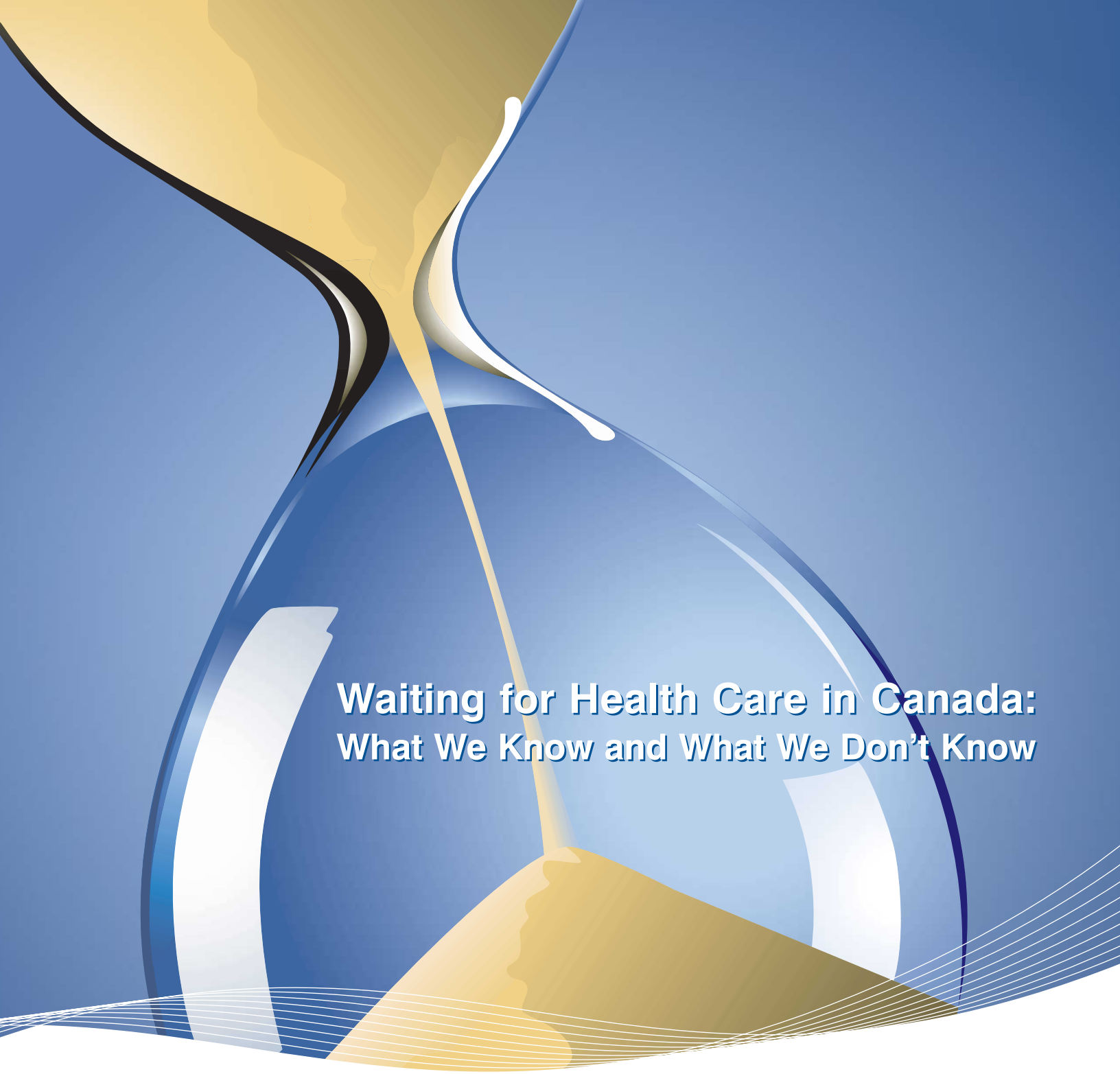


Waiting for Health Care in Canada:
What We Know and What We Don't Know

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

Canadian Institute for Health Information
495 Richmond Road, Suite 600
Ottawa, Ontario K2A 4H6

Phone: (613) 241-7860
Fax: (613) 241-8120
www.cihi.ca

ISBN 1-55392-784-2

Cette publication est aussi disponible en français sous le titre :
Temps d'attente et soins de santé au Canada :
ce que nous savons et ce que nous ignorons
1-55392-786-9

Table of Contents

About the Canadian Institute for Health Information

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 Web site at www.cihi.ca.

