



Canadian Institute  
for Health Information  
Institut canadien  
d'information sur la santé

## Analysis in Brief

March 2016

# Wait Times for Priority Procedures in Canada, 2016

## Introduction

Since first ministers committed to reducing wait times as part of the *10-Year Plan to Strengthen Health Care*,<sup>i, 1</sup> the collection and reporting of wait time data has expanded significantly. Provinces have worked together over the past decade to develop indicators for wait time reporting that reflect — to the greatest extent possible — the patient's true wait for treatment and diagnostics. All provinces are now collecting and reporting wait time data for 4 of the 5 priority areas — cancer, heart, joint replacement and sight restoration — and 6 provinces are reporting on waits for the 5th priority area, diagnostic imaging.<sup>2</sup>

As part of the first ministers' plan to reduce wait times, the Canadian Institute for Health Information (CIHI) was asked to report on the progress of wait times for procedures in these priority areas across jurisdictions. This year's report explores data from April to September 2015 and compares these results with those of the previous 4 years. With the exception of hip fracture repair, wait times data is submitted by each province to CIHI. For procedures where pan-Canadian benchmarks have been established,<sup>3</sup> provinces also report the percentage of patients receiving care within the evidence-based recommended time frames.

While Canadian wait times have improved since the initial data was released in 2006, this report focuses on more recent changes (from 2011 to 2015). Wait times for urgent procedures were at or approaching benchmark targets. Canada has seen improvements in wait times for hip fracture repair: nearly 90% of patients were treated within the benchmark. Similar to previous years, more than 90% of Canadians received radiation therapy within the benchmark. However, efforts to reduce wait times for elective procedures — including cataract surgery and joint replacement — have produced mixed results. Despite this lack of consistent improvement in wait times for joint replacement and cataract surgery, Canada continues to perform well on median wait times for these procedures when compared internationally.<sup>4</sup>

Wait times for specialist care are also an important part of a patient's journey. International data suggests that Canadians experience longer waits than patients in other countries surveyed by The Commonwealth Fund for specialist care and diagnostics.<sup>5, 6</sup> There is now a pan-Canadian

---

i. In the companion agreement, *Asymmetrical Federalism That Respects Quebec's Jurisdiction*, it was noted that Quebec would apply its own wait time reduction plan in accordance with the objectives, standards and criteria established by the relevant Quebec authorities.

definition for measuring wait times for specialist care, and many provinces have begun making these wait times publicly available. As data on wait times for specialist care becomes more comprehensive and comparable across jurisdictions, this information will provide a more complete picture of how Canadians experience waiting for care.

## Understanding this report

This report provides a snapshot of wait times in Canada. Additional wait time information, including trends from 2008 to 2015 by province, health region and priority area, is available on CIHI's website in our [Wait Times tool](#).



This report provides comparative wait time information for procedures in the 5 priority areas set by the first ministers in 2004. To facilitate comparisons, pan-Canadian benchmarks for joint replacement, cataract surgery, radiation therapy and coronary artery bypass graft (CABG) surgery were established in 2005. Benchmarks are defined here as “evidence-based goals each province or territory will strive to meet, while balancing other priorities aimed at providing quality care to Canadians. Benchmarks express the amount of time that clinical evidence shows is appropriate to wait for a particular procedure.”<sup>7</sup> Because not all delays in receiving treatment are directly related to access to care, it may not be reasonable to expect 100% of procedures to be performed within a benchmark time frame. To date, 90% has served as a practical target.

