionals.
  - modifying test instructions and reminder protocol to increase compliance.

Cervical Cancer

Figure 2.3

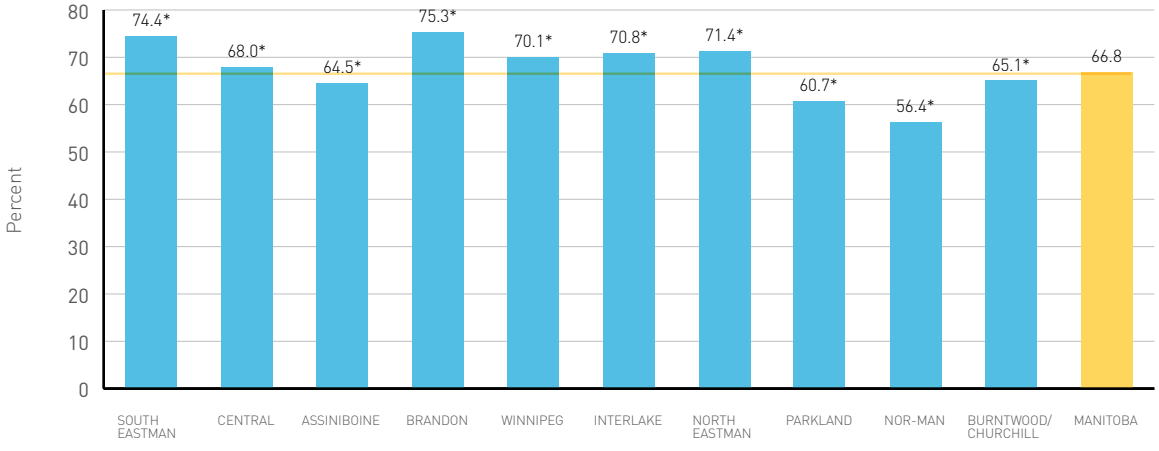
Percent of women (ages 20 – 69) who had a Pap test in the last three years, by current Regional Health Authority



Source: CervixCheck Registry April 1, 2009 – March 31, 2012. Corrected for hysterectomy.
**Significantly different from Manitoba rate (p<0.05)*

Figure 2.4

Percent of women (ages 20 – 69) who had a Pap test in the last three years, by former Regional Health Authority



Source: CervixCheck Registry April 1, 2009 – March 31, 2012. Corrected for hysterectomy.
**Significantly different from Manitoba rate (p<0.05)*

What does this tell us?

Screening rates for cervical cancer vary across regions and can be improved.

- Figure 2.3 shows that the lowest rate for cervical cancer screening is in the Northern RHA at 61.9%.
- Figure 2.4 shows the rates for cervical cancer screening based on the former RHA groupings. Nor-Man RHA had the lowest rate at 56.4% while Brandon RHA had the highest rate at 75.3%.

What else do we know?

- Cervical cancer screening rates have declined slightly over the most recent three-year period from 69.4% to 66.8%.
- Cervical cancer screening rates are highest among 20 to 29 year olds.[10]
- Screening rates decrease with increasing age.[10]
- About 8% of Pap tests are abnormal and require follow-up testing.[10]

Why is this important?

Regular Pap tests reduce the risk of cervical cancer.

- Most women who are diagnosed with cervical cancer have never had a Pap test or have not had one in the previous five years.[11]
- Regular screening can prevent up to 80% of cervical cancer.[2]
- Data from the Manitoba Cancer Registry shows that about 50 Manitoba women are diagnosed with invasive cervical cancer every year.

How do we compare?

Women in Manitoba have similar cervical screening rates as women in other provinces.

- The percentage of Canadian women 20-69 years of age who had at least one Pap test between April 1, 2006 and March 31, 2008 was 70.2% and ranged from 63.8% to 75.5% depending on the province. Participation in Manitoba during this time period was 69.7%.[5]

What is CancerCare Manitoba doing to help improve cervical screening rates?

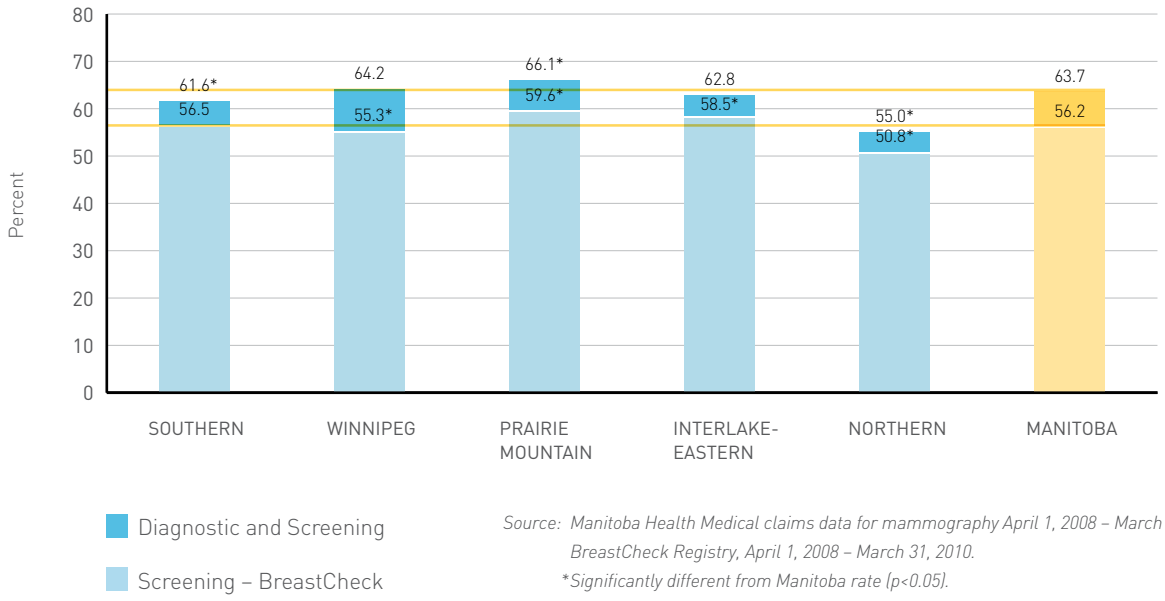
CancerCare Manitoba operates CervixCheck which aims to increase screening participation and reduce deaths from cervical cancer.

- To increase the number of unscreened women having Pap tests, CervixCheck works with health care providers to improve access to cervical cancer screening services and provides education about all aspects of cervical cancer screening including the importance of Pap tests for the prevention of cancer.
- In 2013, the program changed its screening guidelines and now recommends routine screening every three years beginning at age 21. To support this change, CervixCheck will be sending recall letters to women who have not had a Pap test in the previous 39 months. The letters will encourage women to make an appointment for a Pap test.
- CervixCheck also:
  - manages the centralized collection of all Pap test and colposcopy results in Manitoba. This registry enables the program to notify health care providers and women when recommended follow-up has not occurred, allows health care providers and women to access screening histories, and supports quality assurance activities.
  - supports competency in Pap testing by promoting CervixCheck's Pap Test Learning Module for health care providers.
  - works with Manitoba Health to monitor and evaluate the human papillomavirus (HPV) vaccination program and newer methods of detecting cervical cancer.

Breast Cancer

Figure 2.5

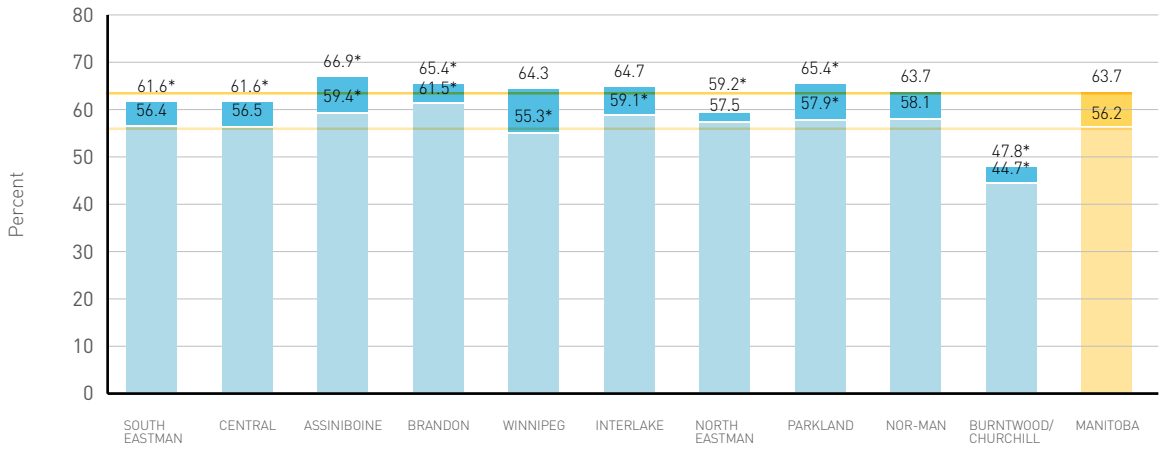
Percent of women (ages 50 – 69) who had a mammogram in the past two years, by current Regional Health Authority



Source: Manitoba Health Medical claims data for mammography April 1, 2008 – March 31, 2010
BreastCheck Registry, April 1, 2008 – March 31, 2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.6

Percent of women (ages 50 – 69) who had a mammogram in the past two years, by former Regional Health Authority



Source: Manitoba Health Medical claims data for mammography April 1, 2008 – March 31, 2010
BreastCheck Registry, April 1, 2008 – March 31, 2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Breast screening rates are approaching the 70% target in many but not all RHAs.

- The majority of women aged 50-69 have a mammogram through BreastCheck. An additional 10% of women in this age group have a mammogram, either diagnostic or screening, outside the program.
- Figure 2.5 shows that mammography rates are lowest in the Northern RHA at 55.0%.
- Figure 2.6 shows that the lowest mammography rate is in the former Burntwood RHA at 47.8% and highest in the former Assiniboine RHA at 66.9%.

What else do we know?

- The mortality rate for breast cancer was reduced by 23% for women 50 to 69 years of age who attended BreastCheck.[12]

Why is this important?

Regular mammograms can reduce the risk of breast cancer.

- As women grow older, the chance of getting breast cancer increases.
- Research has shown that regular screening mammograms can lower breast cancer deaths in women 50-69 years of age by up to 25%.[3]

How do we compare?

Manitoba's breast screening rates compare favourably to other provinces.

- The mammography rate in Manitoba is similar to the national average and the majority of provinces.[6]
- Of all Canadian provinces, Manitoba has the fifth highest rate for women screened through an organized breast cancer screening program.[6]

What is CancerCare Manitoba doing to help improve breast screening rates?

CancerCare Manitoba operates BreastCheck for women 50 years of age and over with no signs or symptoms of breast cancer to detect breast cancer early with screening mammography.

- Our goal is to continue to reduce mortality from breast cancer by screening 70% of women aged 50-69 every two years.
- To improve breast screening rates, BreastCheck:
  - provides mammograms and information on breast health through four fixed sites located in Winnipeg, Brandon, Thompson and Morden/Winkler.
  - operates two mobile units that visit over 90 community sites throughout the province.
  - enhances services in the North by providing transportation for women in 11 remote, fly-in locations.
  - works with women in vulnerable populations to address barriers to screening related to culture, geography, transportation, and language. Many resources are available in a variety of languages.
  - partners with the colorectal and cervical screening programs to increase awareness about risk reduction and screening guidelines.

Wait Times

WAIT TIMES	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
Breast Assessment Waits median waiting time (in days) for women (ages 50 – 69), from screening by mammogram to final diagnosis.[f]	26.0 days	21.0 days	↓	18.0 - 31.0 days
Radiation Therapy Waits percent of patients treated with radiation therapy within four weeks from ready to treat to start of treatment.[g]	98.6%	99.2%	→	98.0% - 99.8%
percent of patients treated with radiation therapy, within four weeks, from ready to treat to start of treatment, by cancer type:[g]				
lung	99.7%	100.0%	→	100.0% - 100.0%
rectal	100.0%	100.0%	→	100.0% - 100.0%
breast (f)	98.1%	99.8%	→	98.5% - 100.0%
prostate	90.0%	92.9%	→	91.5% - 96.9%

Source: [g] *Data from BreastCheck, women (ages 50 – 69) with an abnormal screen, April 1, 2006 – March 31, 2008 (past), April 1, 2008 – March 31, 2010 (current).*

[h] *Data from CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2009 – March 31, 2010 (past), April 1, 2011 – March 31, 2012 (current).*

Note: Trend arrow is based on + or - 10% of the past value. Colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red).

RHA refers to Regional Health Authority.

What does this tell us?

Wait times for breast cancer assessment and radiation therapy are improving.

- Currently, these are the only two complete measures CCMB has for points along the cancer care journey.
  - One represents diagnostic workup and the other is treatment based.
  - These are not comprehensive, but provide a starting point as we continue to map and measure aspects of the patient journey.

What else do we know?

- Breast assessment waits vary by health region while radiation therapy waits stay consistent across the province.
- Both measures show improvement over time. Manitoba's wait times are among the shortest in the country.
- The majority of women who have an abnormal screening mammogram do not have cancer. They receive a diagnosis more quickly than women diagnosed with cancer because they require less additional testing.
- Radiation therapy achieved the national wait time guarantee of four weeks as of April 1, 2008. Efforts at shortening wait times even further have resulted in additional minor improvements.
- Wait time for radiation therapy includes patients whose treatment has been delayed due to a change in medical condition requiring a change in treatment plan and those where the patient has chosen to wait for a specific treatment to become available in Manitoba.

Why is this important?

Cancer services must be delivered in a timely way to reduce patient anxiety and ensure optimal treatment outcomes.

- Breast cancer assessment and radiation therapy treatment are only two of many components of the patient journey that require measurement.

How do we compare?

- The wait times from an abnormal mammogram to diagnosis for women attending BreastCheck are better than those reported in most other provinces.[6, 13]
- Wait times for radiation therapy are among the best in Canada.[14]

What is CancerCare Manitoba doing to improve wait times?

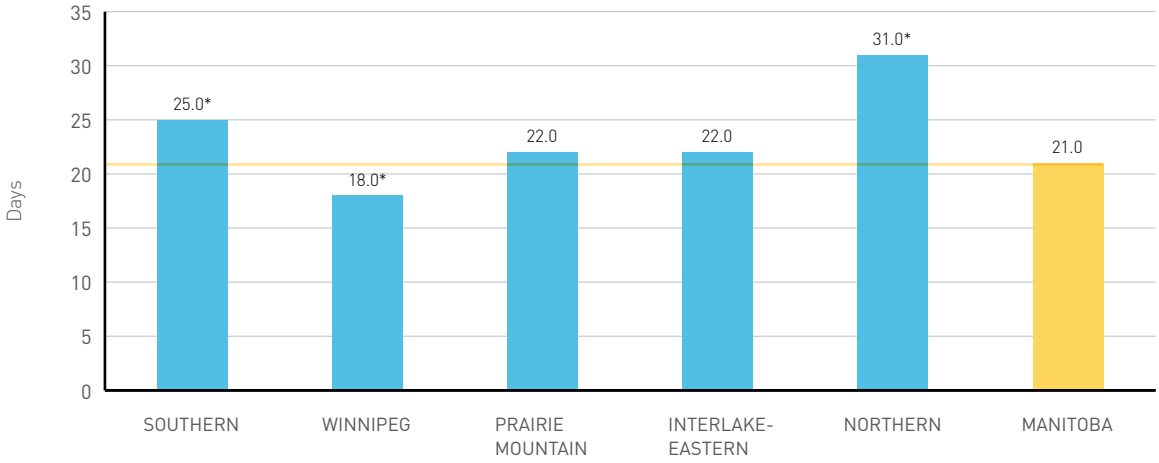
CancerCare Manitoba works with multiple partners across different organizations, a necessary approach due to the complexity of cancer diagnosis and treatment.

- BreastCheck coordinates the recommended testing following an abnormal mammogram which results in shorter wait times.
- The Radiation Oncology Program continues to enhance and increase utilization of software systems designed to identify delays in individual patients' progress through radiation therapy. These assist us in finding and addressing bottlenecks in the process.
- In Sixty, Manitoba's Cancer Patient Journey Initiative, is exploring ways to make the cancer diagnosis and treatment process more efficient and to make the care experience more positive for patients and their families. The program has identified ways to make improvements, including the move to a centralized referral system, improved communication and tracking mechanisms as well as better alignment of services.
  - Many providers, from primary care to various specialists, have been engaged to assist in identifying wait times early in the patient journey from suspicion of cancer through the early stages of diagnostics to referral to a cancer specialist. The target is to cover the whole journey pathway from early suspicion to treatment across multiple care providers across the province.

Breast Cancer Assessment Waits

Figure 2.7

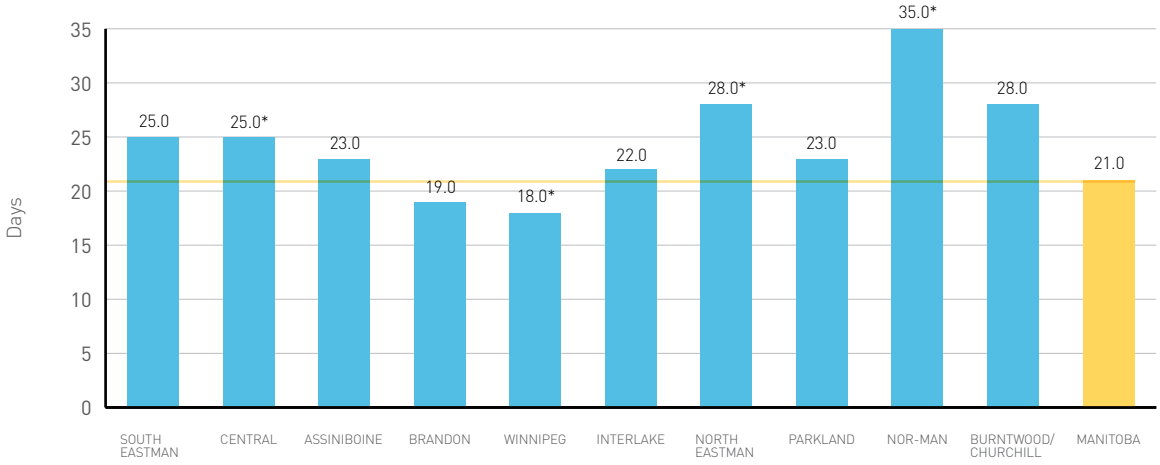
Median waiting time (in days) for women from screening by mammogram to final diagnosis in the last two years, by current Regional Health Authority



Source: BreastCheck Registry, April 1, 2008 – March 31, 2010
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.8

Median waiting time (in days) for women from screening by mammogram to final diagnosis in the last two years, by former Regional Health Authority



Source: BreastCheck Registry, April 1, 2008 – March 31, 2010
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

- Figures 2.7 and 2.8 show the median wait time from breast screening (mammogram) to diagnosis for the new and old RHA groupings, respectively. The Northern RHA has the longest wait time; the median time was 10 days longer compared to provincial median.
  - This appears to be driven by the longer wait times observed in the former Nor-Man RHA where the median wait time is 14 days longer than the provincial average.

What else do we know?

- Data from BreastCheck show:
  - About 5% of women who undergo screening require referral for further testing. The majority require only a diagnostic mammogram or an ultrasound.
  - Nearly 90% of women who require further testing have a benign outcome. Ten percent will have a cancer diagnosis.
  - The median wait for the women diagnosed with breast cancer is 30 days compared to 20 days for women with a benign outcome. The longer wait can be attributed to the need to arrange additional tests such as biopsies which can result in delays.

Why is this important?

Research has found that long waits following an abnormal breast screening result in anxiety.

- Women commonly experience acute anxiety following an abnormal breast screening result. Reducing the time that women have to wait to complete follow-up testing can reduce this anxiety.[13]

How do we compare?

- The wait times from an abnormal mammogram to diagnosis for women attending BreastCheck are similar to those reported in other provinces.[6]
- The Canadian targets for these indicators are:
  - 90% of abnormal screens will be resolved within five weeks if no tissue biopsy is required.
  - 90% within seven weeks if tissue biopsy is required.
  - in Manitoba 82% of women who needed follow-up without a tissue biopsy had a diagnosis within five weeks of their screening date compared to 76% for Canadian provinces overall.[6]
  - additionally, 55% of Manitoba women who required a tissue biopsy had a final diagnosis within seven weeks compared to 48% for all provincial programs.[6]

What is CancerCare Manitoba doing to improve breast screening waits?

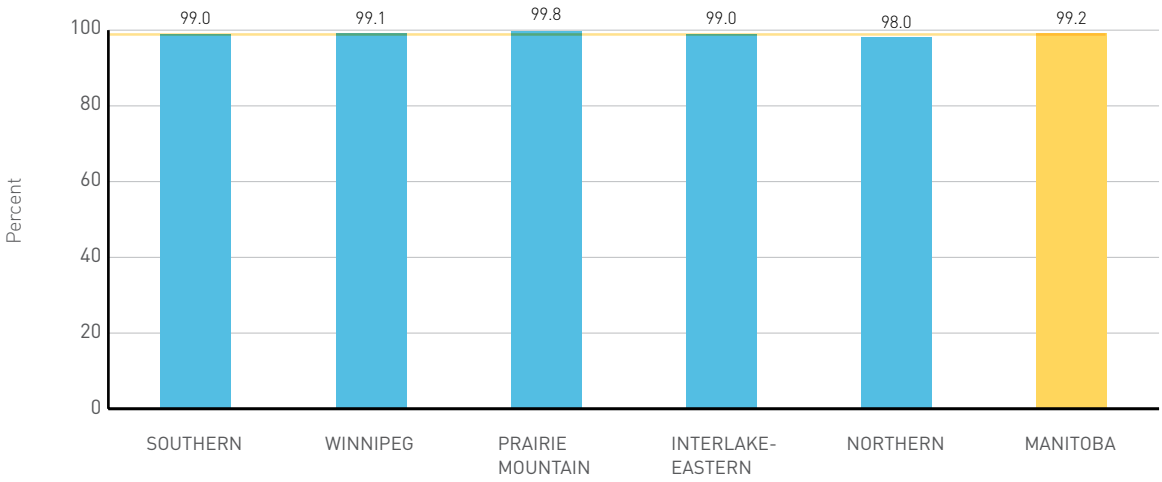
BreastCheck coordinates diagnostic follow-up procedures for most women following an abnormal screening mammogram.

- This process results in a shorter time compared to follow-up coordinated by referral back to a primary care provider.[15]
- BreastCheck also monitors wait times on a continuous basis and will alter referral patterns if necessary to shorten wait times.

Radiation Therapy Waits

Figure 2.9

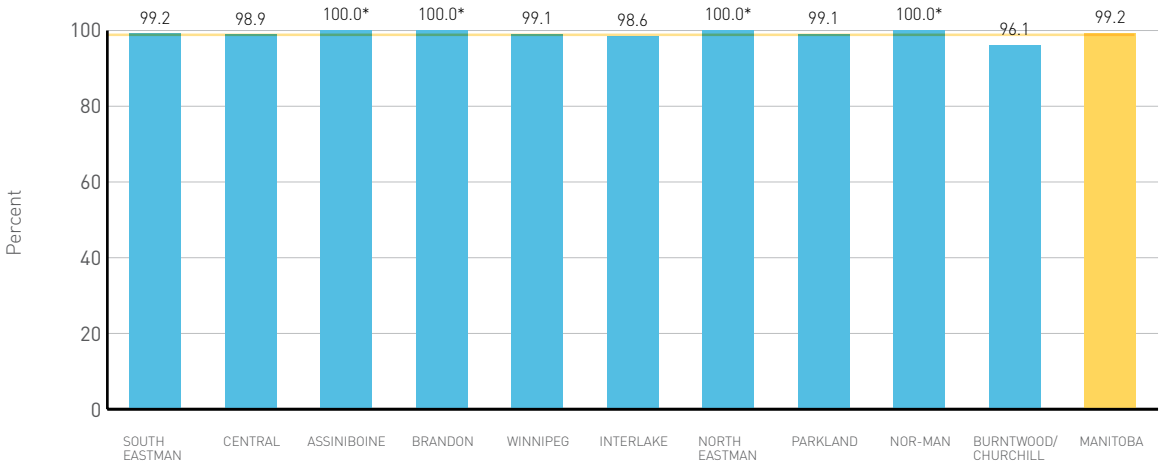
Percent of patients starting radiation treatment within four weeks of being ready to treat, by current Regional Health Authority



Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Figure 2.10

Percent of patients starting radiation within four weeks of being ready to treat, by former Regional Health Authority



Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Manitobans receive radiation therapy in a timely manner.

- Figures 2.9 and 2.10 show that there is consistency in radiation therapy wait times across Manitoba, when looking at all the disease sites combined.
- Figures 2.11 to 2.18 show some variations still exist when the data are broken down by disease site, in the case of prostate cancer for example.

What else do we know?

- Good results were seen in Manitoba even before the implementation of the national wait time guarantee (2008).
- More recent data (since the implementation of thenational wait time guarantee) show rates of 100% across the province and more types of cancer.
  - The primary reason for not always achieving the four week target for patients with prostate cancer requiring radiation therapy is the need for fiducial marker implants prior to treatment commencing. These inert markers are used for on-line imaging during treatment, ensuring the target area is treated precisely each day. Delays due to availability of operating room time will impact overall wait time from ready-to-treat to the first treatment.

Why is this important?

Wait times are now within the benchmark of four weeks from "ready to treat" to first treatment, and patients are triaged appropriately according to their disease site, stage and condition.

- However, it is important to continue to reduce wait times across the spectrum of cancer services to improve the overall experience.

How do we compare?

Wait times for radiation therapy in Manitoba are among the best in Canada.

- Recent reports show that Manitoba is the only province where 100% of its radiation therapy patients begin treatment within the 28 day benchmark.[14]

What is CancerCare Manitoba doing to improve radiation therapy waits?

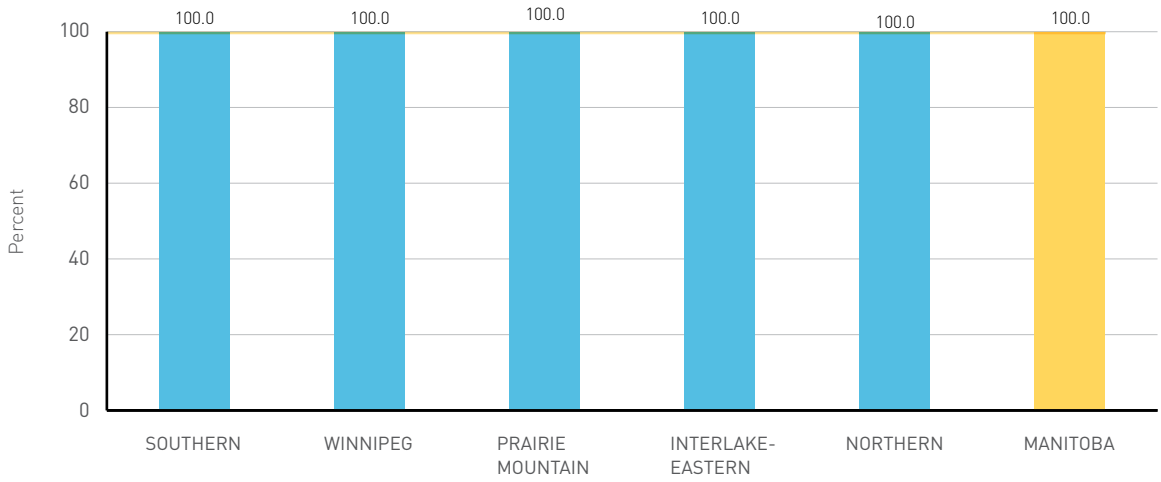
CancerCare Manitoba continually monitors and manages its radiation therapy services to meet the national wait time guarantee.

- Since April 2008, CCMB has been achieving the national wait time guarantee of four weeks. However, we still want to work at shortening the wait.
- As technology progresses, treatments get more complex. Planning these treatments requires more time and that affects the start of treatment.
- The Radiation Oncology Program continues to enhance and increase utilization of software systems designed to identify delays in individual patients' progress through radiation therapy. These assist us in finding and addressing bottlenecks in the process.
- The opening of the Western Manitoba Cancer Centre in Brandon has increased overall capacity for radiation therapy in the province, thereby increasing access and improving wait times.

Radiation Therapy Waits: Lung

Figure 2.11

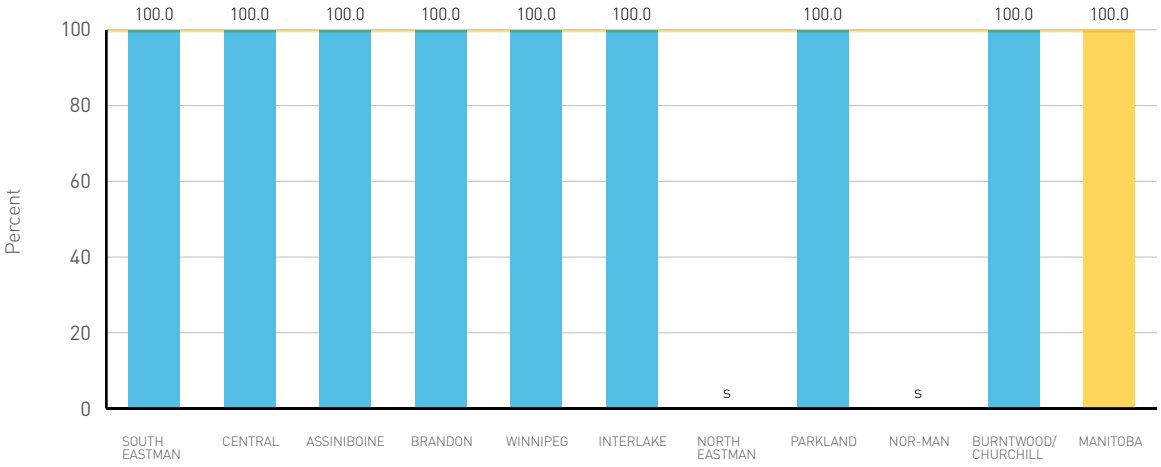
Percent of patients starting radiation treatment for lung cancer within four weeks of being ready to treat, by current Regional Health Authority



Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Figure 2.12

Percent of patients starting radiation treatment for lung cancer within four weeks of being ready to treat, by former Regional Health Authority

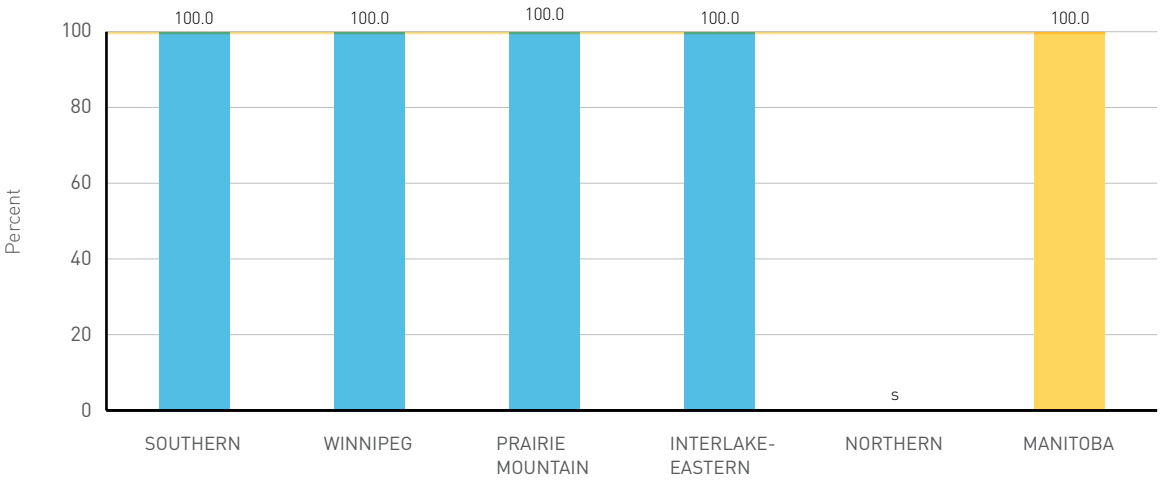


Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Radiation Therapy Waits: Rectal

Figure 2.13

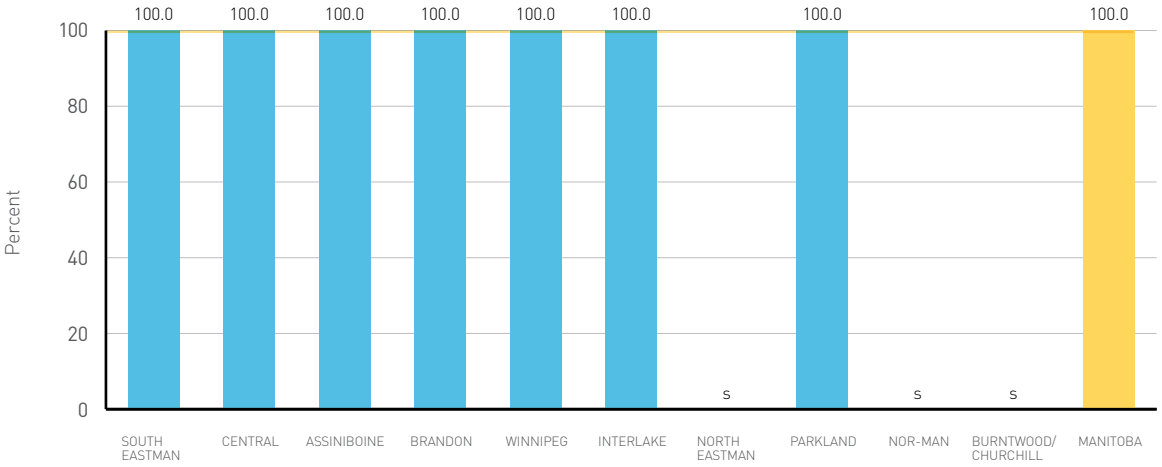
Percent of patients starting radiation treatment for rectal cancer within four weeks of being ready to treat, by current Regional Health Authority



Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Figure 2.14

Percent of patients starting radiation treatment for rectal cancer within four weeks of being ready to treat, by former Regional Health Authority

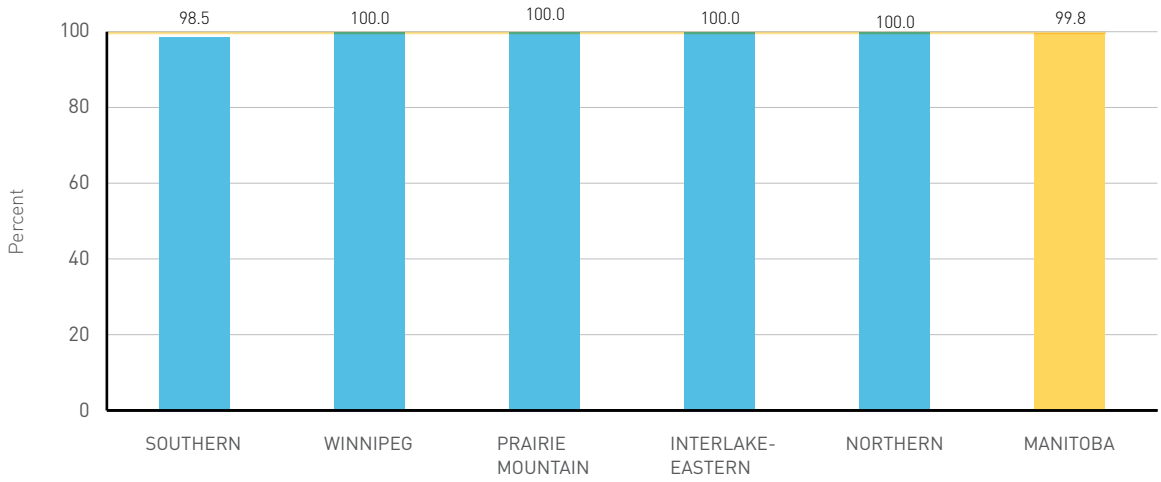


Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Radiation Therapy Waits: Breast

Figure 2.15

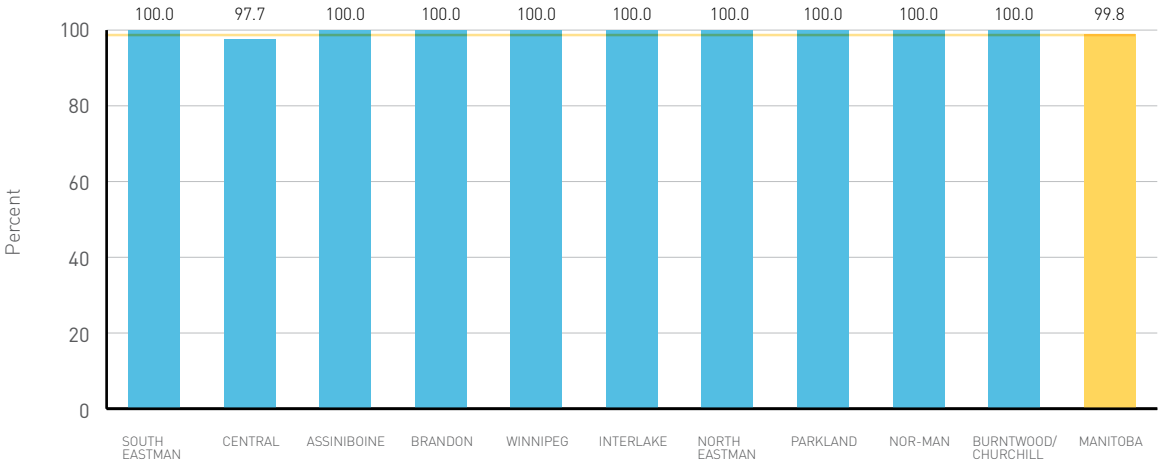
Percent of patients starting radiation treatment for breast cancer within four weeks of being ready to treat, by current Regional Health Authority



Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Figure 2.16

Percent of patients starting radiation treatment for breast cancer within four weeks of being ready to treat, by former Regional Health Authority

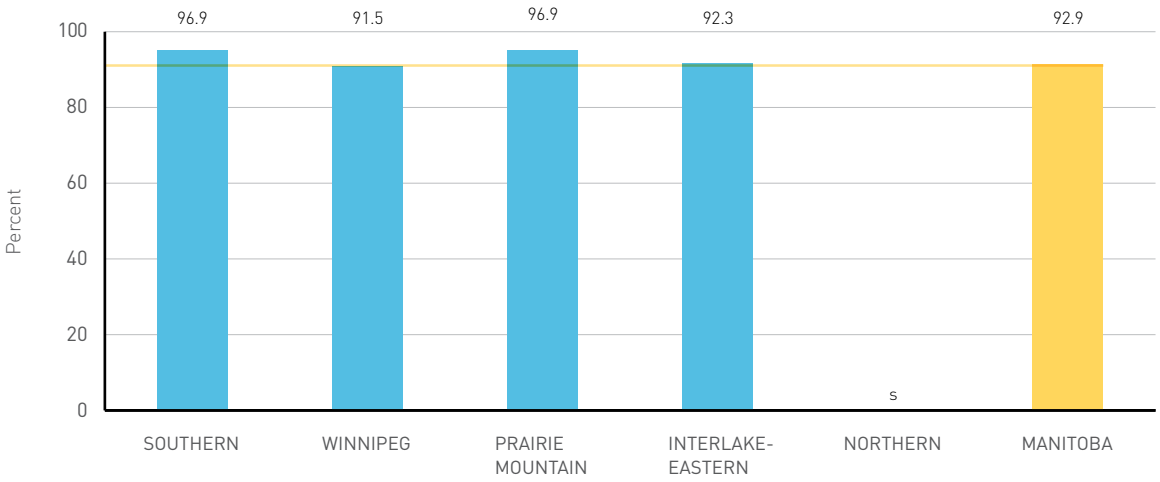


Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Radiation Therapy Waits: Prostate

Figure 2.17

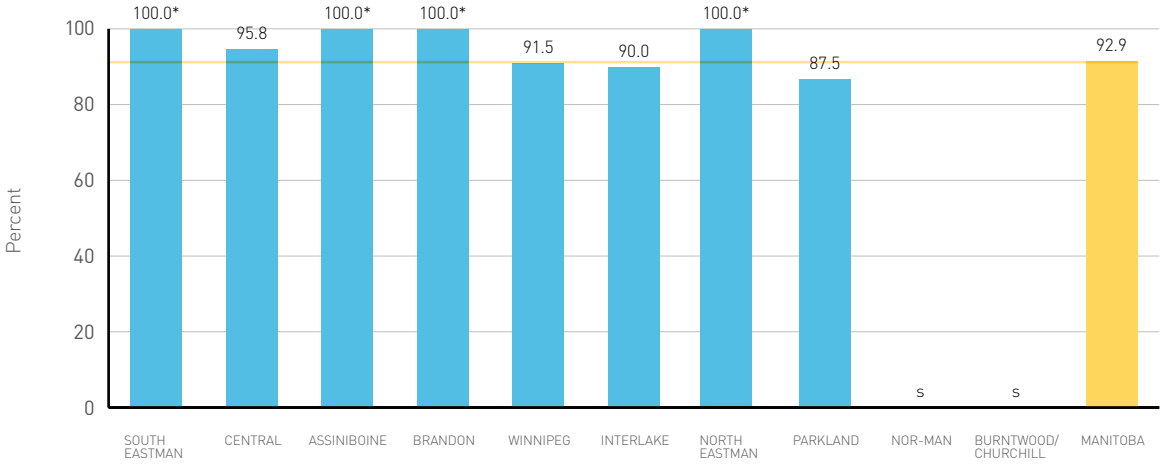
Percent of patients starting radiation treatment for prostate cancer within four weeks of being ready to treat, by current Regional Health Authority



Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Figure 2.18

Percent of patients starting radiation treatment for prostate cancer within four weeks of being ready to treat, by former Regional Health Authority



Source: CancerCare Manitoba, Radiation Oncology Program, patients seen April 1, 2011 – March 31, 2012.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Treatment

TREATMENT	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
 **Surgery**				
percent of patients treated with surgery, all cancers[i]	54.4%	54.5%	→	52.5% - 56.8%
percent of patients treated with surgery by cancer type[i]:				
lung	24.4%	26.5%	→	26.1% - 30.8%
colorectal	80.8%	81.4%	→	75.0% - 85.3%
breast (f)	91.7%	90.6%	→	90.1% - 93.9%
prostate	48.6%	41.4%	↓	36.8% - 47.5%
 **Radiation Therapy**				
percent of patients receiving radiation therapy, all cancers[j]	32.6%	29.1%	↓	24.0% - 30.6%
percent of patients receiving radiation therapy by cancer type:[j]				
lung	44.5%	39.9%	↓	35.0% - 42.4%
rectal	44.0%	41.7%	→	33.9% - 51.6%
breast (f)	61.4%	57.2%	→	50.7% - 63.6%
prostate	33.9%	24.4%	↓	19.4% - 28.6%
 **Radiation After Breast Conserving Surgery**				
percent of stage I and II breast cancer patients treated with radiation following breast conserving surgery[i]	71.3%	68.9%	→	61.5% - 77.8%
 **Systemic Therapy**				
percent of patients receiving systemic therapy (cancer drugs), all cancers[i]	36.7%	35.2%	→	32.0% - 38.8%
percent of patients receiving systemic therapy (cancer drugs) by cancer type:[i]				
lung	25.8%	21.1%	↓	19.2% - 23.9%
colon	30.4%	29.1%	→	23.6% - 31.3%
breast (f)	75.7%	72.3%	→	68.6% - 80.3%
prostate	32.2%	30.8%	→	28.0% - 36.6%

Source: [i] *Manitoba Cancer Registry, patients diagnosed 2006-2007 (past), 2008-2010 (current).*
[j] *Manitoba Cancer Registry, patients diagnosed 2005-2007 (past), 2008-2010 (current).*

Note: Trend arrow is based on + or - 10% of the past value. Colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red). Grey is used where interpretation of trend is not appropriate.

RHA refers to Regional Health Authority.

What does this tell us?

Treatment patterns vary by region and type of cancer.

- Overall, the percent of Manitoba cancer patients who have received surgery or systemic therapy has remained stable compared to previous years, while the percentage of those receiving radiation therapy has decreased slightly.
- The percent of women with early stage breast cancer who received radiation treatment after breast conserving surgery (lumpectomy) has remained stable over time.

What else do we know?

- A patient's treatment plan is based on several factors, including cancer diagnosis, stage of disease, the patient's medical fitness for treatment and the patient's preference.
- For most types of cancer, use of each kind of treatment has been steady over time except:
  - lower rates of radiation and systemic therapy for lung cancer.
  - lower rates of surgery and radiation therapy for prostate cancer.

The data tells us that:

- More than half of all cancer patients undergo surgery. Almost a third have radiation therapy and a similiar proportion undergo systemic therapy.
- Just under 70% of early stage breast cancer patients received radiation following their breast conserving surgery as per guidelines.

Why is this important?

This information can be used to plan for services and use of resources by cancer patients.

- 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. It is important to note that care received outside of Manitoba will not be captured in our data sources.
- Assessing the appropriateness of treatment is possible where evidence-based guidelines exist. Some treatments, such as radiation therapy for women with early stage breast cancer who undergo breast conserving surgery, are associated with clinical practice guidelines.
  - Patterns in these measures identify success and areas for improvement.

How do we compare?

There are very few Canadian benchmarks because cancer treatment utilization data are not routinely reported.

- However, recent System Performance reports by the Canadian Partnership Against Cancer are beginning to describe treatment rates by provinces, especially where accepted clinical practice guidelines exist.

What is CancerCare Manitoba doing to improve access to treatment?

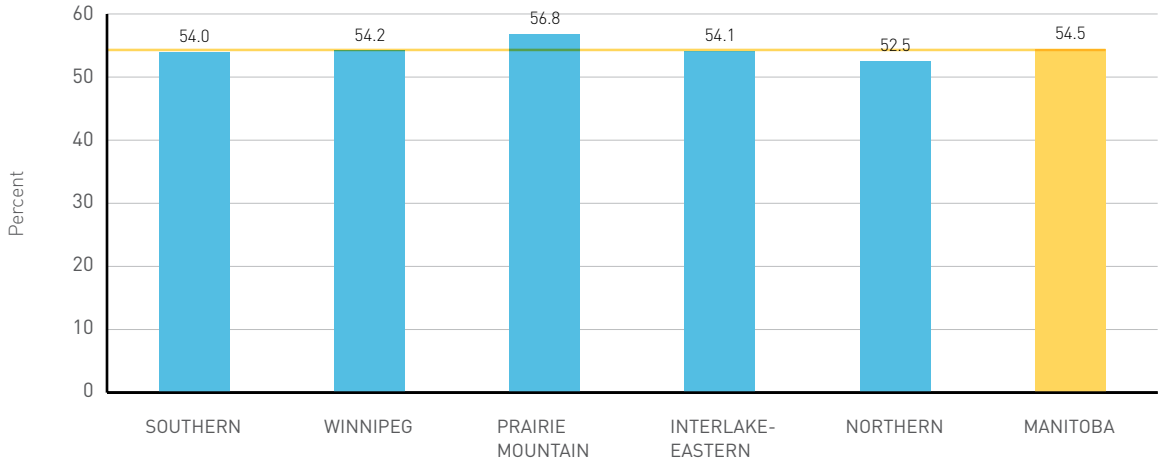
CancerCare Manitoba is involved in several programs to help ensure patients have access to appropriate treatment, regardless of where they live.

- CancerCare Manitoba's Disease Site Group structure enables specialists from different disciplines to interact on specific care plans.
- The Clinical Practice Guidelines Initiative involves reviewing the latest research and consensus statements of medical associations to develop standard evidence-based treatment guidelines for use in Manitoba.
- The Community Oncology Program consists of the well-known Community Cancer Programs Network (CCPN) and Uniting Primary Care and Oncology Network (UPCON).
  - CCPN includes seven Regional Cancer Program hubs and nine Community Cancer Programs hubs, that allow patients to receive systemic therapy, psychosocial oncology intervention and support, and nurse navigator assistance at any time in the cancer patient journey in or near their home communities.
  - UPCON supports the involvement of family physicians and primary health care providers in support of diagnosis, ongoing and follow-up care of cancer patients through networking, education and a help line.
  - The Community Oncology Program has established a standardized approach to transitioning selective patients to the care of Primary Care. Presently, all patients with a clear response to curative therapy for colorectal cancer, can be transitioned to primary care through Moving Forward after Colorectal Cancer. This allows our cancer programs to successfully discharge patients, allowing access to specialists for new patients.
- The Western Manitoba Cancer Centre provides additional capacity for radiation therapy, chemotherapy, patient support and outpatient care. Opened in 2011, the centre sees about 300 patients per year.
- In June 2011, the Province of Manitoba committed to a $40 million strategy to shorten the entire cancer patient journey to 60 days or less. Known as In Sixty, Manitoba's Cancer Patient Journey Initiative, this effort will address the entire journey, starting from when a patient's family doctor first suspects cancer until treatment actually begins.

Surgery

Figure 2.19

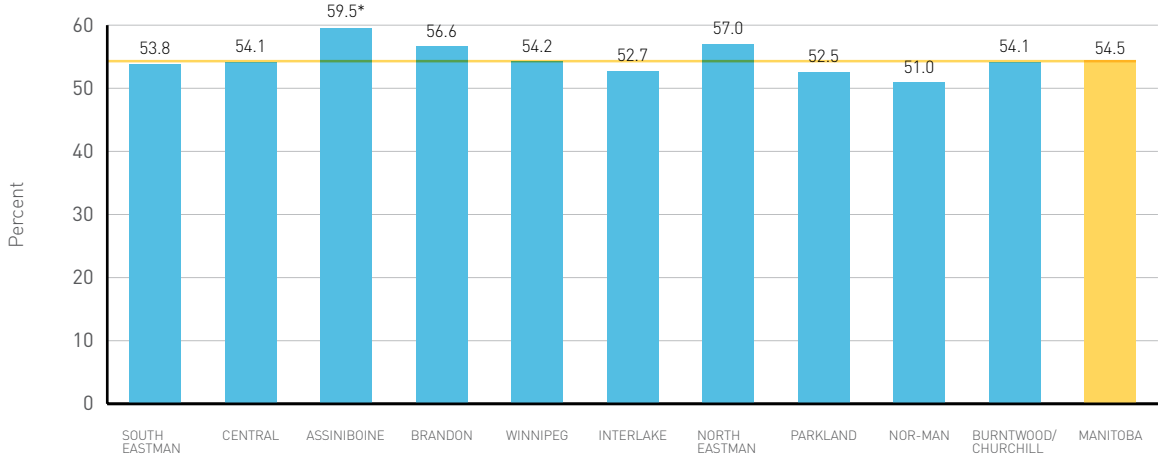
Percent of cancer patients who undergo surgery, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.20

Percent of cancer patients who undergo surgery, by former Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

The percentage of all cancer patients receiving surgery varies by region and type of cancer.

- Figures 2.19 and 2.20 show similar use of surgery across regions with a slightly lower percentage in the Northern RHA.
  - However, there are a number of contributing factors that have not been accounted for such as the type of cancer, cancer stage, or level of complexity.
- Figures 2.21 through 2.28 (see following pages) show a fair degree of consistency in use of surgery for each type of cancer, though there are slight differences with lower rates in the North for colorectal cancer but higher rates for lung and prostate cancer.

What else do we know?

Variations in surgery rates for any type of cancer may be due to clinical factors or patient choice.

- Advances in chemotherapy and radiation therapy have reduced the need for some surgeries.[16]
- Surgeons are often the first cancer specialist the patient meets.[17]
- Research has shown that surgical care and outcomes often correlate with the number of cancer operations a surgeon performs annually.[18]

Why is this important?

Surgery has a major role in the treatment of cancer.

- Variations in cancer surgery rates may reflect the type and stage of the 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.
- Although there are good reasons for differences in surgery rates including clinical factors and patient choice, these variations may affect outcome.
- We need to better understand the reasons for variations in cancer surgery to ensure the delivery of quality cancer care.
- Integrating surgical services within provincially accessible multidisciplinary teams is key because variations in surgical oncology practices can be better analyzed and reduced by sharing best practices, and new technologies can be evaluated and promoted.

How do we compare?

The Canadian Partnership Against Cancer's System Performance reports include some treatment rates.

- Indicators about surgery include the proportion of women with breast cancer undergoing mastectomy and the percentage of patients undergoing colon resections with 12 or more lymph nodes removed.
- ✓ When looking at breast cancer resections, Manitoba has one of the lowest mastectomy rates in Canada (36.0% of breast cancer resections are mastectomies vs 39.5% for all of Canada).[19]
- ✓ In terms of colon resections, the Canadian Partnership Against Cancer has shown that Manitoba surgeons consistently perform well in terms of ensuring 12 or more lymph nodes are removed, with rates among the best in Canada.[19]

What is CancerCare Manitoba doing to improve access to surgery?

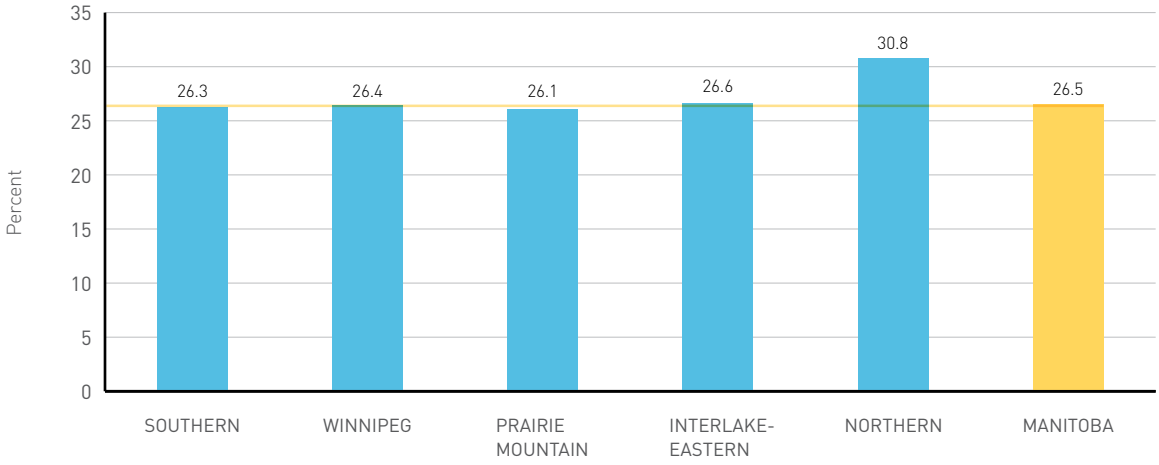
CancerCare Manitoba promotes the highest level of quality care in all aspects of surgical oncology, working to standardize practices to ensure equal care.

- CancerCare Manitoba is exploring the addition of community surgeon advisor to the seven Regional Cancer Hubs. The emphasis would be on expanding the local capabilities so that more patients can have an even greater part of their care in the home community. Just as the Community Oncology Program family practitioner is an important member of CCMB's medical oncology team, a surgeon in each hub will be able to provide the guidance and surgical care that will be part of CCMB's overall plan for the patient.
- Studies show standard treatment protocols reduce unnecessary variations in care, eliminate duplication of procedures, establish clear lines of communication for all caregivers and reduce the costs of hospital stays.[20-25]

Surgery: Lung

Figure 2.21

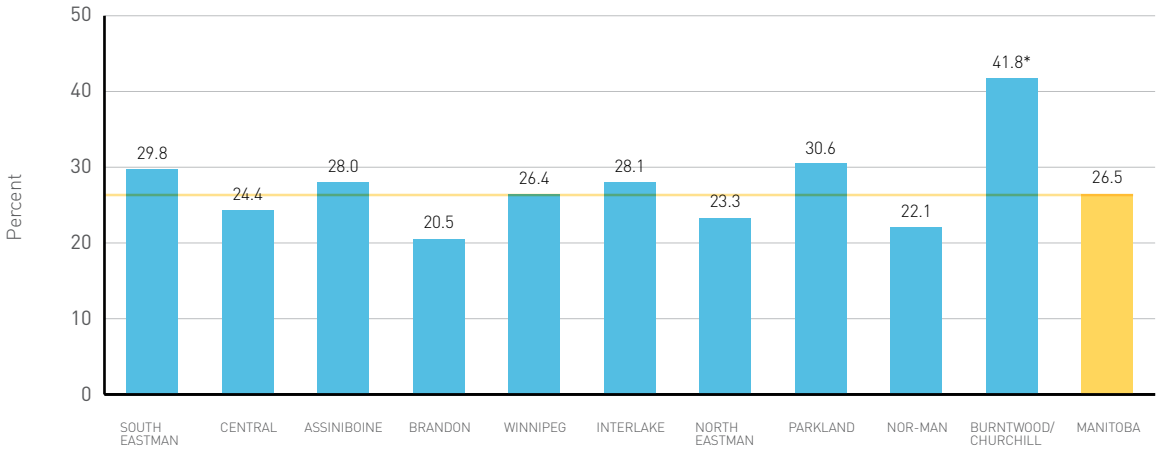
Percent of lung cancer patients who undergo surgery, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.22

Percent of lung cancer patients who undergo surgery, by former Regional Health Authority

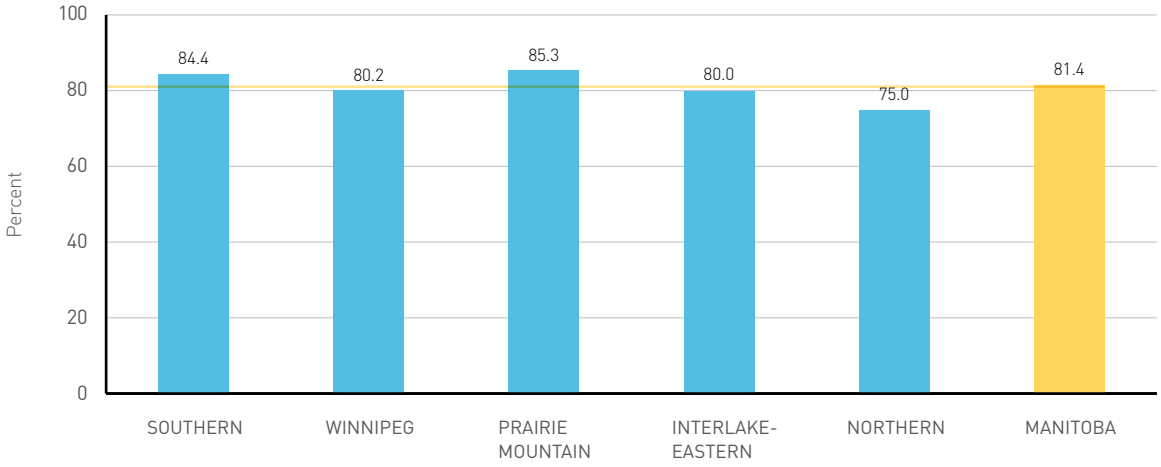


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Surgery: Colorectal

Figure 2.23

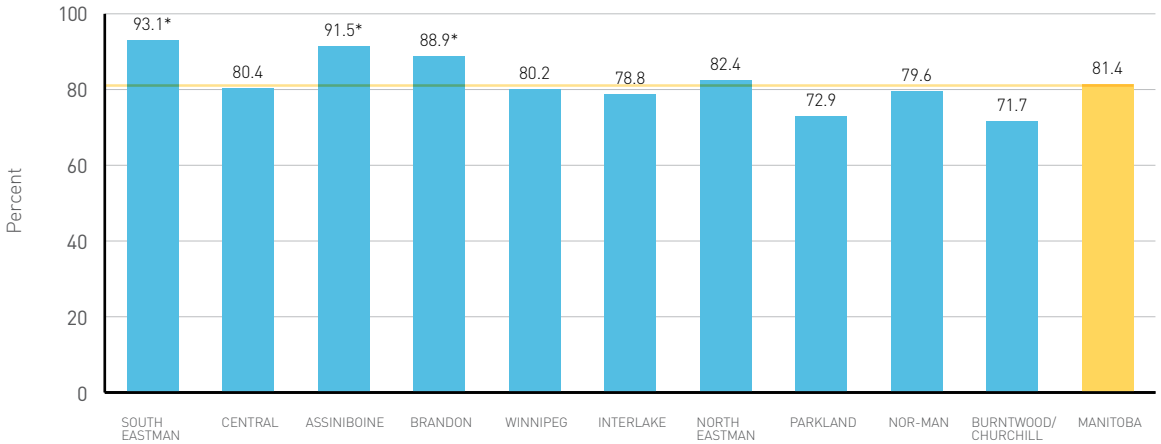
Percent of colorectal cancer patients who undergo surgery, by current Regional Health Authorities



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.24

Percent of colorectal cancer patients who undergo surgery, by former Regional Health Authority

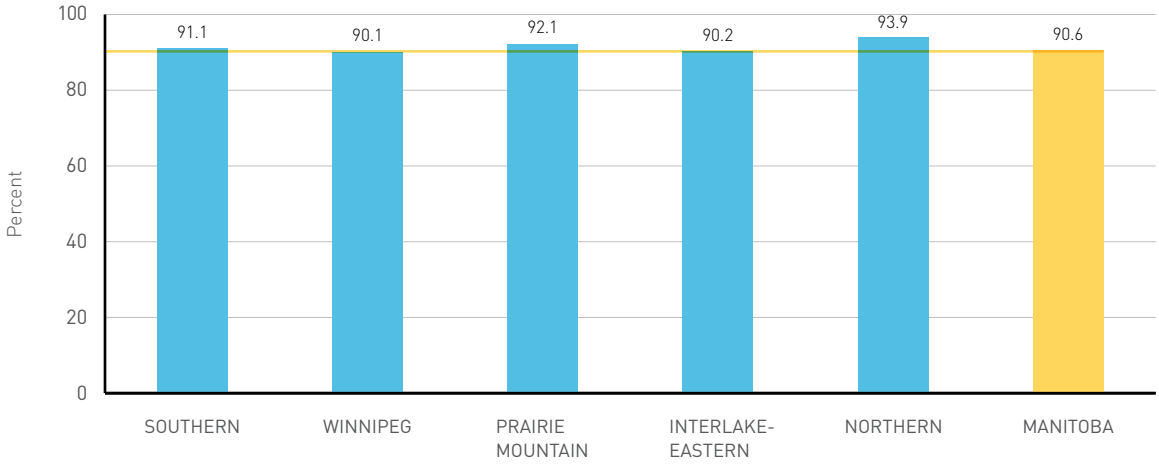


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Surgery: Breast

Figure 2.25

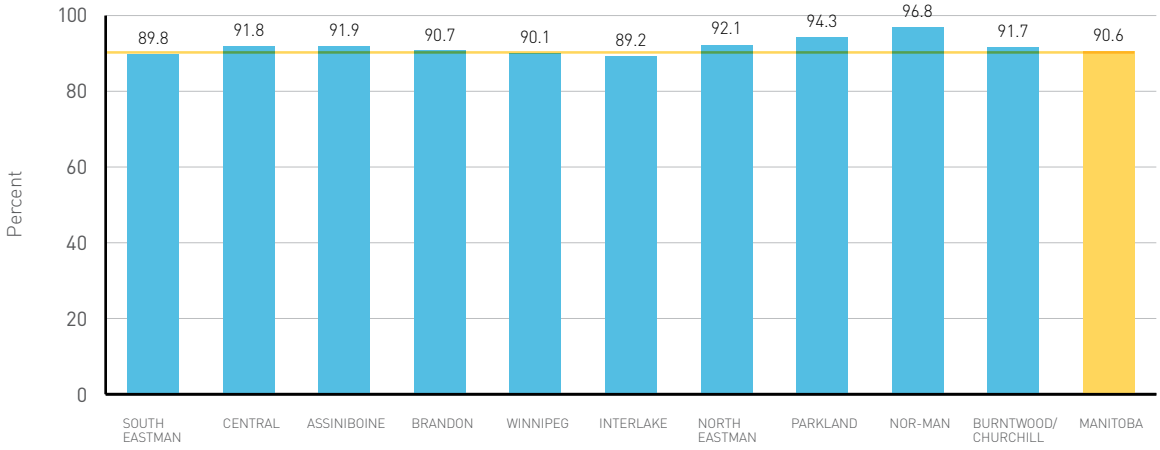
Percent of breast cancer patients who undergo surgery, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010. Significantly different from Manitoba rate ($p<0.05$).

Figure 2.26

Percent of breast cancer patients who undergo surgery, by former Regional Health Authority

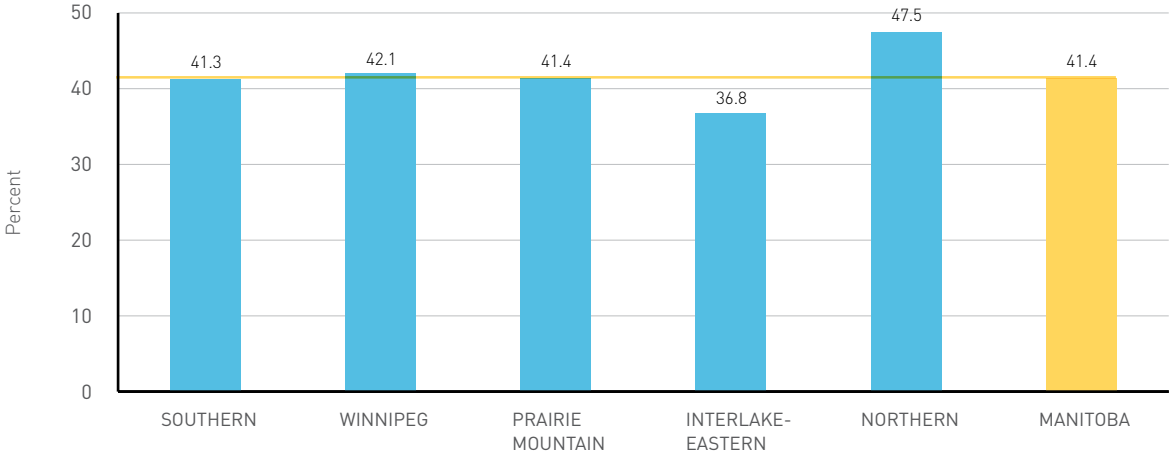


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010. Significantly different from Manitoba rate ($p<0.05$).

Surgery: Prostate

Figure 2.27

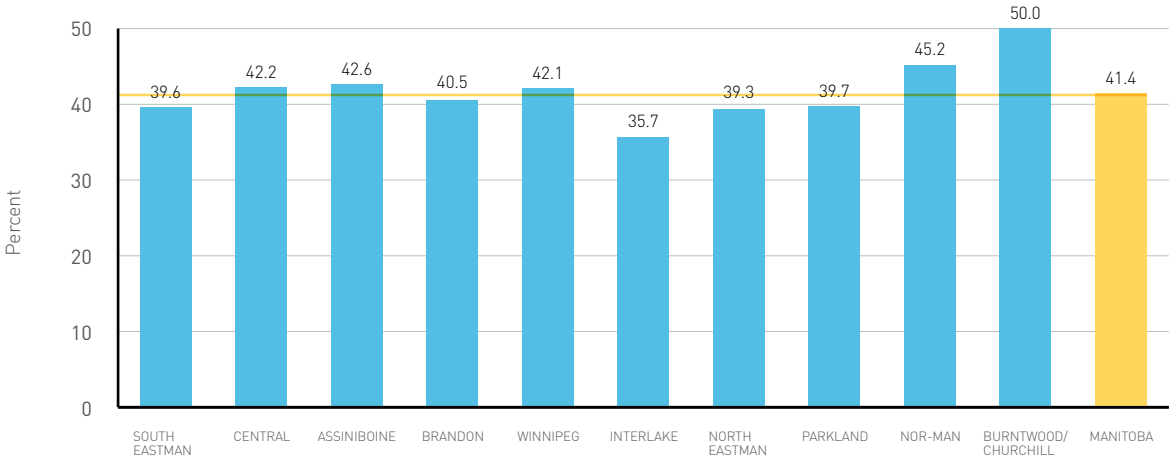
Percent of prostate cancer patients who undergo surgery, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010. Significantly different from Manitoba rate (p<0.05).

Figure 2.28

Percent of prostate cancer patients who undergo surgery, by former Regional Health Authority

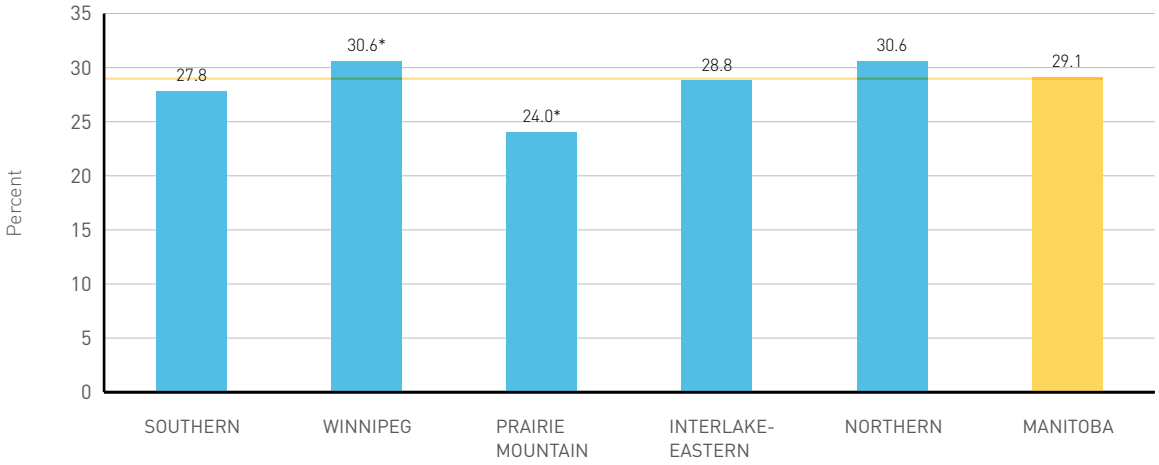


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010. Significantly different from Manitoba rate (p<0.05).

Radiation Therapy

Figure 2.29

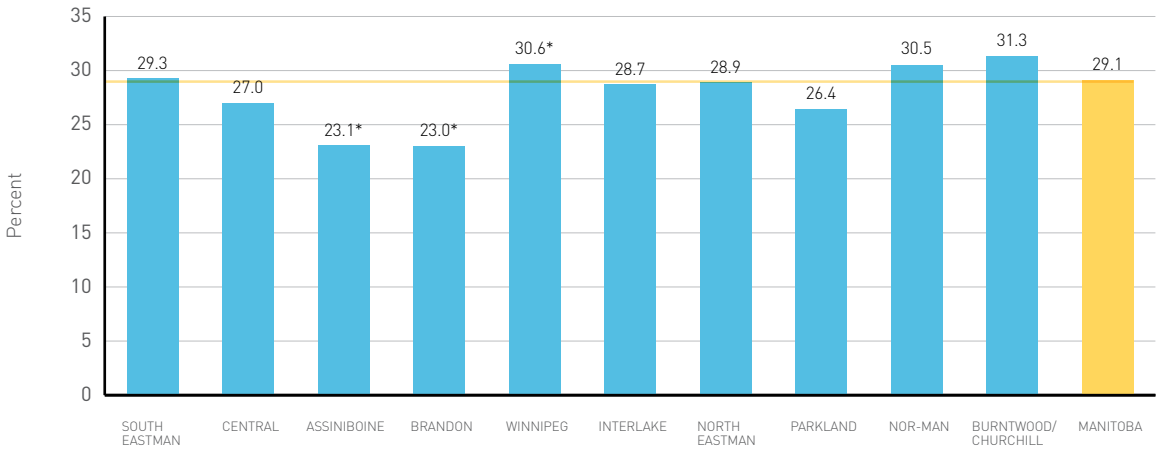
Percent of cancer patients receiving radiation therapy, by Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.30

Percent of cancer patients receiving radiation therapy, by former Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

The proportion of all cancer patients receiving radiation therapy varies by region and type of cancer.

- Figures 2.29 and 2.30 show that radiation therapy use is lowest in the southwestern region of the province, the current Prairie Mountain RHA.
- Figures 2.31 to 2.38 (see following pages) show regional variations in radiation therapy use by cancer type with lower percentages of patients receiving radiation therapy in Prairie Mountain.

What else do we know?

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 CCMB in Winnipeg and at the Western Manitoba Cancer Centre in Brandon.

Why is this important?

Radiation therapy has a major role in the treatment of some cancers.

- Variation in radiation therapy rates depend on the type and stage of the disease, the patient's medical fitness for treatment, patient choice and use of radiation therapy outside of Manitoba which may not be recorded in our data sources.
- Although there are good reasons for differences rates including patient choice and clinical factors, these variations in radiation therapy may affect outcomes.
- We need to better understand the reasons for variations in radiation therapy to ensure the delivery of quality cancer care.

How do we compare?

Canadian benchmarks for rates of radiation therapy are emerging.

- Radiation therapy rates for patients diagnosed in 2009 were 29% in a recent Canadian Partnership Against Cancer report, similar to most other provinces, with the highest rate being found in BC (33.1%).[19]
- Pre-operative radiation therapy for patients with stage II and III rectal cancer in Manitoba is consistent with several provinces, but slightly lower than others.[19]

What is CancerCare Manitoba doing to improve access to radiation therapy?

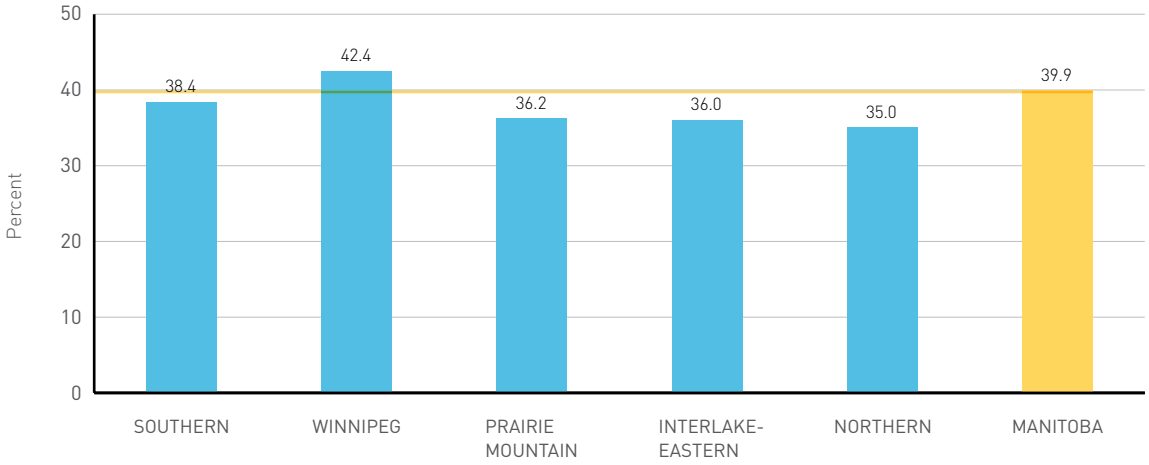
CancerCare Manitoba aims to provide all Manitobans with equal options for treatment, including use of radiation therapy.