As of December 6, 2005, the following individuals are members of CIHI's Board of Directors:

- **Mr. Graham W. S. Scott**, C.M., Q.C. (Chair), Managing Partner, McMillan Binch Mendelsohn LLP
- **Ms. Glenda Yeates** (ex officio), President and Chief Executive Officer, CIHI
- **Dr. Penny Ballem**, Deputy Minister, British Columbia Ministry of Health Services
- **Dr. Peter Barrett**, Physician and Faculty, University of Saskatchewan Medical School
- **Ms. Jocelyne Dagenais**, Assistant Deputy Minister of Strategic Planning, Evaluation and Information Management, ministère de la Santé et des Services sociaux, Quebec
- **Ms. Roberta Ellis**, Vice President, Prevention Division, Workers' Compensation Board of British Columbia
- **Mr. Kevin Empey**, Executive Vice President, Clinical Support and Corporate Services, University Health Network
- **Dr. Ivan Fellegi**, Chief Statistician of Canada, Statistics Canada
- **Ms. Nora Kelly**, Deputy Minister, New Brunswick Ministry of Health and Wellness
- **Ms. Alice Kennedy**, Chief Operating Officer, Long Term Care, Eastern Health, Newfoundland and Labrador
- **Dr. Richard Lessard**, Director of Prevention and Public Health, Agence de développement de réseaux locaux de services de santé et de services sociaux de Montréal, Quebec
- **Mr. David Levine**, President and Director General, Agence de développement de réseaux locaux de services de santé et de services sociaux de Montréal, Quebec
- **Mr. Malcolm Maxwell**, Chief Executive Officer, Northern Health Authority, British Columbia
- **Dr. Brian Postl**, Chief Executive Officer, Winnipeg Regional Health Authority, Manitoba (on leave)
- **Mr. Morris Rosenberg**, Deputy Minister, Health Canada
- **Mr. Ron Sapsford**, Deputy Minister, Ministry of Health and Long-Term Care, Ontario
- **Ms. Sheila Weatherill**, President and Chief Executive Officer, Capital Health Authority, Edmonton, Alberta

Acknowledgements

The Canadian Institute for Health Information (CIHI) would like to acknowledge and thank the many individuals and organizations that have contributed to the development of this report.

The editorial committee for *Waiting for Health Care in Canada* included Jennifer Zelmer, Kathleen Morris, Tracy Johnson and Jocalyn Clark.

Core members of the project team included Michelle Arakgi, Linda Choy, Nicole de Guia, Margaret-Anne Keresteci, Ellen Shi, Marc Tallentire and Jennifer Walker.

We would also like to acknowledge the assistance and advice of Steven Lewis, as well as the work of external consultants Antoni Basinski, Alexandra Flatt, Rami Rahal and Jan Walker.

Production of this report involves many people and many aspects of the CIHI organization. We want to thank all CIHI staff for their contribution to this report, including individuals from Publications, Translation, Communications, Distribution Services and the Web.

This report could not have been completed without the generous support and assistance of many other individuals and organizations, including representatives from the many health regions, the Federal, Provincial and Territorial Ministries of Health and Statistics Canada.

Introduction

Ask what makes Canada different from the United States, and health care is sure to come up. Interestingly, though, Canadians and insured Americans are about equally likely to report unmet needs for health care in the past year.[1] One in ten adults on both sides of the border did so in 2002–2003. (Rates are much higher for uninsured Americans.) But the leading reasons for access problems do diverge. In the United States, cost was the most common barrier, cited by just over half of those with unmet needs. In Canada, waiting for care was named as a barrier by 32% of those with access difficulties.

This overall result, however, masks the variations in barriers to access for different types of services. Waits are the most common barrier named by seekers of specialist care who encounter difficulties. The same is true for those seeking non-emergency diagnostic testing and surgery. For routine and ongoing medical care, more mentioned difficulties getting an appointment than cited wait time. Likewise, the cost of getting help was the top barrier reported by Canadians with disabilities who had unmet needs for help with everyday activities. On the other hand, Canadian women who have not had a recent pap smear or mammogram are most likely to say that it was because they or their doctor didn't think one was necessary or because they haven't gotten around to it.

Perhaps not surprisingly, access to care—particularly wait times—is often the focus of intense media coverage and public debate. Ideally, solid information would inform this debate and the decisions that follow. Imagine knowing how long patients wait for different types of care and how this has changed over time. Or how waits affect the health and well-being of patients and their families. Or what works best to reduce wait times. Now imagine having this type of information for all parts of a patient's journey—from initial assessment and diagnosis, to treatment, to recovery or management of chronic illness. This would mean no hidden waits and make it more obvious how changing one part of the health system affects others.