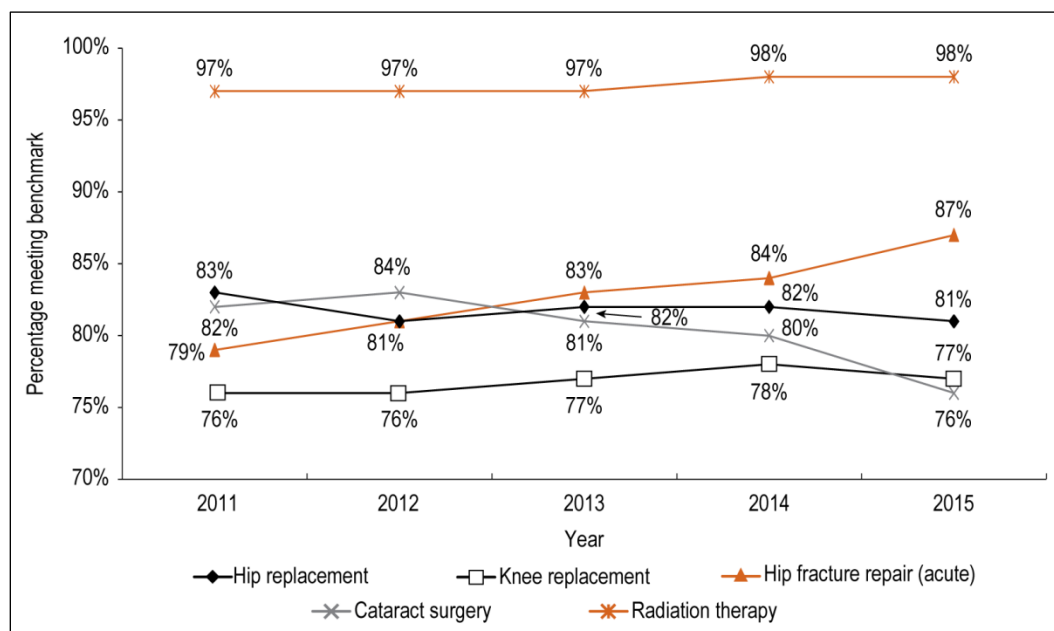
Comparing wait times for CABG surgery continues to be a challenge in 2016. The benchmarks for CABG were established based on the urgency level of a patient's condition. However, there continues to be a lack of consensus across provinces on how physicians should prioritize these patients. Some clinicians have expressed concern that applying a benchmark of 26 weeks — the longest benchmark time frame — for all bypass surgery patients, regardless of priority level, presents a more favourable picture of wait times than would otherwise be seen. Addressing this challenge will require engagement and collaboration between the provinces and physicians. CABG wait times are not discussed in this report, but the 50th and 90th percentile wait times are available in our [Wait Times tool](#).

Trends are used to track progress. For this report, a trend is considered an increase or decrease of at least 5 points in the percentage of patients receiving care within the benchmark from the baseline year of 2011. A proportion is considered unchanged if there is a difference of less than 5 percentage points. Cancer surgery trends were determined using the most recent 3 years of available data, where wait times have been consistently reported from the baseline year of 2013.

## Waiting for priority procedures: Key findings

In examining wait time trends from 2011 to 2015, the degree of improvement depends on the priority procedure of interest. Over this time frame, the 2 procedures that saw the greatest changes were cataract surgery and hip fracture repair.

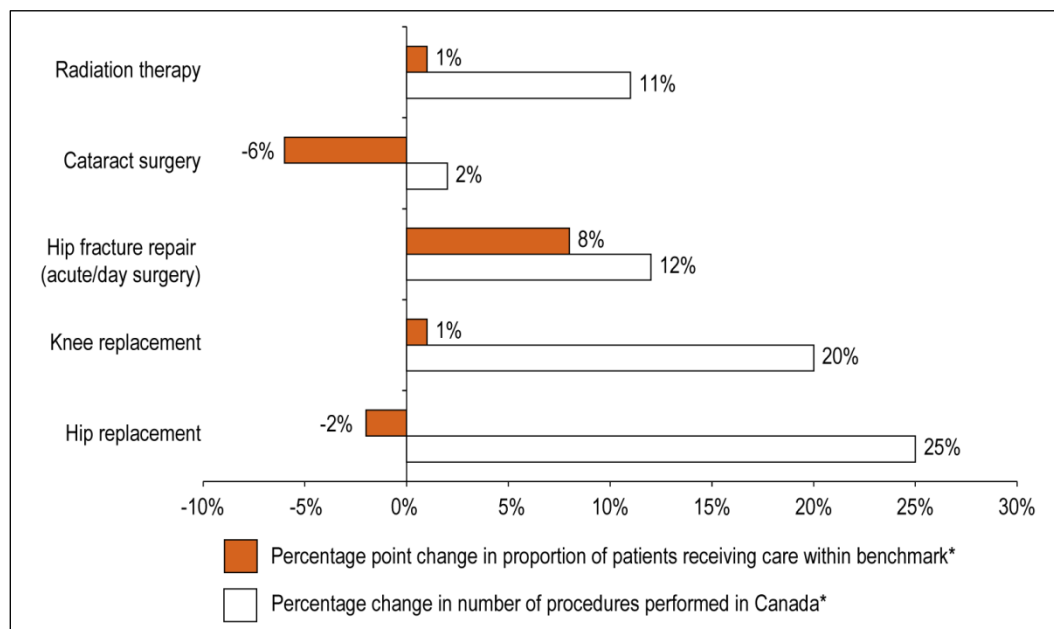
**Figure 1** Percentage meeting benchmark for priority procedures in Canada, April to September, 2011 to 2015