- The 2011 opening of the Western Manitoba Cancer Centre in Brandon offers improved access to radiation therapy for Manitobans living in the southwest region of the province.
- By providing more information to primary care providers and surgeons, we can improve communication and keep people up-to-date on advances in cancer care and treatment. For example, the Community Oncology Program provides educational sessions specifically designed for radiation therapy experts to share information with primary care providers and the Community Cancer Programs' health care providers.
- Through our website, conferences and partners we continually work to ensure both public and health care providers are aware of access to radiation therapy services available at the Western Manitoba Cancer Centre. The WMCC has an on-site radiation oncologist, as well as support from radiation oncologists traveling from the Winnipeg site. The radiation oncologists, along with radiation therapists, physicist and technical support team members are all CCMB staff.
- We are continuing to analyze our data to find ways of making treatment more accessible and allowing patients to make informed choices.

Radiation Therapy: Lung

Figure 2.31

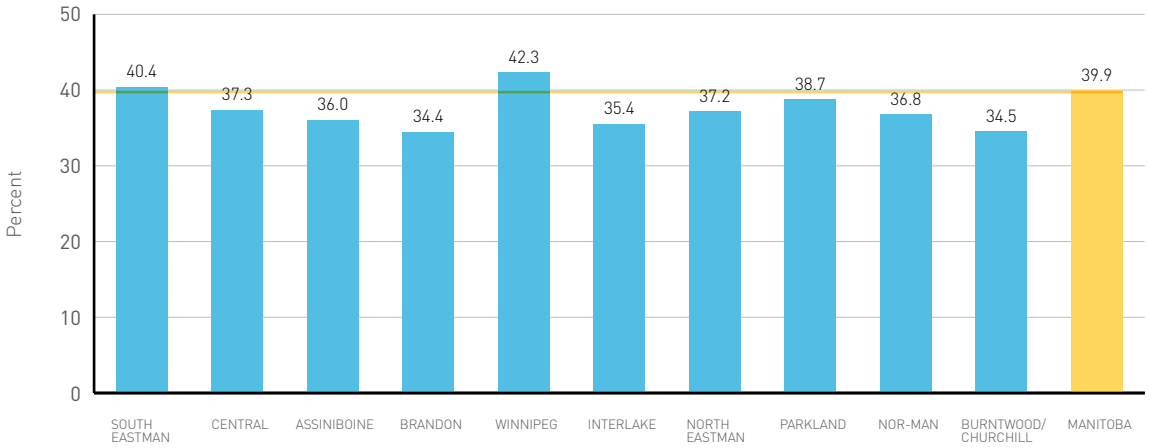
Percent of lung cancer patients receiving radiation therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.32

Percent of lung cancer patients receiving radiation therapy, by former Regional Health Authority

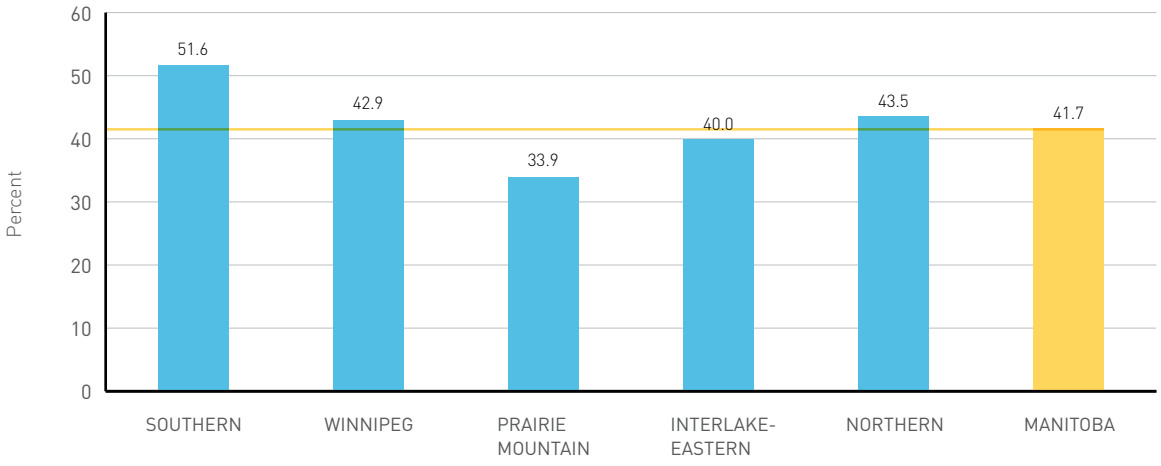


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Radiation Therapy: Rectal

Figure 2.33

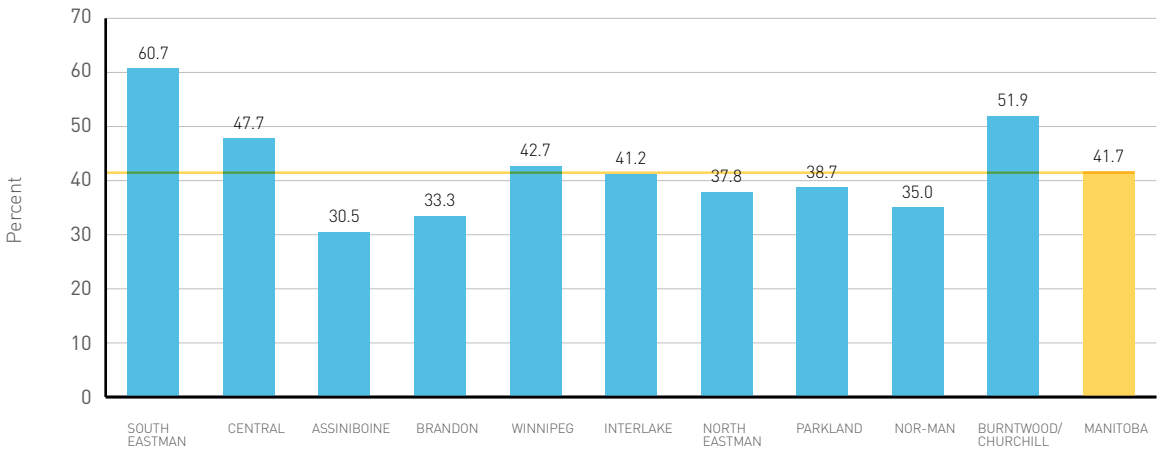
Percent of rectal cancer patients receiving radiation therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.34

Percent of rectal cancer patients receiving radiation therapy, by former Regional Health Authority

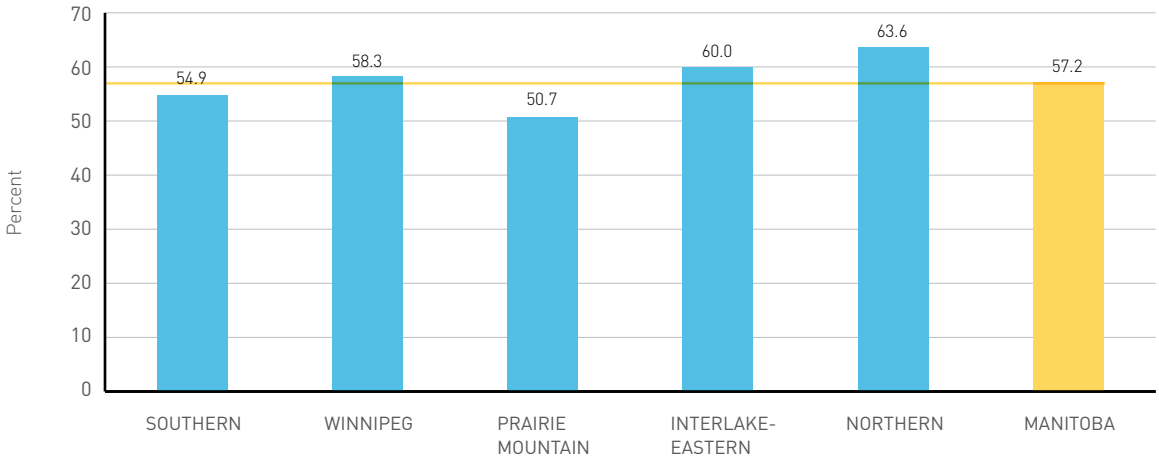


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Radiation Therapy: Breast

Figure 2.35

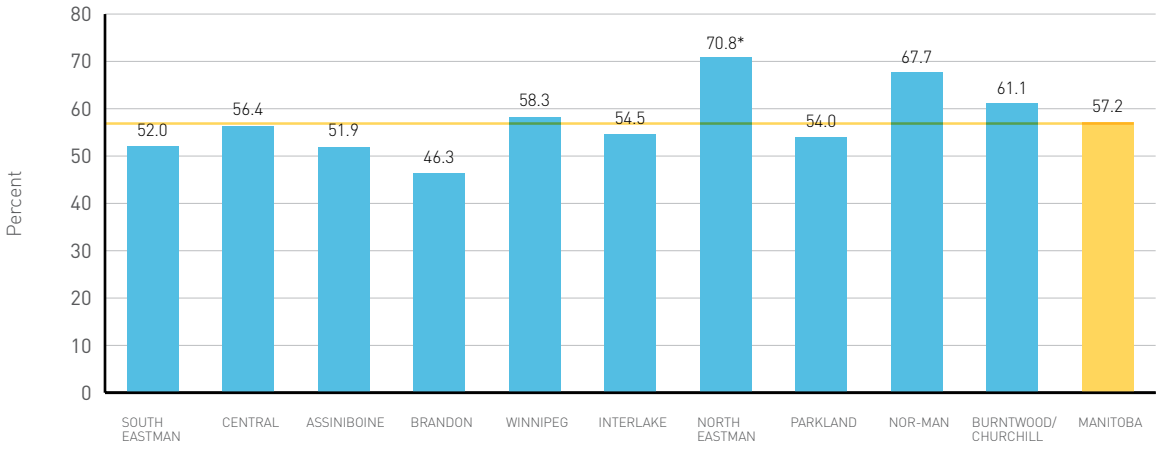
Percent of breast cancer patients receiving radiation therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.36

Percent of breast cancer patients receiving radiation therapy, by former Regional Health Authority

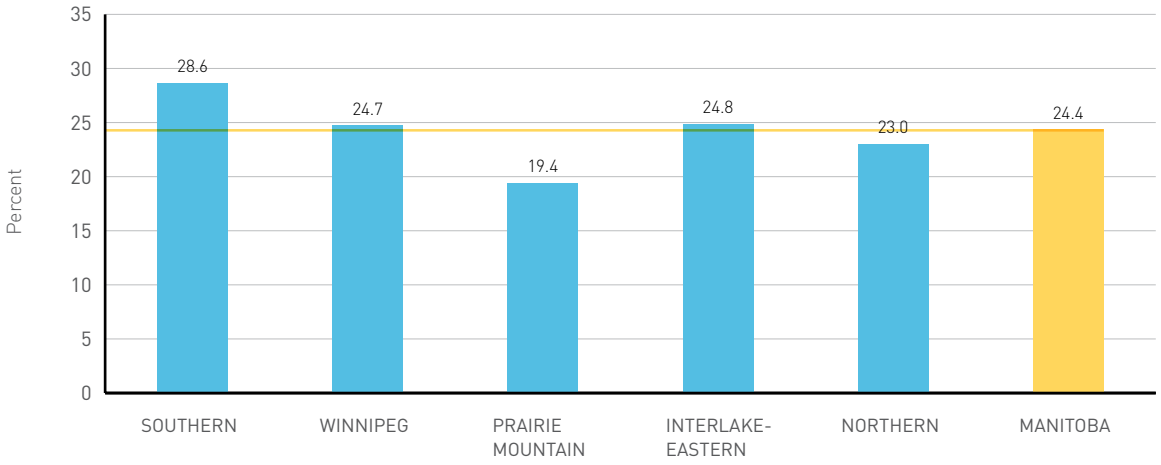


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Radiation Therapy: Prostate

Figure 2.37

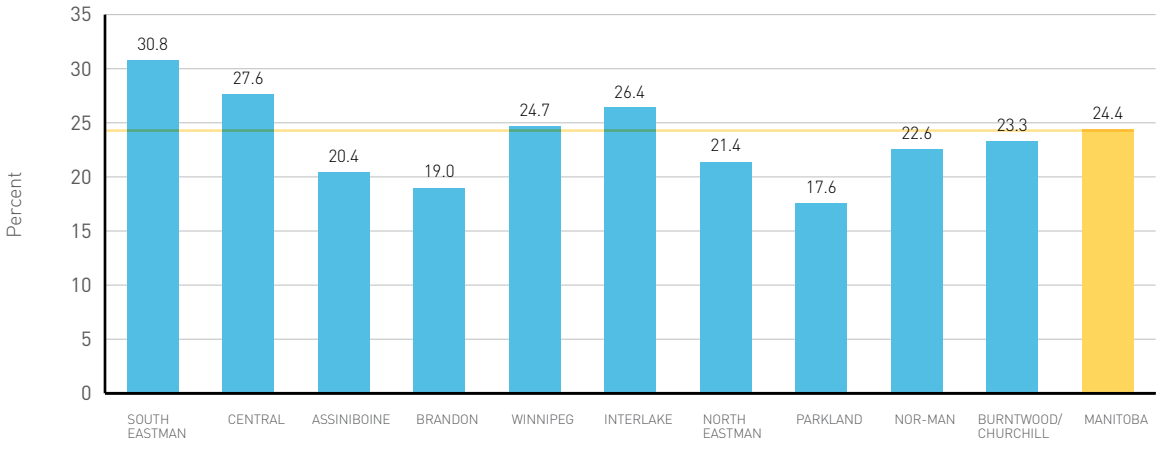
Percent of prostate cancer patients receiving radiation therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.38

Percent of prostate cancer patients receiving radiation therapy, by former Regional Health Authority

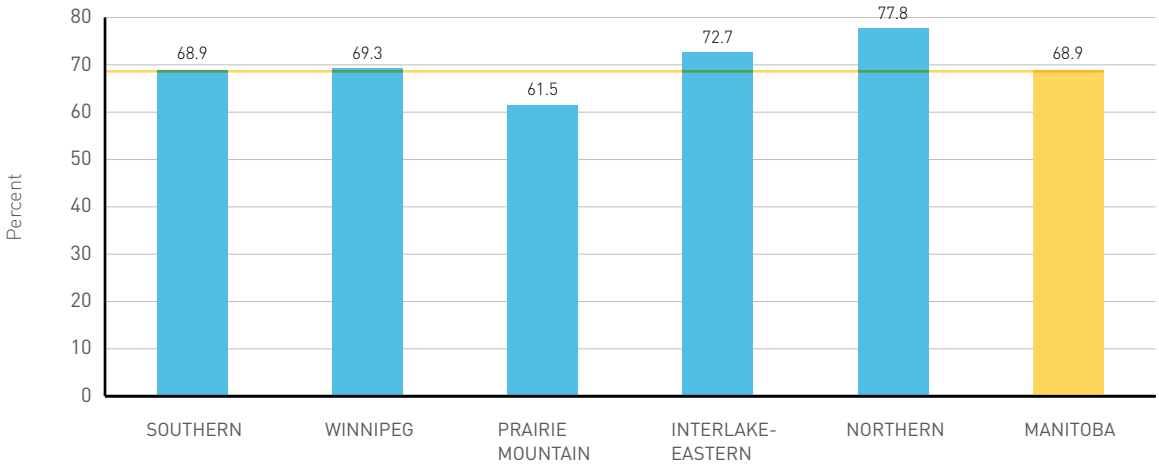


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Radiation After Breast Conserving Surgery

Figure 2.39

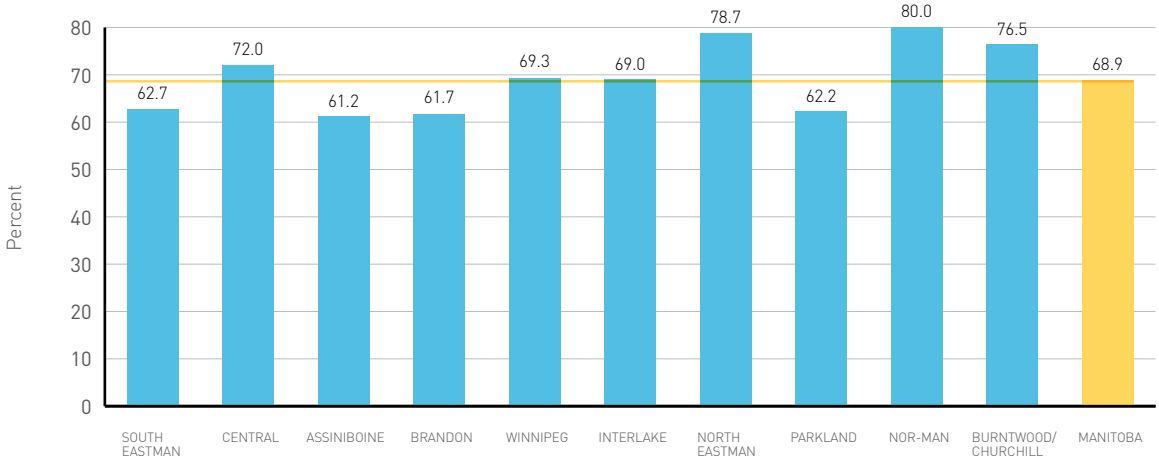
Percent of early stage breast cancer patients treated with radiation within a year of breast conserving surgery, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.40

Percent of early stage breast cancer patients treated with radiation within a year of breast conserving surgery, by former Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Use of radiation therapy after breast conserving surgery (lumpectomy) varies by region.

- Figure 2.39 shows lower use of radiation therapy in early stage breast cancer patients after breast conserving surgery (BCS) in the Prairie Mountain RHA.
- Analyzing the data in terms of previous RHA groupings, the lowest use of radiation therapy after BCS in early stage breast cancer patients is in the former Assiniboine RHA (Figure 2.40).

What else do we know?

Variations in use of radiation therapy may be due to clinical factors or patient choice.

- Women undergoing BCS for stage I and II breast cancer who do not receive radiation therapy may still be receiving appropriate care. Not having radiation therapy after BCS may be due to factors such as:
  - patients not being medically fit for radiation therapy due to factors not recorded in available data sources
  - patients with very good prognosis (older age, smaller tumour size, low stage) receiving anti-estrogens as a substitute for radiation
  - patients' refusal of treatment
  - patients may get radiation therapy outside the province which may not be recorded in available data sources

Why is this important?

Women with early stage breast cancer who have BCS without radiation therapy have an increased risk of cancer recurrence.

- Variation may be due to medical factors, patient choice or use of treatment outside Manitoba.
- Although there may be good reasons for differences in these treatment rates, these variations may affect outcomes.
- We need to better understand the reasons for variations in radiation therapy use after BCS to ensure the delivery of quality cancer care.
- Research has shown that geographic barriers (distance to radiation therapy facilities) are a significant factor in lower rates of radiation therapy after BCS.[26-28]

How do we compare?

Canadian benchmarks for rate of radiation therapy after BCS are emerging.

- The Canadian Partnership Against Cancer's System Performance reports include data on the percentage of women with stage I and II breast cancer who receive radiation therapy after BCS.
- Data from a recent report shows that other provinces such Ontario, Alberta and Saskatchewan have rates over 85%, while Manitoba's rates are lower by about 10%.[19]

What is CancerCare Manitoba doing to improve access to radiation therapy after breast conserving surgery?

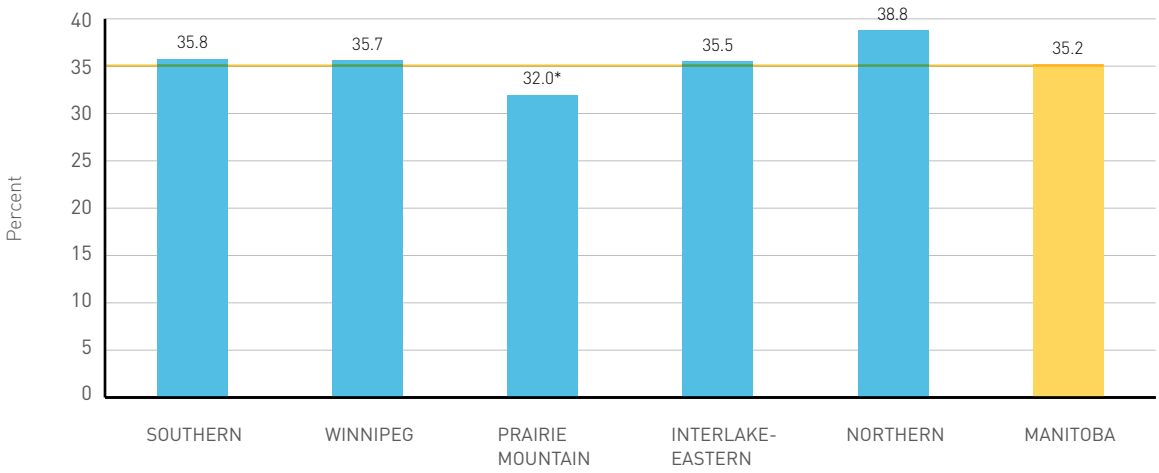
CancerCare Manitoba aims to provide equal access to treatment options including breast conserving surgery combined with radiation therapy.

- The 2011 opening of the Western Manitoba Cancer Centre in Brandon greatly increases the convenience and use of radiation therapy for patients in southwest Manitoba with all types of cancer, including breast cancer.
- Continued work on developing and communicating clinical practice guidelines will ensure equitable access to quality cancer care.

Systemic Therapy
(Chemotherapy, Hormone Therapy)

Figure 2.41

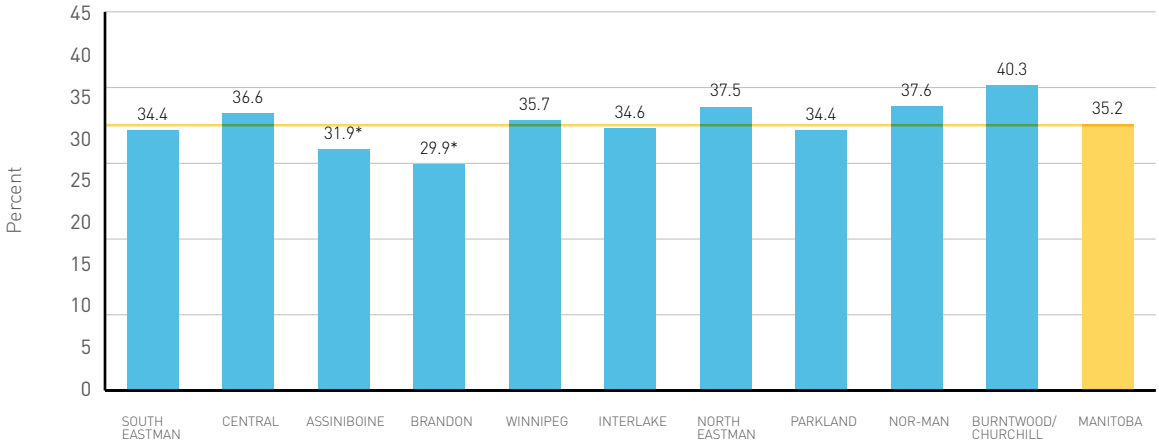
Percent of cancer patients receiving systemic therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.42

Percent of cancer patients receiving systemic therapy, by former Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

The proportion of all cancer patients receiving systemic therapy (cancer drugs) vary by region and type of cancer.

- Figures 2.41 and 2.42 show that the highest systemic therapy rates are in the Northern RHA, while some of the RHAs in the southwest have relatively low rates.
  - These low rates may be due to treatments occurring outside the province, which would not be included in our data sources.
- Figures 2.43 to 2.50 (see following pages) show variation in systemic therapy occurs by type of cancer as well as geography.

What else do we know?

- The more advanced the stage of cancer, the greater the chances of needing chemotherapy. Surgery and radiation therapy may not be appropriate for advanced cases.
- Advances in chemotherapy have improved outcomes for patients by tailoring the treatment to the patient's disease, but this has also increased the complexity of preparing and delivering these treatments.

Why is this important?

Systemic therapy has a major role in the treatment of some cancers.

- Variations in systemic therapy rates depend on the type and stage of cancer, 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.
- Variations in systemic therapy may affect outcomes.
- We need more indepth studies to understand the reasons for variations in systemic therapy to ensure the delivery of quality cancer care.

How do we compare?

Canadian benchmarks for rates of systemic therapy are starting to emerge.

- The Canadian Partnership Against Cancer is including treatment rates in its System Performance reports. Two of these indicators relate to systemic therapy guidelines, but only a few provinces can report on them.
- ⊖ Only five provinces reported on one systemic therapy-related indicator: chemotherapy following surgery for stage III colon cancer. Manitoba's rate was 56% for patients diagnosed in 2009, approaching the rate for Alberta (60%), but lower than the other reporting provinces (Saskatchewan, Prince Edward Island and Newfoundland) which were around 70-80%.[19]
- ⊖ Only four provinces reported on the other systemic therapy indicator: the percentage of stage II and stage III non-small cell lung cancer patients who undergo chemotherapy after surgery. Manitoba's rate was 44% for patients diagnosed in 2009, similar to Alberta but lower than Ontario (58%).[19]

What is CancerCare Manitoba doing to improve systemic therapy?

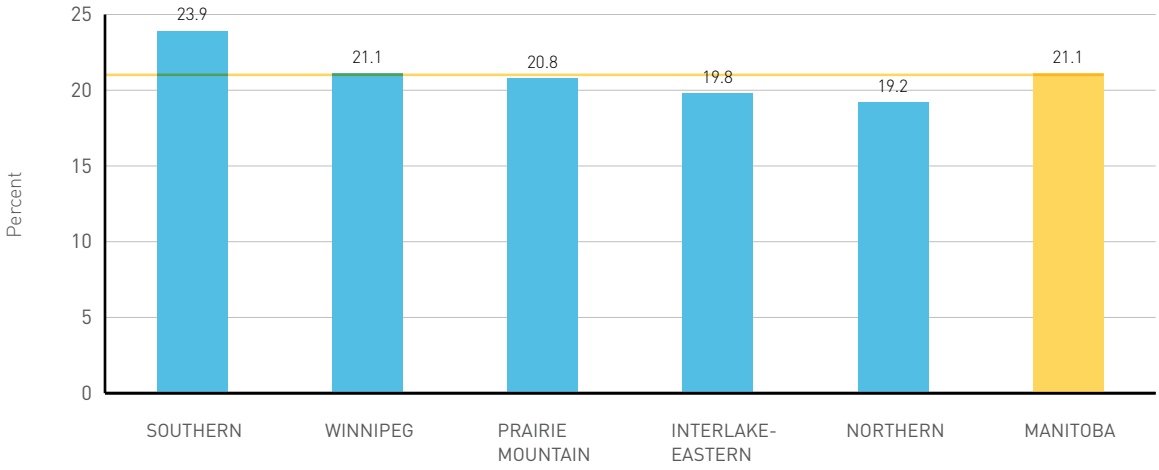
CCMB has launched several initiatives to improve the delivery of systemic therapy in Manitoba.

- The development of the Provincial Oncology Drug Program in 2006 ensures patients in all regions have equal access to new and existing cancer therapies. It has effectively taken the pressure off the budgets of smaller facilities and is managing the use and distribution of oncology drugs as well as planning ahead for future new drug expenses.
- Strategies are underway to reduce the length of time patients wait for chemotherapy to start. Beginning October 2013, systemic therapy hours were extended into the evening at the MacCharles site.
- Leading-edge robotic technology has significantly enhanced patient safety and is now preparing chemotherapy drugs quickly and safely. Known as RIVA (robotic IV automations system), the system prepares chemotherapy doses at a faster rate than manual mixing, which increases efficiency and reduces the potential for repetitive strain injuries for pharmacy staff mixing drugs for extended periods of time.
- Physicians can now enter their chemotherapy orders electronically which has been shown to decrease prescription errors. To ensure consistency and best practice processes are in place, training is underway for physicians and all CCMB medical staff.
- Drug preparation and labeling procedures have been improved to increase safety.
- A comprehensive training program for nurses and pharmacy staff on the use of ambulatory infusion pumps (devices that allow patients to get chemotherapy at home) is mandatory every two years to ensure the right medications and the right dose are being administered.

Systemic Therapy: Lung

Figure 2.43

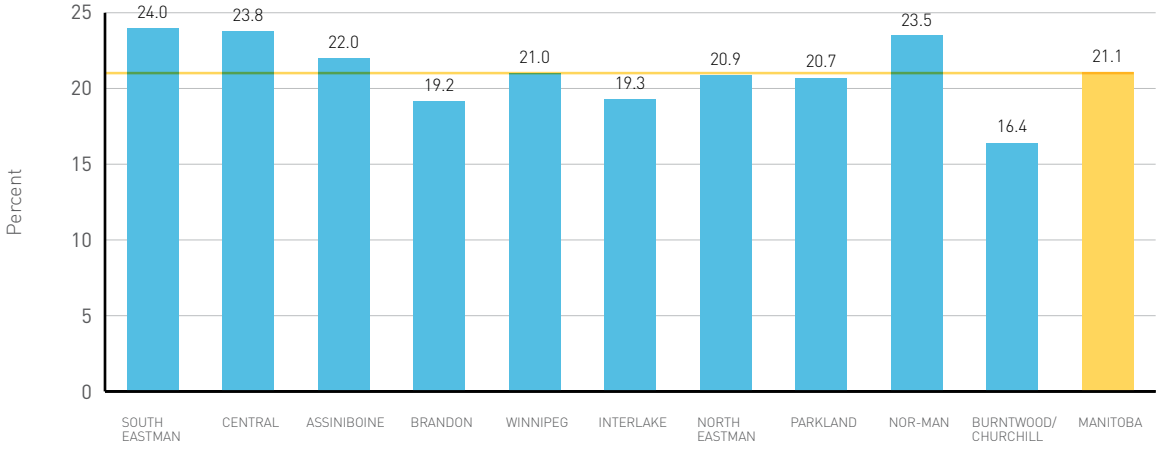
Percent of lung cancer patients receiving systemic therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.44

Percent of lung cancer patients receiving systemic therapy, by former Regional Health Authority

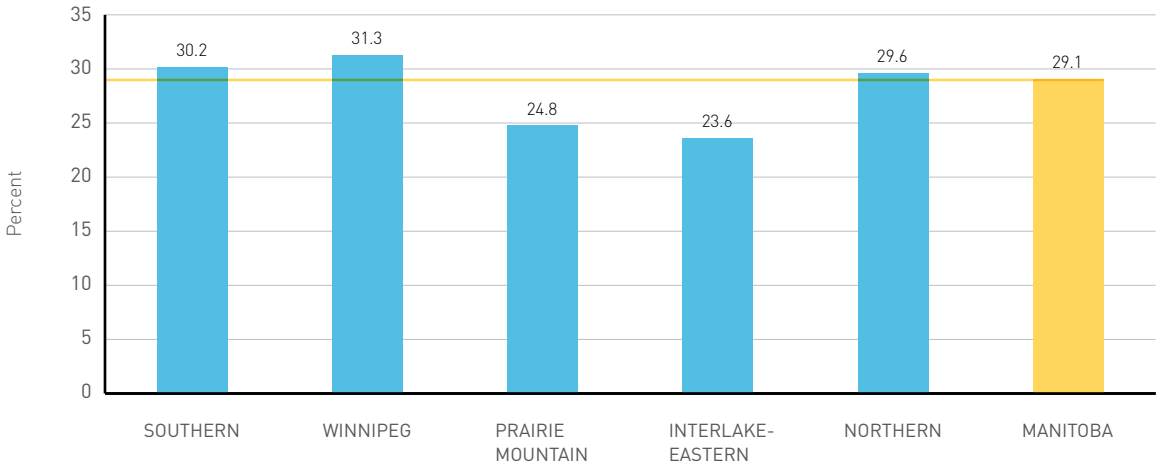


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Systemic Therapy: Colon

Figure 2.45

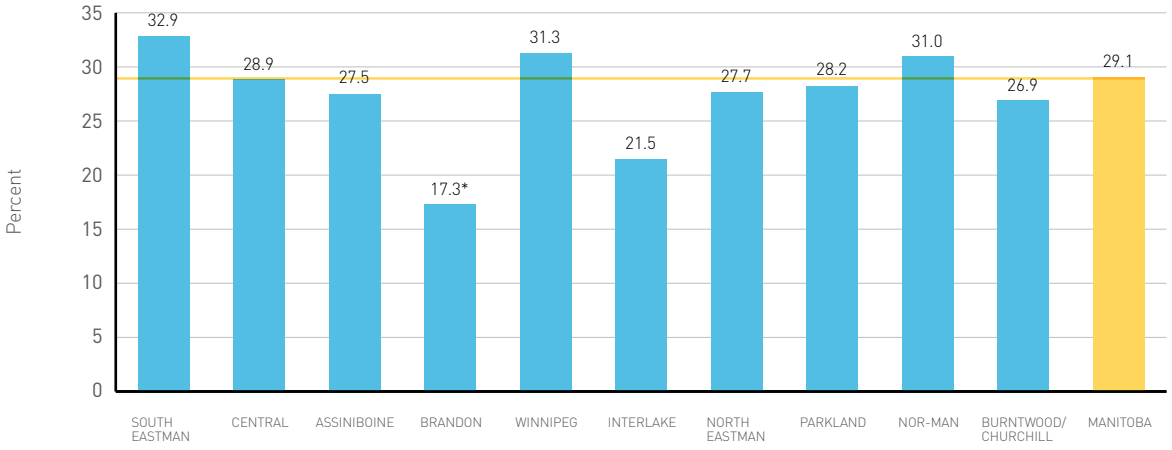
Percent of colon cancer patients receiving systemic therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.46

Percent of colon cancer patients receiving systemic therapy, by former Regional Health Authority

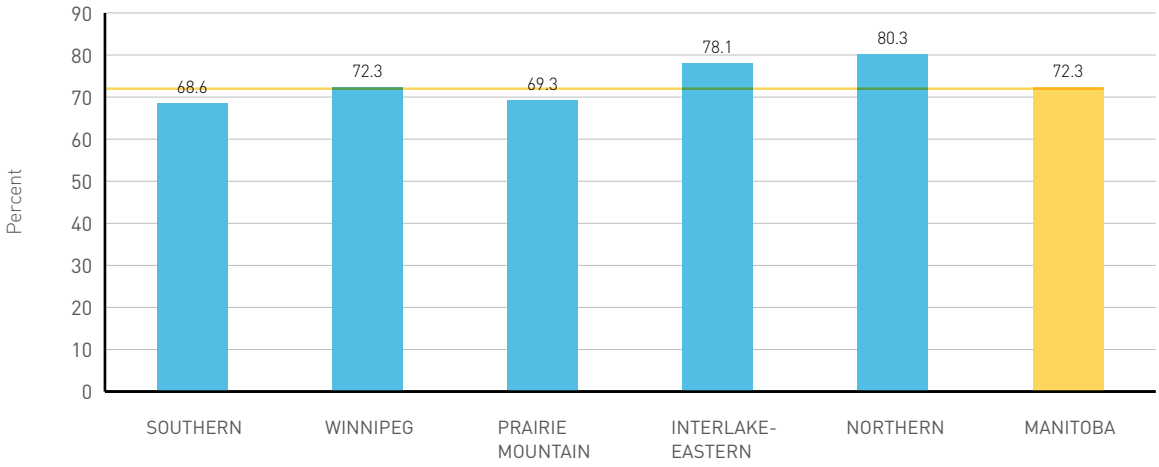


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Systemic Therapy: Breast

Figure 2.47

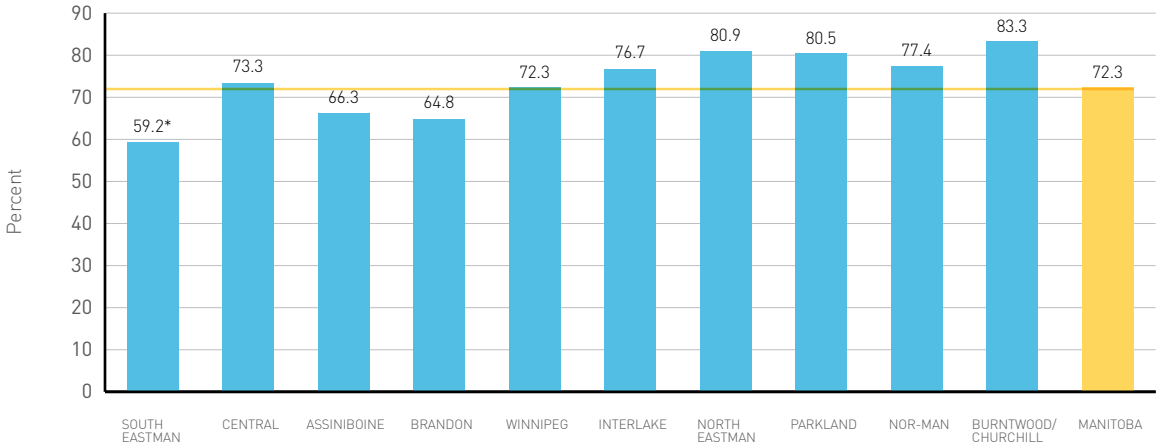
Percent of breast cancer patients receiving systemic therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.48

Percent of breast cancer patients receiving systemic therapy, by former Regional Health Authority

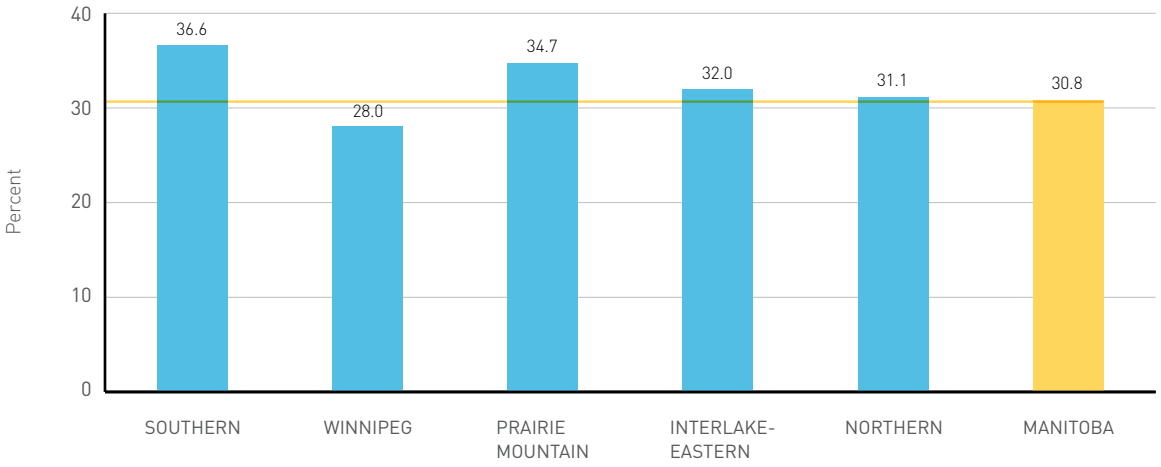


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Systemic Therapy: Prostate

Figure 2.49

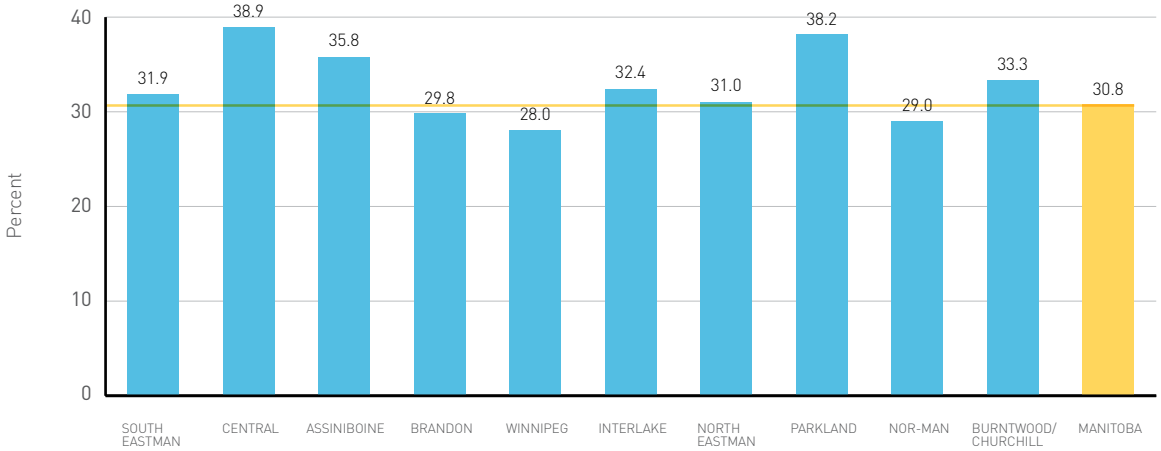
Percent of prostate cancer patients receiving systemic therapy, by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.50

Percent of prostate cancer patients receiving systemic therapy, by former Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Additional Access Indicators

ADDITIONAL ACCESS INDICATORS	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
Accessing the Cancer System				
percent of cancer patients diagnosed at late stage (IV), all cancers[k]	19.5%	19.5%	→	18.3% - 23.6%
percent of cancer patients diagnosed at late stage (IV), by cancer type:[k]				
lung	41.4%	45.7%	↑	42.6% - 47.1%
colorectal	20.4%	18.3%	→	12.3% - 23.0%
breast (f)	5.7%	6.0%	→	4.2% - 6.7%
prostate	11.8%	12.2%	→	10.1% - 17.2%
End-of-Life Care percent of patients who die of cancer with an acute care hospital stay in the last two weeks of life[l]	79.1%	78.4%	→	76.7% - 81.7%

Source: [k] *Manitoba Cancer Registry, patient diagnosed 2005-2007 (past), 2008-2010 (current).*

[l] *Manitoba Cancer Registry, cancer deaths 2005-2007 (past), 2008-2010 (current); combined with hospital data from Manitoba Health.*

Note: Trend arrow is based on + or - 10% of the past value. Colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red). Grey is used where interpretation of trend is not appropriate.