There is more information on wait times than ever before, but we are far from this vision. Tracking waits is complex. Patients may experience many waits along their health care journey. For example, during the course of cancer treatment, patients may wait to see their family doctors, to see a specialist, for tests, for the results, for radiation therapy or surgery and for other types of care. Depending on their condition, the severity of their illness, where they live and other factors, the experience of waiting may be very different. Added to this are the many technical challenges. For instance, when should you start and stop the wait times clock? Do you include emergency cases? What about follow-up care? Finally, interpreting wait times requires an understanding of the broader context of care. This may mean taking into account indications for and rates of services, system capacity, patterns of practice and other factors.

1. C. Sanmartin, E. Ng, *Joint Canada/United States Survey of Health, 2002–03* (Ottawa: Statistics Canada, 2003).

Chapter 1 addresses these issues. It tracks progress on understanding wait times across Canada. The chapter profiles a sample of the work underway, both within and outside of government. Drawing on results from a symposium on wait times measurement held in the fall of 2005, it also highlights shared underlying challenges in measuring and understanding wait times.[2]

The rest of the report explores what we know and do not know about wait times across the spectrum of care. It highlights findings from a range of surveys, provincial wait times data and other sources. Given the patchwork of information available, our intent is not to be comprehensive. Instead, our aim is to provide useful insights and a starting point for collective efforts to understand and reduce wait times. If you are interested in knowing more about a particular area, we have provided references to detailed documents or data sources where possible.

Chapter 2 covers assessment and diagnosis. It focuses on access to services provided by family physicians, medical specialists and diagnostic tests. Chapter 3 covers waits for surgery. The bulk of the chapter addresses wait times in four areas identified as priorities by First Ministers in 2004: cancer, sight restoration, joint replacement and cardiac care. In each area, we explore what is known about how waits compare with benchmarks recently set by Health Ministers. Chapter 4 then follows patients beyond their acute hospital stay to rehabilitation and other types of care.

2. Canadian Institute for Health Information, *CIHI Wait Times Measurement Synopsis* (Ottawa: CIHI, 2005).

For More Information

Copies of *Waiting for Health Care in Canada: What We Know and What We Don't Know* are available free of charge in both official languages on the CIHI Web site, at www.cihi.ca. To order additional copies of the report (a nominal charge will apply to cover printing, shipping and handling costs), please contact:

Canadian Institute for Health Information Order Desk
495 Richmond Road, Suite 600
Ottawa, Ontario K2A 4H6

Phone: (613) 241-7860
Fax: (613) 241-8120

There's More on the Web!

With the release of *Waiting for Health Care in Canada: What We Know and What We Don't Know* and in the weeks following, CIHI will add more information to the site. For example, it will be possible to:

- Download free copies of the technical notes in English or French.
- Sign up to receive regular updates on CIHI's upcoming reports via email.
- Look at related reports, such as *Health Care in Canada* and *Medical Imaging in Canada*; CIHI's regular series of reports on aspects of health spending, health human resources, health services and population health; and reports from Statistics Canada.

1

Tracking Progress on Wait Times

Chapter 1. Tracking Progress on Wait Times

From linguistic rights to same sex marriage, the Supreme Court tackles some of the country's thorniest social questions. Its recent deliberations on access to health care are no exception. The case started with a court challenge by Quebec resident George Zeliotis and his physician, Dr. Jacques Chaoulli. Mr. Zeliotis waited a year for hip replacement surgery in 1997. In his challenge, Dr. Chaoulli held that when the public health care system does not provide "reasonable" access to services, a prohibition on private health insurance for medical and hospital services violates both the *Quebec Charter of Human Rights and Freedoms* and the *Canadian Charter of Rights and Freedoms*. The Quebec courts acknowledged that the patient's rights to security of the person were violated but felt that this was defensible because of an overriding public interest. However, the Supreme Court of Canada, by a 4:3 majority, allowed the appeal. It ruled that Quebec's ban on private health insurance to obtain medically necessary treatment violated the provincial Charter.[1] (The court did not determine whether the Canadian Charter was violated.)

As the heated reaction to the Chaoulli decision shows, not all agree on how best to reduce wait times. But many believe that better information about who is waiting for what, for how long and the factors that influence wait times would be an important step forward. The road ahead is long and complex. This chapter profiles a sample of the work by the many individuals and groups, both within and outside government, who are working to improve access to health care. It also highlights shared underlying challenges in measuring and understanding wait times.