**Notes**

Quebec's hip fracture repair data is not included due to the methodological differences in the data. All-Canada estimates were calculated using provincially submitted surgical volumes and percentages meeting benchmarks. Volumes and wait times for Nova Scotia have been updated for 2011 to 2014 and are different than those that appear in last year's report.

**Figure 2** Change in percentage meeting wait time benchmarks and total volume, April to September, 2011 to 2015, Canada



**Notes**

\* Changes calculated for the period 2011 to 2015. Quebec's hip fracture repair data is not included due to the methodological differences in the data. All-Canada estimates were calculated using provincially submitted surgical volumes and percentages meeting benchmarks. Volumes and wait times for Nova Scotia have been updated for 2011 to 2014 and are different than those that appear in last year's report.

The percentage meeting benchmark for cataract surgery significantly declined from 2011 to 2015, while it increased for hip fracture repair (Figure 1). For joint replacement and radiation therapy, the proportion of patients receiving care within benchmark time frames was relatively stable. Despite increases in the number of priority procedures performed over these 5 years, the data suggests that demand for some procedures is still outpacing the ability of health systems to improve wait times (Figure 2). Important contextual information for understanding the increased need or demand for surgeries may include an aging population, increases in disease incidence and prevalence, and changes in surgical practice and procedures. Factors affecting the number of procedures performed include the number of surgeons, incentive systems and available resources like operating room time and post-operative beds.

## **Pan-Canadian wait times for hip and knee replacements remain stable while volumes increase**

Similar to previous years, in 2015, at least 3 out of 4 patients received hip and knee replacements within the benchmark time frame. 81% of patients received their hip replacement and 77% received their knee replacement within the benchmark of 182 days (26 weeks). Canada continued to perform well in joint replacement when compared internationally: the median wait times of 86 days for hip replacement and 104 days for knee replacement in Canada were well below the averages among 12 Organisation for Economic Co-operation and Development (OECD) comparator countries (121 days and 157 days, respectively).<sup>4</sup>

There continued to be a steady increase in the number of joint replacements performed. Between 2011 and 2015, hip and knee replacement volumes rose 25% and 20%, respectively (Figure 2). Although population aging played a role in this change, the rate of joint replacement per capita increased even when adjusting for age.<sup>8</sup> The prevalence of osteoarthritis and joint pain — which can result in the need for joint replacement — increases with age, but there is also evidence that genetics are an important risk factor in knee and hip osteoarthritis.<sup>9</sup> Other factors contributing to this increase in volume may include obesity, occupational habits, previous injuries and sporting activities.<sup>9</sup> The number of people with joint discomfort will likely continue to rise and an aging population may lead to a growing demand for these types of surgeries, making wait time management increasingly important in Canada.<sup>9</sup>

### **Regional wait time data**

For the second consecutive year, provinces have submitted wait time data for health regions. The data includes 50th and 90th percentile waits for hip and knee replacements, as well as the percentage meeting benchmark in each region. The results can be found in CIHI's online [Wait Times tool](#).



Although pan-Canadian joint replacement wait times remained stable, trends across the provinces were mixed (Figure 3). From 2011 to 2015, the percentage of patients receiving care within the benchmark for knee replacement significantly increased in 6 provinces (Newfoundland and Labrador, Prince Edward Island, New Brunswick, Manitoba, Saskatchewan and Alberta); 4 of these provinces also had significant improvements in the percentage meeting benchmark for hip replacement (Newfoundland and Labrador, P.E.I., Manitoba and Saskatchewan). British Columbia saw a significant decrease in the percentage meeting benchmark for both hip and knee replacement.

There was also variation in the percentage of patients being treated within the benchmark across provinces. For hip replacement, the percentage meeting benchmark ranged from 52% to 100%; only Newfoundland and Labrador and Saskatchewan achieved the target of treating 90% of hip replacement patients within the benchmark. For knee replacement, the range was larger — between 36% and 99% — with only P.E.I. and Saskatchewan achieving the 90% target.