RHA refers to Regional Health Authority.

What does this tell us?

Some patients enter the system when their disease is advanced and outcomes are poorer; most are hospitalized at end-of-life.

- Breast cancer is often found early due to screening and women's awareness of symptoms; at the other extreme, lung cancer is often found late when the disease has spread to other parts of the body (metastasized).
- Most patients who are dying of cancer are admitted to acute care hospitals for end-of-life care.

Why is this important?

The stage at which the cancer is diagnosed can have an impact on survival.

- Patients with late stage cancers have the poorest prognosis (chance of survival); at this point, the disease is widespread and treatment is least effective.

End-of-life care requires special consideration.

- By tracking hospital utilization near end-of-life, plans can be made to ensure appropriate care options can be made available to those patients and their families.

How do we compare?

Canadian benchmarks for stage at diagnosis are emerging.

- Since 2010, all Canadian provinces, except Quebec, have been collecting stage data for the four most frequently diagnosed cancers.
- Manitoba led the country in the capture of stage at diagnosis reporting a rate of 100 percent since 2007. Other provinces such as Alberta, Saskatchewan, Prince Edward Island and Nova Scotia have consistently reported stage at close to 100% for the top four cancers (lung, colorectal, breast and prostate) for the past several years, whereas others (British Columbia, Newfoundland and Ontario) have been later adopters of population-based stage capture.[19]
- Reports from the Canadian Partnership Against Cancer show that stage distribution for Manitoba cancer patients is similar to that experienced by other Canadians.[29,30]

What is CancerCare Manitoba doing to decrease late stage diagnoses and improve end-of-life care?

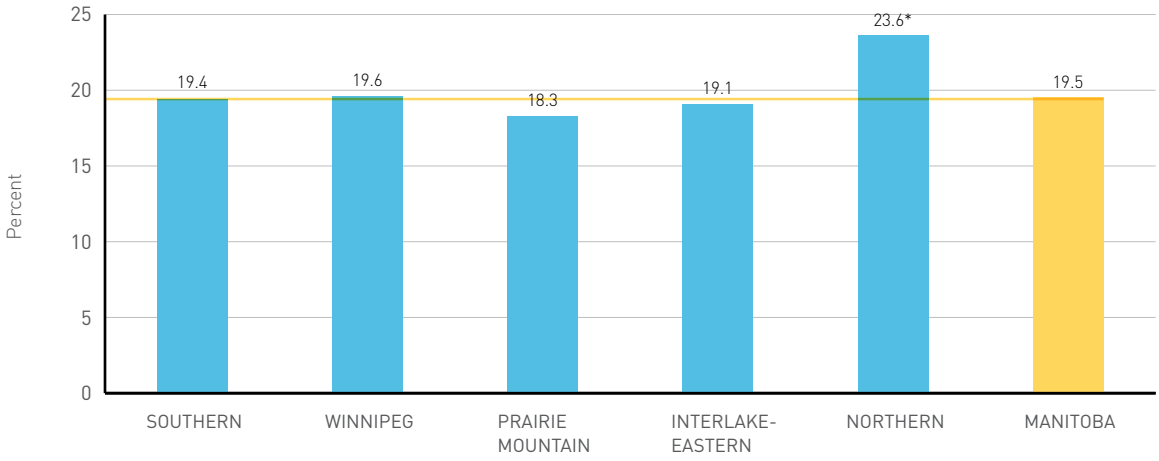
With our partners, CancerCare Manitoba is working to provide services across the cancer spectrum – prevent what we can, find it early if we cannot prevent it, and treat using the most appropriate therapies.

- Late stage diagnosis:
  - CancerCare Manitoba promotes early detection through three provincial screening programs.
  - Supported by the Community Oncology Program, the Uniting Primary Care and Oncology Network (UPCON), is educating family physicians and nurse practitioners about early diagnosis and responds to questions regarding efficient work-up of suspected cancer.
    - Primary care practioners can call, email or text questions to UPCON's cancer question help line.
  - In partnership with First Nations, Metis and Inuit Cancer Control Unit, the Community Oncology Program is establishing community engagement positions within RHAs. The goal of this position is to engage with different cultural populations placing a focus on education, building trust, and encouraging ongoing health care checks.
  - In Sixty, the Manitoba Cancer Patient Journey Initiative, is designed to reduce time from suspicion of cancer to first treatment to 60 days or less, and is investigating the patient journey to understand and address system delays. This effort involves many Manitoba partners across treatment sectors.
    - As a deliverable for In Sixty, the Community Oncology Program is providing disease specific workshops for leaders within communities that are designed to cover the diagnostic journey primary care is responsible for. The goal of these workshops is to align education to the newly created pathways for each disease group, providing consistency and time lines. Another goal is to prepare the leaders to be able to do the same workshop to their peers in their community thereby reaching a far wider audience with the same consistent message that has time lines built in.
- End-of-life care:
  - by working together with partners such as the Winnipeg Regional Health Authority Palliative Care Program and the regions, CCMB is furthering our understanding about how services are used and which services could be used as patients approach end-of-life.

Accessing the Cancer System

Figure 2.51

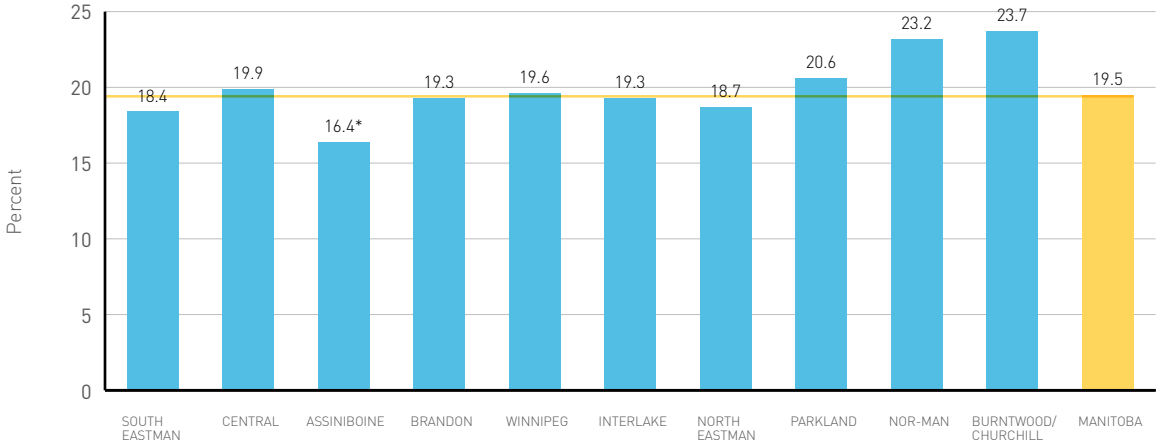
Percent of cancer patients diagnosed at late stage (IV), by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.52

Percent of cancer patients diagnosed at late stage (IV), by former Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Late stage diagnosis varies by region and type of cancer.

- Figure 2.51 shows the Northern RHA has the highest percentage of cancer patients diagnosed at a late stage at 23.6%, while the other regions are relatively similar to the provincial average (19.5%).
- Figure 2.52 shows that the former Burntwood/ Churchill RHA has the highest percentage of cancer patients diagnosed at late stage at 23.7%, and the former Assiniboine RHA has the lowest rate at 16.4%.
- Figures 2.53 to 2.60 (see following pages) show that stage at diagnosis varies by type of cancer:
  - lung cancer is frequently diagnosed at a late stage (45.7%).
  - breast cancer is rarely diagnosed at a late stage (6.0%).
  - colorectal cancer patients are diagnosed at a late stage more often in the Northern RHA (23.0%), while prostate cancer patients are diagnosed at a late stage more often in the Prairie Mountain RHA (17.2%).

Why is this important?

Diagnosing a cancer late can lead to poorer survival.

- Recognizing symptoms and seeking medical help is key to early cancer diagnosis.
- The health care system's response to suspected cancers is also critical to timely diagnosis.
- For some cancers there is scientific evidence supporting screening the population so that cancers are found before symptoms are present. But, not all cancers have scientifically proven screening tests.

How do we compare?

Canadian benchmarks for stage at diagnosis are beginning to emerge as population-based data on stage is available in almost every Canadian province.[19]

- Since 2010, all Canadian provinces, except Quebec, have been collecting stage data for the four most frequently diagnosed cancers.
- Reports from the Canadian Partnership Against Cancer show that stage distribution for Manitoba cancer patients is similar to that experienced by other Canadians.[29,30]

What is CancerCare Manitoba doing to decrease late stage diagnosis?

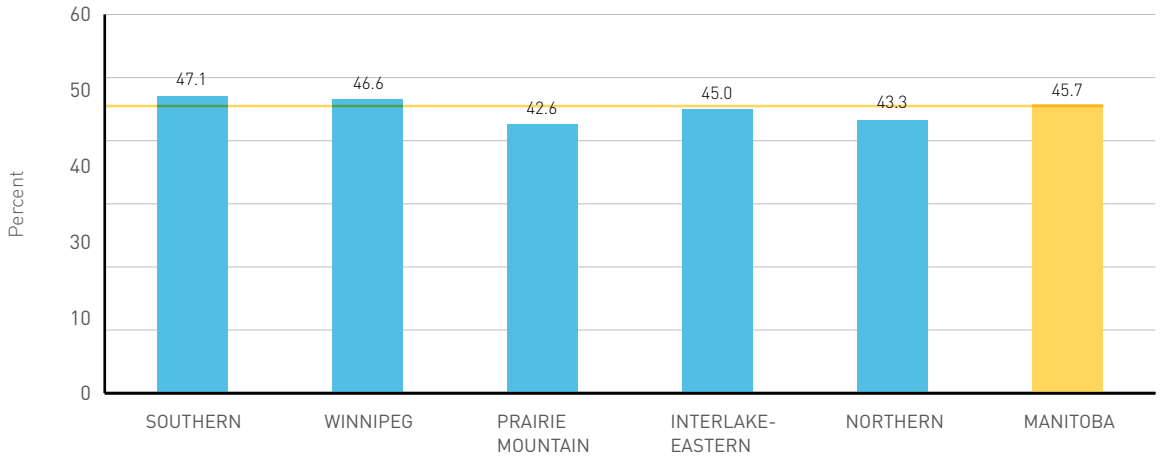
Longstanding screening programs such as BreastCheck, the provincial breast screening program, have led to more patients being diagnosed early when expected outcomes are good and treatment is most effective.

- The introduction of ColonCheck, the provincial colon cancer screening program, in 2007 is expected to have the same effect for colorectal cancer. ColonCheck has completed the provincial roll out of the direct mail invitation component of the program. Individuals from all Regional Health Authorities in Manitoba are now included.
- In Sixty, the Manitoba Cancer Patient Journey Initiative, involves many health care partners throughout Manitoba working to ensure rapid system response for cancer diagnosis as well as cancer treatment.
- "Cancer Awareness Days" have been held in several First Nations communities over the past few years. Facilitated by CCMB's First Nations, Metis and Inuit Cancer Control unit, these information events have provided unique opportunities for community members to understand cancer, it symptoms and available services. This information is essential for empowering Manitobans to recognize symptoms and access cancer diagnosis and treatment services earlier.

Accessing the Cancer System: Lung

Figure 2.53

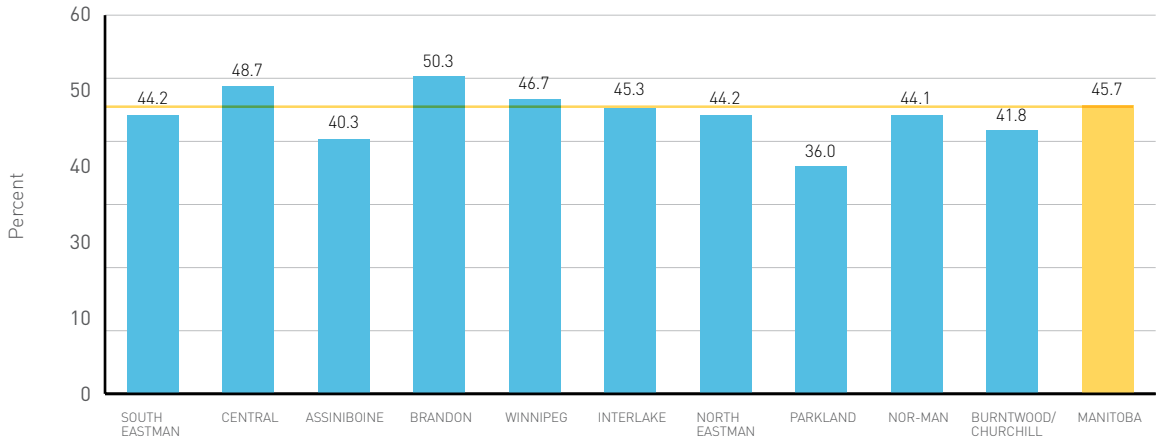
Percent of lung cancer patients diagnosed at late stage (IV), by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.54

Percent of lung cancer patients diagnosed at late stage (IV), by former Regional Health Authority

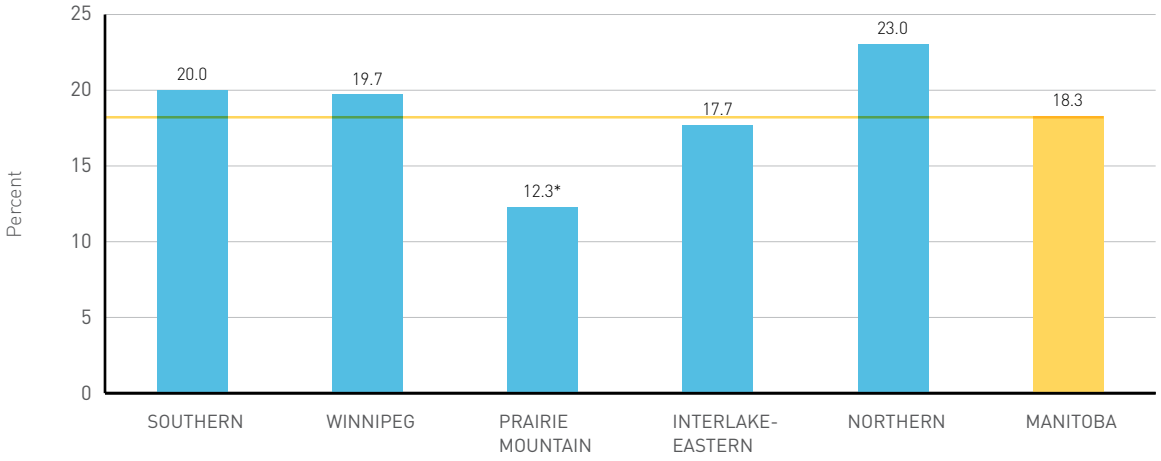


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Accessing the Cancer System: Colorectal

Figure 2.55

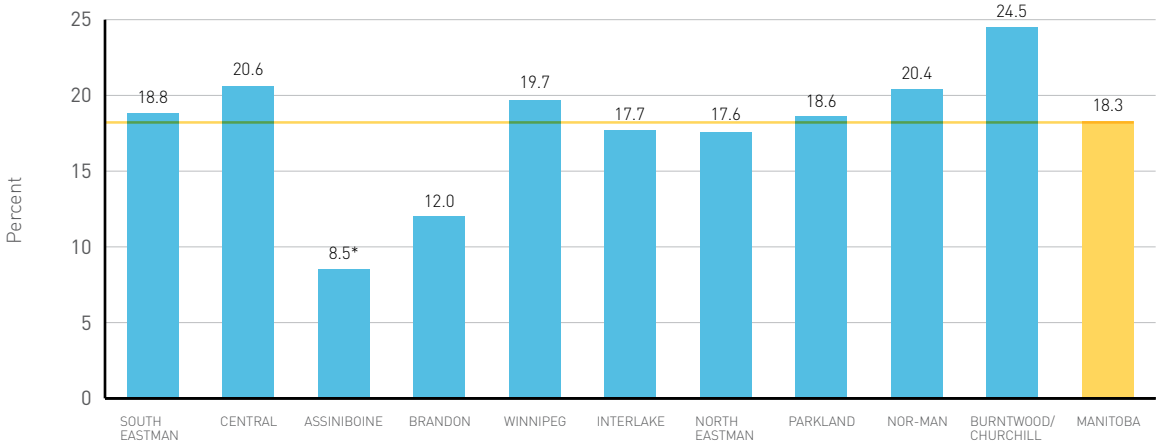
Percent of colorectal cancer patients diagnosed at late stage (IV), by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.56

Percent of colorectal cancer patients diagnosed at late stage (IV), by former Regional Health Authority

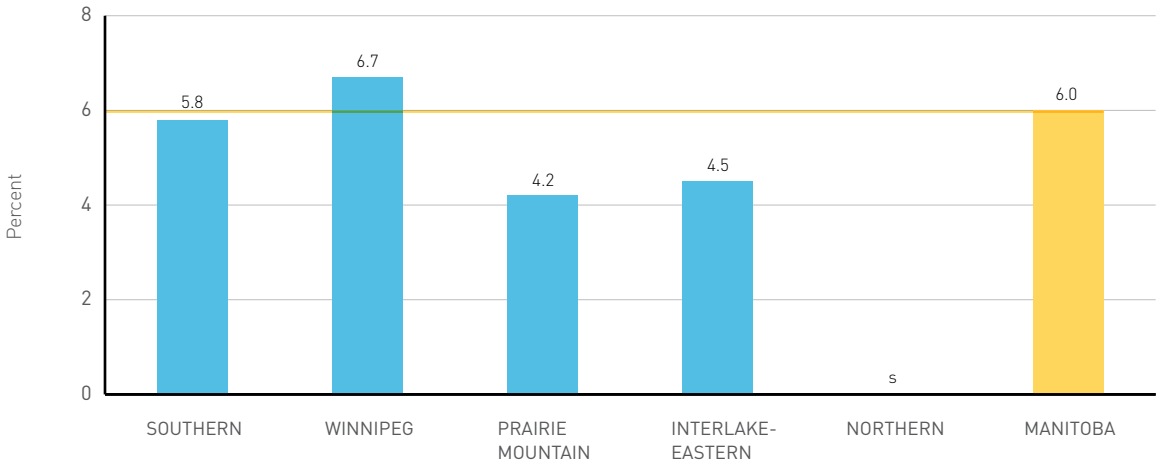


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Accessing the Cancer System: Breast

Figure 2.57

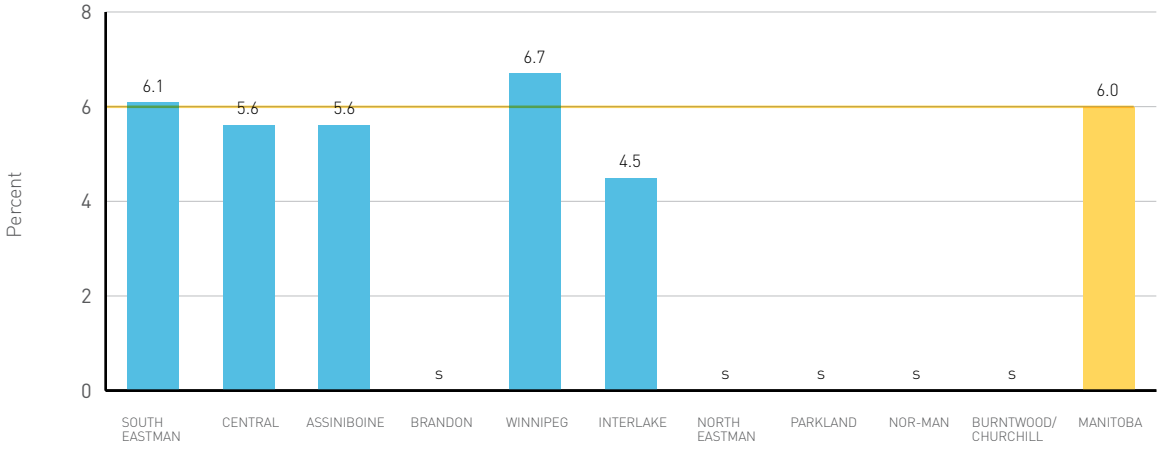
Percent of breast cancer patients diagnosed at late stage (IV), by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*
s = numbers suppressed where < 6

Figure 2.58

Percent of breast cancer patients diagnosed at late stage (IV), by former Regional Health Authority

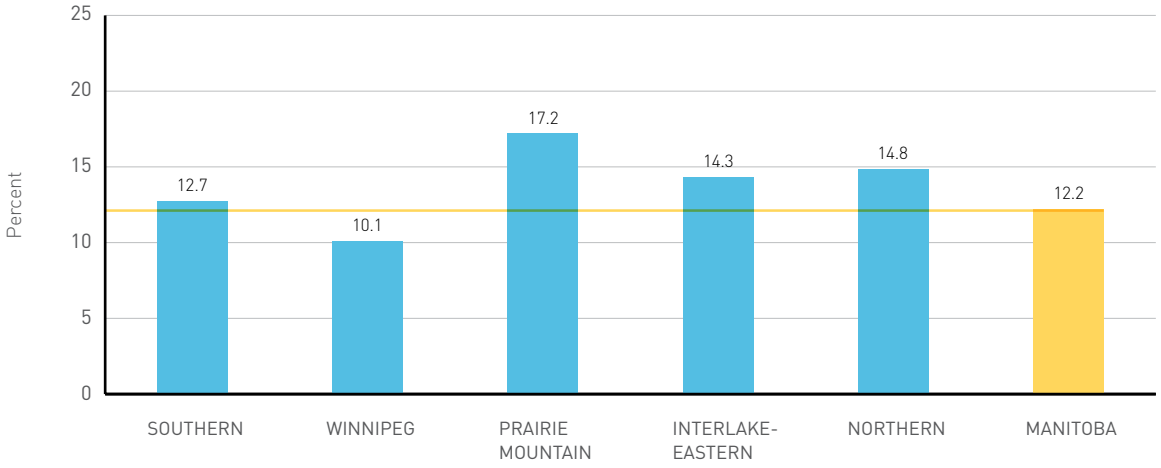


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*
s = numbers suppressed where < 6

Accessing the Cancer System: Prostate

Figure 2.59

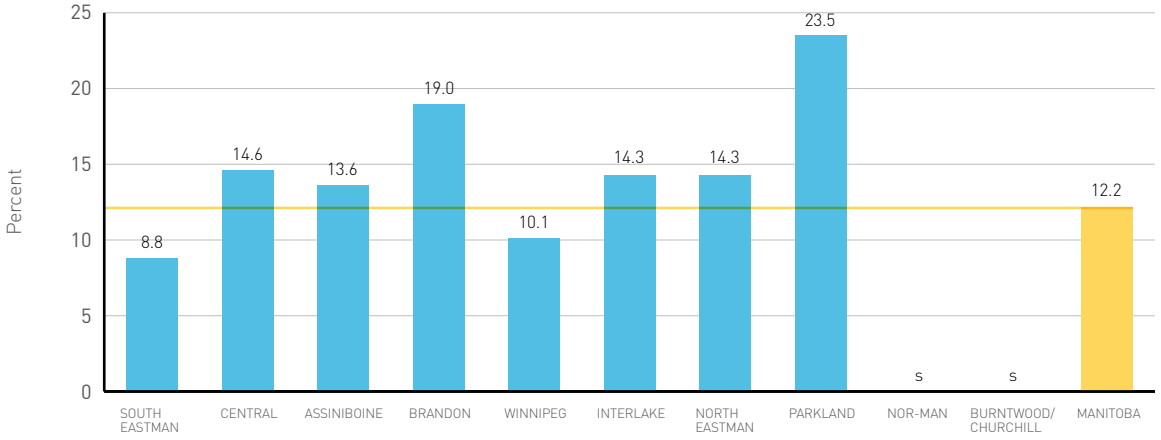
Percent of prostate cancer patients diagnosed at late stage (IV), by current Regional Health Authority



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 2.60

Percent of prostate cancer patients diagnosed at late stage (IV), by former Regional Health Authority

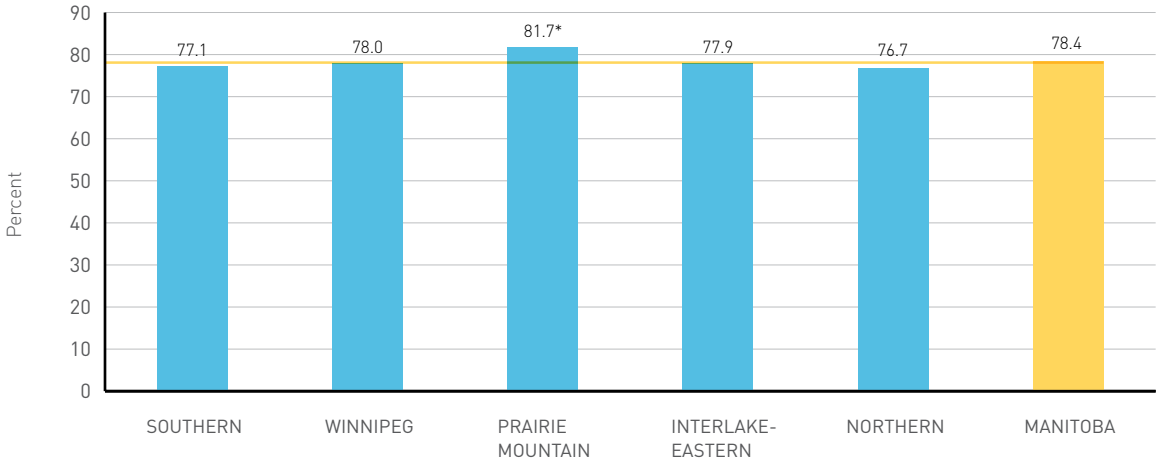


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*
s = numbers suppressed where < 6

End-of-Life Care

Figure 2.61

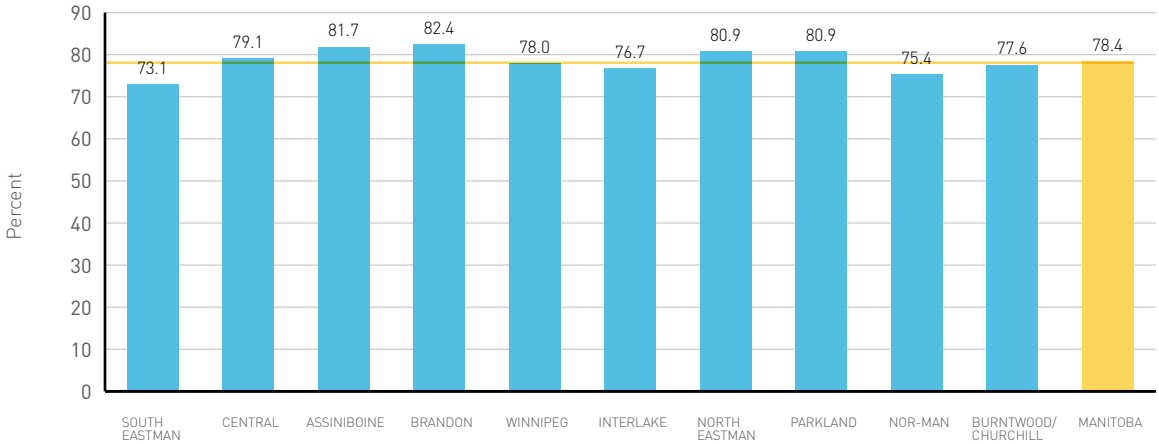
Percent of patients who die of cancer with an acute care hospital stay in the last two weeks of life, by current Regional Health Authority



Source: *Manitoba Cancer Registry, cancer deaths 2008–2010; combined with hospital data from Manitoba Health.*
** Statistically different from Manitoba rate (p<0.05).*

Figure 2.62

Percent of patients who die of cancer with an acute care hospital stay in the last two weeks of life, by former Regional Health Authority



Source: *Manitoba Cancer Registry, cancer deaths 2008–2010; combined with hospital data from Manitoba Health.*
** Statistically different from Manitoba rate (p<0.05).*

What does this tell us?

Overall, a high percentage of patients dying of cancer are spending their final days in a hospital setting.

- Figure 2.61 shows little variation in the percentage of patients that have a hospital stay at end-of-life, with Prairie Mountain RHA having the highest rate in the province.
- Figure 2.62 shows the highest percent of patients dying of cancer with an acute care hospital stay at end-of-life is in the former Brandon RHA at 82.4% and the lowest percentage is in the former South Eastman RHA at 73.1%.

What else do we know?

- Research suggests many people approaching end-of-life want to die at home, but only a minority do so.[31-36]
- Factors associated with dying at home include patient preference, family support and caregiver resources, and a health care system that supports home-based and community palliative services.[31-33, 37-40]
- Data from the Winnipeg Regional Health Authority Palliative Care Program and CCMB show 77% of cancer patients who die in Winnipeg hospitals are in designated palliative care units.

Why is this important?

Providing options for end-of-life care gives patients and families more choice.

- Palliative care programs try to facilitate home deaths by way of extending care in the home as long as possible. This can help avoid crisis emergency department visits or patients being transferred to acute care facilities during their final days and often, should the patient and family so desire, enables the patient to die at home.

How do we compare?

Canadian benchmarks for this measure are not available yet.

- The Canadian Partnership Against Cancer has provided data on cancer patients' place of death using Vital Statistics data, but these data include any hospital death (palliative *or* acute care unit). Because of the inability to separate palliative care units in these statistics, Manitoba's rates appear very high (88.8%) compared to other jurisdictions (eg, less than 70% "in hospital" for Nova Scotia, Ontario, Saskatchewan, Alberta, Prince Edward Island and British Columbia) where palliative care units are more appropriately coded as "other" types of hospitals.[19]

What is CancerCare Manitoba doing to improve access to end-of-life care?

With our partners, CancerCare Manitoba aims to provide support to patients who are dying of cancer and their families.

- The WHRA Palliative Care Program is a community-based program that provides care at home, in palliative care units or hospices, and supports palliative care in other health care facilities. The program is based on the belief that quality end-of-life care can be provided in a variety of settings.
  - Additionally, a joint working group has been established between CCMB and the WRHA Palliative Care Program to address the needs of cancer patients regarding palliative and end-of-life care.
- CancerCare Manitoba supports the internationally-recognized Manitoba Palliative Care Research Unit where more is being learned about how to help patients and their families with the end-of-life stage of the cancer journey.
- A clinical nurse specialist in palliative care has been hired by CCMB to assist staff working with patients who are transitioning to palliative care.
- The hospital stay indicator does not differentiate between palliative care units and acute care units. However, for Winnipeg it is known that the majority of patients who die of cancer are in palliative care units.
- A working group with key palliative care stakeholders has been established to focus on issues including transition, pathway development and teaching documents.
- A standard transition appointment and education booklet for palliative patients has been developed.
- A standard orientation session has been designed for CCMB nurses and physicians relating to palliative care, advance care planning and treating symptoms related to advanced cancer.
- CCMB hosts patient and family education sessions about living with advanced cancer.

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Outcomes

To streamline cancer services and dramatically reduce the wait time for patients between the time cancer is suspected and the start of effective treatment, CancerCare Manitoba, the province of Manitoba and our partners have embarked on a five-year, $40 million first-in-Canada cancer strategy to address the entire journey.

Announced in June 2011, the goal of In Sixty, the Manitoba Cancer Patient Journey Initiative, is to ensure Manitoba patients have access to faster cancer testing, diagnosis and treatment by reducing the time for the entire patient journey to two months or less. Currently, CancerCare Manitoba estimates the full cancer patient journey takes three to nine months.

The strategy includes:

- streamlining health services for cancer patients and prioritizing areas for action
- guaranteeing an appointment with a specialist within two weeks or less for urgent referrals
- developing a rapid diagnostic network for cancer patients to better link and speed up diagnostic imaging and pathology
- introducing cancer patient journey advocates to monitor and help cancer patients and families through their entire journey, identify delays and issues, and work to resolve them to ensure timely diagnosis and treatment
- establishing the Manitoba Partnership Against Cancer, a coalition of health care leaders who will focus on and ensure all parts of the health-care system integrate their services and implement system-wide changes as rapidly and efficiently as possible to deliver patient-centred care.