What Governments Are Doing

When First Ministers met in the fall of 2004, they listed timely access to quality care at the top of their collective agenda.[2] Together, they agreed to focus on better management of wait times and on reducing waits that are longer than medically acceptable. Specifically, First Ministers committed to achieving "meaningful reductions in wait times in priority areas such as cancer, heart, diagnostic imaging, joint replacements, and sight restoration by March 31, 2007, recognizing the different starting points, priorities, and strategies across jurisdictions."[i] To assist in achieving this goal, they agreed to establish:

- comparable indicators of access to health care professionals, diagnostic and treatment procedures with a report to their citizens to be developed by all jurisdictions by December 31, 2005;
- evidence-based benchmarks for medically acceptable wait times starting with cancer, heart, diagnostic imaging procedures, joint replacements and sight restoration by December 31, 2005, through a process to be developed by Federal, Provincial and Territorial Ministers of Health;

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.[3]

- jurisdictional multi-year targets to achieve priority benchmarks by December 31, 2007; and
- annual reports to their citizens on their progress in meeting their multi-year wait time targets.

Since then, wait times issues have appeared regularly on the agenda for inter-governmental discussions. At the federal level, the government has been active. It has funded research on wait times, established a six-year $4.5-billion Wait Times Reduction Fund and appointed a Federal Advisor on Wait Times. Statistics Canada has also conducted a series of surveys that ask Canadians about their access to health services.

Governments jointly commissioned research on evidence-based wait times benchmarks and have done work on comparable indicators of access. On December 12, 2005, Health Ministers announced benchmarks, established based on clinical evidence, for five types of non-emergency surgery, radiation therapy and cancer screening. These benchmarks apply to the period between booking (defined as when the patient and an appropriate physician agree to a service and the patient is ready to receive it) and when the service starts.[4] For additional discussion of benchmarks see Chapter 3.

Starting Points for Wait Times Measurement

After the release of the *Ten Year Plan*, governments struck a committee to identify comparable indicators of access for the five priority areas listed by First Ministers. Together, members agreed on starting points for defining and measuring wait times across jurisdictions. For example, they decided to define a wait time as the number of days between a start date (when the patient and physician agree to a service and the patient is ready to receive the service) and a finish date (when the patient receives the service or the initial service in a series).

In their work on comparable indicators of access, provinces and territories agreed to focus initially on the following areas:

Cancer—wait times for radiation therapy and chemotherapy.
Heart—wait times for cardiac bypass surgery (i.e. coronary artery bypass grafting) and angioplasty.
Diagnostic imaging—wait times for MRI and CT scans, which meet appropriateness guidelines; used for diagnosis.
Joint replacements—wait times for total hip and total knee replacement surgeries.
Vision restoration—wait time for cataract removal from the first eye.
Access to health professionals—the percentage who reported waiting less than three months for a specialist appointment.

Source: Proposal to Establish Comparable Indicators of Access, accepted by Deputy Ministers December 2005.

In addition to these collective efforts, many provinces have pursued their own work on reporting, managing and reducing wait times. The range of activities is diverse and constantly evolving. Progress is occurring at different points in the system and at different speeds in various parts of the country.

All provinces have created public Web sites or reports that list wait times in one or more of the five priority areas—and sometimes beyond. The scope of these reports varies widely, and they draw on a range of sources. Some build on the work of provincial groups or networks charged with improving access to surgery. Other jurisdictions have enhanced wait times data collected from regional health authorities and/or hospitals, developed new wait times registries or modified existing data collection systems to accommodate wait times data.[ii] A number of provinces have also funded analyses of linked administrative data.

1 Surfing for Wait Times

All provinces provide some wait times data on Web sites or in reports, but the scope and depth of reporting varies considerably. The level of detail also differs and is changing rapidly. For each of First Ministers' priority areas, the table below shows which jurisdictions reported some wait times information as of December 2005 and the Web sites where this information can be accessed. More details are included in the chapters that follow.

