



March 24, 2010

Wait Times Tables—A Comparison by Province, 2010

Just over five years have passed since first ministers developed the *10-Year Plan to Strengthen Health Care*.¹ The plan included an agreement to reduce wait times for five priority areas: cancer, heart, diagnostic imaging, joint replacement and sight restoration.¹ To assess progress toward this goal, the Canadian Institute for Health Information (CIHI) was asked to report on progress on wait times across jurisdictions.

At the outset, information was limited and it was not possible to compare wait times across provinces. Mid-way into the 10-year plan, however, most provinces are now regularly reporting wait times for priority-area procedures on publicly accessible websites. Over the past two years, provinces have worked together in an effort to further refine how wait times are measured, building on indicators agreed to by first ministers in 2005.³ Together they have developed a common understanding of the precise start and stop times for waits and an agreement on which patients should be included in wait time calculations for each procedure. The result is a more complete and comparable picture of wait times across the priority areas.

This fifth consecutive annual report provides an overview of wait time information across the country. The report provides three measures of waits for care: median, 90th percentile and the percent of patients receiving care within benchmark time frames. To the extent possible, provinces provided this information according to the agreed-upon definitions. Where differences exist that are material to the reported wait, they are noted. For some priority areas, such as joint replacements and cataract surgery, most provinces were able to match the common definitions. Differences in reported waits for these areas are likely to reflect real differences in wait times across provinces. For other priority areas, such as radiation therapy and cardiac bypass surgery, provinces encountered challenges using the common definitions, and it is less clear whether differences in reported wait times by province are related to variations in definitions or to real differences in waits.

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.²

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Many provinces recently made changes to the way they collect and report wait time data. While these changes improved the quality and comparability of the information, they limited the ability to assess whether meaningful reductions in wait times were made. Where information has been consistently reported, the report also looks at whether waits became shorter or longer over time.

A series of tables in Appendix A provides detailed results on wait times by province for each priority area procedure and, where appropriate, how the waits evolved over time.

New for 2010

Bypass Surgery Waits Reported by Priority Level

Past reports presented wait times for all bypass patients combined, regardless of priority level. In an effort to improve understanding of waits for cardiac bypass surgery, cardiac wait times are now reported by three priority levels (see tables 6-A to 6-C). Each of these priority levels has a benchmark wait time as established by first ministers in 2005. The benchmarks reflect how urgently care is required:⁴

- Level I patients: within 2 weeks
- Level II patients: within 6 weeks
- Level III patients: within 26 weeks

The refinement of cardiac wait time reporting is helpful to understand the experiences of patients with different requirements for treatment. Three out of seven provinces use a common urgency rating scale. Still, comparisons by priority level across provinces are not possible for a number of reasons. The proportion of patients in each urgency level varies considerably by province, indicating probable differences in how priority levels are assigned. Further exploration of how priority levels are applied across provinces is required before conclusions can be drawn from cardiac data.

Hip Fracture Surgery

New to the report this year is wait time data for hip fracture surgery. Since 2007, CIHI has reported waits for hip fracture repair in the *Health Indicators* report series. *Health Indicators* looks at the proportion of patients who receive surgery on the same day, next day or day after admission to hospital for hip fracture. Starting in 2009–2010, new information is available that identifies the time of surgery. This new data enables a more precise calculation of patient waits for hip fracture repair, measured in hours rather than days. The result is a wait time that can be compared to the pan-Canadian benchmark of 48 hours.

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This benchmark is particularly important for seniors because hip fractures can carry significant risks. In Canada, in 2005–2006, about 7% of seniors admitted with hip fractures died in hospital within 30 days of admission.⁵ While some patients who break their hips need medical treatment to stabilize their conditions before fracture repair, research suggests patients typically benefit from timely surgery.⁶ Data from 2009–2010 was used to calculate the median, 90th percentile and percent of patients undergoing hip fracture surgery within 48 hours for all provinces, outside Quebec. The wait was calculated starting with the time of inpatient admission and ending with the surgical procedure to repair the fracture (see Table 7).

Overview of Wait Times Across Canada

What does the wait time picture look like across the country? To answer this question, the median, 90th percentile and proportion of patients who receive care within pan-Canadian benchmarks were examined for all priority-area procedures. All provinces are now able to report against benchmarks for cancer, joints and cataract procedures, while CIHI provided data on waits for hip fracture surgery. Key findings include the following:

- **The extent to which priority-area benchmarks are achieved varies across the country.** Provinces continue to work toward a goal of providing almost all priority procedures within benchmark time frames. In the interim, it is helpful to know whether most patients (75%) are receiving care within the benchmark. Table 1 shows that at least three-quarters of hip repair procedures are completed within the benchmark of 48 hours across the country. On the other hand, only three provinces (Ontario, British Columbia and Quebec) completed 75% or more of knee replacements within the benchmark time frame. These three provinces achieved the 75% threshold across all priority areas where data is available. Note that cardiac bypass surgery is not included in Table 1, as the data is not yet comparable by urgency level. There are no pan-Canadian benchmarks for angioplasty or for magnetic resonance imaging (MRI) and computed tomography (CT) scans.

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Table 1 Provinces Completing 75% of Procedures Within Benchmark Time Frames

Wait Time Benchmarks	Hip Replacement	Knee Replacement	Cataract Surgery	Hip Fracture Repair	Cancer—Radiation Treatment
	Surgery Within 26 Weeks (182 Days)	Surgery Within 26 Weeks (182 Days)	Surgery Within 16 Weeks (112 Days)*	Surgery Within 48 Hours	Treatment Within 4 Weeks (28 Days) of Being Ready to Treat
N.L.	--	--	✓		✓ [†]
P.E.I.	✓	--	✓		✓
N.S.	--	--	--	✓	--
N.B.	✓	--	✓	✓	✓
Que.	✓	✓			✓
Ont.	✓	✓	✓	✓	✓
Man.	--	--	✓	✓	✓
Sask.	--	--	✓	✓	✓
Alta.	✓	--	--	✓	--
B.C.	✓	✓	✓	✓	✓

Legend

- Benchmark data is not available.
- ✓ 75% of patients receive treatment within benchmark.
- Less than 75% of patients receive treatment within benchmark.

Notes

* The pan-Canadian benchmark specifies surgery within 16 weeks for patients who are at high risk.³ There is not yet consensus on a definition of “high risk,” so the benchmark is applied across all priority levels.

† Newfoundland and Labrador reports data for patients who receive radiation therapy within 30 days.

- **There is wide variation across Canada in the number of patients having hip replacement surgery within the benchmark.** Across provinces, the percent of patients receiving hip replacements within the 182-day benchmark varies from 51% to 100%. The typical patient (50th percentile) waits between 42 and 178 days, depending on the province where he or she receives treatment (see Table 3).
- **Many patients wait longer than the benchmark time frame for knee replacements.** In seven provinces, fewer than three-quarters of patients receive knee replacement surgery within the benchmark of 182 days. In two provinces, the median wait time exceeds the benchmark. Patients in all 10 provinces wait longer for knee replacements than for any other priority procedure (see tables 1 and 4).