Outcomes

INCIDENCE, MORTALITY, AND SURVIVAL	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
Cancer Incidence				
age-standardized incidence rates (per 100,000 people), all cancers[m]	466.1	471.2	→	434.2 – 523.3
age-standardized incidence rates (per 100,000 people), by cancer type:[m]				
lung	69.7	68.8	→	60.7 - 115.1
colorectal	65.2	68.3	→	64.2 - 84.5
breast (f)	121.3	122.6	→	92.1 - 127.9
prostate	123.5	116.4	→	101.7 - 126.5
Cancer Mortality				
age-standardized mortality rates (per 100,000 people), all cancers[n]	210.3	202.7	→	176.9 – 264.1
age-standardized mortality rates (per 100,000 people), by cancer type:[n]				
lung	50.5	51.1	→	44.6 - 70.5
colorectal	26.4	25.3	→	21.9 - 44.7
breast (f)	29.5	27.3	→	18.8 - 35.5
prostate	38.5	33.9	↓	27.1 - 49.1
Cancer Survival				
age-standardized five-year relative survival ratios, all cancers[o]	59.4%	59.3%	→	46.4%- 62.5%
age-standardized five-year relative survival ratios, by cancer type:[o]				
lung	20.1%	21.7%	→	17.3% - 22.8%
colorectal	61.2%	61.6%	→	35.3% - 70.1%
breast (f)	86.3%	84.9%	→	76.9% - 89.0%
prostate	90.8%	91.7%	→	74.7% - 94.8%

Source: [m] *Manitoba Cancer Registry, patients diagnosed 2005-2007 (past).2008-2010 (current).*

[n] *Manitoba Cancer Registry, cancer deaths 2005-2007 (past). 2008-2010 (current).*

[o] *Manitoba Cancer Registry, patients diagnosed 2003-2005 (past). 2006-2008 (current).*

Note: Trend arrow is based on + or - 10% of the past value. Colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red).

RHA refers to Regional Health Authority.

What does this tell us?

Cancer is a significant health issue for Manitobans.

- In Manitoba, the incidence, or number of new cancer diagnoses, has remained fairly stable over time.
- Cancer mortality or death rates have also been quite steady over time.
  - Looking at the four most common cancers:
    - the incidence rates of lung, colorectal and breast cancers have stayed about the same
    - only the mortality rate of prostate cancer has decreased significantly
- Cancer survival rates have remained fairly stable over time.
  - Five-year relative survival following a diagnosis of lung cancer is poor, and has stayed about the same.
  - Five-year relative survival following a diagnosis of colorectal cancer is fair, and has stayed about the same.
  - Five-year relative survival following a diagnosis of breast cancer is very good and has stayed about the same.
  - Five-year relative survival following a diagnosis of prostate cancer is very good, and has stayed about the same.

Why is this important?

Incidence, mortality and survival are often used to understand how well we are doing to reduce the burden of cancer in our population.

- Cancer incidence rates are not increasing over time, but they are not decreasing either. A similar trend can be seen in cancer mortality rates. The exception is prostate cancer where rates are generally decreasing.
  - The introduction of the prostate specific antigen (PSA) test in the early 1990s resulted in a statistical 'bump' in prostate cancer incidence rates. However, a similar effect did not occur for prostate cancer morality. The use of PSA testing is not recommended as a population-based screening method.
- Lung cancer contributes significantly to the burden of cancer in Manitoba, despite being highly preventable. It also has the poorest survival.
- Although frequently diagnosed, prostate and breast cancers have the highest five-year relative survival rates.

How do we compare?

Manitoba's cancer rates are similar to the national experience.

- Manitoba's rates of cancer incidence and mortality are generally similar to other provincial rates as well as the Canadian national rate. No single province reports the best or worst incidence or mortality rates for all types of cancer.[1,2]
- Survival patterns observed for Manitoba are consistent with other provinces except for lung cancer where survival is better in Manitoba.[1,2]
- In fact, international studies have shown Manitoba's lung cancer rates to be amongst the best in the world.[3]

What is CancerCare Manitoba doing to improve cancer outcomes?

With our partners, CancerCare Manitoba is working to decrease the impact of cancer by preventing the disease, detecting it sooner, and treating it more effectively.

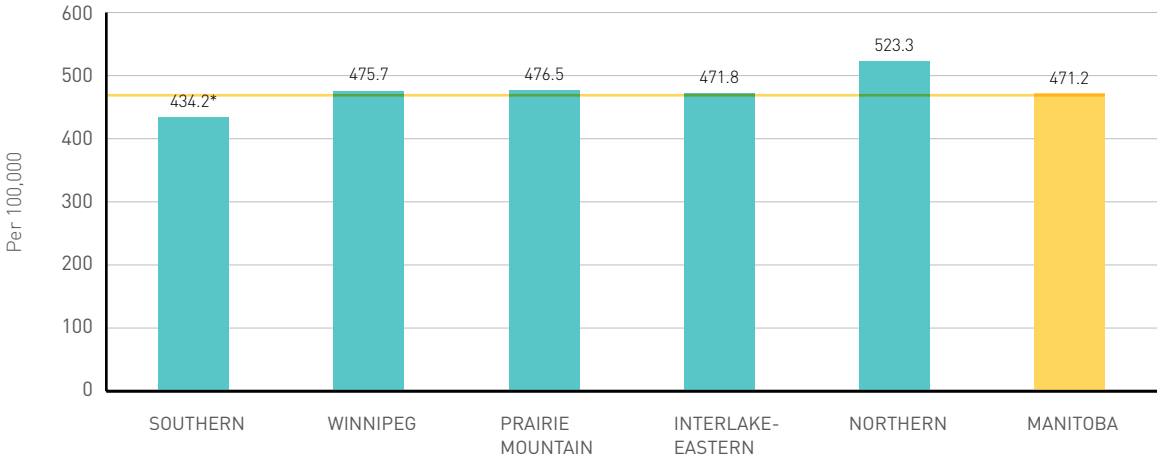
- These efforts are reflected throughout this report, and include activities across the spectrum of cancer control, from prevention through treatment.

Cancer Incidence: Rates

Figure 3.1

Cancer incidence, by current Regional Health Authority

Age-standardized incidence rates per 100,000 people

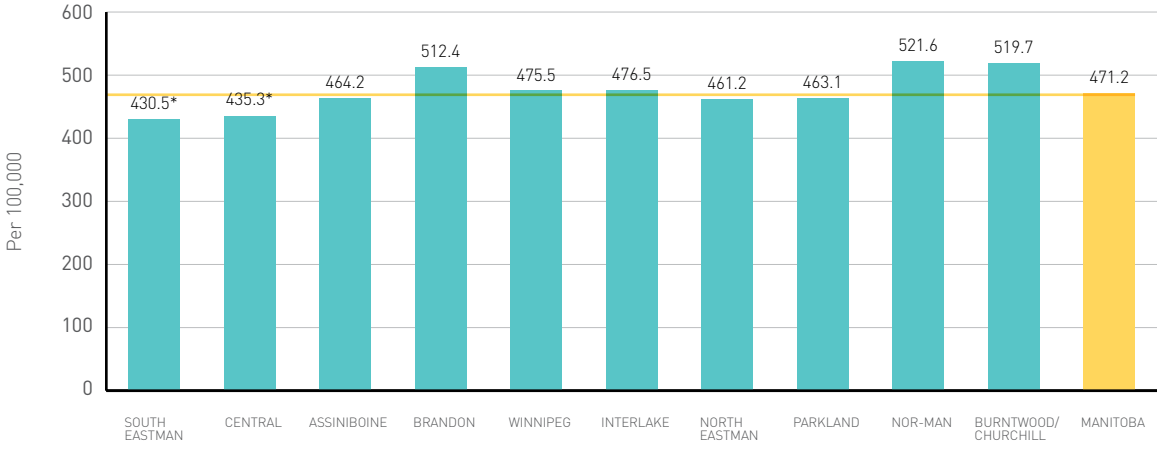


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.2

Cancer incidence, by former Regional Health Authority

Age-standardized incidence rates per 100,000 people



Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Cancer incidence varies by region.

- Figure 3.1 shows that the highest age-standardized cancer incidence rate is in the Northern RHA (523.3 per 100,000 people) while the lowest is in the Southern RHA (434.2 per 100,000).
- Figure 3.2 refines this view of provincial incidence rates and shows that the highest cancer incidence rate is in the former Nor-Man RHA (521.6 per 100,000 people) and lowest in the former South Eastman RHA (430.5 per 100,000).

What else do we know?

Cancer incidence for specific types of cancer also varies by region.

- Figures 3.3 to 3.10 (see following pages) show:
  - cancer incidence varies by type and region.
  - among the RHAs, lung cancer incidence rates are very similar to the provincial average except for the Northern RHA where the incidence rate is significantly higher (115.1 per 100,000 people). Using the former RHA groupings, incidence rates show a similar pattern with the highest rates in the Nor-Man and Burntwood/Churchill RHAs, but they are also significantly higher in the former Brandon RHA (Figure 3.4).
  - colorectal cancer incidence rates vary across the RHAs with the highest rates in the Northern RHA (84.5 per 100,000) (Figure 3.5). Figure 3.6 shows that of the former RHA regions, the highest observed colorectal cancer rates are in the former Nor-Man RHA (86.4 per 100,000 people).
  - breast cancer incidence rates among the RHAs are similar to the provincial average except in the Northern RHA where rates are somewhat lower (Figure 3.7). Looking at the former RHA groupings shows that Burntwood/Churchill RHA has the lowest rates (Figure 3.8).
  - prostate cancer incidence rates among the RHAs are similar to the provincial average except in the Northern RHA (101.7 per 100,000 men) where rates are more than 10% lower (Figure 3.9). Using the former RHA groupings, rates are significantly lower than the Manitoba average in the former RHA of Parkland (83.5 per 100,000 men), and the highest rates are observed in the former Interlake RHA (133.0 per 100,000 men).

Why is this important?

Reporting region-specific incidence can help focus efforts to prevent and reduce the burden of cancer in Manitoba.

- Ideally, cancer incidence should be reduced in all regions across the province.

What is CancerCare Manitoba doing to reduce incidence rates?

With our partners, CancerCare Manitoba is working to decrease the impact of cancer by preventing the disease.

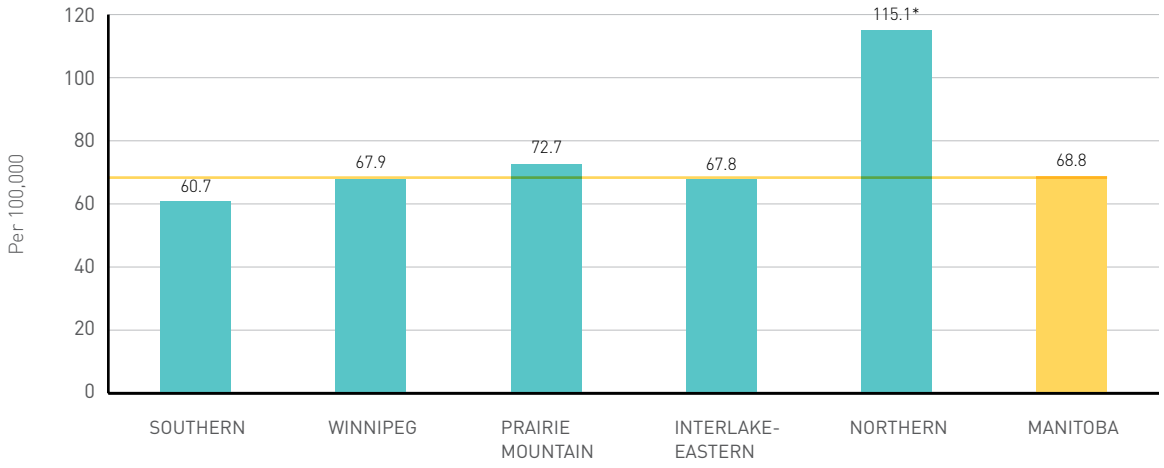
- With our chronic disease prevention partners such as the CancerCare Manitoba Foundation, Partners in Planning for Healthy Living and the Alliance for the Prevention of Chronic Disease, CCMB promotes healthy living behaviours for all Manitobans through campaigns that encourage sun/UV safety, tobacco reduction, healthy eating and physical activity.
- In some cases, pre-cancerous conditions can be detected and treated early so that they never become cancer. Two of CCMB's screening programs, CervixCheck and ColonCheck, contribute to the prevention of cervical and colorectal cancers because screening for these cancers often finds such pre-cancerous conditions.
- The three provincial screening programs are updating the joint screening and prevention video to reflect current risk reduction information. To ensure the video reaches Manitoba's diverse population, translation and dissemination strategies are being planned. "GetCheckedManitoba" promotes screening education for all Manitobans and, in partnership with CancerCare Manitoba Foundation, the screening programs will launch it as a broader campaign.
- CCMB's Virtual Prevention Unit provides a forum for a wide range of CCMB departments and staff to discuss efforts to facilitate healthy lifestyles in Manitoba.
- CCMB introduced a new smoking cessation program for patients and families in 2012.
- CCMB has recently partnered with the Reh-Fit Centre to enhance the physical activity sessions in the Cancer Transitions program for cancer survivors.
- CancerCare Manitoba Foundation is promoting Cover Up as part of the Kick Cancer Risk Reduction campaign.
  - Since 2013, CancerCare Manitoba Foundation has supported an interactive sun/UV education program for the public.

Cancer Incidence: Lung

Figure 3.3

Lung cancer incidence, by current Regional Health Authority

Age-standardized rates per 100,000 people

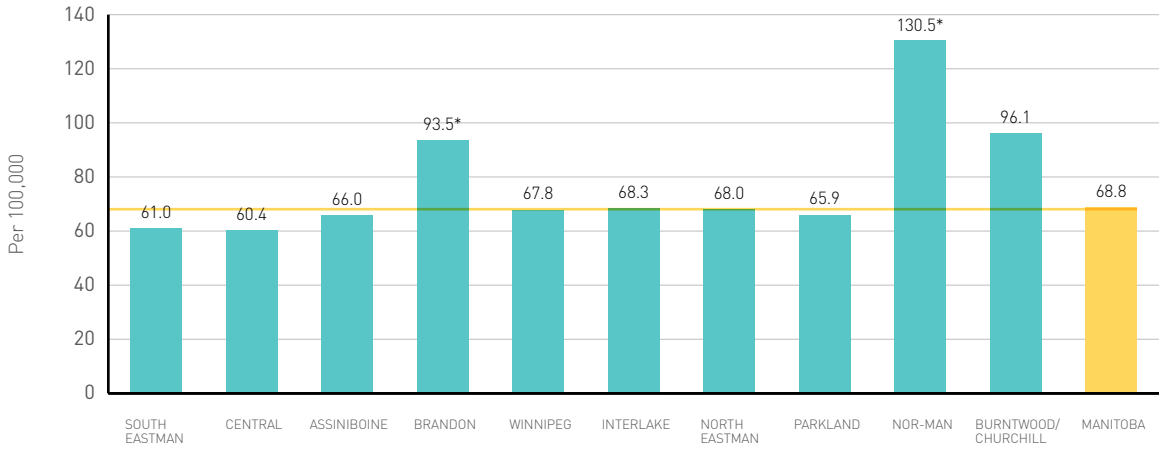


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.4

Lung cancer incidence, by former Regional Health Authority

Age-standardized rates per 100,000 people



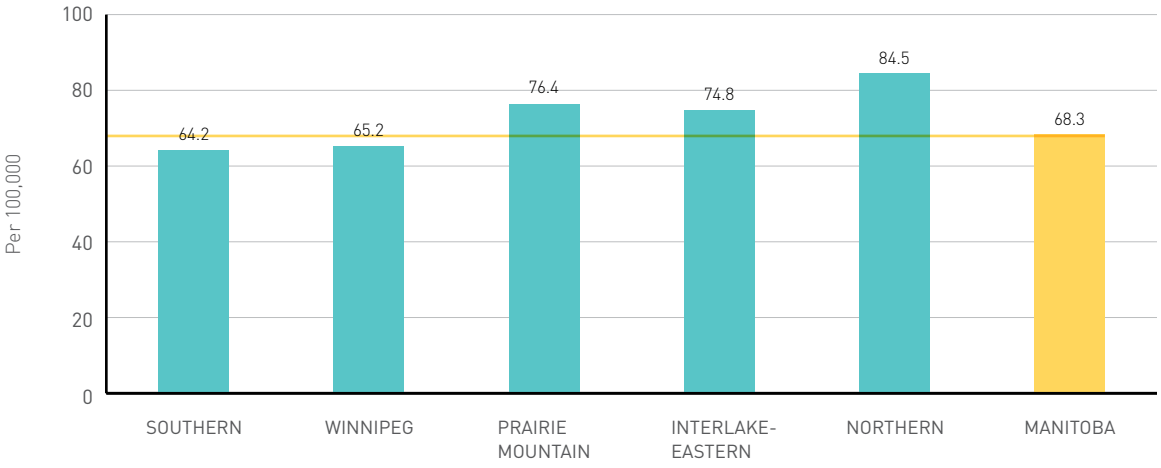
Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Cancer Incidence: Colorectal

Figure 3.5

Colorectal cancer incidence, by current Regional Health Authority

Age-standardized rates per 100,000 people

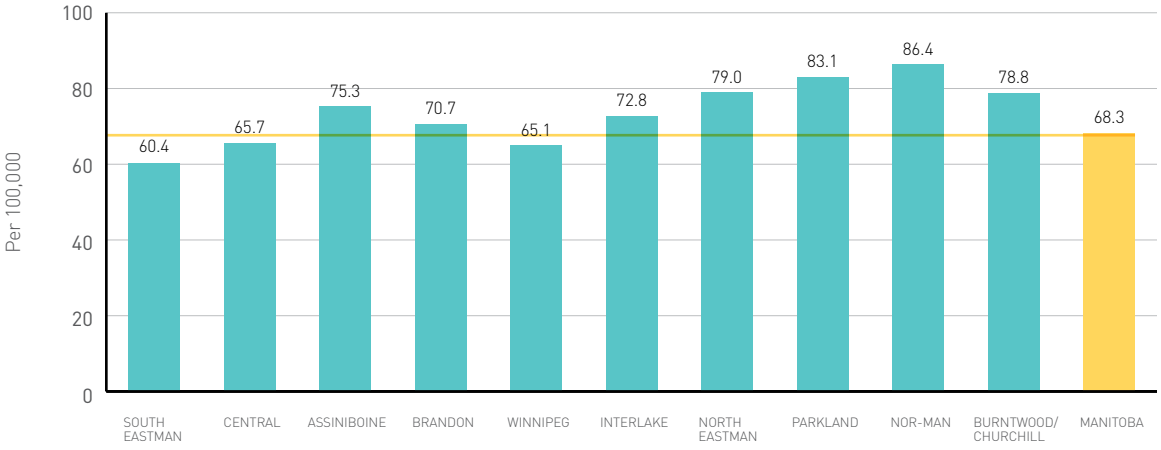


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.6

Colorectal cancer incidence, by former Regional Health Authority

Age-standardized rates per 100,000 people



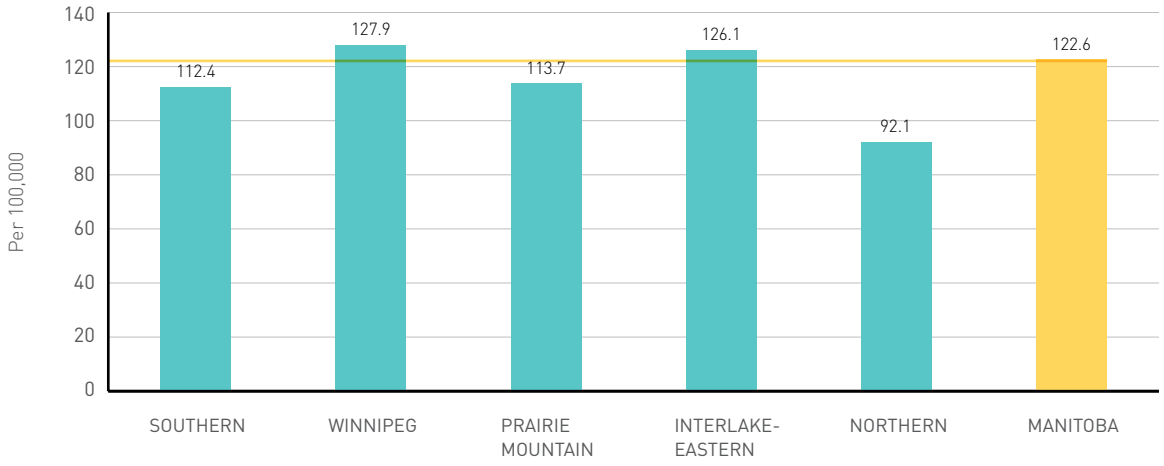
Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Cancer Incidence: Breast

Figure 3.7

Breast cancer incidence, by current Regional Health Authority

Age-standardized rates per 100,000 women

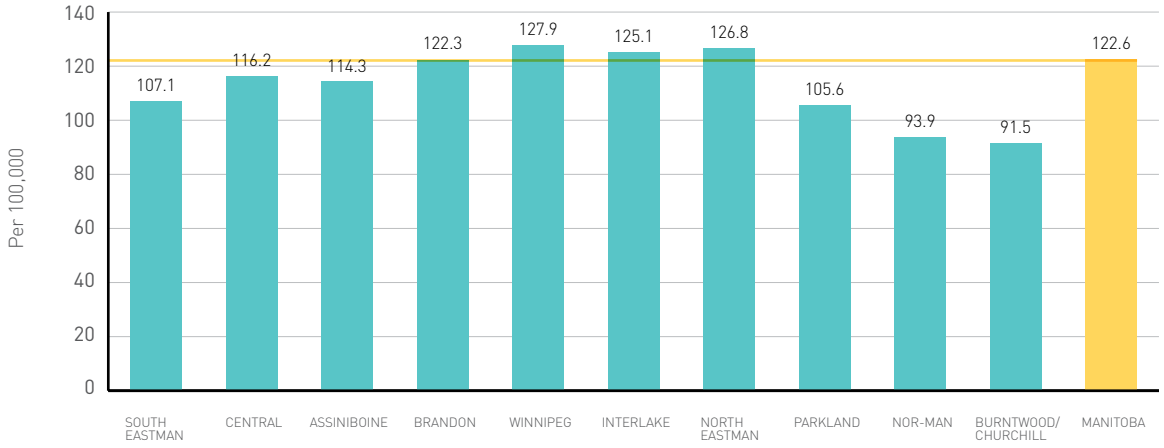


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.8

Breast cancer incidence, by former Regional Health Authority

Age-standardized rates per 100,000 women



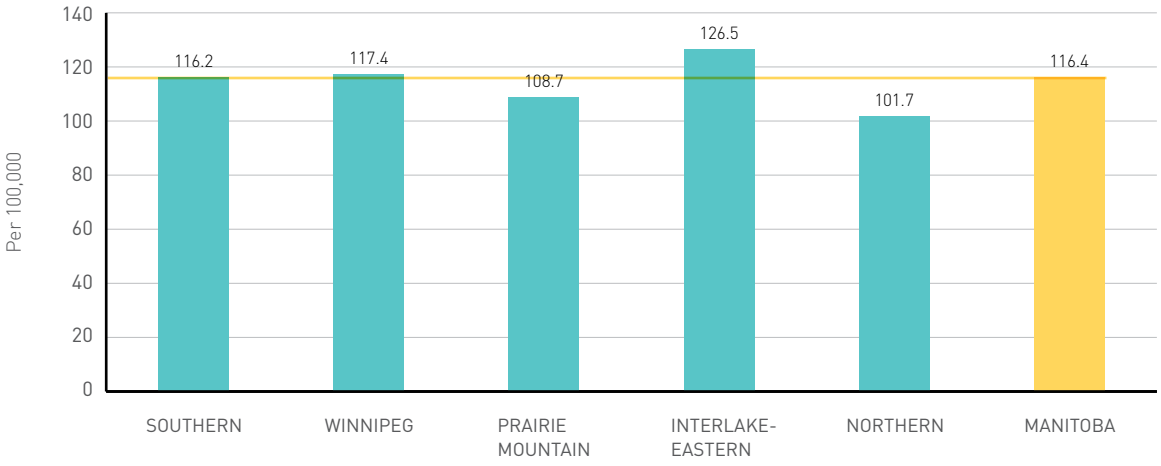
Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Cancer Incidence: Prostate

Figure 3.9

Prostate cancer incidence, by current Regional Health Authority

Age-standardized rates per 100,000 men

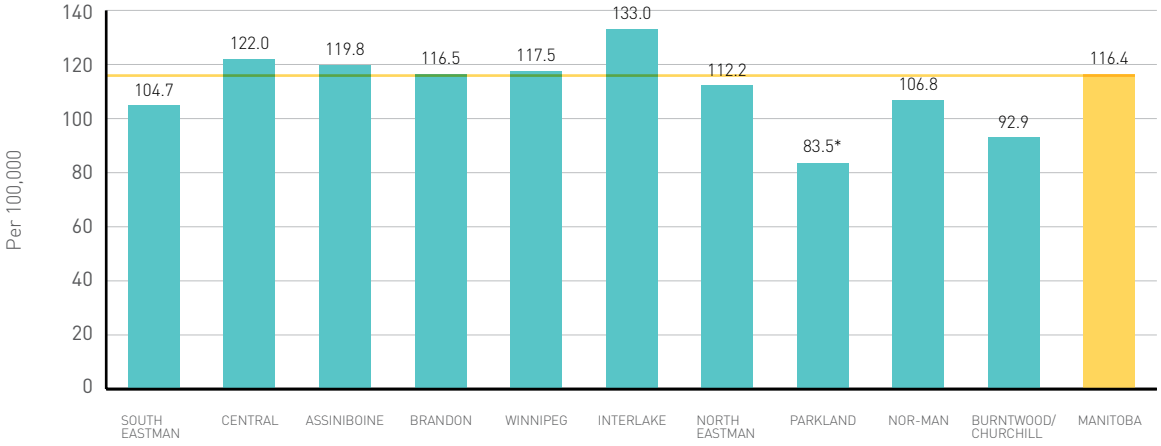


Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.10

Prostate cancer incidence, by former Regional Health Authority

Age-standardized rates per 100,000 men



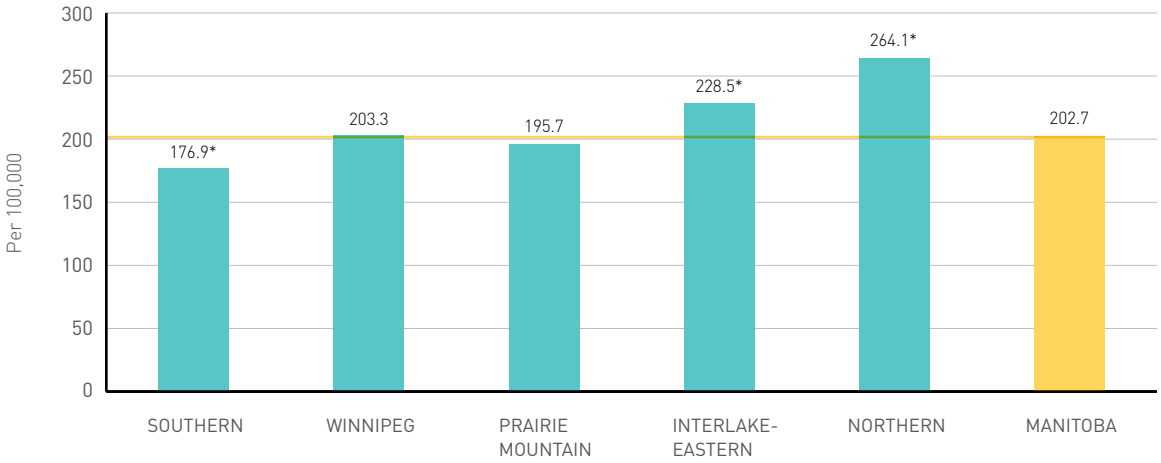
Source: Manitoba Cancer Registry, patients diagnosed 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Cancer Mortality: Rates

Figure 3.11

Total – All invasive cancer mortality, by current Regional Health Authority

Age-standardized rates per 100,000 people

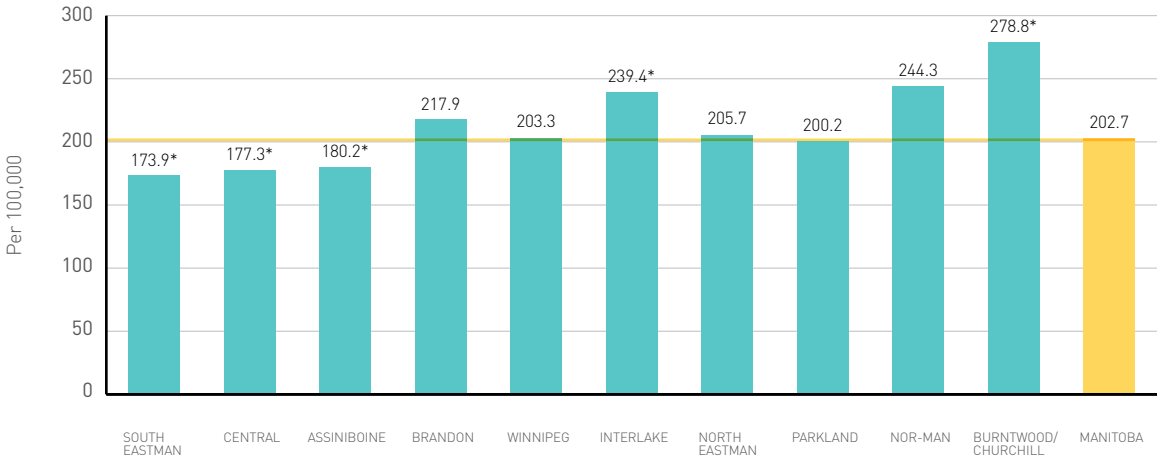


Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.12

Total – All invasive cancer mortality, by former Regional Health Authority

Age-standardized rates per 100,000 people



Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Cancer mortality varies by region.

- Figure 3.11 shows that cancer mortality rates are highest in the Northern RHA (264.1 per 100,000 people) and lowest in the Southern RHA (176.9 per 100,000 people).
- Figure 3.12 shows cancer mortality based on the former RHA groupings. Burntwood/Churchill RHA has the highest rates, while South Eastman RHA has the lowest.

What else do we know?

Cancer mortality varies by type of cancer, with rates declining only slightly over time for almost all types of cancers.

- Figures 3.13 to 3.20 show:
  - cancer mortality rates vary by region and type of cancer.
  - lung, colorectal and prostate cancer show similar trends in mortality by region with the lowest rates occurring in the Southern RHA and the highest rates occurring in the Northern RHA (Figures 3.13, 3.15 and 3.19).
  - breast cancer mortality does not share the same geographic pattern in mortality rates as the other RHAs with the Northern RHA having the lowest rate (18.8 per 100,000 women) and the Interlake-Eastern RHA having the highest (35.5 per 100,000 women).

Why is this important?

Mortality is an important indicator of success in reducing the impact of cancer overall.

- Reduced mortality rates combine successes in risk factor reduction, early detection and effective treatment.
- Cancer mortality is highest when the disease is found at a late stage, when treatment options are fewer and is less effective.

How do we compare?

Manitobans' cancer mortality rate is similar to the overall Canadian experience.

- ✓ Over the past few decades, cancer mortality has decreased for Manitobans.
- = Manitobans have a comparable mortality rate for the most common cancers (for example, lung, colorectal, breast, and prostate), compared to other Canadians diagnosed with these types of cancers.[1,2]

What is CancerCare Manitoba doing to decrease cancer mortality?

With our many partners, CancerCare Manitoba is working to prevent cancer whenever possible and to ensure access to early detection and treatment services.

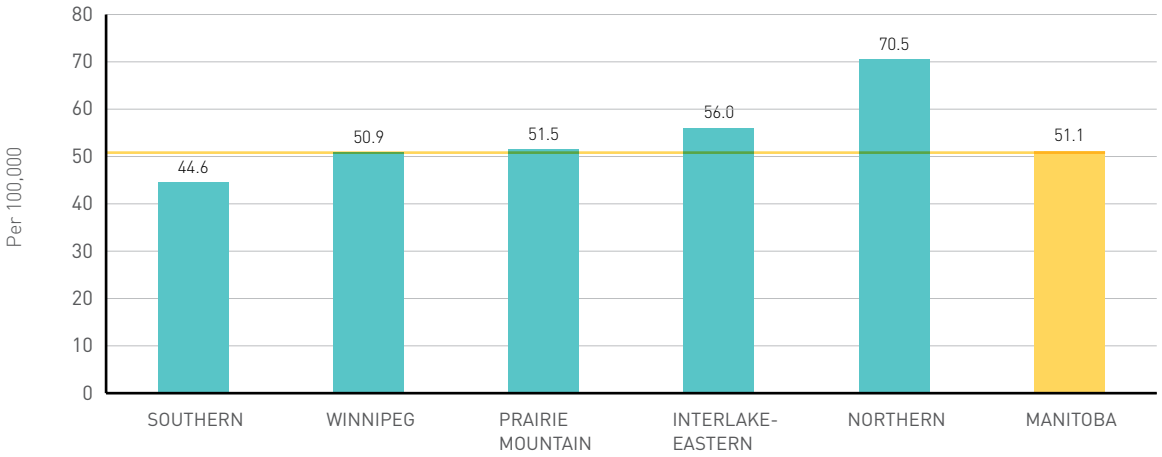
- Working with many partners, CCMB is encouraging Manitobans to live healthier lifestyles to reduce their risk of developing cancer.
- CancerCare Manitoba manages three screening programs for early detection of breast, cervical and colorectal cancers which aim to find cancers early, even before symptoms are found, in order to improve cancer outcomes.
- CancerCare Manitoba is working to ensure equitable access to quality, standard care by improving patient navigation as well as developing and implementing standard practice guidelines.

Cancer Mortality: Lung

Figure 3.13

Lung cancer mortality, by current Regional Health Authority

Age-standardized rates per 100,000 people

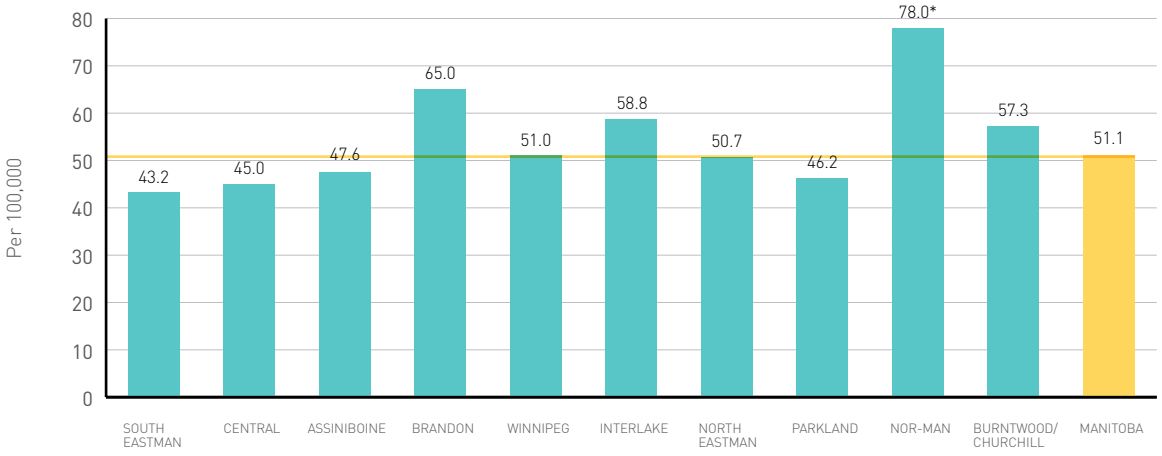


Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.14

Lung cancer mortality, by former Regional Health Authority

Age-standardized rates per 100,000 people



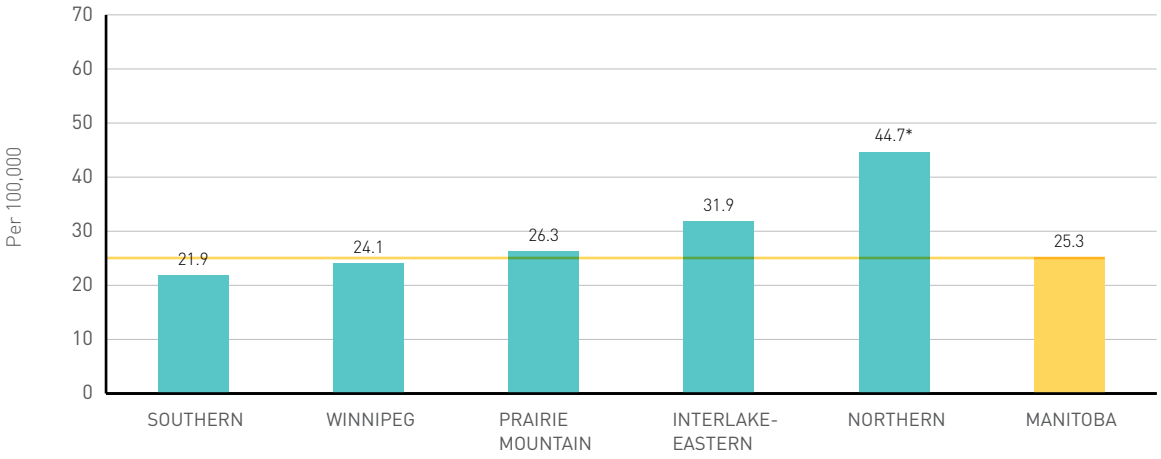
Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Cancer Mortality: Colorectal

Figure 3.15

Colorectal cancer mortality, by current Regional Health Authority

Age-standardized rates per 100,000 people



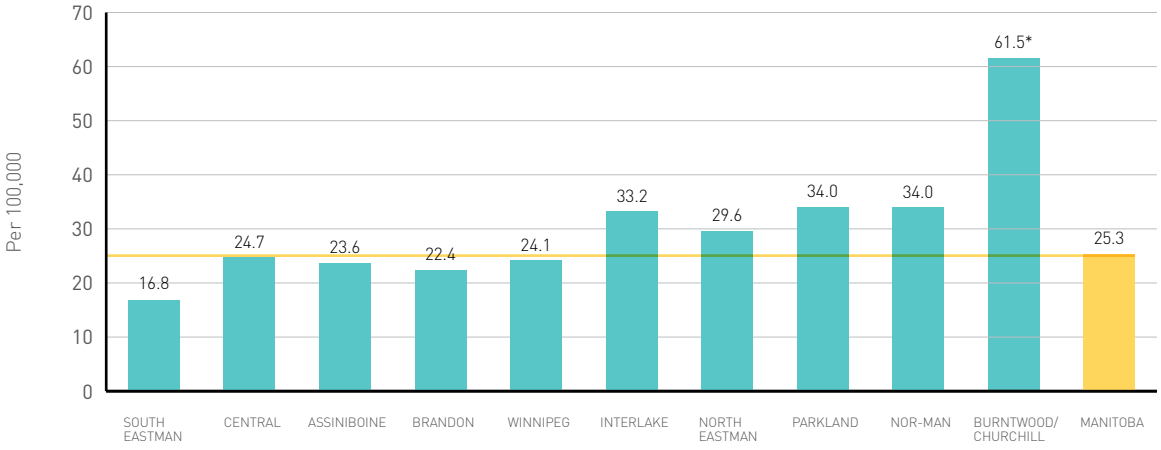
Source: Manitoba Cancer Registry, cancer deaths 2008-2010.