## **Fewer patients are receiving cataract surgery within the benchmark, although some provinces have seen improvements**

In Canada, fewer patients are receiving cataract surgery within recommended time frames. In 2015, 76% of patients received cataract surgery within the benchmark of 112 days, compared with 82% of patients in 2011 (Figure 1). The median wait for cataract surgery increased from 49 days to 58 days during this time period. However, this trend was not consistent across provinces. The change in the pan-Canadian percentage meeting benchmark for cataract surgery since 2011 was driven by significant decreases in B.C. and Ontario. Alberta, Saskatchewan, Nova Scotia, P.E.I. and Newfoundland and Labrador saw improvements.<sup>ii</sup> The largest improvements were seen in Saskatchewan (38 percentage points) and Newfoundland and Labrador (25 percentage points). Despite the overall decline in percentage meeting benchmark, the pan-Canadian median wait time for cataract surgery of 58 days was substantially lower than the 2013 international average of 103 days.<sup>4</sup>

## **Wait times for hip fracture repair continue to improve**

Access to timely care for hip fracture is critical, as longer wait times have been associated with a higher risk of mortality, especially in elderly patients.<sup>10, 11</sup> Across Canada, wait times for hip fracture repair continued to improve. In 2015, 87% of patients were treated within the benchmark of 48 hours — an increase of 8 percentage points from 2011 (Figure 1). This improvement was also seen across provinces, where significant progress was made in 5 of the 9 provinces in which the wait time was calculated (Figure 3). The largest improvements were seen in B.C. (15 percentage points) and Ontario (8 percentage points).

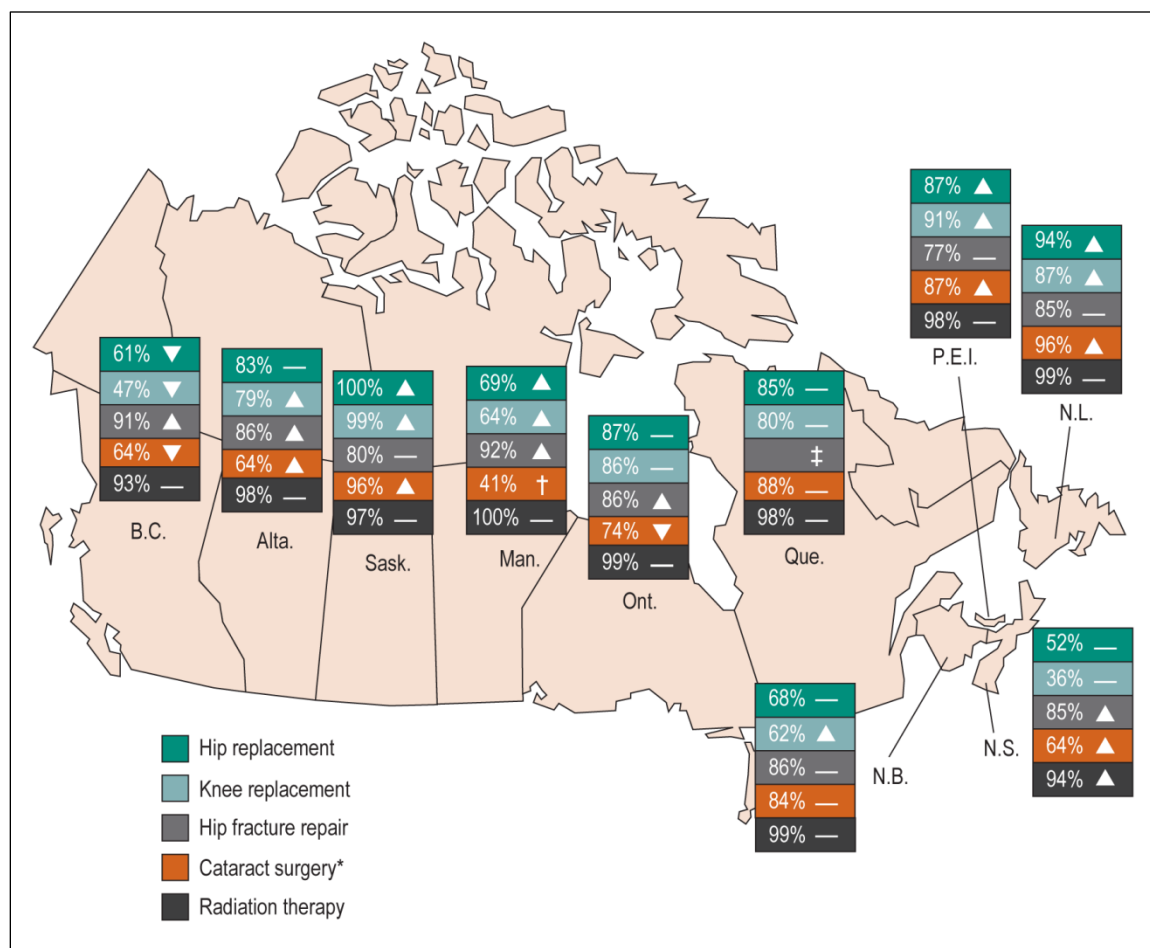
## **All provinces reach 90% meeting benchmark for radiation therapy**