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- **Most cataract surgery patients are treated within the benchmark time frame.** At least 75% of patients in seven provinces had cataract surgery within the benchmark wait time of 112 days. In all provinces, the typical patient is seen within the benchmark time frame (see Table 5).
- **Although cardiac urgency level definitions vary, patients in the middle level are least likely to receive care within the benchmark time frame.** Only three out of seven provinces use a common urgency rating scale, making comparisons by priority level across provinces difficult.

That said, in each reporting province, more than 80% of patients in urgency Level I and 90% of patients in Level III receive treatment within the pan-Canadian benchmarks set for those levels. However, the percent of patients having bypass surgery within the middle (Level II) benchmark ranges between 43% and 98%. In six of seven provinces, patients assigned to this urgency level are least likely to receive care within the benchmark, as compared to levels I and III patients (see tables 6-A to 6-C).

- **Most patients receive radiation therapy within a month of requiring treatment.** Eight of 10 provinces provide at least 88% of patients with radiation therapy within the 28-day benchmark (see Table 8).
- **Waits for MRI scans are longer than those for CT scans.** Reporting for CT and MRI scans is more limited than for other priority areas. In the four provinces providing CT and MRI scan information, the typical patient waits longer for an MRI scan than for a CT scan. This is a priority area where no pan-Canadian benchmarks have been developed, although three provinces have developed their own targets (see tables 9 and 10).
- **Many patients receive surgery to repair hip fractures within the 48-hour benchmark.** Across Canada,ⁱⁱ 79% of patients receive surgery within the benchmark. The variation among provinces for hip fracture repair is small compared to other priority areas—provinces perform between 75% and 83% of procedures within 48 hours (see Table 7).

ii. Excluding Quebec.

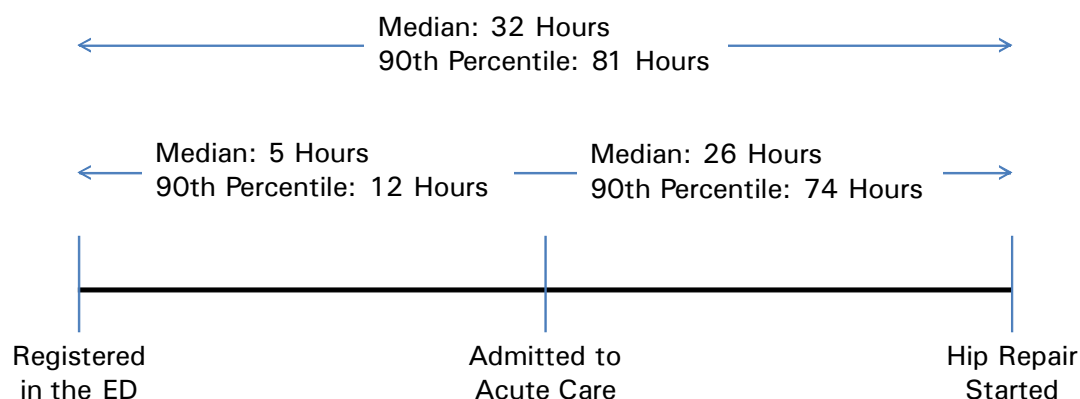
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Emergency Department Wait Times: A Focus on Hip Fracture in Ontario

Across the country, waits for surgery following hip fracture are measured starting at the time a patient is admitted to an inpatient bed. However, hip fractures are usually the result of a fall and, for most patients, the wait for treatment begins in the emergency department (ED).⁷ In Ontario, complete data on ED visits is available in CIHI’s National Ambulatory Care Reporting System (NACRS). NACRS data can provide some insight into how long the first segment, or emergency department wait, is.

When the ED wait is included, fewer patients receive their surgery within the pan-Canadian benchmark of 48 hours. In the first two quarters of 2009–2010, 4,221 patients were admitted to Ontario EDs and went on to have a surgical repair of a hip fracture. The typical patient spent five hours waiting in the ED, while 10% waited longer than 12 hours. On average, Ontario hip fracture patients spent about 15% of their total wait time in the emergency department. As a comparison, Newfoundland and Labrador reports a median range of 10 to 34 hours from admission to the ED to surgery.



Sources

National Ambulatory Care Reporting System, 2009–2010, Canadian Institute for Health Information; Regional Health Authorities, Newfoundland and Labrador.

Trends

In this annual report, CIHI compiles wait time information reported on provincial websites as of December 1 (see Appendix A). As wait time information became more comparable within individual provinces, trends began to emerge from this data. Provinces continue to refine their reporting and, in some cases, recently aligned their wait time measures with those presented in this report. As a result, meaningful interpretation of trends was disrupted in some provinces. Where this is the case, trends were not assigned. Some provinces also continue to make improvements to their data collection and reporting techniques. The extent to which these improvements are reflected in the trends is unclear and should therefore be interpreted with caution.

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Table 2 shows trends from 2006 to 2009 in wait times by province and priority area. Waits for knee replacements remained stable or declined in reporting provinces. The same is true for hip replacements. In other priority areas, the direction of the trends varies.

Table 2 Provincial Wait Time Trends*

Priority Area	Joint Replacements		Sight Restoration	Heart	Cancer	Diagnostic Imaging	
	Hip Replacement	Knee Replacement	Cataract Surgery	Coronary Artery Bypass Surgery	Cancer – Radiation Treatment	CT Scan	MRI Scan
N.L.				--	--		
P.E.I.							
N.S.	--	↓		↓		↑	↓
N.B.					--		
Que.							
Ont.	↓	↓	↓	--	↓	↓	↑
Man.	↓	↓			--	↓	↑
Sask.							
Alta.	--	↓					
B.C.	↓	↓	--		↑		

Legend

- ☐ Unable to comment on trend or data not available.
- No change in wait times.
- ↓ Wait times decreasing.
- ↑ Wait times increasing.

Note

* Trends in wait times were analyzed by procedure for jurisdictions that consistently defined and measured wait times over at least a three-year period. A trend is a 10% change, from the first year, either way in the wait time. For ranges, both ends must go up or down. Evaluation of trends for these tables is not sensitive enough to pick up changes in wait times for ranges, which may go in different directions. See Appendix A.

In the future, trends will be assessed based on the common measures that provinces are now providing for this report—median, 90th percentile and percent within benchmark. Examining differences between two years of data does not give a clear picture of how trends are changing over time and, in general, there is no dramatic difference between the data in this report compared to last year’s data. When another year of data is added in 2011, trending based on the comparable measures submitted by provinces will support a more fulsome discussion of changes in wait times over time and between provinces.