**Significantly different from Manitoba rate (p<0.05).*

Figure 3.16

Colorectal cancer mortality, by former Regional Health Authority

Age-standardized rates per 100,000 people



Source: Manitoba Cancer Registry, cancer deaths 2008-2010.

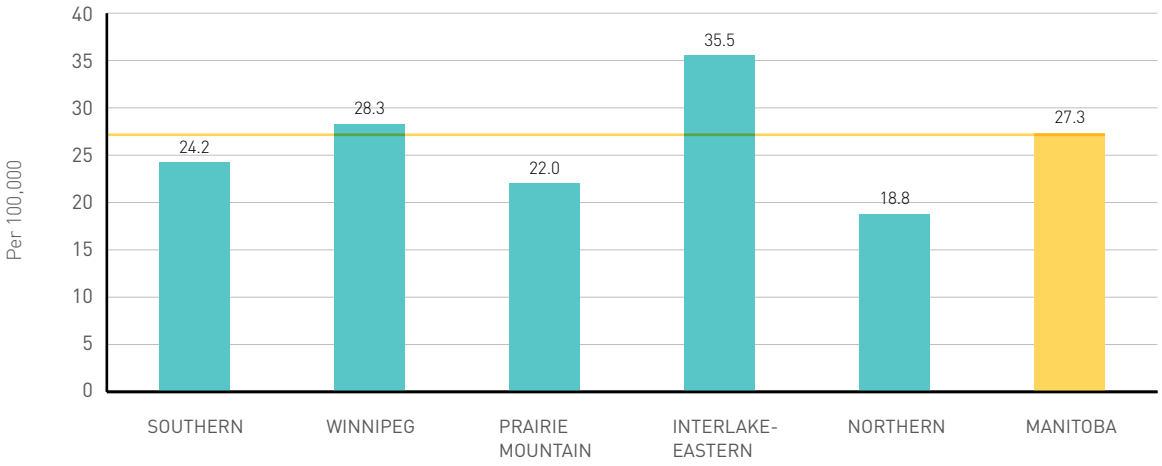
**Significantly different from Manitoba rate (p<0.05).*

Cancer Mortality: Breast

Figure 3.17

Breast cancer mortality, by current Regional Health Authority

Age-standardized rates per 100,000 women

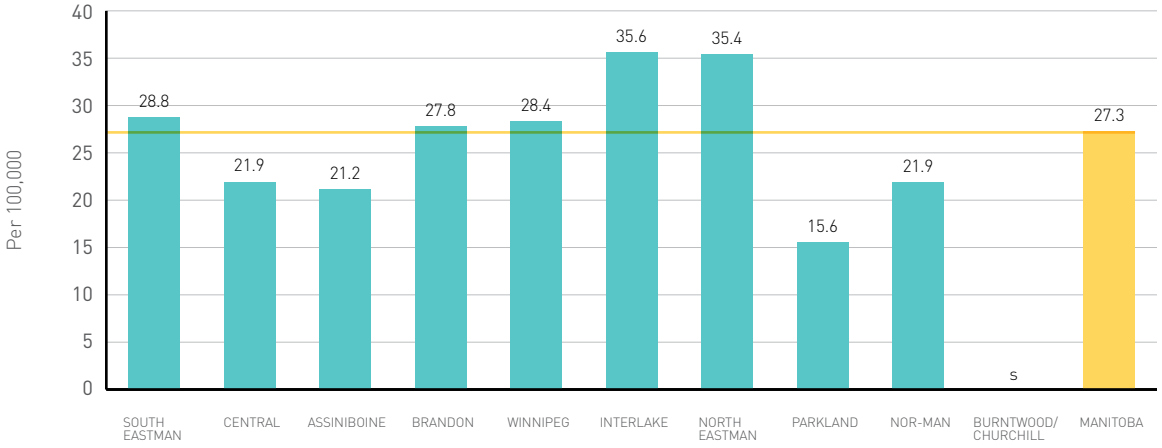


Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.18

Breast cancer mortality, by former Regional Health Authority

Age-standardized rates per 100,000 women



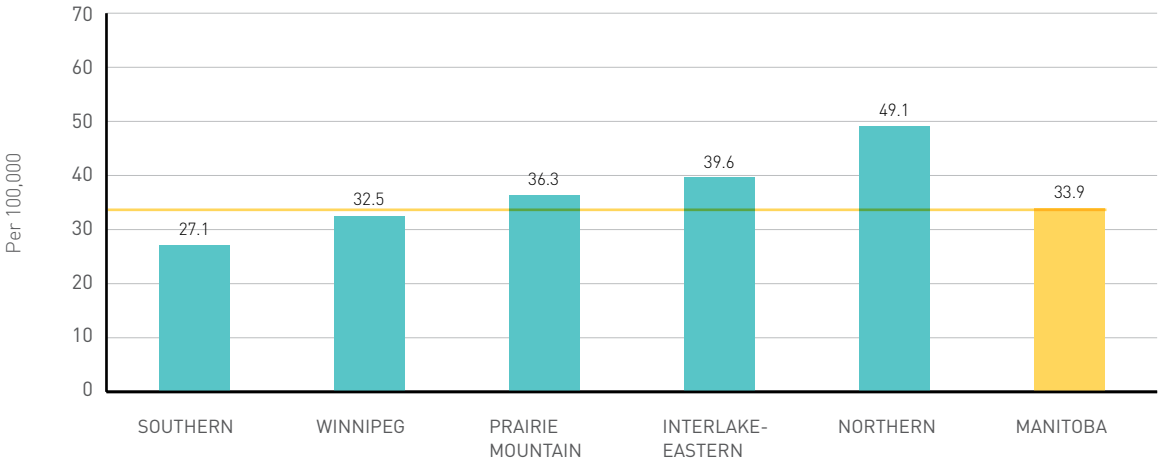
Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.

Cancer Mortality: Prostate

Figure 3.19

Prostate cancer mortality, by current Regional Health Authority

Age-standardized rates per 100,000 men

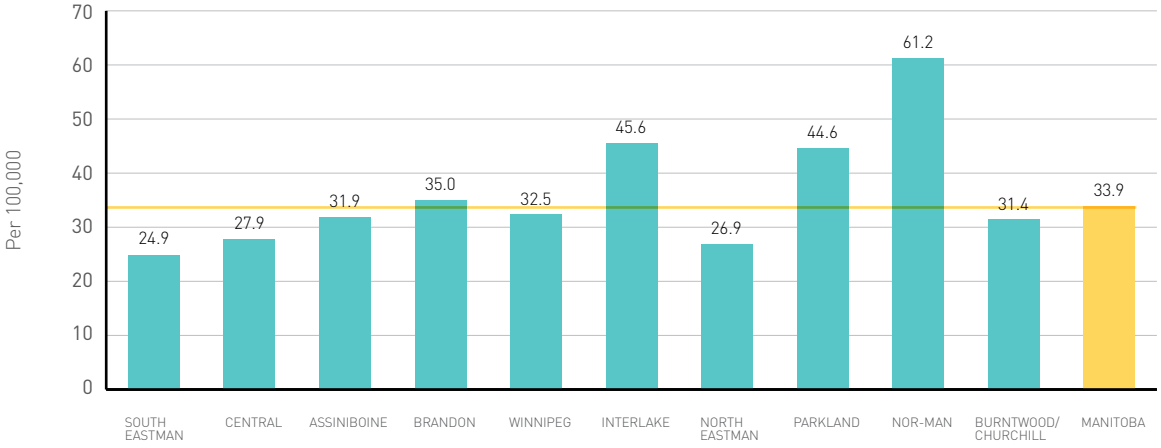


Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.20

Prostate cancer mortality, by former Regional Health Authority

Age-standardized rates per 100,000 men



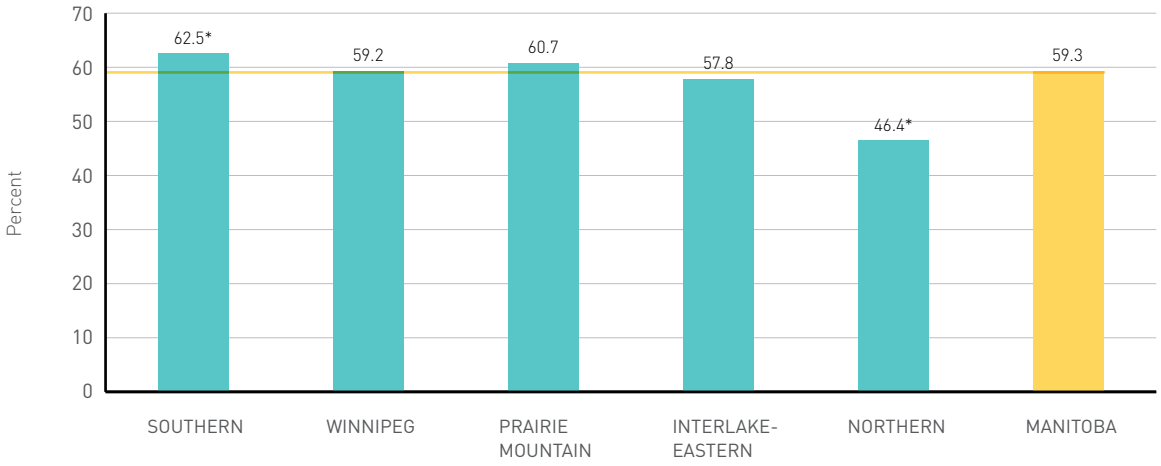
Source: Manitoba Cancer Registry, cancer deaths 2008-2010.
**Significantly different from Manitoba rate (p<0.05).*

Cancer Survival

Figure 3.21

Cancer survival, by current Regional Health Authority

Age-standardized five-year relative survival (%)

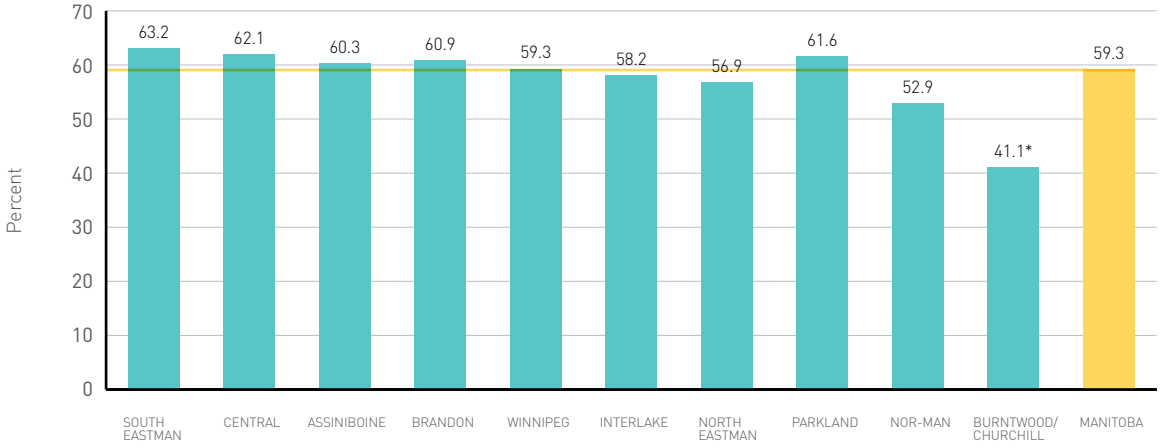


Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.22

Cancer survival, by former Regional Health Authority

Age-standardized five-year relative survival (%)



Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*

What does this tell us?

Survival after a cancer diagnosis is similar among most of the RHAs except in the North.

- Figure 3.21 shows that five-year survival is significantly lower in the Northern RHA.
- Figure 3.22 shows that when using the former RHA groupings, cancer patients in Burntwood/Churchill have markedly lower survival.

What else do we know?

Survival varies more by type of cancer than by region.

- Figures 3.23 to 3.30 show survival by region for different types of cancer.
- Survival varies, but not significantly by RHA, for lung cancer.
- Colorectal and prostate cancer show significant variation with lower survival in the Northern RHA.
- Breast cancer survival is fairly consistent by RHA, although it is significantly lower in the Interlake-Eastern RHA.
- Five-year survival is highest in patients diagnosed with prostate cancer, followed by those diagnosed with breast, colorectal and lung cancers.

Why is this important?

Survival is an important indicator of our success in finding and treating cancer early.

- Cancer survival is poorest when the disease is found at its latest stages. Finding cancer early, when treatment works best, is important.
- Better survival is often an indication of better access to screening and diagnostic testing as well as effective treatment.

How do we compare?

Manitobans' survival after a diagnosis of cancer is similar to the overall Canadian experience.

- ✓ Survival after a cancer diagnosis is gradually improving over time for Manitobans and for all Canadians.[4]
- = Manitobans who are diagnosed with particular cancers (for example, breast, and prostate) have similar outcomes to other Canadians diagnosed with these types of cancers.[1,2,4]
- ✓ Manitoba has the best lung cancer survival rates in Canada, and a recent international study also shows Manitoba has better lung cancer survival than other countries in the world.[1-4]

What is CancerCare Manitoba doing to improve cancer survival?

With our partners, CancerCare Manitoba is working to improve cancer survival by detecting the disease sooner and treating it more effectively.

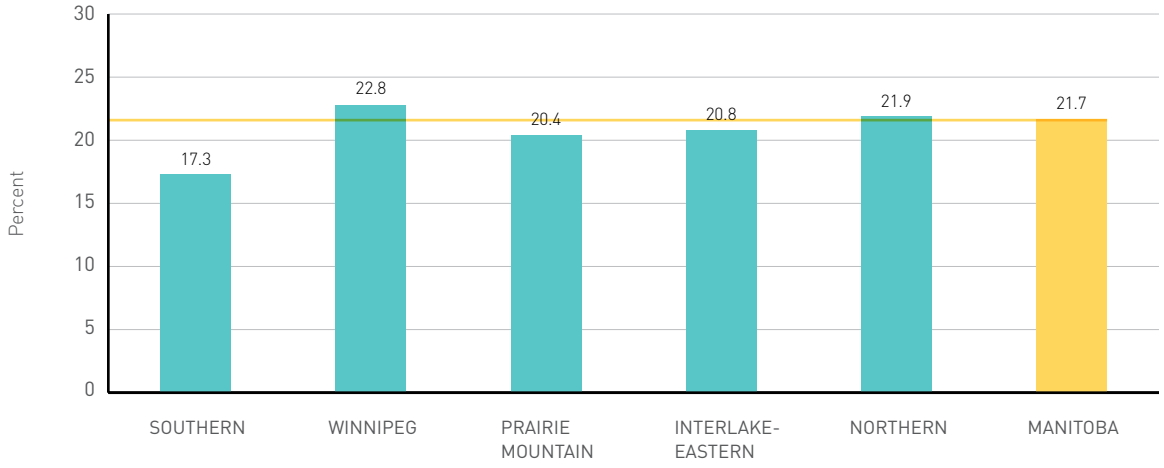
- CancerCare Manitoba's colorectal, cervical and breast screening programs contribute to improved cancer survival because regular screening can detect early signs of the disease, when it is the most treatable.
- CancerCare Manitoba is working to ensure equal access to quality, standard care by improving patient navigation and practice guidelines.
- CancerCare Manitoba is also providing services that support cancer survivors.
  - For example, the Moving Forward After Treatment Initiative is in the process of implementing "transitional appointments" for patients with colorectal, breast, gynecologic, lymphoproliferative or advanced cancers. During these end of treatment appointments, written follow-up care plans are shared with the patient and their community family physician. Follow-up care plans summarize the basics of the diagnosis and treatment, and provides information to support rehabilitation and follow-up testing. The initiative will expand to other patients with different cancers in the future.

Cancer Survival: Lung

Figure 3.23

Lung cancer survival, by current Regional Health Authority

Age-standardized five-year relative survival (%)

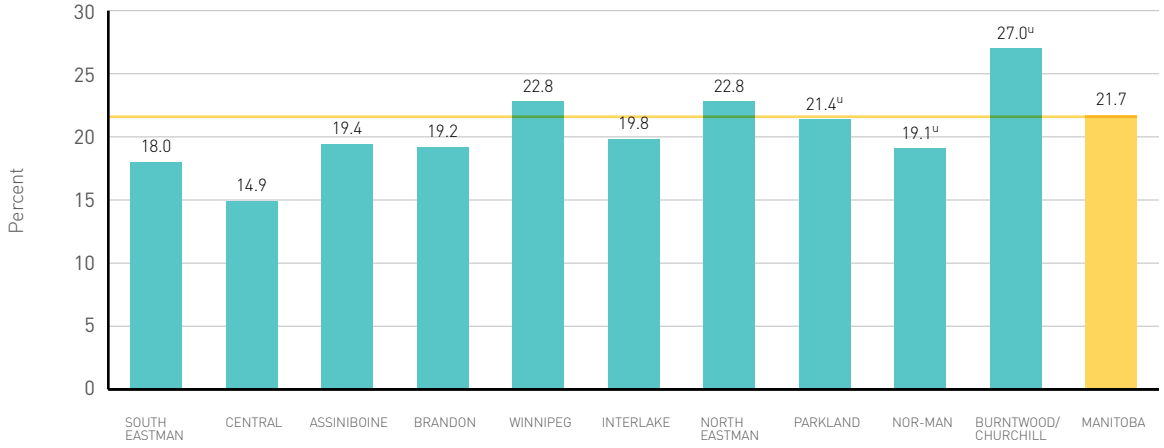


Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*

Figure 3.24

Lung cancer survival, by former Regional Health Authority

Age-standardized five-year relative survival (%)



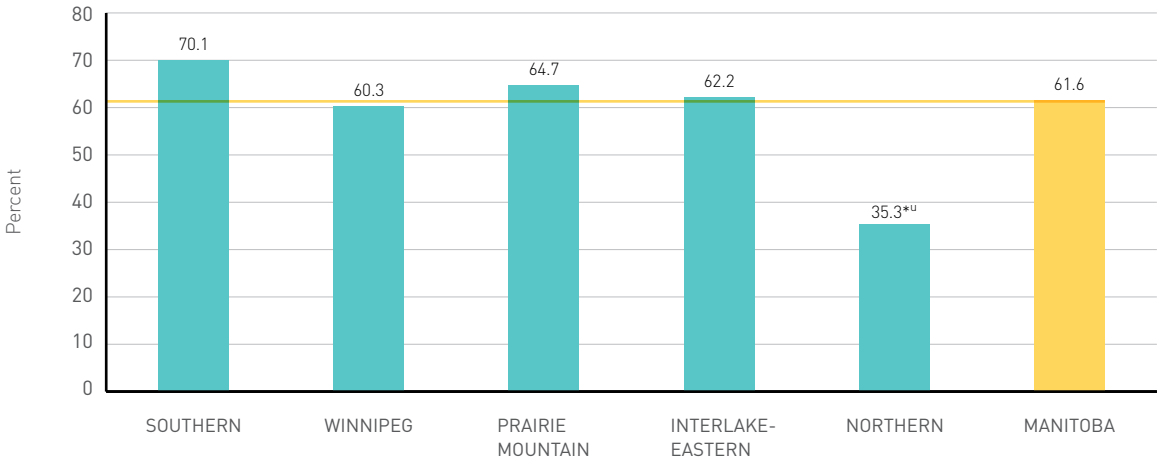
Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers.

Cancer Survival: Colorectal

Figure 3.25

Colorectal cancer survival, by current Regional Health Authority

Age-standardized five-year relative survival (%)

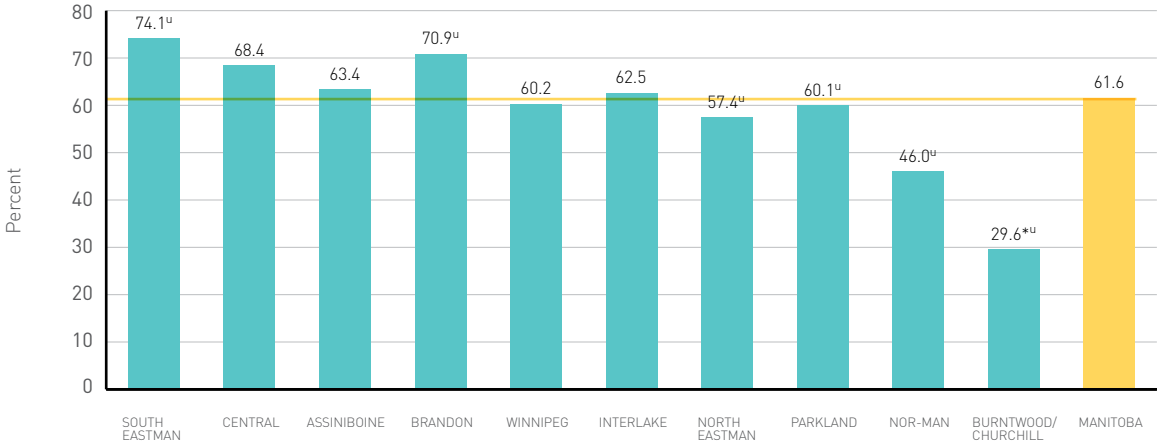


Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers.

Figure 3.26

Colorectal cancer survival, by former Regional Health Authority

Age-standardized five-year relative survival (%)



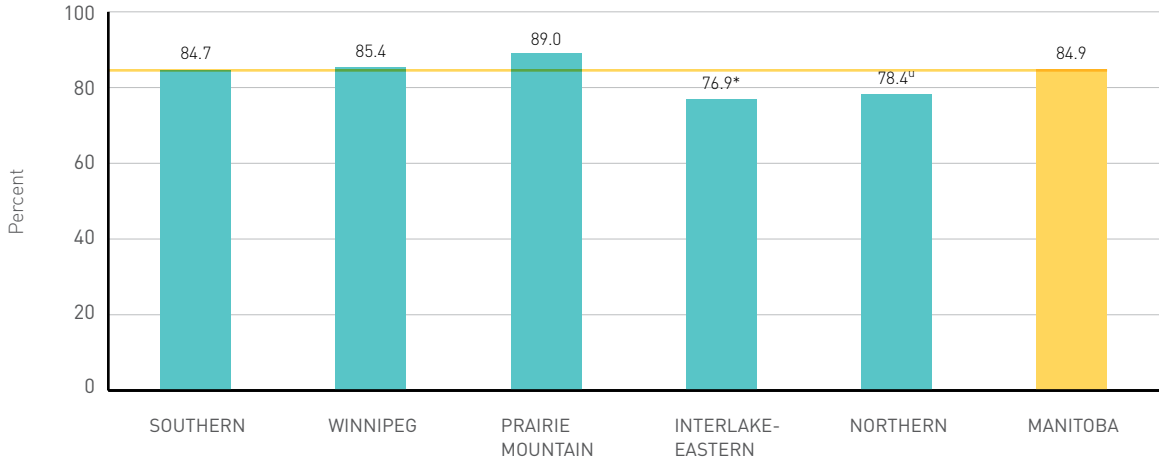
Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers.

Cancer Survival: Breast

Figure 3.27

Breast cancer survival, by current Regional Health Authority

Age-standardized five-year relative survival (%)

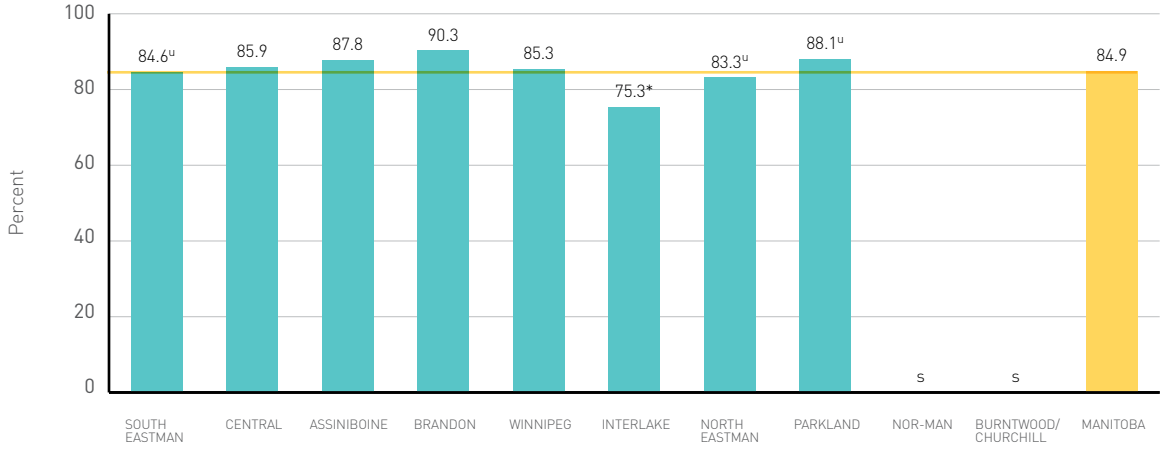


Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers.

Figure 3.28

Breast cancer survival, by former Regional Health Authority

Age-standardized five-year relative survival (%)



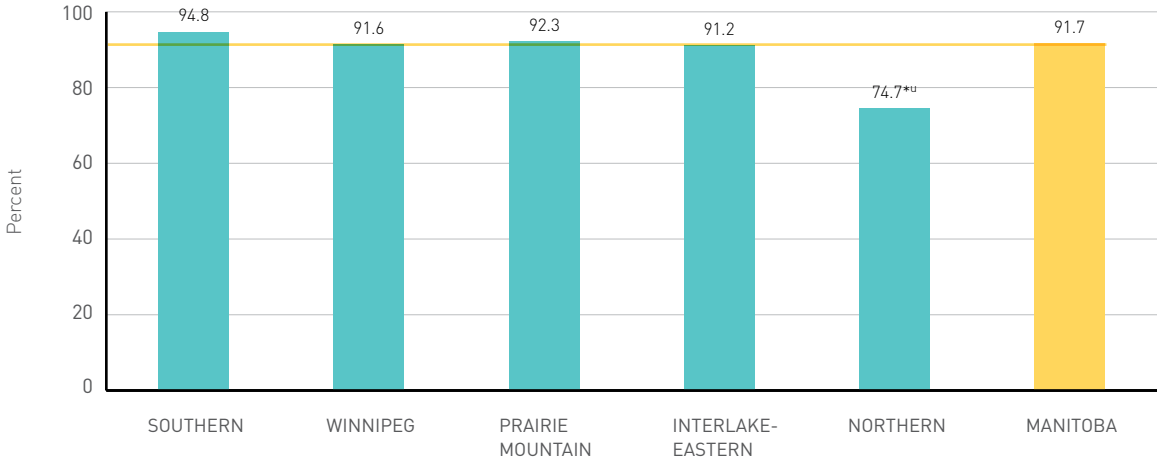
Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.
u = potentially unstable values due to low numbers.

Cancer Survival: Prostate

Figure 3.29

Prostate cancer survival, by current Regional Health Authority

Age-standardized five-year relative survival (%)

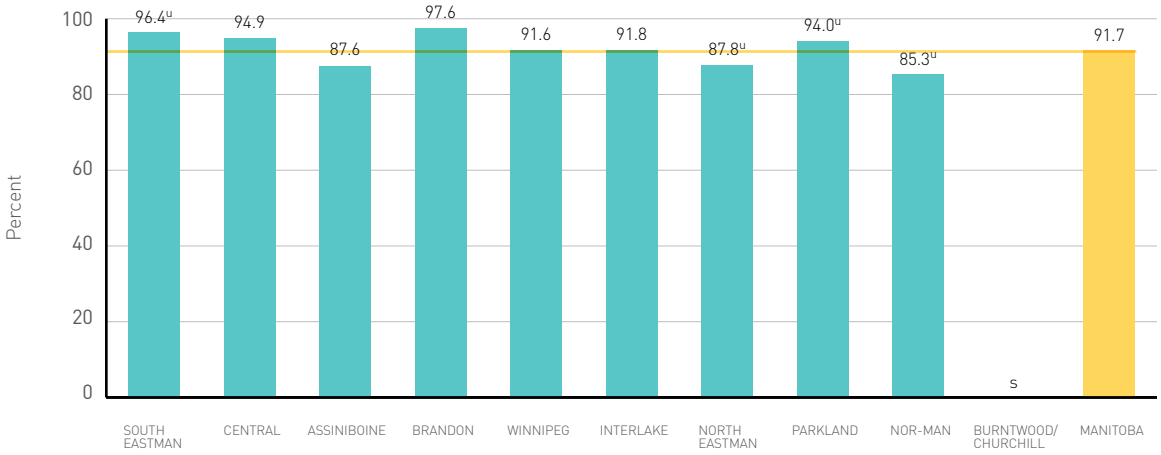


Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers.

Figure 3.30

Prostate cancer survival, by former Regional Health Authority

Age-standardized five-year relative survival (%)



Source: Manitoba Cancer Registry, patients diagnosed 2006-2008.
**Significantly different from Manitoba rate (p<0.05).*
s = number suppressed where <6.
u = potentially unstable values due to low numbers.

Outcomes

THE PATIENT EXPERIENCE	Past Estimate	Current Estimate	Time Trend	Range of Current Estimates *(Lowest RHA – Highest RHA)*
Patient Satisfaction overall average satisfaction score for outpatient care based on patient satisfaction survey (% positive responses)[p]	95.4%	96.6%	→	95.6%-100.0%
average satisfaction score for emotional support based on patient satisfaction survey (% positive responses)[p]	46.9%	46.4%	→	39.7%-50.2%
Pain Management for those experiencing pain, percent of patients who felt staff did everything they could to control pain or discomfort based on patient satisfaction survey (% positive responses)[p]	69.7%	69.0%	→	58.3%-73.4%

Source: [p] *NRC Picker, Ambulatory Oncology Survey, June 1, 2007 – March 31, 2008 (past), June 1, 2011 – October 31, 2011 (current).*

Note: Trend arrow is based on + or - 10% of the past value. Colour indicates if the trend is good (green), neutral (yellow) or needs to improve (red).

RHA refers to Regional Health Authority.

What does this tell us?

Overall patient satisfaction is high, but more can be done to improve the areas of emotional support and pain management.

- Overall patient satisfaction scores have remained high over the past four years.
- Emotional support scores are lower than overall satisfaction scores.
- Patients experiencing pain are not always confident that staff are doing everything they can to control pain or discomfort.

Why is this important?

Patient feedback helps CancerCare Manitoba to provide better care.

- These survey results show that overall care is excellent, but more could be done in certain areas, such as emotional support and pain management.

How do we compare?

- On many areas measured, Manitoba is similar to national rates.[2,5]

What is CancerCare Manitoba doing to improve the patient experience?

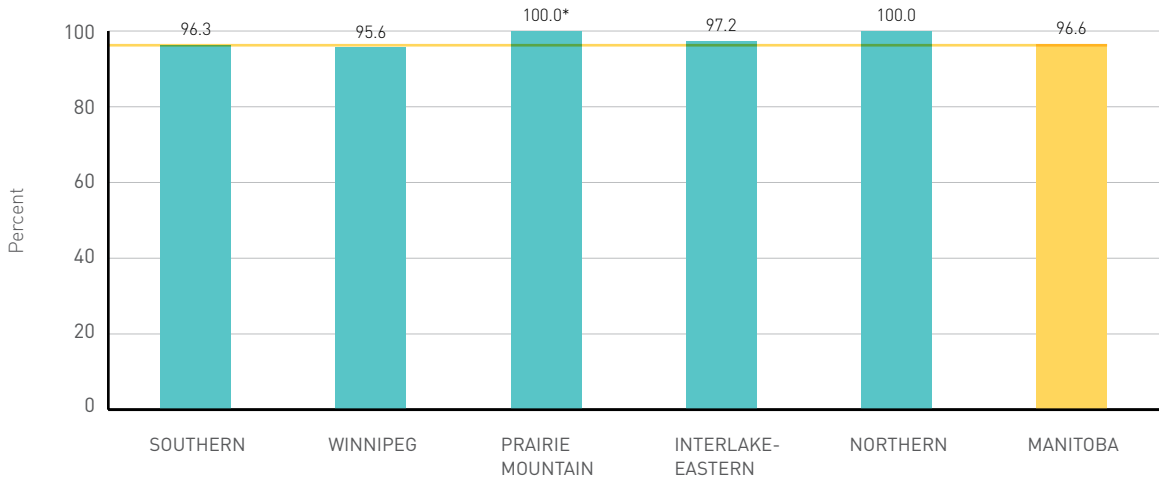
With our partners, CancerCare Manitoba is dedicated to providing exceptional care to our patients and their families.

- Examples of CCMB's commitment to a quality patient experience include:
  - Finding ways of reducing wait times and improving the cancer experience. In 2011, CCMB began working with its many partners to review the entire patient journey. Known as In Sixty, the Manitoba Cancer Patient Journey Initiative, the aim is to reduce the time of suspicion of cancer to first treatment 60 days or less by 2016.
  - As part of In Sixty, the Community Oncology Program has introduced nurse navigators and psychosocial oncology expertise throughout the Regional and Community Cancer Programs across the province to assist patients and their families in navigating the complexities of the health care system as it relating to their cancer treatment.
  - In Sixty has committed to having the patient voice, patient advice and leadership, be a partner to planning and decision making.
  - The expansion of the services provided at the Community Cancer Programs to Regional and Community Cancer Program Hubs, is supported at every RHA with patient membership and contribution at the planning and implementation level.
- CancerCare Manitoba continually seeks feedback from patients through a variety of patient satisfaction evaluation, like the NRC Picker Ambulatory Oncology Survey. On the basis of this information, CCMB strategically responds to the gaps in patient satisfaction. We listen!
- The Community Oncology Program hosts the Uniting Primary Care and Oncology Network (UPCON) supports family physicians and primary health care providers in communicating more easily with cancer care specialists, and ensures that people with cancer in our partner clinics experience better coordination of their care between their different care providers.
- The Community Oncology Program has established a standardized approach to transitioning selective patients to the care of primary care. Presently, all patients having achieved a clear response to curative therapy for colorectal cancer, can be transitioned to primary care through Moving Forward after Colorectal Cancer. This allows our cancer programs to successfully discharge patients, allowing access to new patients.
- Patient and Family Support Services supports a multidisciplinary team of skilled professionals with many years of experience to help and support patients and their families. This includes increasing patients' knowledge about cancer and its treatment and providing support for emotional and practical issues.
- Updated information for patients was released in June 2013; *Patient Guide: Your First Appointment* provides cancer education, site specific details and contact information for new patients. It is also available in French.
- The Quality, Patient Safety and Risk Program supports programs and clinicians in their efforts to deliver safe, effective care by maintaining a culture that strives for open communication about concerns.
- Interpersonal communication workshops are held regularly for front line clerks and receptionists.
- Research shows there are proven benefits to providing patients with a recording of the conversation they have had with their health care team, including anxiety reduction, enhancing retention of information, better informed decision-making and improved communication with the oncologist and family members. CancerCare Manitoba has piloted a program to offer patients the opportunity to record their initial consultation with their oncologist which gives patients the ability to review their health information in the comfort of their own home and share it with family members.

Patient Satisfaction

Figure 3.31

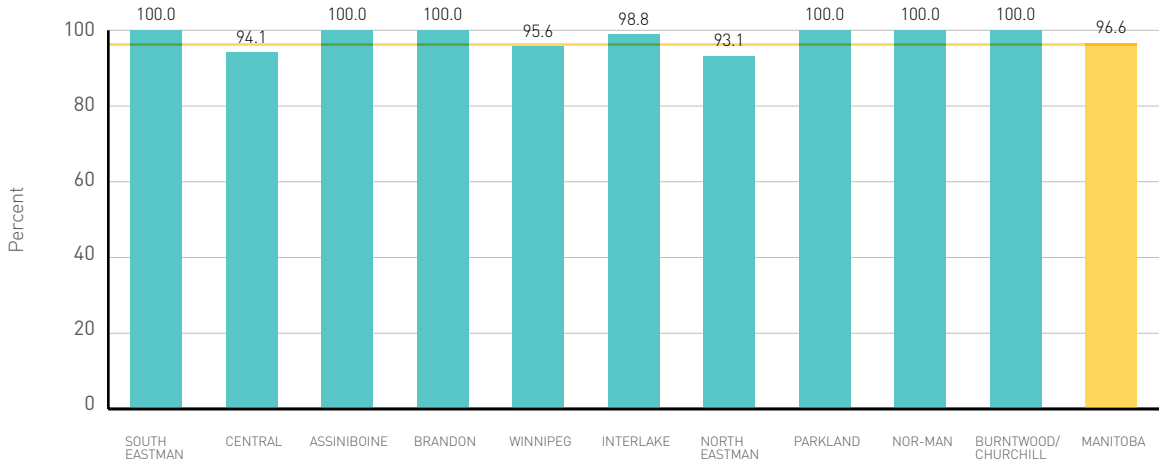
Percent of patients satisfied with care overall, by current Regional Health Authority



Source: NRC Picker, Ambulatory Oncology Survey, June 1, 2011 – October 31, 2011.
**Significantly different from Manitoba rate (p<0.05)*

Figure 3.32

Percent of patients satisfied with care overall, by former Regional Health Authority



Source: NRC Picker, Ambulatory Oncology Survey, June 1, 2011 – October 31, 2011.
**Significantly different from Manitoba rate (p<0.05)*

What does this tell us?