Radiation therapy wait times remained within the benchmark of 28 days for most patients. In 2015, all provinces reported at least 90% of patients meeting the benchmark, and 8 of 10 provinces reported at least 97% meeting the benchmark. Relative to 2011, the largest improvement was in Nova Scotia, where the percentage meeting benchmark increased by 11 percentage points to 94%. In Manitoba, all patients received radiation therapy within the 28-day benchmark (Figure 3). Across the provinces, the median wait time for radiation therapy ranged from 6 to 13 days.

---

ii. The data shows that wait times for cataract surgery also increased significantly in Manitoba. However, due to methodology changes in the cataract surgery wait time data that was submitted for 2015, the results are not directly comparable over time.

**Figure 3** Change in percentage meeting wait time benchmark, April to September, 2011 to 2015, by province



#### Notes

- ▲ At least a 5-percentage-point *increase* in percentage meeting benchmark since 2011 (after rounding to nearest percent).
- ▼ At least a 5-percentage-point *decrease* in percentage meeting benchmark since 2011 (after rounding to nearest percent).
- No substantial change in percentage meeting benchmark since 2011.
- \* The pan-Canadian benchmark specifies cataract surgery within 16 weeks (112 days) for patients who are at high risk. There is not yet consensus on a definition of “high risk,” so the benchmark is applied across all priority levels.
- † Manitoba’s 2015 results incorporate changes in methodology and coverage and therefore are not directly comparable with results from previous years.
- ‡ Quebec wait times for hip fracture repair are not included due to methodological differences in the data. As of 2012, the percentage of patients receiving CABG surgery within the benchmark is no longer reported. Volumes and wait times for Nova Scotia have been updated for 2011 to 2014 and are different than those that appear in last year’s report.

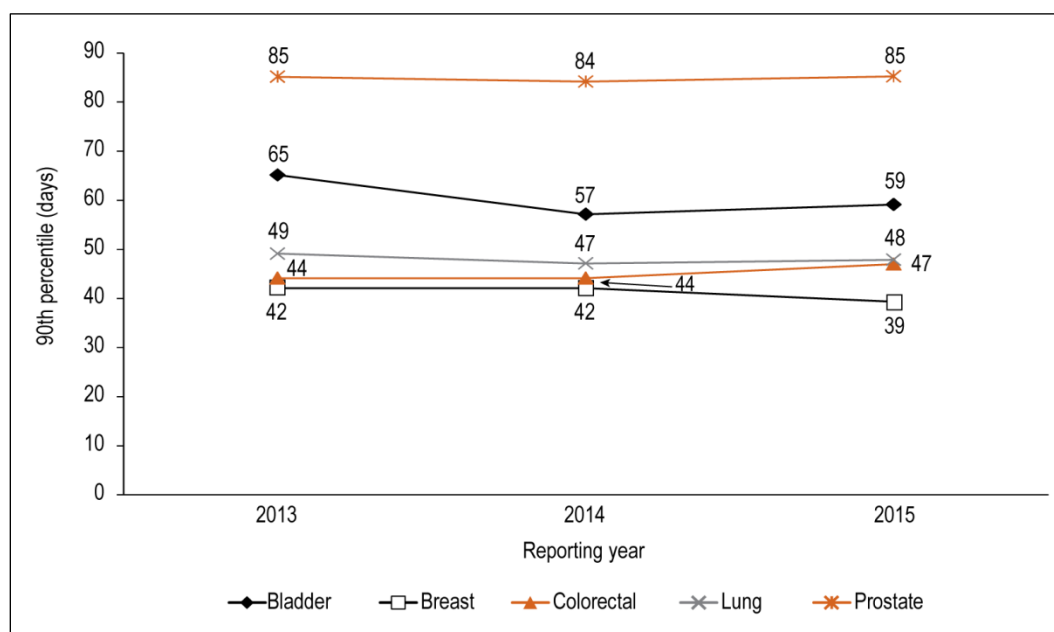
## A third year of reporting on cancer surgery reveals stable volumes and wait times