Provincial Reporting of Wait Times in Priority Areas

Table 3 Hip Replacement Wait Times by Province, April to September 2009

Definition: The number of days a patient waited, from the booking date to the date the patient received a planned total hip replacement

Population:

- Age 18 and older
- Includes all total hip replacements (primary and revision); bilateral joint replacements count as a single wait
- Includes all priority levels
- Excludes emergency cases
- Excludes elective partial hip replacements and hip resurfacing techniques
- Excludes days when patient was unavailable

	Exceptions to the Definition and Population	50th Percentile	90th Percentile	Percent Within Benchmark of 182 Days	Three-Year Trend*
N.L.†	Data is from April to June 2009 Excludes revisions Includes days when patient was unavailable in some regions	42 to 116 Days	87 to 386 Days	62% to 100%	
P.E.I.	Includes days when patient was unavailable	105 Days	197 Days	84%	
N.S.		178 Days	543 Days	51%	--
N.B.	Excludes hip revisions Bilateral joint replacements are counted separately as two waits	94 Days	250 Days	76%	
Que.	Data is from April to October 2009			88%	--
Ont.	Start time is decision to treat Includes elective partial hip replacements and hip resurfacing techniques	62 Days	160 Days	93%	↓
Man.	Start time is decision to treat	117 Days	333 Days	62%	↓
Sask.	Includes elective partial hip replacements and resurfacing techniques	132 Days	410 Days	63%	
Alta.	Start time is decision to treat Includes elective partial hip replacements and resurfacing techniques	93 Days	250 Days	81%	--
B.C.	Includes days when patient was unavailable	73 Days	223 Days	85%	↓

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.

Notes

* Trend is based on information gathered from provincial websites on December 1 of each year, from 2006 to 2009.

† Newfoundland and Labrador reports separately by health region. The range represents regional values.

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Table 4 Knee Replacement Wait Times by Province, April to September 2009

Definition: The number of days a patient waited, from the booking date to the date the patient received a planned total knee replacement

Population:

- Age 18 and older
- Includes all total knee joint replacements (primary and revision); bilateral joint replacements count as a single wait
- Includes all priority levels
- Excludes emergency cases
- Excludes knee resurfacing techniques
- Excludes days when patient was unavailable

	Exceptions to the Definition and Population	50th Percentile	90th Percentile	Percent Within Benchmark of 182 Days	Three-Year Trend*
N.L.†	Data is from April to June 2009 Excludes revisions Includes days when patient was unavailable in some regions	49 to 206 Days	102 to 431 Days	43% to 100%	
P.E.I.	Includes days when patient was unavailable	137 Days	309 Days	69%	
N.S.		195 Days	576 Days	47%	↓
N.B.	Excludes revisions Bilateral joint replacements are counted separately as two waits	137 Days	340 Days	63%	
Que.	Data is from April to October 2009			85%	--
Ont.	Start time is decision to treat	67 Days	184 Days	90%	↓
Man.	Start time is decision to treat	154 Days	397 Days	58%	↓
Sask.		195 Days	464 Days	48%	
Alta.	Start time is decision to treat Includes cement spacers	120 Days	352 Days	71%	↓
B.C.	Includes days when patient was unavailable	85 Days	275 Days	77%	↓

Legend

- Data is not available.
- Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.

Notes

* Trend is based on information gathered from provincial websites on December 1 of each year, from 2006 to 2009.

† Newfoundland and Labrador reports separately by health region. The range represents regional values.

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Table 5 Cataract Surgery Wait Times by Province, April to September 2009

Definition: The number of days a patient waited, from the booking date to the date the patient received cataract surgery

Population:

- Age 18 and older
- Includes first eye only; bilateral cataract removal counts as a single wait
- Includes all priority levels[‡]
- Excludes emergency cases
- Excludes days when patient was unavailable

	Exceptions to the Definition and Population	50th Percentile	90th Percentile	Percent Within Benchmark of 112 Days	Three-Year Trend*
N.L.†	Data is from April to June 2009 Excludes revisions Includes days when patient was unavailable in some regions	2 to 59 Days	85 to 142 Days	77% to 100%	
P.E.I.	Bilateral cataract removal is counted as two waits Includes days when patient was unavailable	67 Days	163 Days	80%	
N.S.		67 Days	210 Days	69%	
N.B.	Bilateral cataract removal is counted as two waits	45 Days	135 Days	83%	
Que.	Data is from April to October 2009 Quebec uses a benchmark of six months for cataract surgery			96%	--
Ont.	Start time is decision to treat	43 Days	104 Days	92%	↓
Man.		82 Days	161 Days	80%	
Sask.	Includes waits for second eye; the start time of the wait for the second eye is the date of surgery for the first eye	28 Days	112 Days	90%	
Alta.	Start time is decision to treat	88 Days	270 Days	61%	
B.C.		49 Days	195 Days	77%	--

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.

Notes

- * Trend is based on information gathered from provincial websites on December 1 of each year, from 2006 to 2009.
- † Newfoundland and Labrador reports separately by health region. The range represents regional values.
- ‡ The pan-Canadian benchmark specifies surgery within 16 weeks (112 days) for patients who are at high risk.³ There is not yet consensus on a definition of "high risk," so the benchmark is applied across all priority levels.

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Table 6 Bypass Surgery Wait Times by Province, April to September 2009

Definition: The number of days a patient waited, from the booking date to the date the patient received a coronary artery bypass graft (CABG)

Population:

- Age 18 and older
- Includes CABG with and without valve replacement

Table 6-A Level I—Within 14 Days (2 Weeks)

	Exceptions to the Definition and Population With Notes on Urgency Rating Scale	Number of CABGs in Level I (Percent)	50th Percentile	90th Percentile	Percent Within Benchmark of 14 Days
N.L.	Data is from April to June 2009 Includes emergency cases (fewer than 20 cases annually) Includes CABG without valve replacement only Urgency rating score less than or equal to 4.0	8 (8)	1 Day	4 Days	100%
P.E.I.*					
N.S.					
N.B.	As determined by the surgical prioritization tool completed by the surgeon Excludes emergency cases (41 cases, 14% of all CABGs)	83 (29)	3 Days	55 Days	81%
Que. †	Includes valve replacement, CABG, repair of congenital defects and other procedures				86%
Ont. ‡	Based on the Cardiac Care Network of Ontario's urgency rating score Includes CABG without valve replacement only	1,003 (28)	3 Days	11 Days	94%
Man.	Excludes emergency cases (2 cases, 0% of all CABGs)	43 (11)	10 Days	14 Days	98%
Sask. §	Based on the Cardiac Care Network of Ontario's urgency rating score Excludes emergency cases (36 cases, 10% of all CABGs)	24 (6)	1 Day	6 Days	92%
Alta.	Start time is decision to treat Excludes emergency cases (50 cases, 9% of all CABGs) Of the 50 emergency cases, 32 were already on the Alberta Waitlist Registry	224 (39)	3 Days	8 Days	96%
B.C.	Start time is the day the patient is placed on the wait list; the day of placement on the wait list is not counted Includes CABG without valve replacement only Excludes inpatient bookings Excludes emergency cases (658 cases, 73% of all CABGs)	2 (0)	1 Day	2 Days	100%

Legend

□ Data is not available.