Overall, patient satisfaction for outpatient cancer care is high.

- Figure 3.31 shows the average satisfaction score for outpatient care is high throughout the different RHAs.
- Figure 3.32 shows a similar trend using the former RHA groupings: overall, patient satisfaction is high across Manitoba.

Why is this important?

Patient satisfaction is a key measure of quality in cancer care.

- Quality and supportive communication between cancer patients and care providers is linked to better feeling of well-being, reducing stress and lowering blood pressure.[6]
- Good patient and health provider communication also enhances treatment compliance and therefore, outcomes.[6]

How do we compare?

Manitoba's patient satisfaction scores for outpatient cancer care are similar slightly lower than the national average.

- The national satisfaction rate is 97.2%, very similar to Manitoba's average.[5]

What is CancerCare Manitoba doing to increase patient satisfaction?

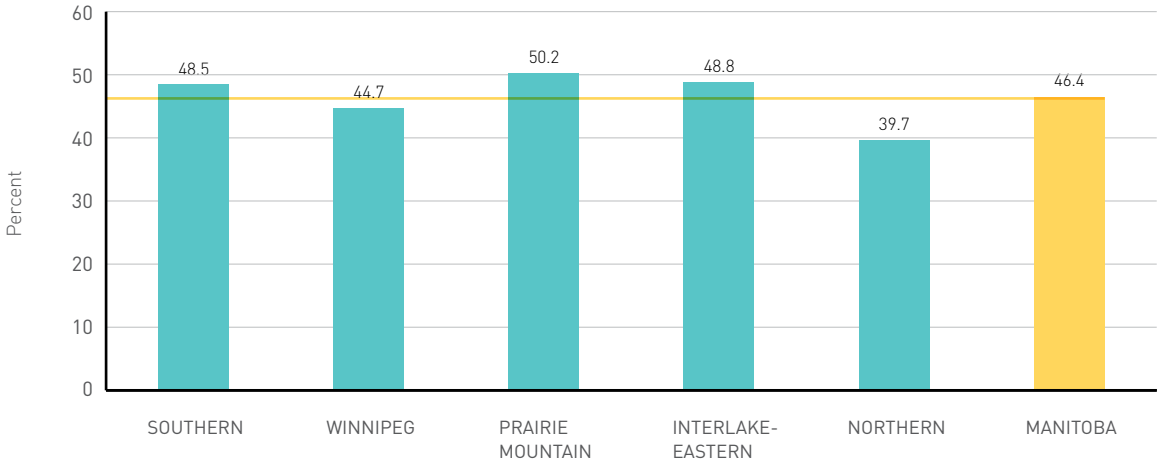
With our partners, CancerCare Manitoba is working to continually improve the care patients receive across the continuum of cancer care.

- To achieve this, we need ongoing feedback from patients.
- CancerCare Manitoba seeks feedback through surveys and focus groups.
- Patients waiting for appointments are periodically surveyed to obtain real time feedback about services and track referrals. Wireless technology also tracks patient flow within CCMB.
- In Sixty, the Manitoba Cancer Patient Journey Initiative, was announced in 2011. It is focused on the time from suspicion of cancer to first appointment with a goal of ensuring timely access to cancer care and treatment and improving the patient experience.
  - As part of In Sixty, the Community Oncology Program has introduced nurse navigators and psychosocial oncology expertise throughout the Regional and Community Cancer Programs across the province to assist patients and their families in navigating the complexities of the health care system as it relating to their cancer treatment.
  - Navigation Services (Navigation, Psychosocial Oncology and Community Engagement) together with family physicians in oncology, primary care, Diagnostic Services Manitoba, and surgery continually collaborate, share information, and work with the patients to expedite their diagnostic journey through the clinical pathway resulting in quality and consistent care.
  - The Community Oncology Program has established a standardized approach to transitioning selective patients to the care of primary care. Presently, all patients having achieved a clear response to curative therapy for colorectal cancer, can be transitioned to primary care through *Moving Forward after Colorectal Cancer*. This allows our cancer programs to successfully discharge patients, allowing access to new patients.
- A centralized referral system has been implemented to improve a patient's first entry into CCMB ensuring all information is collected, collated and reviewed by a physician to ensure a smooth journey through cancer diagnosis and treatment.
  - The centralized referral office also provides a contact point for patients to obtain information on their referral's progress. A nurse or clerk will call with an appointment date and provide the patient with CCMB's *Patient Guide: Your First Appointment.*

Patient Satisfaction: Emotional Support

Figure 3.33

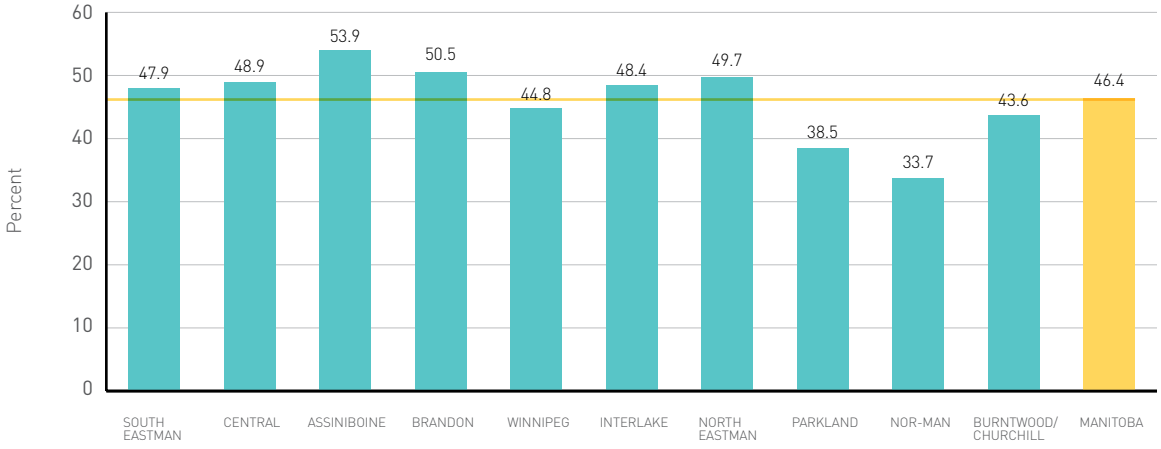
Percent of patients satisfied with emotional support, by current Regional Health Authority



Source: NRC Picker, Ambulatory Oncology Survey, June 1, 2011 – October 31, 2011.
**Significantly different from Manitoba rate (p<0.05)*

Figure 3.34

Percent of patients satisfied with emotional support, by former Regional Health Authority



Source: NRC Picker, Ambulatory Oncology Survey, June 1, 2011 – October 31, 2011.
**Significantly different from Manitoba rate (p<0.05)*

What does this tell us?

Patient satisfaction with emotional support is low.

- Figure 3.33 shows the average satisfaction score for emotional support is 50% or less across the province with the highest average satisfaction score for emotional support in the Prairie Mountain RHA and the lowest in the Northern RHA.
- Figure 3.34 shows the highest average satisfaction score for emotional support is in the former Assiniboine RHA and the lowest is in Nor-Man.

Why is this important?

Emotional well-being is linked to a number of health benefits.

- The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[7]
- Good patient support and education can significantly reduce patient anxiety and depression.[6,8]
- Improved patient and cancer care provider communication is related to better patient quality of life and overall patient satisfaction.[9]
- A diagnosis of cancer affects more than the physical body. There are emotional, social, spiritual, functional, cognitive, and practical issues that arise for both patients and families. Extensive research reveals that a significant number of people with cancer, no matter at what point in the cancer trajectory, experience distress in these domains.[10]

How do we compare?

Manitoba's patient satisfaction scores for emotional support are lower than the national average.

- The national satisfaction score for emotional support is 54.2%; significantly higher than the Manitoba average.[5]

What is CancerCare Manitoba doing to improve emotional support?

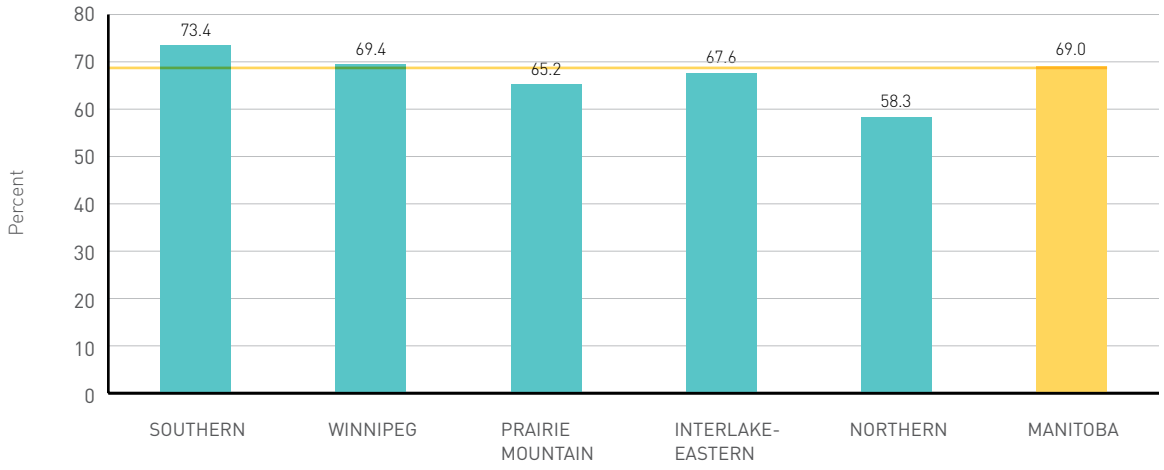
With our partners, CancerCare Manitoba provides psychosocial support and information for patients.

- Professional counselling services are available for individuals, couples and families. CancerCare Manitoba's social workers, spiritual health specialist, counsellors and psychiatrists have the necessary experience, training, skills and knowledge to help patients and families cope with the impact of cancer before, after and during treatment. They provide a safe and confidential place to talk and can help turn a personal health crisis into a chance for hope and healing. They also provide evidence based group interventions and programs, some focused on the unique issues of a particular type of cancer.
- Physicians, nurses, dietitians, social workers and others work together to provide monthly disease site specific information and support sessions for patients and families.
- The formation of cancer hubs in rural Manitoba has included the creation of cancer nurse navigator positions in some health regions to assist patients and families navigate the health care system and provide ongoing support. There are also additional psychosocial positions in some health regions dedicated specifically to cancer patients and their families.
- Breast cancer patient navigators help patients with decision making, system navigation and connecting with other resources.
- COMPASS (COMprehensive Problem And Symptom Screening) is a screening for distress tool offered to patients at every physician visit at CCMB (including the Community Cancer Programs) to allow self-reporting severity of symptoms, problems and concerns. Educational sessions for clinical staff on responding to distress post-screening are provided.
- *Moving Forward After Cancer* is a post-treatment program that plans transition appointments and personalized follow-up care plans for patients and their primary care providers.
- CancerCare Manitoba has translated information on cancer treatment topics in other languages.
- A CCMB team has been established to review the results of the patient satisfaction surveys. The working group will assess the current services that are provided and then develop a plan to address the gaps.

Pain Management

Figure 3.35

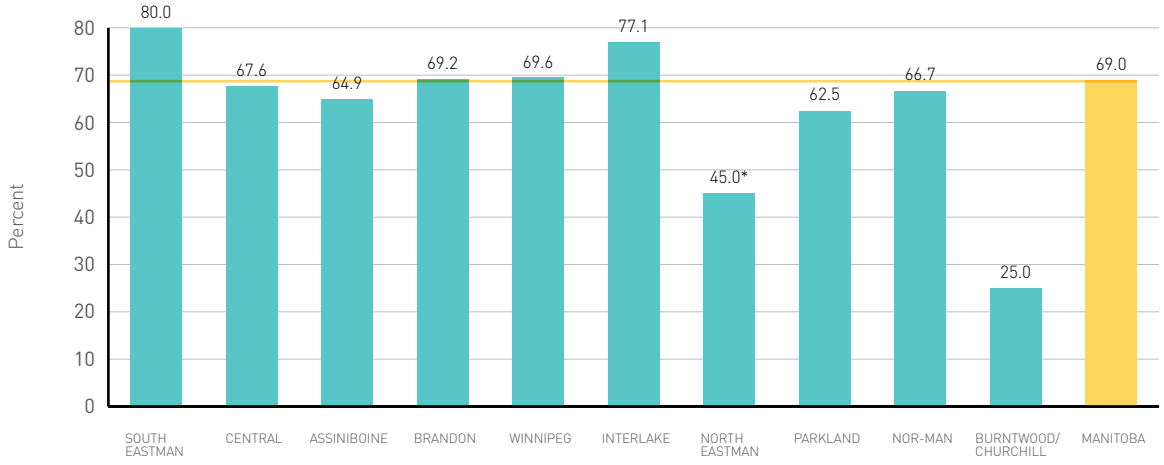
Percent of patients who felt staff did everything they could to control pain or discomfort, by current Regional Health Authority



Source: NRC Picker, Ambulatory Oncology Survey, June 1, 2011 – October 31, 2011.
**Significantly different from Manitoba rate (p<0.05)*

Figure 3.36

Percent of patients who felt staff did everything they could to control pain or discomfort by former Regional Health Authority



Source: NRC Picker, Ambulatory Oncology Survey, June 1, 2011 – October 31, 2011.
**Significantly different from Manitoba rate (p<0.05)*

What does this tell us?

Successful pain management varies across the regions.

- Figure 3.35 shows the percent of patients who felt staff did everything they could to control pain or discomfort is highest in the Southern RHA and lowest in the Northern RHA.
- Figure 3.36 shows that the former South Eastman RHA had the highest percentage of patients who felt staff did everything they could to control pain or discomfort (80.0%). Conversely, the former North Eastman was significantly lower than the rest of the province at 45% and the former Burntwood/Churchill RHA had the lowest rate (25.0%).

Why is this important?

Pain is one of the most common symptoms that patients with advanced cancer develop, but effective treatments are available.

- Understanding patient pain and clearly explaining treatment options is key to a successful program.
- Research shows a patient pain experience depends on a number of factors including the quality of relationship with their health care provider.[11]

How do we compare?

Pain management scores are similar to the national average.

- The provincial pain management score is similar to the national pain management score (70.7%).[5]

What is CancerCare Manitoba doing to improve pain management?

With our partners, CancerCare Manitoba is working to manage patients' pain.

- Pain may be the result of the disease or occur as a side effect of complex treatment. Patients are being screened for pain management using the COMPASS (COMprehensive Problem And Symptom Screening) screening tool.
  - The goal is to screen all patients at every visit in every CCMB clinic and Community Cancer Program (CCP). Currently all CCPs and the main Winnipeg medical oncology and radiation oncology clinics are screening patients using COMPASS at every physician clinic visit.
  - CancerCare Manitoba's Pain and Symptom Clinic is providing a provincial on-call service to all health care providers treating cancer patients. Through this service, appropriate pain management can be directed through phone consultation.
  - CancerCare Manitoba, supported by the Canadian Partnership Against Cancer, delivers annual education workshops. These workshops are aimed at health care providers provincially that care for cancer patients and provides a lot of pain management education.
- In partnership with the Winnipeg Regional Health Authority Palliative Care Program, CCMB implemented Pain and Symptom Management Clinics to provide a multidisciplinary assessment of patients/clients. These clinics include:
  - consultation and immediate follow-up for evaluation of treatment interventions.
  - access to many different health providers including physicians, nurses, pharmacists, counsellors and a dietitian.
- Nurse practitioners offer pain and symptom seminars for staff to provide refresh and update of practice information.
- A clinical nurse specialist in palliative care has been hired to improve transition to palliative care from CCMB and improve symptom management.
- A working group with CCMB and Palliative Care has been formed to look at improving transitions from active treatment to palliative care.
- Pain management also occurs as a function of other health service programs through the RHAs.

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Regional Profiles

Interlake-Eastern

REGIONAL PROFILE	Interlake-Eastern		Interlake	North Eastman	Manitoba
	Past Estimate	Current Estimate	Estimate	Estimate	Current Estimate
PREVENTION					
Obesity percent of adults (ages 18+) with Body Mass Index classified as "obese." Based on self-reported height and weight[a]	27.2%	**28.4%**	27.5%	30.3%	23.4%
Smoking percent of daily current or occasional smokers (ages 12+)[a]	22.2%	**24.1%**	26.2%	19.7%	19.6%
Alcohol percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+)[a]	22.3%	**22.7%**	24.9%	18.2%	18.2%
Fruits and Vegetables percent consuming fruits and vegetables five or more times a day (ages 12+)[a]	37.3%	**40.8%**	40.6%	41.3%	36.5%
Physical Activity percent of population 12+ who reported a moderate or active level of physical activity during leisure time[a]	56.6%	**55.8%**	58.2%	50.9%	53.5%
ACCESS – SCREENING					
Colorectal Cancer FOBT: percent of men and women (ages 50 – 74) who completed a FOBT in the last two years[b]	14.0%	**24.3%***	25.4%*	22.1%*	31.9%
percent of men and women (ages 50 – 74) who completed a FOBT in the last two years or a colonoscopy or flexible sigmoidoscopy in the past five years[c]	27.7%	**39.1%***	40.0%*	37.4%*	45.2%
Cervical Cancer percent of women (ages 20 – 69) who had a Pap test in the last three years[d]	73.2%	**71.0%***	70.8%*	71.4%*	66.8%
Breast Cancer percent of women (ages 50 – 69) who had a mammogram within the last two years[e]	66.1%	**62.8%**	64.7%	59.2%*	63.7%
percent of women (ages 50 – 69) who had a routine screening mammogram within the last two years through BreastCheck[f]	56.3%	**58.5%***	59.1%*	57.5%	56.2%

*Notes: *Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers
s = numbers suppressed where < 6.
Data source symbols reference: see end of report.

REGIONAL PROFILE	Interlake-Eastern Past Estimate	Interlake-Eastern Current Estimate	Interlake Estimate	North Eastman Estimate	Manitoba Current Estimate
ACCESS – WAIT TIMES					
Breast Assessment Waits median waiting time (in days) for women (ages 50 – 69), from screening by mammogram to final diagnosis[g]	27.0 days	**22.0 days**	22.0 days	28.0 days*	21.0 days
Radiation Therapy Waits percent of patients treated with radiation therapy within four weeks from ready to treat to start of treatment[h]	98.6%	**99.0%**	98.6%	100.0%*	99.2%
percent of patients treated with radiation therapy, within four weeks, from ready to treat to start of treatment, by cancer type:[h]					
lung	100.0%	**100.0%**	100.0%	*s*	100.0%
rectal	100.0%	**100.0%**	100.0%	*s*	100.0%
breast (f)	97.0%	**100.0%**	100.0%	100.0%	99.8%
prostate	91.3%	**92.3%**	90.0%	100.0%*	92.9%
ACCESS – TREATMENT					
Surgery					
percent of patients treated with surgery, all cancers[i]	52.2%	**54.1%**	52.7%	57.0%	54.5%
percent of patients treated with surgery, by cancer type:[i]					
lung	22.3%	**26.6%**	28.1%	23.3%	26.5%
colorectal	77.5%	**80.0%**	78.8%	82.4%	81.4%
breast (f)	93.2%	**90.2%**	89.2%	92.1%	90.6%
prostate	45.8%	**36.8%**	35.7%	39.3%	41.4%
Radiation Therapy					
percent of patients receiving radiation therapy, all cancers[i]	34.8%	**28.8%**	28.7%	28.9%	29.1%
percent of patients receiving radiation therapy, by cancer type[i]					
lung	44.4%	**36.0%**	35.4%	37.2%	39.9%
rectal	55.3%	**40.0%**	41.2%	37.8%	41.7%
breast (f)	63.4%	**60.0%**	54.5%	70.8%*	57.2%
prostate	33.9%	**24.8%**	26.4%	21.4%	24.4%

Interlake-Eastern

REGIONAL PROFILE	Interlake-Eastern Past Estimate	Interlake-Eastern Current Estimate	Interlake Estimate	North Eastman Estimate	Manitoba Current Estimate
Radiation After Breast Conserving Surgery percent of Stage I and II breast cancer patients treated with radiation following breast conserving surgery[j]	70.8%	**72.7%**	69.0%	78.7%	68.9%
Systemic Therapy percent of patients receiving systemic therapy (cancer drugs), all cancers[i]	38.9%	**35.5%**	34.6%	37.5%	35.2%
percent of patients receiving systemic therapy (cancer drugs), by cancer type[i]					
lung	24.9%	**19.8%**	19.3%	20.9%	21.1%
colon	32.0%	**23.6%**	21.5%	27.7%	29.1%
breast (f)	74.4%	**78.1%**	76.7%	80.9%	72.3%
prostate	37.4%	**32.0%**	32.4%	31.0%	30.8%
ACCESS – OTHER					
Accessing the Cancer System percent of cancer patients diagnosed at late stage (IV), all cancers[k]	19.7%	**19.1%**	19.3%	18.7%	19.5%
percent of cancer patients diagnosed at late stage (IV), by cancer type[k]					
lung	38.6%	**45.0%**	45.3%	44.2%	45.7%
colorectal	23.4%	**17.7%**	17.7%	17.6%	18.3%
breast (f)	5.1%	**4.5%**	4.5%	*s*	6.0%
prostate	12.6%	**14.3%**	14.3%	14.3%	12.2%
End-of-Life Care percent of patients who die of cancer with an acute hospital stay in the last two weeks of life[l]	77.5%	**77.9%**	76.7%	80.9%	78.4%
OUTCOMES – INCIDENCE, MORTALITY, SURVIVAL					
Cancer Incidence age-standardized incidence rates (per 100,000 people), all cancers[m]	502.8	**471.8**	476.5	461.2	471.2
age-standardized incidence rates (per 100,000 people), by cancer type[m]					
lung	75.5	**67.8**	68.3	68.0	68.8
colorectal	68.4	**74.8**	72.8	79.0	68.3
breast (f)	136.4	**126.1**	125.1	126.8	122.6
prostate	133.2	**126.5**	133.0	112.2	116.4

*Notes: *Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers
s = numbers suppressed where < 6.
Data source symbols reference: see end of report.

REGIONAL PROFILE	Interlake-Eastern Past Estimate	Interlake-Eastern Current Estimate	Interlake Estimate	North Eastman Estimate	Manitoba Current Estimate
Cancer Mortality	233.7	**228.5***	239.4*	205.7	202.7
age-standardized mortality rates (per 100,000 people), all cancers[n]					
age-standardized mortality rates (per 100,000 people), by cancer type:[n]					
lung	54.1	**56.0**	58.8	50.7	51.1
colorectal	28.0	**31.9**	33.2	29.6	25.3
breast (f)	28.0	**35.5**	35.6	35.4	27.3
prostate	47.0	**39.6**	45.6	26.9	33.9
Cancer Survival	59.5	**57.8**	58.2	56.9	59.3
age-standardized five-year relative survival ratios, all cancers[o]					
age-standardized five-year relative survival ratios, by cancer type:[o]					
lung	*s*	**20.8**	19.8	22.8	21.7
colorectal	59.3	**62.2**	62.5	57.4[u]	61.6
breast (f)	83.1	**76.9***	75.3*	83.3[u]	84.9
prostate	93.8	**91.2**	91.8	87.8[u]	91.7
OUTCOMES – THE PATIENT EXPERIENCE					
Patient Satisfaction	93.4%	**97.2%**	98.8%	93.1%	96.6%
overall average satisfaction score for outpatient care based on patient satisfaction survey (% positive responses)[p]					
average satisfaction score for emotional support based on patient satisfaction survey (% positive responses)[p]	43.7%	**48.8%**	48.4%	49.7%	46.4%
Pain Management for those experiencing pain, percent of patients who felt staff did everything they could to control pain or discomfort based on patient satisfaction survey (% positive responses)[p]	62.1%	**67.6%**	77.1%	45.0%*	69.0%

Northern

REGIONAL PROFILE	Northern		Burntwood/ Churchill Estimate	Nor-Man Estimate	Manitoba Current Estimate
	Past Estimate	Current Estimate			
PREVENTION					
Obesity percent of adults (ages 18+) with Body Mass Index classified as "obese." Based on self-reported height and weight[a]	31.3%	**32.6%***	36.6%*	29.2%	23.4%
Smoking percent of daily current or occasional smokers (ages 12+)[a]	35.7%	**36.8%***	37.7%*	35.6%*	19.6%
Alcohol percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+)[a]	24.7%	**25.3%***	26.3%*	24.4%	18.2%
Fruits and Vegetables percent consuming fruits and vegetables five or more times a day (ages 12+)[a]	32.2%	**37.2%**	33.7%	40.5%	36.5%
Physical Activity percent of population 12+ who reported a moderate or active level of physical activity during leisure time[a]	52.6%	**55.5%**	55.8%	54.7%	53.5%
ACCESS – SCREENING					
Colorectal Cancer FOBT: percent of men and women (ages 50 – 74) who completed a FOBT in the last two years[b]	0.6%	**1.5%***	1.6%*	1.4%*	31.9%
percent of men and women (ages 50 – 74) who completed a FOBT in the last two years or a colonoscopy or flexible sigmoidoscopy in the past five years[c]	9.8%	**12.9%***	13.7%*	12.4%*	45.2%
Cervical Cancer percent of women (ages 20 – 69) who had a Pap test in the last three years[d]	62.8%	**61.9%***	65.1%*	56.4%*	66.8%
Breast Cancer percent of women (ages 50 – 69) who had a mammogram within the last two years[e]	57.1%	**55.0%***	47.8%*	63.7%	63.7%
percent of women (ages 50 – 69) who had a routine screening mammogram within the last two years through BreastCheck[f]	52.7%	**50.8%***	44.7%*	58.1%	56.2%

*Notes: *Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers
s = numbers suppressed where < 6.
Data source symbols reference: see end of report.

REGIONAL PROFILE	Northern		Burntwood/ Churchill	Nor-Man	Manitoba
	Past Estimate	Current Estimate	Estimate	Estimate	Current Estimate
ACCESS – WAIT TIMES					
Breast Assessment Waits median waiting time (in days) for women (ages 50 – 69), from screening by mammogram to final diagnosis[g]	40.0 days	**31.0 days***	28.0 days	35.0 days*	21.0 days
Radiation Therapy Waits percent of patients treated with radiation therapy within four weeks from ready to treat to start of treatment[h]	98.8%	**98.0%**	96.1%	100.0%*	99.2%
percent of patients treated with radiation therapy, within four weeks, from ready to treat to start of treatment, by cancer type:[h]					
lung	100.0%	**100.0%**	100.0%	*s*	100.0%
rectal	100.0%	***s***	*s*	*s*	100.0%
breast (f)	100.0%	**100.0%**	100.0%	100.0%	99.8%
prostate	87.5%	***s***	*s*	*s*	92.9%
ACCESS – TREATMENT					
Surgery					
percent of patients treated with surgery, all cancers[i]	48.5%	**52.5%**	54.1%	51.0%	54.5%
percent of patients treated with surgery, by cancer type:[i]					
lung	18.4%	**30.8%**	41.8%*	22.1%	26.5%
colorectal	66.0%	**75.0%**	71.7%	79.6%	81.4%
breast (f)	92.1%	**93.9%**	91.7%	96.8%	90.6%
prostate	35.0%	**47.5%**	50.0%	45.2%	41.4%
Radiation Therapy					
percent of patients receiving radiation therapy, all cancers[j]	31.9%	**30.6%**	31.3%	30.5%	29.1%
percent of patients receiving radiation therapy, by cancer type[j]					
lung	36.1%	**35.0%**	34.5%	36.8%	39.9%
rectal	44.4%	**43.5%**	51.9%	35.0%	41.7%
breast (f)	56.1%	**63.6%**	61.1%	67.7%	57.2%
prostate	37.9%	**23.0%**	23.3%	22.6%	24.4%

Northern

REGIONAL PROFILE	Northern		Burntwood/ Churchill	Nor-Man	Manitoba
	Past Estimate	Current Estimate	Estimate	Estimate	Current Estimate
Radiation After Breast Conserving Surgery percent of Stage I and II breast cancer patients treated with radiation following breast conserving surgery[j]	69.0%	**77.8%**	76.5%	80.0%	68.9%
Systemic Therapy percent of patients receiving systemic therapy (cancer drugs), all cancers[i]	40.9%	**38.8%**	40.3%	37.6%	35.2%
percent of patients receiving systemic therapy (cancer drugs), by cancer type[i]					
lung	20.4%	**19.2%**	16.4%	23.5%	21.1%
colon	20.7%	**29.6%**	26.9%	31.0%	29.1%
breast (f)	71.1%	**80.3%**	83.3%	77.4%	72.3%
prostate	52.5%	**31.1%**	33.3%	29.0%	30.8%
ACCESS – OTHER					
Accessing the Cancer System percent of cancer patients diagnosed at late stage (IV), all cancers[k]	24.6%	**23.6%***	23.7%	23.2%	19.5%
percent of cancer patients diagnosed at late stage (IV), by cancer type[k]					
lung	40.7%	**43.3%**	41.8%	44.1%	45.7%
colorectal	36.0%	**23.0%**	24.5%	20.4%	18.3%
breast (f)	3.5%	***s***	*s*	*s*	6.0%
prostate	25.9%	**14.8%**	*s*	*s*	12.2%
End-of-Life Care percent of patients who die of cancer with an acute hospital stay in the last two weeks of life[l]	74.3%	**76.7%**	77.6%	75.4%	78.4%
OUTCOMES – INCIDENCE, MORTALITY, SURVIVAL					
Cancer Incidence age-standardized incidence rates (per 100,000 people), all cancers[m]	496.7	**523.3**	519.7	521.6	471.2
age-standardized incidence rates (per 100,000 people), by cancer type[m]					
lung	91.5	**115.1***	96.1	130.5*	68.8
colorectal	70.6	**84.5**	78.8	86.4	68.3
breast (f)	88.5	**92.1**	91.5	93.9	122.6
prostate	130.8	**101.7**	92.9	106.8	116.4

*Notes: *Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers
s = numbers suppressed where < 6.
Data source symbols reference: see end of report.

REGIONAL PROFILE	Northern		Burntwood/ Churchill	Nor-Man	Manitoba
	Past Estimate	Current Estimate	Estimate	Estimate	Current Estimate
Cancer Mortality age-standardized mortality rates (per 100,000 people), all cancers[n]	271.1	**264.1***	278.8*	244.3	202.7
age-standardized mortality rates (per 100,000 people), by cancer type:[n]					
lung	61.8	**70.5**	57.3	78.0*	51.1
colorectal	33.7	**44.7***	61.5*	34.0	25.3
breast (f)	28.2	**18.8**	*s*	21.9	27.3
prostate	84.9	**49.1**	31.4	61.2	33.9
Cancer Survival age-standardized five-year relative survival ratios, all cancers[o]	47.5	**46.4***	41.1*	52.9	59.3
age-standardized five-year relative survival ratios, by cancer type:[o]					
lung	*s*	**21.9**	27.0[u]	19.1[u]	21.7
colorectal	56.8[u]	**35.3*[u]**	29.6*[u]	46.0[u]	61.6
breast (f)	72.6[u]	**78.4[u]**	*s*	*s*	84.9
prostate	*s*	**74.7*[u]**	*s*	85.3[u]	91.7
OUTCOMES – THE PATIENT EXPERIENCE					
Patient Satisfaction overall average satisfaction score for outpatient care based on patient satisfaction survey (% positive responses)[p]	83.3%	**100.0%**	100.0%	100.0%	96.6%
average satisfaction score for emotional support based on patient satisfaction survey (% positive responses)[p]	43.2%	**39.7%**	43.6%	33.7%	46.4%
Pain Management for those experiencing pain, percent of patients who felt staff did everything they could to control pain or discomfort based on patient satisfaction survey (% positive responses)[p]	37.5%	**58.3%**	25.0%	66.7%	69.0%

Prairie Mountain

REGIONAL PROFILE	Prairie Mountain Past Estimate	Prairie Mountain Current Estimate	Assiniboine Estimate	Brandon Estimate	Parkland Estimate	Manitoba Current Estimate
PREVENTION						
Obesity percent of adults (ages 18+) with Body Mass Index classified as "obese." Based on self-reported height and weight[a]	24.9%	**23.7%**	26.1%	20.6%	23.8%[u]	23.4%
Smoking percent of daily current or occasional smokers (ages 12+)[a]	23.7%	**20.5%**	19.2%	19.7%	24.2%	19.6%
Alcohol percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+)[a]	17.2%	**15.5%**	15.3%	17.6%	13.1%[u]	18.2%
Fruits and Vegetables percent consuming fruits and vegetables five or more times a day (ages 12+)[a]	35.6%	**36.4%**	45.1%	28.8%	31.3%	36.5%
Physical Activity percent of population 12+ who reported a moderate or active level of physical activity during leisure time[a]	49.2%	**49.7%**	48.8%	51.6%	48.5%	53.5%
ACCESS - SCREENING						
Colorectal Cancer FOBT: percent of men and women (ages 50 – 74) who completed a FOBT in the last two years[b]	14.4%	**20.6%***	18.0%*	35.6%*	9.8%*	31.9%
percent of men and women (ages 50 – 74) who completed a FOBT in the last two years or a colonoscopy or flexible sigmoidoscopy in the past five years[c]	30.0%	**39.0%***	35.7%*	53.3%*	30.1%*	45.2%
Cervical Cancer percent of women (ages 20 – 69) who had a Pap test in the last three years[d]	70.4%	**67.2%**	64.5%*	75.3%*	60.7%*	66.8%
Breast Cancer percent of women (ages 50 – 69) who had a mammogram within the last two years[e]	66.9%	**66.1%***	66.9%*	65.4%*	65.4%*	63.7%
percent of women (ages 50 – 69) who had a routine screening mammogram within the last two years through BreastCheck[f]	57.5%	**59.6%***	59.4%*	61.5%*	57.9%*	56.2%

*Notes: *Significantly different from Manitoba rate (p<0.05).*
u = potentially unstable values due to low numbers
s = numbers suppressed where < 6.
Data source symbols reference: see end of report.

REGIONAL PROFILE	Prairie Mountain Past Estimate	Prairie Mountain Current Estimate	Assiniboine Estimate	Brandon Estimate	Parkland Estimate	Manitoba Current Estimate
ACCESS - WAIT TIMES						
Breast Assessment Waits median waiting time (in days) for women (ages 50 – 69), from screening by mammogram to final diagnosis[g]	26.0 days	**22.0 days**	23.0 days	19.0 days	23.0 days	21.0 days
Radiation Therapy Waits percent of patients treated with radiation therapy within four weeks from ready to treat to start of treatment[h]	99.1%	**99.8%**	100.0%*	100.0%*	99.1%	99.2%
percent of patients treated with radiation therapy, within four weeks, from ready to treat to start of treatment, by cancer type:[h]						
lung	97.6%	**100.0%**	100.0%	100.0%	100.0%	100.0%
rectal	100.0%	**100.0%**	100.0%	100.0%	100.0%	100.0%
breast (f)	97.1%	**100.0%**	100.0%	100.0%	100.0%	99.8%
prostate	100.0%	**96.9%**	100.0%*	100.0%*	87.5%	92.9%
ACCESS - TREATMENT						
Surgery						
percent of patients treated with surgery, all cancers[i]	54.5%	**56.8%**	59.5%*	56.6%	52.5%	54.5%
percent of patients treated with surgery, by cancer type:[i]						
lung	25.0%	**26.1%**	28.0%	20.5%	30.6%	26.5%
colorectal	81.7%	**85.3%**	91.5%*	88.9%*	72.9%	81.4%
breast (f)	92.9%	**92.1%**	91.9%	90.7%	94.3%	90.6%
prostate	53.0%	**41.4%**	42.6%	40.5%	39.7%	41.4%
Radiation Therapy						
percent of patients receiving radiation therapy, all cancers[j]	24.5%	**24.0%***	23.1%*	23.0%*	26.4%	29.1%
percent of patients receiving radiation therapy, by cancer type[j]						
lung	33.1%	**36.2%**	36.0%	34.4%	38.7%	39.9%
rectal	29.1%	**33.9%**	30.5%	33.3%	38.7%	41.7%
breast (f)	47.2%	**50.7%**	51.9%	46.3%	54.0%	57.2%
prostate	29.8%	**19.4%**	20.4%	19.0%	17.6%	24.4%

Prairie Mountain

REGIONAL PROFILE	Prairie Mountain Past Estimate	Prairie Mountain Current Estimate	Assiniboine Estimate	Brandon Estimate	Parkland Estimate	Manitoba Current Estimate
Radiation After Breast Conserving Surgery percent of Stage I and II breast cancer patients treated with radiation following breast conserving surgery[j]	57.6%	**61.5%**	61.2%	61.7%	62.2%	68.9%
Systemic Therapy percent of patients receiving systemic therapy (cancer drugs), all cancers[i]	32.1%	**32.0%***	31.9%*	29.9%*	34.4%	35.2%
percent of patients receiving systemic therapy (cancer drugs), by cancer type[i]						
lung	22.6%	**20.8%**	22.0%	19.2%	20.7%	21.1%
colon	28.0%	**24.8%**	27.5%	17.3%*	28.2%	29.1%
breast (f)	67.7%	**69.3%**	66.3%	64.8%	80.5%	72.3%
prostate	32.8%	**34.7%**	35.8%	29.8%	38.2%	30.8%
ACCESS - OTHER						
Accessing the Cancer System percent of cancer patients diagnosed at late stage (IV), all cancers[k]	19.1%	**18.3%**	16.4%*	19.3%	20.6%	19.5%
percent of cancer patients diagnosed at late stage (IV), by cancer type[k]						
lung	42.1%	**42.6%**	40.3%	50.3%	36.0%	45.7%
colorectal	16.4%	**12.3%***	8.5%*	12.0%	18.6%	18.3%
breast (f)	4.1%	**4.2%**	5.6%	*s*	*s*	6.0%
prostate	11.8%	**17.2%**	13.6%	19.0%	23.5%	12.2%
End-of-Life Care percent of patients who die of cancer with an acute hospital stay in the last two weeks of life[l]	81.3%	**81.7%***	81.7%	82.4%	80.9%	78.4%
OUTCOMES - INCIDENCE, MORTALITY, SURVIVAL						
Cancer Incidence age-standardized incidence rates (per 100,000 people), all cancers[m]	483.2	**476.5**	464.2	512.4	463.1	471.2
age-standardized incidence rates (per 100,000 people), by cancer type[m]						
lung	72.6	**72.7**	66.0	93.5*	65.9	68.8
colorectal	74.3	**76.4**	75.3	70.7	83.1	68.3
breast (f)	111.6	**113.7**	114.3	122.3	105.6	122.6
prostate	126.8	**108.7**	119.8	116.5	83.5*	116.4

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Data source symbols reference: see end of report.