Access to cancer surgery is an important health system issue.<sup>12</sup> It has been estimated that 196,600 Canadians would develop cancer in 2015, and that 2 in 5 Canadians would develop cancer in their lifetime.<sup>12</sup> More than half of the cases diagnosed in Canada are lung, prostate, breast and colorectal cancer.<sup>12</sup> To address questions about how long Canadians are waiting for cancer surgery, provinces developed a common wait time indicator, and most are now reporting wait times for breast, colorectal, prostate, lung and bladder cancer. The data includes all cancer stages and consists of 50th and 90th percentile waits. There are no established wait time benchmarks for cancer surgery.

At the pan-Canadian level, the median wait for cancer surgery ranged from 18 to 37 days for the 5 body sites reported here. Similar to previous years, the shortest wait times were for breast cancer surgery — 9 out of 10 patients received this surgery within 39 days — and the longest wait times were for prostate cancer — 9 out of 10 patients received care within 85 days. In many men, prostate cancer is slow-growing; therefore, a longer wait time might not be considered inappropriate for some patients.<sup>13</sup>

When compared with the 2 previous years of reporting, cancer surgery volumes remained stable for the 5 body sites except prostate (14% decrease) and lung (3% increase). Lung cancer is the leading cause of cancer death in Canada — contributing to more deaths than 3 other major cancer types (prostate, breast, colorectal) combined.<sup>12</sup>

**Figure 4** 90th percentile wait times for cancer surgery by site, 2013 to 2015



### Note

Volumes and wait times for Nova Scotia have been updated for 2011 to 2014 and are different than those that appear in last year's report.



## Waits for IV chemotherapy

CIHI and the provinces continue to work toward comprehensive reporting of comparable intravenous chemotherapy wait times, under the agreed-upon definition:

*The wait time for IV chemotherapy treatment is the number of calendar days a patient waited, between the date the patient is ready to treat and the date of the first IV chemotherapy treatment (day 1, cycle 1).*

Reporting for this wait time is to be finalized in the upcoming year. This information, when combined with the surgical wait time data already being reported, will help to improve our knowledge of the full cancer care journey experienced by patients.

Additional information about the definition for IV chemotherapy wait time is available in [Wait Time Information in Priority Areas: Definitions](#).

## For both CT and MRI scans, the median wait time has increased in most reporting provinces

Early detection of health issues contributes greatly to positive outcomes, as treatments can be initiated at a faster rate. Diagnostic imaging (DI) can also be an important step in early detection. A 2015 survey of Canadian primary care doctors showed that 40% thought their patients often experienced difficulty getting specialized diagnostic tests — much higher than the international average of 21%.<sup>6</sup>

Wait times for DI are reported by fewer provinces than are waits for other priority procedures. 6 out of 10 provinces submitted comparable wait time data for computerized tomography (CT) and magnetic resonance imaging (MRI) scans. There have been no benchmarks established for DI due to the lack of clinical evidence and the variety of indications for these tests.

For MRI scans, the median wait time increased significantly in 4 of the 6 reporting provinces from 2011 to 2015. For CT scans, the median wait increased significantly in 5 provinces. The 90th percentile wait also increased in 4 provinces for CT scans and 3 provinces for MRI scans in the same time frame. There continued to be significant variability in the wait times for CT and MRI scans by province. CT scan data shows that in 2015 the 90th percentile wait time ranged from 28 days (Manitoba) to 74 days (Nova Scotia). A similar pattern was seen for MRI scans, where 90th percentile waits varied from 91 days (Ontario) to 202 days (Nova Scotia) (Table 1).