Notes

- * P.E.I. does not offer cardiac services; patients receive care out of province.
- † Quebec uses five priority levels to monitor cardiac procedures: less than 24 hours, less than 72 hours, less than two weeks, less than six weeks and less than three months. The provincial rate was calculated by CIHI for the period October 11, 2009, to November 7, 2009.
- ‡ Ontario reports percent meeting recommended maximum wait times at www.ccn.on.ca. The provincial rate was calculated by the Cardiac Care Network for CIHI.
- § 13% of CABG patients in Saskatchewan were not assigned a priority level.

Table 6-B Level II—Within 42 Days (6 Weeks)

	Exceptions to the Definition and Population With Notes on Urgency Rating Scale	Number of CABGs in Level II (Percent)	50th Percentile	90th Percentile	Percent Within Benchmark of 42 Days
N.L.	Data is from April to June 2009 Includes CABG without valve replacement only Urgency rating score between 4.01 and 5.0	30 (31)	10 Days	45 Days	87%
P.E.I.*					
N.S.					
N.B.	As determined by the surgical prioritization tool completed by the surgeon	161 (56)	49 Days	123 Days	47%
Que.†	Includes valve replacement, CABG, repair of congenital defects and other procedures				91%
Ont.‡	Based on the Cardiac Care Network of Ontario's urgency rating score Includes CABG without valve replacement only	1,099 (31)	6 Days	38 Days	92%
Man.		158 (39)	34 Days	39 Days	93%
Sask.§	Based on the Cardiac Care Network of Ontario's urgency rating score	69 (18)	4 Days	45 Days	90%
Alta.	Start time is decision to treat	156 (27)	48 Days	149 Days	43%
B.C.	Start time is the day the patient is placed on the wait list; the day of placement on the wait list is not counted Includes CABG without valve replacement only Excludes inpatient bookings	41 (5)	8 Days	32 Days	98%

Legend

□ Data is not available.

Notes

* P.E.I. does not offer cardiac services; patients receive care out of province.

† Quebec uses five priority levels to monitor cardiac procedures: less than 24 hours, less than 72 hours, less than two weeks, less than six weeks and less than three months. The provincial rate was calculated by CIHI for the period October 11, 2009, to November 7, 2009.

‡ Ontario reports percent meeting recommended maximum wait times at www.ccn.on.ca. The provincial rate was calculated by the Cardiac Care Network for CIHI.

§ 13% of CABG patients in Saskatchewan were not assigned a priority level.

Table 6-C Level III—Within 182 Days (26 Weeks)

	Exceptions to the Definition and Population With Notes on Urgency Rating Scale	Number of CABGs in Level III (Percent)	50th Percentile	90th Percentile	Percent Within Benchmark of 182 Days
N.L.	Data is from April to June 2009 Includes CABG without valve replacement only Urgency rating score greater than 5.0	58 (60)	10 Days	105 Days	100%
P.E.I.*					
N.S.					
N.B.	As determined by the surgical prioritization tool completed by the surgeon	1 (0)	80 Days	80 Days	100%
Que.†					
Ont.‡	Based on the Cardiac Care Network of Ontario's urgency rating score Includes CABG without valve replacement only	1,453 (41)	18 Days	53 Days	100%
Man.		200 (50)	127 Days	173 Days	100%
Sask.§	Based on the Cardiac Care Network of Ontario's urgency rating score	195 (52)	9 Days	123 Days	94%
Alta.	Start time is decision to treat	188 (33)	10 Days	116 Days	99%
B.C.	Start time is the day the patient is placed on the wait list; the day of placement on the wait list is not counted Includes CABG without valve replacement only Excludes inpatient bookings	202 (22)	21 Days	58 Days	100%

Legend

□ Data is not available.

Notes

* P.E.I. does not offer cardiac services; patients receive care out of province.

† Quebec uses five priority levels to monitor cardiac procedures: less than 24 hours, less than 72 hours, less than two weeks, less than six weeks and less than three months.

‡ Ontario reports percent meeting recommended maximum wait times at www.ccn.on.ca. The provincial rate was calculated by the Cardiac Care Network for CIHI.

§ 13% of CABG patients in Saskatchewan were not assigned a priority level.

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Table 7 Hip Fracture Repair Wait Times by Province, April 1 to September 30, 2009

Definition: The time of first inpatient admission with a hip fracture (index admission) to the time when hip surgery was received

Population:

- Age 18 and older
- Includes admission to an acute care institution
- Excludes in-hospital hip fractures
- Excludes cases with no hip fracture surgery following a hip fracture in the same year

	50th Percentile	90th Percentile	Percent Meeting Benchmark of 48 Hours From First Inpatient Admission to Surgery	Confidence Interval (CI)	
				Lower 95% CI	Upper 95% CI
N.L.*					
P.E.I.†					
N.S.	21 Hours	69 Hours	82%	78	86
N.B.	19 Hours	69 Hours	82%	78	86
Que.‡					
Ont.	26 Hours	75 Hours	77%	76	78
Man.	26 Hours	76 Hours	78%	74	81
Sask.	26 Hours	84 Hours	75%	71	80
Alta.	26 Hours	68 Hours	80%	77	82
B.C.	23 Hours	64 Hours	83%	81	84
Can.§	25 Hours	72 Hours	79%	78	80

Legend

□ Data is not available.

Notes

* Data for Newfoundland and Labrador is not shown as 62% of abstracts were received at the time of analysis.

† Data for P.E.I. is not shown due to small numbers of hip fractures.

‡ Quebec wait times are not calculated due to methodological differences in the data.

§ Excludes data from Quebec.

The hip fracture analysis uses open-year data from the first two quarters of 2009–2010, and may not contain complete provincial submissions to CIHI. At the time of analysis, CIHI had received 94% of abstracts for this period. While pan-Canadian completeness is high, there may be distinct analytic impacts for provinces with slower submissions to CIHI. Additionally, open-year data may not have been subject to the full cycle of quality validation, by both CIHI and the submitting facilities. Hospitals may still add, delete or correct records. See Appendix B for detailed inclusions and exclusions.

Source

Discharge Abstract Database, 2009–2010, Canadian Institute for Health Information.