REGIONAL PROFILE	Prairie Mountain Past Estimate	Prairie Mountain Current Estimate	Assiniboine Estimate	Brandon Estimate	Parkland Estimate	Manitoba Current Estimate
Cancer Mortality age-standardized mortality rates (per 100,000 people), all cancers[n]	214.7	**195.7**	180.2*	217.9	200.2	202.7
age-standardized mortality rates (per 100,000 people), by cancer type:[n]						
lung	55.2	**51.5**	47.6	65.0	46.2	51.1
colorectal	29.2	**26.3**	23.6	22.4	34.0	25.3
breast (f)	27.3	**22.0**	21.2	27.8	15.6	27.3
prostate	44.1	**36.3**	31.9	35.0	44.6	33.9
Cancer Survival age-standardized five-year relative survival ratios, all cancers[o]	61.7	**60.7**	60.3	60.9	61.6	59.3
age-standardized five-year relative survival ratios, by cancer type:[o]						
lung	26.9	**20.4**	19.4	19.2	21.4[u]	21.7
colorectal	62.3	**64.7**	63.4	70.9[u]	60.1[u]	61.6
breast (f)	86.7	**89.0**	87.8	90.3	88.1[u]	84.9
prostate	91.1	**92.3**	87.6	97.6	94.0[u]	91.7
OUTCOMES - THE PATIENT EXPERIENCE						
Patient Satisfaction overall average satisfaction score for outpatient care based on patient satisfaction survey (% positive responses)[p]	98.4%	**100.0%***	100.0%	100.0%	100.0%	96.6%
average satisfaction score for emotional support based on patient satisfaction survey (% positive responses)[p]	42.5%	**50.2%**	53.9%	50.5%	38.5%	46.4%
Pain Management for those experiencing pain, percent of patients who felt staff did everything they could to control pain or discomfort based on patient satisfaction survey (% positive responses)[p]	80.0%	**65.2%**	64.9%	69.2%	62.5%	69.0%

Southern

REGIONAL PROFILE	Southern		Central	South Eastman	Manitoba
	Past Estimate	Current Estimate	Current Estimate	Current Estimate	Current Estimate
PREVENTION					
Obesity percent of adults (ages 18+) with Body Mass Index classified as "obese." Based on self-reported height and weight[a]	20.9%	**21.3%**	22.3%	19.7%	23.4%
Smoking percent of daily current or occasional smokers (ages 12+)[a]	22.7%	**20.8%**	20.0%	22.0%	19.6%
Alcohol percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+)[a]	16.1%	**14.9%**	12.5%*	18.5%	18.2%
Fruits and Vegetables percent consuming fruits and vegetables five or more times a day (ages 12+)[a]	31.6%	**30.6%**	31.6%	29.0%	36.5%
Physical Activity percent of population 12+ who reported a moderate or active level of physical activity during leisure time[a]	45.0%	**45.4%***	41.2%*	51.8%	53.5%
ACCESS – SCREENING					
Colorectal Cancer FOBT: percent of men and women (ages 50 – 74) who completed a FOBT in the last two years[b]	14.1%	**22.9%***	20.8%*	26.6%*	31.9%
percent of men and women (ages 50 – 74) who completed a FOBT in the last two years or a colonoscopy or flexible sigmoidoscopy in the past five years[c]	26.7%	**37.8%***	34.6%*	43.4%*	45.2%
Cervical Cancer percent of women (ages 20 – 69) who had a Pap test in the last three years[d]	71.1%	**70.5%***	68.0%*	74.4%*	66.8%
Breast Cancer percent of women (ages 50 – 69) who had a mammogram within the last two years[e]	61.7%	**61.6%***	61.6%*	61.6%*	63.7%
percent of women (ages 50 – 69) who had a routine screening mammogram within the last two years through BreastCheck[f]	54.7%	**56.5%**	56.5%	56.4%	56.2%

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Data source symbols reference: see end of report.

REGIONAL PROFILE	Southern		Central	South Eastman	Manitoba
	Past Estimate	Current Estimate	Current Estimate	Current Estimate	Current Estimate
ACCESS – WAIT TIMES					
Breast Assessment Waits median waiting time (in days) for women (ages 50 – 69), from screening by mammogram to final diagnosis[g]	26.0 days	**25.0 days***	25.0 days*	25.0 days	21.0 days
Radiation Therapy Waits percent of patients treated with radiation therapy within four weeks from ready to treat to start of treatment[h]	98.6%	**99.0%**	98.9%	99.2%	99.2%
percent of patients treated with radiation therapy, within four weeks, from ready to treat to start of treatment, by cancer type:[h]					
lung	100.0%	**100.0%**	100.0%	100.0%	100.0%
rectal	100.0%	**100.0%**	100.0%	100.0%	100.0%
breast (f)	98.5%	**98.5%**	97.7%	100.0%	99.8%
prostate	91.3%	**96.9%**	95.8%	100.0%*	92.9%
ACCESS – TREATMENT					
Surgery					
percent of patients treated with surgery, all cancers[i]	56.2%	**54.0%**	54.1%	53.8%	54.5%
percent of patients treated with surgery, by cancer type:[i]					
lung	19.9%	**26.3%**	24.4%	29.8%	26.5%
colorectal	85.6%	**84.4%**	80.4%	93.1%*	81.4%
breast (f)	94.1%	**91.1%**	91.8%	89.8%	90.6%
prostate	42.8%	**41.3%**	42.2%	39.6%	41.4%
Radiation Therapy					
percent of patients receiving radiation therapy, all cancers[j]	34.1%	**27.8%**	27.0%	29.3%	29.1%
percent of patients receiving radiation therapy, by cancer type[j]					
lung	50.8%	**38.4%**	37.3%	40.4%	39.9%
rectal	51.9%	**51.6%**	47.7%	60.7%	41.7%
breast (f)	61.4%	**54.9%**	56.4%	52.0%	57.2%
prostate	38.6%	**28.6%**	27.6%	30.8%	24.4%

Southern

REGIONAL PROFILE	Southern		Central	South Eastman	Manitoba
	Past Estimate	Current Estimate	Estimate	Estimate	Current Estimate
Radiation After Breast Conserving Surgery percent of Stage I and II breast cancer patients treated with radiation following breast conserving surgery[j]	73.9%	**68.9%**	72.0%	62.7%	68.9%
Systemic Therapy percent of patients receiving systemic therapy (cancer drugs), all cancers[i]	37.4%	**35.8%**	36.6%	34.4%	35.2%
percent of patients receiving systemic therapy (cancer drugs), by cancer type[i]					
lung	31.0%	**23.9%**	23.8%	24.0%	21.1%
colon	20.2%	**30.2%**	28.9%	32.9%	29.1%
breast (f)	77.0%	**68.6%**	73.3%	59.2%*	72.3%
prostate	38.9%	**36.6%**	38.9%	31.9%	30.8%
ACCESS – OTHER					
Accessing the Cancer System percent of cancer patients diagnosed at late stage (IV), all cancers[k]	18.9%	**19.4%**	19.9%	18.4%	19.5%
percent of cancer patients diagnosed at late stage (IV), by cancer type[k]					
lung	44.3%	**47.1%**	48.7%	44.2%	45.7%
colorectal	16.1%	**20.0%**	20.6%	18.8%	18.3%
breast (f)	8.0%	**5.8%**	5.6%	6.1%	6.0%
prostate	16.8%	**12.7%**	14.6%	8.8%	12.2%
End-of-Life Care percent of patients who die of cancer with an acute hospital stay in the last two weeks of life[l]	80.5%	**77.1%**	79.1%	73.1%	78.4%
OUTCOMES – INCIDENCE, MORTALITY, SURVIVAL					
Cancer Incidence age-standardized incidence rates (per 100,000 people), all cancers[m]	413.6	**434.2***	435.3*	430.5*	471.2
age-standardized incidence rates (per 100,000 people), by cancer type[m]					
lung	57.4	**60.7**	60.4	61.0	68.8
colorectal	55.2	**64.2**	65.7	60.4	68.3
breast (f)	108.9	**112.4**	116.2	107.1	122.6
prostate	93.4	**116.2**	122.0	104.7	116.4

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REGIONAL PROFILE	Southern		Central	South Eastman	Manitoba
	Past Estimate	Current Estimate	Estimate	Estimate	Current Estimate
Cancer Mortality	184.8	**176.9***	177.3*	173.9*	202.7
age-standardized mortality rates (per 100,000 people), all cancers[n]					
age-standardized mortality rates (per 100,000 people), by cancer type:[n]					
lung	43.6	**44.6**	45.0	43.2	51.1
colorectal	22.2	**21.9**	24.7	16.8	25.3
breast (f)	31.1	**24.2**	21.9	28.8	27.3
prostate	32.7	**27.1**	27.9	24.9	33.9
Cancer Survival	62.0	**62.5***	62.1	63.2	59.3
age-standardized five-year relative survival ratios, all cancers[o]					
age-standardized five-year relative survival ratios, by cancer type:[o]					
lung	15.6	**17.3**	14.9	18.0	21.7
colorectal	64.0	**70.1**	68.4	74.1[u]	61.6
breast (f)	87.3	**84.7**	85.9	84.6[u]	84.9
prostate	94.2	**94.8**	94.9	96.4[u]	91.7
OUTCOMES – THE PATIENT EXPERIENCE					
Patient Satisfaction	93.8%	**96.3%**	94.1%	100.0%	96.6%
overall average satisfaction score for outpatient care based on patient satisfaction survey (% positive responses)[p]					
average satisfaction score for emotional support based on patient satisfaction survey (% positive responses)[p]	50.1%	**48.5%**	48.9%	47.9%	46.4%
Pain Management for those experiencing pain, percent of patients who felt staff did everything they could to control pain or discomfort based on patient satisfaction survey (% positive responses)[p]	81.4%	**73.4%**	67.6%	80.0%	69.0%

Winnipeg (includes Churchill)

REGIONAL PROFILE	Winnipeg (includes Churchill) Past Estimate	Winnipeg (includes Churchill) Current Estimate	Winnipeg Estimate	Manitoba Current Estimate
PREVENTION				
Obesity percent of adults (ages 18+) with Body Mass Index classified as "obese." Based on self-reported height and weight[a]	16.3%	**22.6%**	22.6%	23.4%
Smoking percent of daily current or occasional smokers (ages 12+)[a]	23.0%	**17.6%**	17.6%	19.6%
Alcohol percent consuming five or more alcoholic drinks on one occasion, at least once a month in the past year (ages 12+)[a]	19.6%	**18.5%**	18.5%	18.2%
Fruits and Vegetables percent consuming fruits and vegetables five or more times a day (ages 12+)[a]	36.9%	**37.2%**	37.2%	36.5%
Physical Activity percent of population 12+ who reported a moderate or active level of physical activity during leisure time[a]	54.9%	**55.7%**	55.7%	53.5%
ACCESS - SCREENING				
Colorectal Cancer FOBT: percent of men and women (ages 50 – 74) who completed a FOBT in the last two years[b]	34.4%	**40.4%***	40.5%*	31.9%
percent of men and women (ages 50 – 74) who completed a FOBT in the last two years or a colonoscopy or flexible sigmoidoscopy in the past five years[c]	44.2%	**51.9%***	51.9%*	45.2%
Cervical Cancer percent of women (ages 20 – 69) who had a Pap test in the last three years[d]	72.5%	**70.1%***	70.1%*	66.8%
Breast Cancer percent of women (ages 50 – 69) who had a mammogram within the last two years[e]	61.3%	**64.2%**	64.3%	63.7%
percent of women (ages 50 – 69) who had a routine screening mammogram within the last two years through BreastCheck[f]	49.4%	**55.3%***	55.3%*	56.2%

*Notes: *Significantly different from Manitoba rate (p<0.05).*
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Data source symbols reference: see end of report.
Data from Churchill are incorporated into the 'current' and 'past' estimates for the Winnipeg region.

REGIONAL PROFILE	Winnipeg (includes Churchill) Past Estimate	Winnipeg (includes Churchill) Current Estimate	Winnipeg Estimate	Manitoba Current Estimate
ACCESS - WAIT TIMES				
Breast Assessment Waits median waiting time (in days) for women (ages 50 – 69), from screening by mammogram to final diagnosis[g]	25.0 days	**18.0 days***	18.0 days*	21.0 days
Radiation Therapy Waits percent of patients treated with radiation therapy within four weeks from ready to treat to start of treatment[h]	98.5%	**99.1%**	99.1%	99.2%
percent of patients treated with radiation therapy, within four weeks, from ready to treat to start of treatment, by cancer type:[h]				
lung	100.0%	**100.0%**	100.0%	100.0%
rectal	100.0%	**100.0%**	100.0%	100.0%
breast (f)	98.3%	**100.0%**	100.0%	99.8%
prostate	86.8%	**91.5%**	91.5%	92.9%
ACCESS - TREATMENT				
Surgery				
percent of patients treated with surgery, all cancers[i]	54.8%	**54.2%**	54.2%	54.5%
percent of patients treated with surgery, by cancer type:[i]				
lung	25.7%	**26.4%**	26.4%	26.5%
colorectal	81.0%	**80.2%**	80.2%	81.4%
breast (f)	90.8%	**90.1%**	90.1%	90.6%
prostate	49.5%	**42.1%**	42.1%	41.4%
Radiation Therapy				
percent of patients receiving radiation therapy, all cancers[j]	34.2%	**30.6%***	30.6%*	29.1%
percent of patients receiving radiation therapy, by cancer type[j]				
lung	47.3%	**42.4%**	42.3%	39.9%
rectal	45.4%	**42.9%**	42.7%	41.7%
breast (f)	64.6%	**58.3%**	58.3%	57.2%
prostate	34.1%	**24.7%**	24.7%	24.4%

Winnipeg (includes Churchill)

REGIONAL PROFILE	Winnipeg (includes Churchill) Past Estimate	Winnipeg (includes Churchill) Current Estimate	Winnipeg Estimate	Manitoba Current Estimate
Radiation After Breast Conserving Surgery percent of Stage I and II breast cancer patients treated with radiation following breast conserving surgery[j]	73.4%	**69.3%**	69.3%	68.9%
Systemic Therapy	37.2%	**35.7%**	35.7%	35.2%
percent of patients receiving systemic therapy (cancer drugs), all cancers[i]				
percent of patients receiving systemic therapy (cancer drugs), by cancer type[i]				
lung	26.3%	**21.1%**	21.0%	21.1%
colon	33.4%	**31.3%**	31.3%	29.1%
breast (f)	77.6%	**72.3%**	72.3%	72.3%
prostate	28.9%	**28.0%**	28.0%	30.8%
ACCESS - OTHER				
Accessing the Cancer System	19.5%	**19.6%**	19.6%	19.5%
percent of cancer patients diagnosed at late stage (IV), all cancers[k]				
percent of cancer patients diagnosed at late stage (IV), by cancer type[k]				
lung	41.2%	**46.6%**	46.7%	45.7%
colorectal	21.2%	**19.7%**	19.7%	18.3%
breast (f)	5.8%	**6.7%**	6.7%	6.0%
prostate	10.1%	**10.1%**	10.1%	12.2%
End-of-Life Care percent of patients who die of cancer with an acute hospital stay in the last two weeks of life[l]	78.8%	**78.0%**	78.0%	78.4%
OUTCOMES - INCIDENCE, MORTALITY, SURVIVAL				
Cancer Incidence	466.0	**475.7**	475.5	471.2
age-standardized incidence rates (per 100,000 people), all cancers[m]				
age-standardized incidence rates (per 100,000 people), by cancer type[m]				
lung	70.1	**67.9**	67.8	68.8
colorectal	63.8	**65.2**	65.1	68.3
breast (f)	125.4	**127.9**	127.9	122.6
prostate	128.2	**117.4**	117.5	116.4

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REGIONAL PROFILE	Winnipeg (includes Churchill) Past Estimate	Winnipeg (includes Churchill) Current Estimate	Winnipeg Estimate	Manitoba Current Estimate
Cancer Mortality age-standardized mortality rates (per 100,000 people), all cancers[n]	207.8	**203.3**	203.3	202.7
age-standardized mortality rates (per 100,000 people), by cancer type:[n]				
lung	49.6	**50.9**	51.0	51.1
colorectal	25.9	**24.1**	24.1	25.3
breast (f)	29.8	**28.3**	28.4	27.3
prostate	34.5	**32.5**	32.5	33.9
Cancer Survival age-standardized five-year relative survival ratios, all cancers[o]	58.8	**59.2**	59.3	59.3
age-standardized five-year relative survival ratios, by cancer type:[o]				
lung	19.8	**22.8**	22.8	21.7
colorectal	60.4	**60.3**	60.2	61.6
breast (f)	87.5	**85.4**	85.3	84.9
prostate	90.2	**91.6**	91.6	91.7
OUTCOMES - THE PATIENT EXPERIENCE				
Patient Satisfaction overall average satisfaction score for outpatient care based on patient satisfaction survey (% positive responses)[p]	95.6%	**95.6%**	95.6%	96.6%
average satisfaction score for emotional support based on patient satisfaction survey (% positive responses)[p]	46.0%	**44.7%**	44.8%	46.4%
Pain Management for those experiencing pain, percent of patients who felt staff did everything they could to control pain or discomfort based on patient satisfaction survey (% positive responses)[p]	67.5%	**69.4%**	69.6%	69.0%

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Glossary → Indicators: Terms and Definitions

PREVENTION SECTION

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) statistical measure used to determine if an individual's weight is in a healthy range based on their height. BMI is calculated as follows:

$$\text{BMI} = \frac{\text{(weight in kilograms)}}{(\text{height in metres})^2}$$

The index is: under 18.5 (underweight), 18.5-24.9 (acceptable weight), 25-29.9 (overweight) and 30 or higher (obese).

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 persons less than 0.91 metres tall or greater than 2.11 metres.

Data source: Statistics Canada, Canadian Community Health Survey (CCHS).

Timeframe: 2007-2008, 2009-2010.

Additional notes: Stratified by region. Crude rate of obesity (not age-adjusted) shown using standard Statistics Canada calculation methods.

Indicator: Smoking

Definition: The percent of teens and adults 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+, based on survey data.

Denominator: Total survey participants, ages 12+.

Data source: Statistics Canada, Canadian Community Health Survey.

Timeframe: 2007-2008, 2009-2010.

Additional notes: Stratified by region. Crude rate of smoking (not age-adjusted) shown; age-adjustment made no substantial effect on these statistics or the associated RHA rankings.

Indicator: Alcohol Use

Definition: The percent of teens and adults who consume five or more alcoholic 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 individuals consuming five or more drinks on one occasion, at least once a month in the past year, ages 12+, based on survey data.

Denominator: Starting in 2009, the denominator includes total survey participants, ages 12+, including non-drinkers. Prior to 2009, the denominator only included the population who reported having had at least one drink in the past 12 months.

Data source: Statistics Canada, Canadian Community Health Survey (CCHS).

Timeframe: 2007-2008, 2009-2010.

Additional notes: Stratified by region. Crude rate of alcohol use (not age-adjusted) shown using standard Statistics Canada calculation methods.

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+, based on survey data.

Denominator: Total survey participants, ages 12+.

Data source: Statistics Canada, Canadian Community Health Survey (CCHS).

Timeframe: 2007-2008, 2009-2010.

Additional notes: Stratified by region. Crude rate of fruit and vegetable consumption (not age-adjusted) shown as per standard Statistics Canada calculation methods.

Indicator: Physical Activity

Definition: The percent of teens and adults with moderate or active levels of physical activity (based on the nature frequency and duration of their participation in leisure time activity). Based on self-reported activity levels in the past three months.

Numerator: Number of survey respondents reporting moderate or active physical activity time during leisure time, ages 12+.

Denominator: Population 12+ who reported a level of physical activity during leisure time.

Data source: Statistics Canada, Canadian Community Health Survey (CCHS).

Timeframe: 2007-2008, 2009-2010.

Additional notes: Stratified by region. Crude rate of total physical activity (not age-adjusted) shown using standard Statistics Canada calculation methods.

ACCESS SECTION

SCREENING

Indicator: Colorectal Cancer Screening (FOBT)

Definition: The percent of the population ages 50-74, who completed a Fecal Occult Blood Test (FOBT) in the last two years.

Numerator: The number of individuals who completed an FOBT in the last two years, ages 50-74.

Denominator: All Manitobans aged 50-74 from Manitoba Health's population database.

Data source: Manitoba Health Medical Claims data and ColonCheck registry.

Timeframe: January 1, 2007 – December 31, 2008; January 1, 2009 – December 31, 2010.

Additional notes: Stratified by region. Excluding testing analyzed in DSM (Diagnosic Services Manitoba) labs.

Indicator: Colorectal Cancer Screening (FOBT, colonoscopy, sigmoidoscopy)

Definition: Percent of the population ages 50-74 who completed an FOBT in the last two years, or a colonoscopy or flexible sigmoidoscopy in the last five years.

Numerator: The number of individuals ages 50-74 who completed an FOBT in the last two years, or a colonoscopy or flexible sigmoidoscopy in the last five years.

Denominator: All Manitobans aged 50-74 from Manitoba Health's population database.

Data source: Manitoba Health Medical Claims data and ColonCheck registry.

Timeframe: January 1, 2004-December 31, 2008; January 1, 2006 – December 31, 2010.

Additional notes: Stratified by region. Excluding testing analyzed in DSM (Diagnosic Services Manitoba) labs.

Indicator: Cervical Cancer Screening

Definition: Percent of women ages 20-69, who had a Papanicolaou (Pap) test in the last three years.

Numerator: Number of women ages 20-69 with a Pap test in the past three years, based on information in the CervixCheck registry.

Denominator: All women ages 20-69 in the CervixCheck registry.

Data source: CervixCheck registery.

Timeframe: April 1, 2006-March 31, 2009; April 1, 2009 – March 31, 2012.

Additional notes: Stratified by region.

Indicator: Breast Cancer Screening (All Mammograms)

Definition: Percent of women ages 50-69, who had a mammogram (screening or diagnostic) in the last two years.

Numerator: Number of women ages 50-69 with a mammogram in the past two years, based on Medical Claims data from Manitoba Health; includes diagnostic and screening mammograms.

Denominator: All women ages 50-69, from Manitoba Health's population database.

Data source: Manitoba Health (using Medical Claims data, population registry).

Timeframe: April 1, 2006-March 31, 2008; April 1, 2008-March 31, 2010.

Additional notes: Stratified by region. Two forms of this indicator are provided, consistent with national reporting, demonstrating mammography utilization overall as well as the proportion delivered through organized programs.

Indicator: Breast Cancer Screening (Mammography through BreastCheck)

Definition: Percent of women ages 50-69, who had a screening mammogram through BreastCheck in the last two years.

Numerator: Number of women ages 50-69 who had a screening mammogram at BreastCheck in the past two years, based on data from the BreastCheck registry.

Denominator: All women ages 50-69, from Manitoba Health's population database.

Data source: BreastCheck registry.

Timeframe: April 1, 2006-March 31, 2008; April 1, 2008-March 31, 2010.

Additional notes: Stratified by region. Two forms of this indicator are provided, consistent with national reporting, demonstrating mammography utilization overall as well as the proportion delivered through organized programs.

WAIT TIMES

Indicator: Wait Times, Breast Assessment

Definition: Median waiting time (in days) from screening by mammogram to final diagnosis, for BreastCheck participants.

Population: Women ages 50-69 participating in BreastCheck with an abnormal breast screen result.

Data source: BreastCheck registry.

Timeframe: April 1, 2006-March 31, 2008; April 1, 2008-March 31, 2010.

Additional notes: Stratified by region. Indicator defined as per national standards for reporting.

Indicator: Wait Times, Radiation Therapy

Definition: Percent of patients treated with radiation therapy within four weeks from ready to treat to start of treatment.

Numerator: Number of patients who receive their radiation therapy within four weeks of being ready for treatment.

Denominator: All patients receiving radiation therapy.

Data source: Radiation Oncology Program, CancerCare Manitoba.

Timeframe: April 1, 2009-March 31, 2010; April 1, 2011-March 31, 2012.

Additional notes: Stratified by type of cancer (lung, rectal, breast, prostate) and region. Indicator defined as per national standards for reporting.

TREATMENT

Indicator: Surgery (Utilization)

Definition: Percent of patients treated with surgery.

Numerator: Number of cancer patients who undergo surgery for their malignancy.

Denominator: All patients diagnosed with invasive cancer (excludes non-melanoma skin cancers as per standard national/international protocols).

Data source: Manitoba Cancer Registry.

Timeframe: 2006-2007; 2008-2010. (Diagnosis years)

Additional notes: Stratified by type of cancer (lung, colorectal, breast, prostate) and region.

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.

Indicator: Radiation Therapy (Utilization)

Definition: Percent of patients treated with radiation therapy.

Numerator: Number of cancer patients who undergo radiation therapy for their malignancy.

Denominator: All patients diagnosed with invasive cancer (excludes non-melanoma skin cancers as per standard national/international protocols).

Data source: Manitoba Cancer Registry.

Timeframe: 2005-2007; 2008-2010. (Diagnosis years)

Additional notes: Stratified by type of cancer (lung, rectal, breast, prostate) and region.

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.

Indicator: 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 undergo radiation therapy within a year of breast conserving surgery.

Denominator: All patients diagnosed with early stage (I/II) breast cancer who undergo breast conserving surgery.

Data source: Manitoba Cancer Registry.

Timeframe: 2005-2007; 2008-2010. (Diagnosis years)

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, ultimate 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.

Indicator: Systemic Therapy (Utilization)

Definition: Percent of patients treated with systemic therapy (chemotherapy or hormone therapy).

Numerator: Number of cancer patients who undergo systemic therapy for their malignancy.

Denominator: All patients diagnosed with invasive cancer (excludes non-melanoma skin cancers as per standard national/international protocols).

Data source: Manitoba Cancer Registry.

Timeframe: 2006-2007; 2008-2010. (Diagnosis years)

Additional notes: Stratified by type of cancer (lung, colon, breast, prostate) and region.

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 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.

ACCESSING THE CANCER SYSTEM

Indicator: Late-Stage Diagnosis

Definition: Percent of patients diagnosed at late stage (IV), indicating advanced cancer with distant spread (metastases) at diagnosis.

Numerator: Number of patients who are diagnosed with stage IV cancer.

Denominator: All patients diagnosed with invasive cancer (excludes non-melanoma skin cancers as per standard national/international protocols).

Data source: Manitoba Cancer Registry.

Timeframe: 2005-2007; 2008-2010. (Diagnosis years)

Additional notes: Stratified by type of cancer (lung, colorectal, breast, prostate) and region. 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.

Indicator: End-of-Life Care (Utilization)

Definition: Percent of patients who die of cancer with an acute care stay during the last two weeks of life.

Numerator: Number of patients who die of cancer with an acute care stay in the last two weeks of life.

Denominator: All patients who die of (invasive) cancer (excludes non-melanoma skin cancers as per standard national/international protocols).

Data source: Manitoba Cancer Registry (note: death information is reported routinely to the Manitoba Cancer Registry by Manitoba's Vital Statistics Agency); Manitoba Health Hospital Discharge Database.

Timeframe: 2005-2007; 2008-2010. (Years of death)

Additional notes: Stratified by region.

This indicator is useful for planning purposes but should not be used as a measure of appropriateness of treatment. Use of acute care hospitals in the last two weeks of life varies depending on the specific cancer diagnosis, patient (and family or personal caregiver) preference, the availability of community and home-based palliative care, and the level of medical intervention required. As a result of these factors, patients who stay in an acute care facility in the last two weeks of life may be receiving appropriate care, although other care options (including dying at home) may also be appropriate.

Acute care stays outside of Manitoba may not be captured in our data sources. We also note that some palliative care units exist within acute care facilities, and are currently identified in the "acute care" category in our data. Efforts to identify palliative care units as a place of death, as distinct from the host acute care facility, will refine this measure in the future.

OUTCOMES SECTION

Indicator: Incidence

Definition: Annual age-standardized cancer incidence rate per 100,000 people. Allows the reader to compare cancer incidence rates in different regions with different age structures (the rates are "adjusted" or "standardized" so that age differences are taken into account).

Numerator: All patients diagnosed with invasive cancer (excludes non-melanoma skin cancers as per standard national/ international protocols).

Denominator: All residents, from Manitoba Health's population database.

Data source: Manitoba Cancer Registry; Manitoba Health population registry (for denominator).

Timeframe: 2005-2007; 2008-2010. (Diagnosis years)

Additional notes: Stratified by type of cancer (lung, colorectal, breast, prostate and region. Rates are age-standardized (using the direct method) to the 2001 Manitoba population.

Indicator: Mortality

Definition: Annual age-standardized cancer mortality rate per 100,000 people. 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).

Numerator: All patients dying of invasive cancer (excludes non-melanoma skin cancers as per standard national/ international protocols).

Denominator: All Manitoba residents, from Manitoba Health's population database.

Data source: Manitoba Cancer Registry (note: death information is reported routinely to the Manitoba Cancer Registry by Manitoba's Vital Statistics Agency); Manitoba Health population registry (for denominator).

Timeframe: 2005-2007; 2008-2010. (Years of death)

Additional notes: Stratified by type of cancer (lung, colorectal, breast, prostate) and region.Rates are age-standardized (using the direct method) to the 2001 Manitoba population.

Indicator: Survival

Definition: Age-standardized five-year relative survival for cancer. Relative survival compares the survival experience of individuals with cancer to individuals without cancer (of the same age). It is "a way of comparing survival of people who have cancer with those who don't—it shows how much cancer shortens life" (see the National Cancer Institute's online dictionary of terms, www.cancer.gov/ dictionary/).

Numerator: Observed survival (five years after diagnosis) for all patients who are diagnosed with invasive cancer (excludes non-melanoma skin cancers as per standard national/ international protocols).

Denominator: Expected survival of Manitobans of a similar age, based on lifetables from *Cancer Survival in Canada: Provincial profiles plus briefings on the ten most common cancer diagnoses*. 2012. CancerCare Manitoba, Winnipeg, Manitoba.

Data source: Manitoba Cancer Registry (note: death information is reported routinely to the Manitoba Cancer Registry by Manitoba's Vital Statistics Agency); Manitoba Health population registry (for denominator).

Timeframe: 2003-2005; 2006-2008. (Diagnosis years)

Additional notes: Stratified by type of cancer (lung, colorectal, breast, prostate) and region.

PATIENT EXPERIENCE

Indicator: Patient Satisfaction

Definition: Overall patient satisfaction score for outpatient cancer care.

Numerator: Number of patients who are satisfied with outpatient cancer care (composite measure); based on survey data.

Denominator: All patients who participate in the survey (sample of all patients still living six months after diagnosis).

Data source: NRC Picker Ambulatory Oncology Survey.

Timeframe: June 1, 2007-March 31, 2008; June 1, 2011-October 31, 2011.

Additional notes: Stratified by region.

Indicator: Patient Satisfaction: Emotional Support

Definition: Overall patient satisfaction score for emotional support.

Numerator: Number of patients who are satisfied with emotional support (composite measure); based on survey data.

Denominator: All patients who participate in the survey (sample of all patients still living six months after diagnosis).

Data source: NRC Picker Ambulatory Oncology Survey.

Timeframe: June 1, 2007-March 31, 2008; June 1, 2011-October 31, 2011.

Additional notes: Stratified by region.

Emotional support question list changed over time; NRC Picker specially analyzed the data with a comparable question list for this report.

Indicator: Pain Management

Definition: Percent of patients experiencing pain, who felt staff did everything they could to control pain or discomfort.

Numerator: Number of patients with positive responses to the question, "Do you think the staff did everything they could to control your pain or discomfort?"; based on survey data.

Denominator: All patients who participate in the survey (sample of all patients still living six months after diagnosis) who experienced pain in the past six months.

Data source: NRC Picker Ambulatory Oncology Survey.

Timeframe: June 1, 2007-March 31, 2008; June 1, 2011-October 31, 2011.

Additional notes: Stratified by region.

General Terms & Definitions

Cancer: Codes, Classifications and Categories

Cancer is a term used to describe a group of 200+ diseases. The common feature of these diseases is that abnormal cells divide without (i.e., not responding to) our bodies' usual biological growth control mechanisms. They are then able to invade surrounding tissue and spread to other parts of the body (metastasize) through our blood and lymph systems. Most types of cancer are named 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 tumour 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 10th edition (ICD-10) from 2002 to present.

Specifically, the following codes are used:

Cancer Category	Incidence (ICDO-3)	Mortality (ICD-9) (up to 2001)	Mortality (ICD-10) (from 2002 to present)
All invasive cancers	C00-C97 with invasive morphology (/3), excluding non-melanoma skin cancers (C44 with morphology outside of 8720-8790)	140-208, excluding non-melanoma skin cancers (173)	C00-C97, excluding non-melanoma skin cancers (C44)
Lung	C34 with invasive morphology (/3)	162	C34
Colorectal	C18-C20, C26.0 with invasive morphology (/3)	153, 154.0-154.1, 159	C18-C20, C26.0
Breast *(females only)*	C50 with invasive morphology (/3)	174	C50
Prostate	C61 with invasive morphology (/3)	185	C61

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/dictionary, for more information on other cancer terms.

Geography: Categories

Only Manitoba residents are included in the analyses.

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. In 2012, the Manitoba government officially announced the merger of the 11 regional health authorities into five new regions as follows:

- Northern RHA: Nor-Man, and Burntwood Regional Health Authorities
- Prairie Mountain Health: Assiniboine, Brandon, and Parkland Regional Health Authorities
- Southern Health-Santé Sud: South Eastman, and Central Regional Health Authorities
- Interlake Eastern: Interlake, and North Eastman Regional Health Authorities.
- Winnipeg Regional Health Authority: Churchill, and Winnipeg Regional Health Authorities.
- For brevity, a short-hand form is used to denote the new RHAs throughout this report:
  - Northern RHA – Northern Regional Health Authority
  - Southern RHA – 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

Data Source Symbols Reference

Prevention

a Canadian Community Health Survey 2007-2008, 2009-2010.

Access

Screening

b Manitoba Health Medical Claims data and ColonCheck registry, January 1, 2007 – December 31, 2008, January 1, 2009 – December 31, 2010.

c Manitoba Health Medical Claims data and ColonCheck registry, January 1, 2004 – December 31, 2008, January 1, 2006 – December 31, 2010.

d CervixCheck registry, women (ages 20 – 69) screened April 1, 2006 – March 31, 2009, April 1, 2009 – March 31, 2012.

e Manitoba Health Medical Claims data for mammography, women (ages 50 – 69), April 1, 2006 – March 31, 2008, April 1, 2008 – March 31, 2010.

f BreastCheck registry, women (ages 50 – 69) screened April 1, 2006 – March 31, 2008, April 1, 2008 – March 31, 2010.

Wait Times

g BreastCheck registry, women (ages 50 – 69) with an abnormal screen, April 1, 2006 – March 31, 2008, April 1, 2008 – March 31, 2010.

h CancerCare Manitoba, Radiation Therapy Program, patients seen April 1, 2009 – March 31, 2010, April 1, 2011 – March 31, 2012.

Treatment

i Manitoba Cancer Registry, patients diagnosed 2006-2007, 2008-2010.

j Manitoba Cancer Registry, patients diagnosed 2005-2007, 2008-2010.

Additional Indicators

k Manitoba Cancer Registry, patients diagnosed 2005-2007, 2008-2010.

l Manitoba Cancer Registry, cancer deaths 2005-2007, 2008-2010; combined with hospital data from Manitoba Health.

Outcomes

m Manitoba Cancer Registry, patients diagnosed 2005-2007, 2008-2010.

n Manitoba Cancer Registry, cancer deaths 2005-2007, 2008-2010.

o Manitoba Cancer Registry, patients diagnosed 2003-2005, 2006-2008.

p NRC Picker, Ambulatory Oncology Survey, 2008 and 2011.

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