**Table 1** Provincial wait times (days) for CT scans and MRI scans, April to September 2015, by province

Province	CT		MRI	
	50th percentile	90th percentile	50th percentile	90th percentile
P.E.I.	30	61	56	167
N.S.	21	74	55	202
Ont.	7	37	36	91
Man.	18	28	99	189
Sask.	20	50	30	149
Alta.	17	56	90	172

**Note**

Wait times for CT scans and MRI scans were unavailable for Newfoundland and Labrador, New Brunswick, Quebec and British Columbia.

## In focus: Waits for specialist care

Although surgical wait times are an important part of the patient's journey, they capture only some of the patient pathway. Measuring waits throughout the continuum of care can provide a more complete picture of the patient's journey and allow for evaluation and improvement of various processes in health care systems. Some have suggested it is likely that patients face the greatest wait-related risk at the earlier phases of care, before the disease has been conclusively diagnosed and a treatment plan established.<sup>14</sup> International data suggests that Canadians are experiencing longer waits for specialist care; a survey of older Canadians found that 25% waited at least 2 months to see a specialist, which was the highest among 11 countries included in the study.<sup>5</sup>

All provinces have worked together to develop a common definition for waits for specialist care and have established the population inclusions and exclusions for measuring this wait. Each province is at a different stage in its ability to measure these waits. Although no comprehensive national data exists at this time, some provinces have started reporting waits for specialist care for selected patient groups, as outlined in Table 2.

**Table 2** Publicly reported wait times for specialist care, by province

Province	Procedure	Volume	50th percentile	90th percentile	Percentage meeting target
P.E.I.	Radiation	●	●	●	●
N.S.	Radiation		●	●	
	Hip replacement		●	●	
	Knee replacement		●	●	
	Cataract surgery		●	●	
	Breast cancer surgery		●	●	
	Colorectal cancer surgery		●	●	
	Prostate cancer surgery		●	●	
	Bladder cancer surgery		●	●	
Ont.	Radiation				●
	Chemotherapy				●
Sask.	Radiation			●	●
Alta.	Radiation	●	●	●	
	Chemotherapy	●	●	●	

Despite the agreed-upon pan-Canadian definition for specialist care wait times, there is a lack of consistency in the measures reported — provinces report a combination of median, 90th percentile and percentage meeting target — as well as reporting periods. Therefore, the results are not yet directly comparable and can't be used to produce national results.

## Measuring waits for specialist care at CIHI

CIHI has been working with provinces to investigate the possibility of calculating waits for specialist care using physician billing and administrative data. In principle, this methodology could be applied across jurisdictions and may result in a more comprehensive and complete picture on the state of waits for specialist care across Canada. When combined with the surgical wait times that provinces submit to CIHI, this new information on specialist waits could help our understanding of patient flow throughout the continuum of care and allow us to better identify the stages of care where patients are experiencing the most difficulties obtaining timely access to care.

Additional information about waits for specialist care, including inclusion and exclusion criteria, is available in [Wait Time Information in Priority Areas: Definitions](#).

## Wait times challenges: The road ahead

Across Canada, jurisdictions are gradually moving toward expanded public reporting of wait times. Having a more complete picture of patients' wait times across the continuum of care will help to identify where challenges exist. Information gaps continue to be a challenge in areas such as waits for specialist care and care provided outside of hospital in long-term care, mental health, rehabilitation and nursing homes. While Canada performs well internationally on wait times for some priority procedures,<sup>4</sup> surgical wait times are only part of the overall wait experienced by the patient. International data also suggests that Canadians' access to specialist and primary care (same day/next day appointment) was the lowest among 11 comparable countries.<sup>5, 15</sup> Understanding these waits can help health system planners set priorities for new initiatives to reduce wait times.

## Conclusion

With a growing and aging population in Canada, it is particularly important to monitor wait times and access to care, as demand for priority procedures will likely continue to increase. In 2015, the pan-Canadian wait times for joint replacement remained stable even as volumes increased. That said, some provinces have reported significant improvements in the number of patients receiving timely care since 2011. Waits for cataract surgery have increased at the national level, while wait times for more urgent procedures — such as hip fracture repair and radiation therapy — are at or approaching benchmark targets. This was the third year of reporting on cancer surgery; the results revealed that volumes and wait times have remained stable.