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Table 8 Radiation Therapy Wait Times by Province, April to September 2009

Definition: The number of days a patient waited, from the date the patient was ready to treat to the date of the first radiation therapy treatment

Population:

- Age 18 and older
- Includes all referrals to start or initiate radiation treatment
- Includes all priority levels and all cancer types rolled up

	Exceptions to the Definition and Population	50th Percentile	90th Percentile	Percent Within Benchmark of 28 Days	Three-Year Trend*
N.L. [†]	Excludes palliative cases Excludes cases where the primary site of cancer is unknown	9 Days	33 Days	88%	--
P.E.I.		9 Days	23 Days	95%	
N.S.		21 Days	49 Days	62%	
N.B.				92%	--
Que. [‡]				92%-100%	
Ont.		7 Days	21 Days	96%	↓
Man.		6 Days	25 Days	100%	--
Sask.		8 Days	22 Days	97%	
Alta.		14 Days	38 Days	74%	
B.C.		8 Days		94%	↑

Legend

- Data is not available.
- Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.
- ↑ Wait times increasing.

Notes

- * Trend is based on information gathered from provincial websites on December 1 of each year, from 2006 to 2009.
- † Includes patients treated within 30 days.
- ‡ The Quebec ministry provided the provincial rate of 97% for patients treated within the 28-day benchmark on December 5, 2009.

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Table 9 CT Scan Wait Times by Province, April to September 2009

Definition: The number of days a patient waited, from the date the order/requisition was received to the date the patient received the CT scan

Population:

- Age 18 and older
- Includes diagnostic scans (inpatient and/or outpatient)
- Includes all priority levels
- Excludes routine follow-up scans
- Excludes mammography screening and prenatal screening

	Exceptions to the Definition and Population	50th Percentile	90th Percentile	Three-Year Trend *
N.L.				
P.E.I. †	Includes all ages Excludes inpatients	7 Days	34 Days	
N.S.	Excludes CT scans performed in Capital District Health Authority or IWK Health Centre	18 Days	78 Days	↑
N.B.				
Que.				
Ont. ‡	Excludes urgent patients	9 Days	42 Days	↓
Man.		↓
Sask.				
Alta. §	Start time is decision date or booking date if decision date is unavailable Excludes inpatients	11 Days	34 Days	
B.C.				

Legend

- Data is not available.
- Unable to comment on trend data.
- Wait times decreasing.
- Wait times increasing.
- ... Manitoba was unable to provide 2009 summary measures as required; however, consistently reported measures have been available on Manitoba’s wait time website for at least three years, enabling trending.

Notes

- * Trend is based on information gathered from provincial websites on December 1 of each year, from 2006 to 2009.
- † P.E.I. established a provincial access target of 90% of patients receiving care within eight weeks of referral for CT scans (Urgency III—completed within 56 days).
- ‡ Ontario established provincial targets for CT scans based on patient urgency classifications. The provincial target for Priority IV (non-emergency, least urgent) patients is four weeks.
- § Alberta set a provincial target of eight weeks for CT scans (Urgency III—non-urgent).

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Table 10 MRI Scan Wait Times by Province, April to September 2009

Definition: The number of days a patient waited, from the date the order/requisition was received to the date the patient received the MRI scan

Population:

- Age 18 and older
- Includes diagnostic scans (inpatient and/or outpatient)
- Includes all priority levels
- Excludes routine follow-up scans
- Excludes mammography screening and prenatal screening

	Exceptions to the Definition and Population	50th Percentile	90th Percentile	Three-Year Trend *
N.L.				
P.E.I. †	Includes all ages Excludes inpatients	111 Days	182 Days	
N.S.	Excludes MRI scans performed in Capital District Health Authority or IWK Health Centre	42 Days	107 Days	↓
N.B.				
Que.				
Ont. ‡	Excludes urgent patients	40 Days	105 Days	↑
Man.		↑
Sask.				
Alta. §	Start time is decision date or booking date if decision date is unavailable Excludes inpatients	57 Days	189 Days	
B.C.				

Legend

- Data is not available.
- Unable to comment on trend data.
- ↓ Wait times decreasing.
- ↑ Wait times increasing.
- ... Manitoba was unable to provide 2009 summary measures as required; however, consistently reported measures have been available on Manitoba’s wait time website for at least three years, enabling trending.

Notes

- * Trend is based on information gathered from provincial websites on December 1 of each year, from 2006 to 2009.
- † P.E.I. established a provincial access target of 90% of patients receiving care within 12 weeks of referral for MRI scans (Urgency III—completed within 84 days).
- ‡ Ontario established provincial targets for MRI scans based on patient urgency classifications. The provincial target for Priority IV (non-emergency, least urgent) patients is four weeks.
- § Alberta set a provincial target of 12 weeks for MRI scans (Urgency III—non-urgent).

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For More Information

This Analysis in Brief is part of CIHI's ongoing program of work related to access to care, including wait times. This area was identified as a priority through consultations leading up to the development of CIHI's *Strategic Directions, 2005–2006 to 2007–2008*. Specific topics for analysis were selected based on subsequent focused consultations on priorities for better information about access to care.

Copies of this document are available free of charge in both official languages on the CIHI website at www.cihi.ca. You can also find related reports, such as *Surgical Volume Trends Within and Beyond Wait Time Priority Areas* and *Alternate Level of Care in Canada*.

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About CIHI

The Canadian Institute for Health Information (CIHI) collects and analyzes information on health and health care in Canada and makes it publicly available. Canada's federal, provincial and territorial governments created CIHI as a not-for-profit, independent organization dedicated to forging a common approach to Canadian health information. CIHI's goal: to provide timely, accurate and comparable information. CIHI's data and reports inform health policies, support the effective delivery of health services and raise awareness among Canadians of the factors that contribute to good health. For more information, visit our website at www.cihi.ca.

Appendix A: Provincial Wait Times Website Data

Interpreting Trends

In this annual report, CIHI compiles wait time information reported on provincial websites as of December 1 each year. As wait time information became more comparable within individual provinces, trends began to emerge from this data. While we still need to be cautious when comparing trends in wait times across provinces, we can examine progress over time within certain provinces. Trends were analyzed by procedure for jurisdictions that consistently defined and measured wait times over at least a three-year period.

Provinces continue to refine their reporting and in some cases recently aligned their wait times measures with those presented in this report. As a result, meaningful interpretation of trends was disrupted in some provinces. Where this is the case, trends were not assigned. Some provinces also continue to make improvements to their data collection and reporting techniques. The extent to which these improvements are reflected in the trends is unclear and should therefore be interpreted with caution.

How were the trends determined?

The tables in Appendix A of this report (tables A-1 to A-8) provide an overview of the wait time information available on provincial websites as of December 1, from 2006 to 2009. Trends in wait times were analyzed by procedure for jurisdictions that consistently defined and measured wait times over at least a three-year period. Trends were assigned for provinces that demonstrated a 10% change (up or down) in reported waits from the first year of trending. Wait times were considered unchanged with any difference less than 10%. Where regional ranges were provided, trends were assigned only when both ends of the range showed a 10% change in a common direction.

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Table A-1 Overview of Reporting From Provincial Wait Times Websites

Province	Wait Times Websites	Joint Replacement	Sight Restoration	Cardiac	Hip Fracture	Cancer	Diagnostic Imaging	Reporting Includes All Facilities
N.L.	www.releases.gov.nl.ca/releases/2009/health/1201n01.htm	•	•	•	•	•		Yes
P.E.I.*	www.gov.pe.ca/index.php3?number=news&lang=E&newsnumber=4418	•	•			•	•	Yes
N.S.	http://gov.ns.ca/health/waittimes/data/	•	•	•		•	•	Yes
N.B.	www1.gnb.ca/0217/surgicalwaittimes/index-e.aspx www.gnb.ca/0051/cancer/wait-times-e.asp	•	•	•	•	•		Yes
Que.	www.msss.gouv.qc.ca/en/sujets/organisation/waiting_lists.html	•	•	•		•		Yes
Ont.†	www.ontariowaittimes.com www.cancercare.on.ca/ocs/wait-times/	•	•	•		•	•	No
Man.	www.gov.mb.ca/health/waitlist/index.html	•	•	•		•	•	Yes
Sask.	www.sasksurgery.ca/wli-wait-list-info.htm www.sasksurgery.ca/spt-pancanadian.htm www.saskcancer.ca/	•	•	•		•		Yes
Alta.	www.albertahealthservices.ca/833.asp	•				•		No
B.C.	www.health.gov.bc.ca/cpa/mediasite/waittimes.html	•	•	•		•		Yes

Notes

* P.E.I. does not offer cardiac services; patients receive care out of province.

† 95 hospital organizations report to the Wait Time Information System (WTIS) (out of 155 hospital organizations in Ontario); total surgical volume reported for cancer surgery, cataract surgery, and hip and knee replacement represents 95% of the total number of these procedures performed in the province.

Table A-2 Provincial Hip Replacement Wait Time Trends

	Wait Segment	Summary Measure	December 2006	December 2007	December 2008	December 2009	Trend
N.L.	Decision to Treat to Surgery	Percent Within Benchmark	90% to 100% Within 182 Days	79% to 100% Within 182 Days	79% to 100% Within 182 Days	63% to 100% Within 182 Days	
P.E.I.	From the Booking Date to the Date of Surgery	Median			15.7 Weeks	11.86 Weeks	
N.S.	Decision to Treat to Surgery	Percentages Within Time Periods by Region	Different Reporting Definition	< 60 Days: 9% < 180 Days: 36% < 270 Days: 64% < 360 Days: 78% < 540 Days: 89%	< 60 Days: 10% < 180 Days: 45% < 270 Days: 55% < 360 Days: 69% < 540 Days: 85%	< 60 Days: 13% < 180 Days: 44% < 270 Days: 65% < 360 Days: 79% < 540 Days: 88%	--
N.B.	Request Form Received to Surgery	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	a) 139 Days b) 302 Days c) 70%	a) 103 Days b) 273 Days c) 77%	
Que.	Decision to Treat to Surgery	Percent Waiting Longer Than 180 Days	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	11% Waiting Longer Than 180 Days	
Ont.	Decision to Treat Date to Actual Procedure Date	90th Percentile in Days	281 Days	210 Days	178 Days	163 Days	↓
Man.	Decision to Treat to Treatment	Median	112 to 161 Days	133 to 385 Days	70 to 126 Days	70 to 133 Days	↓
Sask.	Booking Date to Date of Surgery	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	a) 132 Days b) 410 Days c) 63%	
Alta.	Decision to Treat to Surgery	Median	97 Days	92 Days	105 Days	92 Days	--
B.C.	Booking to Surgery	Median	114 Days	72 Days	71 Days	83 Days	↓

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.

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Table A-3 Provincial Knee Replacement Wait Time Trends

	Wait Segment	Summary Measure	December 2006	December 2007	December 2008	December 2009	Trend
N.L.	Decision to Treat to Surgery	Percent Within Benchmark	50% to 100% Within 182 Days	70% to 96% Within 182 Days	67% to 100% Within 182 Days	56% to 100% Within 182 Days	
P.E.I.	From the Booking Date to the Date of Surgery	Median			15.4 Weeks	14.36 Weeks	
N.S.	Request Form Received to Surgery	Percentages Within Time Periods	Different Reporting Definition	< 60 Days: 3% < 180 Days: 26% < 270 Days: 52% < 360 Days: 70% < 540 Days: 83%	< 60 Days: 7% < 180 Days: 31% < 270 Days: 45% < 360 Days: 59% < 540 Days: 79%	< 60 Days: 10% < 180 Days: 36% < 270 Days: 50% < 360 Days: 68% < 540 Days: 87%	↓
N.B.	Date Surgical Request Received by Hospital to Date Surgery Completed	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	a) 151 Days b) 408 Days c) 59%	a) 112 Days b) 308 Days c) 67%	
Que.	Decision to Treat to Surgery	Percent Waiting Longer Than 180 Days	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	13% Waiting Longer Than 180 Days	
Ont.	Decision to Treat Date to Actual Procedure Date	90th Percentile in Days	353 Days	291 Days	209 Days	177 Days	↓
Man.	Decision to Treat to Treatment	Median	175 to 329 Days	112 to 168 Days	105 to 140 Days	98 to 168 Days	↓
Sask.	Booking Date to Date of Surgery	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	a) 195 Days b) 464 Days c) 48%	
Alta.	Decision to Treat to Surgery	Median	134 Days	120 Days	140 Days	110 Days	↓
B.C.	Booking to Surgery	Median	139 Days	112 Days	96 Days	96 Days	↓

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- ↔ No change in wait times.
- ↓ Wait times decreasing.

Table A-4 Provincial Cataract Surgery Wait Time Trends

	Wait Segment	Summary Measure	December 2006	December 2007	December 2008	December 2009	Trend
N.L.	Decision to Treat to Surgery for First Eye	Percent Within Benchmark	25% to 100% in 112 Days	23% to 100% in 112 Days	29% to 100% in 112 Days	85% to 100% in 112 Days	
P.E.I.	From the Booking Date to the Date of Surgery	Median			11.1 Weeks	13 Weeks	
N.S.	Decision to Treat to Surgery	Percentages Within Time Periods	Different Reporting Definition	Different Reporting Definition	< 30 Days: 29% < 60 Days: 46% < 90 Days: 63% < 112 Days: 74% < 120 Days: 77% < 180 Days: 88%	< 30 Days: 32% < 60 Days: 48% < 90 Days: 62% < 112 Days: 70% < 120 Days: 73% < 180 Days: 85%	
N.B.	Date Surgical Request Received by Hospital to Date Surgery Completed	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	a) 62 Days b) 169 Days c) 78%	a) 56 Days b) 131 Days c) 84%	
Que.	Decision to Treat to Surgery	Percent Waiting Longer Than 180 Days	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	6% Waiting Longer Than 180 Days	
Ont.	Decision to Treat to Procedure Date	90th Percentile in Days	225 Days	141 Days	119 Days	114 Days	↓
Man.	Decision to Treat to Treatment	Median	Different Reporting Definition	14 to 126 Days	35 to 105 Days	14 to 98 Days	
Sask.*	Booking Date to Surgery	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	a) 28 Days b) 112 Days c) 90%	
Alta.			104 Days	81 Days	56 Days	Not Reporting	
B.C.	Booking to Surgery	Median	56 Days	63 Days	56 Days	56 Days	--

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.