Since 2004, the quality and comprehensiveness of data on wait times for priority procedures in Canada have greatly improved. At the same time, jurisdictions across Canada have recognized that surgical and diagnostic wait times are just one part of the wait time experienced by patients. As a result, some provinces are now publicly reporting on waits for specialist care, and CIHI is working with provincial representatives to investigate methods for calculating these waits using existing data sources. These efforts should result in a greater understanding of wait times across Canada.

### There's more on the web

Additional wait time information, including trends from 2008 to 2015 by province, health region and priority area, is available on CIHI's website in our [Wait Times tool](#).



# Acknowledgements

CIHI would like to acknowledge and thank the many individuals and organizations that contributed to the development of this report.

Production of this analysis involved many people throughout CIHI. Special thanks go to the Emerging Issues team for its contribution to this report.

This analysis could not have been completed without the generous support and assistance of several other organizations and individuals, including access and wait time representatives from the provincial ministries of health.

# References

1. Health Canada. [A 10-year plan to strengthen health care](#). September 16, 2004.
2. Health Canada. [Asymmetrical federalism that respects Quebec's jurisdiction](#). September 15, 2004.
3. Norris S. [The Wait Times Issue and the Patient Wait Time Guarantee](#). October 2009.
4. Canadian Institute for Health Information. [OECD Interactive Tool: International Comparisons](#). Accessed January 15, 2016.
5. Canadian Institute for Health Information. [How Canada Compares: Results From The Commonwealth Fund 2014 International Health Policy Survey of Older Adults](#). January 2015.
6. Canadian Institute for Health Information. [How Canada Compares: Results From The Commonwealth Fund 2015 International Health Policy Survey of Primary Care Physicians](#). January 2016.
7. Ontario Ministry of Health and Long-Term Care. [First ever common benchmarks will allow Canadians to measure progress in reducing wait times](#) [media release]. December 12, 2005.
8. Canadian Institute for Health Information. [Hip and Knee Replacements in Canada: Canadian Joint Replacement Registry 2015 Annual Report](#). September 2015.
9. MacDonald Wood A, Brock TM, Heil K, Holmes R, Weusten A. [A review on the management of hip and knee osteoarthritis](#). *International Journal of Chronic Diseases*. 2013.
10. Moja L, et al. [Timing matters in hip fracture surgery: patients operated within 48 hours have better outcomes. A meta-analysis and meta-regression of over 190,000 patients](#). *PLOS ONE*. October 2012.
11. Bottle A, Aylin P. [Mortality associated with delay in operation after hip fracture: observational study](#). *BMJ*. March 2006.
12. Canadian Cancer Society's Advisory Committee on Cancer Statistics. [Canadian Cancer Statistics, 2015](#). 2015.
13. Tran K, et al. [Wait times for prostate cancer treatment and patient perceptions of care in Canada: a mixed-methods report](#). *Current Oncology*. October 2015.
14. Knudtson ML, et al. [Treating the right patient at the right time: access to specialist consultation and noninvasive testing](#). *The Canadian Journal of Cardiology*. August 2006.
15. Osborn R, Moulds D. [2014 Commonwealth Fund International Health Policy Survey of Older Adults in 11 Countries](#). November 2014.

## Our vision

Better data. Better decisions.  
Healthier Canadians.

## Our mandate

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

## Our values

Respect, Integrity, Collaboration,  
Excellence, Innovation

## Additional resources

The following companion products are available on [CIHI's website](#).

- Technical notes
- Infographic

## Talk to us

For data-specific information:  
[healthreports@cihi.ca](mailto:healthreports@cihi.ca)

For media inquiries:  
[media@cihi.ca](mailto:media@cihi.ca)

ISBN 978-1-77109-444-3 (PDF)

12487-0316

Production of this document is made possible by financial contributions from Health Canada and provincial and territorial governments. The views expressed herein do not necessarily represent the views of Health Canada or any provincial or territorial government.

Unless otherwise indicated, this product uses data provided by Canada's provinces and territories.

How to cite this document:

Canadian Institute for Health Information. *Wait Times for Priority Procedures in Canada, 2016*. Ottawa, ON: CIHI; 2016.

Cette publication est aussi disponible en français sous le titre *Les temps d'attente pour les interventions prioritaires au Canada 2016*.

© 2016 Canadian Institute for Health Information

[www.cihi.ca](http://www.cihi.ca)  
*At the heart of data*



Canadian Institute  
for Health Information  
Institut canadien  
d'information sur la santé