Note

* In Saskatchewan, wait times are captured for cataract surgery in both eyes. The start date for the second eye is the date of surgery for the first eye.

Table A-5 Provincial Bypass Surgery Wait Time Trends

	Wait Segment	Summary Measure	December 2006	December 2007	December 2008	December 2009	Trend
N.L.	Decision to Treat to Surgery	Percent Within Benchmark	99% Within 182 Days	92% Within 182 Days	95% Within 182 Days	100% Within 182 Days	--
P.E.I.							
N.S.	Decision to Treat to Surgery	Mean by Priority Level	3 to 182 Days	2 to 22 Days	3 to 76 Days	2 to 75 Days	↓
N.B.	Request Received to Date Surgery Was Completed	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	Level I (2 Weeks) a) 1 Day b) 6 Days c) 91% Level II (2 to 6 Weeks) a) 41 Days b) 194 Days c) 51% Level III (6 to 26 Weeks) N/A	Level I (2 Weeks) a) 1 Day b) 78 Days c) 83% Level II (2 to 6 Weeks) a) 31 Days b) 111 Days c) 55% Level III (6 to 26 Weeks) a) 80 Days b) 80 Days c) 100%	
Que.*							
Ont.	Decision to Treat Date to Procedure Date	90th Percentile in Days	Different Reporting Definition	61 Days	58 Days	59 Days	--
Man.	Decision to Treat to Treatment	Median	Different Reporting Definition	46 Days— Elective	13 Days—All Priority Levels	22 Days—All Priority Levels	
Sask.	Booking Date to Date of Surgery	a) Median b) 90th Percentile c) Percent Within Benchmark	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	Level I a) 1 Day b) 6 Days c) 92% Level II a) 4 Days b) 45 Days c) 90% Level III a) 9 Days b) 123 Days c) 94%	
Alta.			40 Days	6 Days	7 Days	Not Reporting	
B.C.			Not Reporting	Not Reporting	6.1 Weeks	Not Reporting	

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.

Note

* Quebec data on cardiac procedures includes coronary bypasses, repairs of congenital defects and other cardiac procedures.

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Table A-6 Provincial Radiation Therapy Wait Time Trends

	Wait Segment	Summary Measure	December 2006	December 2007	December 2008	December 2009	Trend
N.L.	Decision to Treat to Treatment	Percent Within Benchmark	100% Within 30 Days	95% Within 30 Days	85% Within 30 Days	93% Within 30 Days	--
P.E.I.	Ready to Treat to the Date of the First Radiation Therapy Treatment	Median			7 Days	7 Days	
N.S.	Decision to Treat to Treatment	Mean by Region and Priority Level	0 to 4.1 Weeks	0 to 5.1 Weeks	0 to 4.6 Weeks	0 to 4.1 Weeks	
N.B.	Ready to Treat to the Date of the First Radiation Therapy Treatment	Percent of Patients Commencing Treatment Within Four Weeks or Less	Not Reporting	94%	98%	91%	--
Que.	Ready to Treat to Treatment	Of Those Who Are Ready in a Given Week, the Percentage Who Started Treatment Within 28 Days	75% to 100% Within 28 Days	84% to 100% Within 28 Days	79% to 100% Within 28 Days	92% to 100% Within 28 Days	
Ont.	Ready to Treat to Treatment	Percent Treated Within 1, 7 and 14 Days	Different Reporting Definition	50% Within Target of 1, 7 and 14 Days	70% Within Target of 1, 7 and 14 Days	77.1% Within Target of 1, 7 and 14 Days	↓
Man.	Decision to Treat to Treatment	Median	1 Week	1 Week	1 Week	1 Week	--
Sask.	Date the Patient Is Ready to Receive Treatment, Taking Into Account Clinical and Patient Factors	Percent Within Benchmark of 28 Days	Different Reporting Definition	Different Reporting Definition	78%	97%	
Alta.	Ready to Treat to First Treatment	Median	Different Reporting Definition	Different Reporting Definition	Different Reporting Definition	2.1 Weeks	
B.C.	Ready to Treat to Treatment	Median	0.9 Weeks	0.9 Weeks	1 Week	1.1 Weeks	↑

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- No change in wait times.
- ↓ Wait times decreasing.
- ↑ Wait times increasing.

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Table A-7 Provincial CT Scan Wait Time Trends

	Wait Segment	Summary Measure	December 2006	December 2007	December 2008	December 2009	Trend
N.L.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	
P.E.I.	From the Date the Order/ Requisition Is Received to the Date the Patient Received the Scan	Health Professionals: Mean and Proportion by Priority Level Patients: Mean by Priority Level (I to III)			22.1 Days	Urgency Level I: 9 Days Urgency Level II: 16 Days Urgency Level III: 30 Days	
N.S.	Date Request Arrives to Day With Three Openings	Expected Number of Days by Facility	2 to 65 Days	0 to 69 Days	8 to 105 Days	9 to 96 Days	↑
N.B.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	
Que.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	
Ont.	Order Received Date to Actual Scan Date	90th Percentile in Days	79 Days	73 Days	48 Days	52 Days	↓
Man.	Request Received to Next Available Slot	Estimated Maximum	77 Days	56 Days	35 Days	28 Days	↓
Sask.			Not Reporting	7 to 42 Days	Not Reporting	Not Reporting	
Alta.			9 Days	14 Days	14 Days	Not Reporting	
B.C.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	

Legend

- Data is not available.
- ▨ Unable to comment on trend data.
- ↓ Wait times decreasing.
- ↑ Wait times increasing.

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Table A-8 Provincial MRI Wait Time Trends

	Wait Segment	Summary Measure	December 2006	December 2007	December 2008	December 2009	Trend
N.L.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	
P.E.I.	From the Date the Order/ Requisition Is Received to the Date the Patient Received the Scan	Mean by Priority Level			Different Reporting Definition	Urgency Level I: 6 Days Urgency Level II: 56 Days Urgency Level III: 118 Days	
N.S.	Date Request Arrives to the Day With Three Openings	Expected Number of Days by Facility	34 to 177 Days	15 to 156 Days	14 to 234 Days	16 to 112 Days	↓
N.B.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	
Que.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	
Ont.	Order Received Date to Actual Scan Date	90th Percentile in Days	104 Days	126 Days	101 Days	114 Days	↑
Man.	Request Received to Next Available Slot	Estimated Maximum	56 Days	42 Days	91 Days	119 Days	↑
Sask.			Not Reporting	133 to 182 Days	Not Reporting	Not Reporting	
Alta.			80 Days	57 Days	42 Days	Not Reporting	
B.C.			Not Reporting	Not Reporting	Not Reporting	Not Reporting	

Legend

- Data is not available.
- Unable to comment on trend data.
- ↓ Wait times decreasing.
- ↑ Wait times increasing.

Appendix B: Technical Notes for Waits for Hip Fracture Surgery

Part 1: Definitions, Data Sources, Case Selection and Methodology for Inpatient Wait Time for Hip Fracture Surgery

Definitions

Benchmark: Hip fracture fixation within 48 hours (set by federal, provincial and territorial governments in December 2005)

In discussion with provinces and recognizing the limitations of the data, this benchmark has been interpreted as:

<p>Percent Meeting Benchmark of 48 Hours From Inpatient Admission</p>	<p>The number of hip fracture patients, age 18 and older, who underwent hip fracture surgery within 48 hours of the time of inpatient admission</p> <p>-----</p> <p>The total number of hip fracture patients, age 18 and older, who received hip fracture surgery</p>
--	--

Inpatient hip fracture surgery wait segment/time: The time of inpatient admission with a hip fracture (index admission) to the time when the hip surgery was received.
Note: Waits were calculated only for patients who had a surgical repair.

50th percentile: The number of hours within which half of the patients in the sample received the surgery and half were still waiting.

90th Percentile: The number of hours within which 90% of the patients in the sample received the surgery and 10% were still waiting.

Data Sources

Patients discharged from April 1, 2009, to September 30, 2009, from acute care facilities that submit to CIHI's Discharge Abstract Database (DAD). Open-year data may not contain complete provincial/territorial submissions to CIHI. At the time of analysis it is estimated CIHI had received 94% of abstracts, relative to 2008–2009 for the same time period. While pan-Canadian completeness is high, there may be distinct analytic impacts for provinces with slower submissions to CIHI. Additionally, open-year data will not have been subject to the full cycle of quality validation, at both CIHI and the submitting facilities. Hospitals may still add, delete or correct records.

Rates for Quebec are not available due to differences in data collection.

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Methodology

Case Selection

Inclusions

- Males and females age 18 and older
- Admitted to acute care facilities
- Admitted for a hip fracture (see definition below) in the following scenarios:
 - A. Main diagnosis was hip fracture (type M)
 - B. Hip fractures were pre-admit comorbidities (type 1) or service transfers (types 1, w, x and y)
 - C. Main diagnosis was for rehabilitation (see definitions) with a pre-admit hip fracture or service transfer (types 1, w, x and y) and a hip replacement procedure (see code selection below)

Exclusions

- Patients with invalid health card numbers
- Fractures that occurred post-admission (type 2)

Episode Building

- Patients may be admitted to one hospital and transferred to another for further treatment. Linking all admissions together into a single episode of care allows us to see the entire acute portion of the pathway of care.
- A transfer is defined as a scenario when a patient is discharged from one acute facility and admitted to another within 24 hours, with all abstracts having a diagnosis of hip fracture.
- Linkage is done by combining the health care number, gender and province issuing health care number to create a unique identifier for each patient and identifying all relevant acute care admissions.

Time Calculations

- Time to surgery is calculated as time from inpatient initial admission for a hip fracture to start time of surgical episode for a hip repair (may be a fixation or replacement).
- There are no time calculations done for patients with invalid date/time estimates in the admission date/time or surgical episode date/time variables.
- If the patient did not receive a hip repair in the time frame (April 1 to September 30, 2009) no time was calculated.

Code Selection

Hip fracture

ICD-10: S72.0[^], S72.1[^] or S72.2[^]

Hip repair

CCI: 1VA74[^], 1VA53[^], 1VC74[^] or 1SQ53[^]

Rehabilitation

ICD-10: Z50.1[^], Z50.8[^], Z50.9[^], Z54.0[^], Z54.4[^], Z54.7[^], Z54.8[^] or Z54.9[^]

Part 2: Definitions, Data Sources and Methodology for Emergency Department Wait Time for Hip Fracture Surgery

Definitions That Differ From Part 1

Benchmark: Hip fracture fixation within 48 hours (set by federal, provincial and territorial governments in December 2005)

This benchmark has been interpreted as

<p>Percent Meeting Benchmark of 48 Hours From ED Admission</p>	<p>The number of hip fracture patients, age 18 and older, who underwent hip fracture surgery within 48 hours of the time of admission to ED</p> <p>-----</p> <p>The total number of hip fracture patients, age 18 and older, who received hip fracture surgery</p>
---	--

Emergency department hip fracture surgery wait time: Measured in hours from the time of first registration in an ED with a hip fracture (index admission) to the time when the hip surgery was received. **Note:** Waits were calculated for patients who had a surgical repair only.

Data Sources

Patients discharged from April 1, 2009, to September 30, 2009, from Ontario emergency care facilities that submit to CIHI’s NACRS, as well as to DAD as indicated in Part 1. Open-year data may not contain complete provincial/territorial submissions to CIHI. At time of analysis CIHI had received 98% of abstracts, relative to 2008–2009 for the same time period. While pan-Canadian completeness is high, there may be distinct analytic impacts for provinces with slower submissions to CIHI. Additionally, open-year data will not have been subject to the full cycle of quality validation, at both CIHI and the submitting facilities. Hospitals may still add, delete or correct records.

Methodology

This methodology for ED wait times for hip fracture surgery builds on previous estimates of inpatient wait times for hip fracture surgery by measuring time spent in the ED by patients in Ontario. This data is not available for other provinces in NACRS.

Our base sample is patients admitted to an Ontario acute care facility with a hip fracture and repair as previously identified (see Part 1 for code selection). The next step is to identify any immediately preceding visits made by sample patients to an Ontario ED, which will provide the ED portion of the wait.

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Emergency Department Definition

Ontario EDs are defined by their MIS functional codes: those starting with 71310, 72310 or 73310.

Transfers/Episode Building

- Patients may be admitted to one ED and transferred to another. Linking all admissions together into a single episode of care allows us to see the entire ED portion of the pathway of care.
- A transfer is defined as a scenario when a patient is discharged from one ED and admitted to another within 24 hours.

Linkage From DAD to NACRS

- Patients are identified in DAD and NACRS using a created personal identifier: the first 10 digits of the health care number, gender and the province issuing health care number.
- The ED record is considered related to the inpatient admission for hip fracture if the patient is discharged from the ED 24 hours or less prior to the inpatient admission.

Note: Abstracts were excluded if they indicated that patients entered through the ED but there were no matching ED episodes, as the analysis was incomplete.

Time Calculations

- Overall wait time was calculated as time patient first registered in ED (index ED admission) to start time of surgical repair.
- Portion of time spent in ED was calculated as time patient first registered in ED (index ED admission) to time of inpatient admission.
- Portion of time spent in acute care was calculated as time from inpatient admission to start time of surgical repair.

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