Province	Web Sites Wait Times Information	Cancer	Heart	Diagnostic Imaging	Joint Replacement	Sight Restoration
N.L.	www.health.gov.nl.ca/health/publications/pdfiles/healthscope_report_2004.pdf		●			
P.E.I.	www.gov.pe.ca/photos/original/hss_2nd_r_chi.pdf	●			●	
N.S.	www.gov.ns.ca/health/waittimes/default.htm	●	●	●	●	●
N.B.	www.gnb.ca/0391/pdf/healthperformanceIndicators2004-e.pdf		●			
Que.	www.msss.gouv.qc.ca/en/sujets/organisation/waiting_lists.html		●		●	●
Ont.	www.health.gov.on.ca/transformation/wait_times/wt_data/data_ontario.html www.cancercare.on.ca/index_waittimesRadiation.asp	●	●	●	●	●
Man.	www.gov.mb.ca/health/waitlist/index.html www.gov.mb.ca/health/pirc/index.html	●	●	●	●	
Sask.	www.sasksurgery.ca/wait-list-info.htm		●		●	●
Alta.	www.ahw.gov.ab.ca/waitlist/WaitListPublicHome.jsp	●	●	●	●	●
B.C.	www.healthservices.gov.bc.ca/waitlist/	●	●		●	●

ii. The territorial governments do not maintain wait lists or report on wait times for major surgery, because residents often have to travel south for complex care.

Beyond Government—Who's Doing What

Governments aren't alone in focusing on wait times. Many other groups—locally, nationally and internationally—are also tackling the issue. They offer very different perspectives and approaches to addressing wait times challenges. A list of all activities underway would fill a report. Below are some examples of the breadth and scope of activity undertaken by pan-Canadian organizations in 2005:

- **Surveying Canadians about their views on wait times.** Several organizations, individually and in collaboration with others, have sponsored surveys of public attitudes towards access issues, as well as public reaction to potential solutions for reducing waits.

- **Measuring waits for care.** Measurement of wait times is increasingly conducted by (or funded through) governments. However, since 1988, the Fraser Institute has published an annual survey reporting physicians' estimates of hospital waiting times across Canada. Other surveys of wait times include the National Physician Survey and the Commonwealth Fund's Health Policy Surveys.

- **Supporting research on access to care.** Some groups have focused on building knowledge about outcomes associated with waiting. For example, at the request of Health Ministers, the Canadian Institutes of Health Research (CIHR) solicited research proposals on evidence-based benchmarks for the five priority areas. Research was subsequently commissioned and completed in three areas: cancer, joint replacement and sight restoration.

- **Establishing wait times benchmarks.** Governments released wait times benchmarks in December 2005, and non-governmental groups have been active in this area as well. For example, several medical associations have jointly formed the Wait Times Alliance, which published a physician perspective on medically acceptable wait time benchmarks. The Western Canada Waiting List Project, a coalition of medical associations, ministries of health, regional health authorities and health research centres, also released a set of maximum acceptable wait times in 2005.

- **Reporting on progress.** The Health Council of Canada has addressed wait times issues in both of its main reports. In addition, the Council has issued three briefs on wait times issues and the challenges ahead.

- **Sharing best practices.** Many organizations share the objective of reducing wait times and wish to disseminate their lessons and challenges learned. Sometimes organizations exchange ideas on what works and learn from the experiences of others at face-to-face meetings, such as the Taming of the Queue colloquia in 2004 and 2005. Other groups, such as the Association of Canadian Academic Healthcare Organizations, have published reports to share strategies used by their members to address wait times.

- **Issuing position statements.** Several developments related to wait times occurred in 2005, including the Chaoulli decision and the release of different sets of wait times benchmarks. Some professional organizations of physicians, nurses and others have published documents and issued media releases that contribute the perspective of their members to the wait times debate.

2 Wait Times at CIHI

The Canadian Institute for Health Information (CIHI) has a long history of working to improve information on access to care. Our activities focus primarily on consensus building and information exchange, data collection and analysis. Building on this base, we identified wait times and other access issues as an important analytical theme in our Strategic Directions for 2005–2008. The table below shows examples of our past, current and planned future wait times activities.

Activity	Past	2005–2006	Going Forward
Consensus-building and information exchange	Convened task groups to develop wait time indicators for cardiac surgery, joint replacements and radiation therapy for cancer. These were adopted by governments for comparable reporting.	Convened the Wait Times Measurement Symposium that shared progress to date and identified challenges for effective wait times measurement.	Committed to working with others to move wait times information forward.
Data collection	The Discharge Abstract Database, National Ambulatory Care Reporting System, Canadian Joint Replacement Registry, National Rehabilitation Reporting System and Canadian Organ Replacement Register include data elements related to wait times.	Opt-in data collection for wait times for surgery, MRI and CT scans, joint replacement and other types of care.	Incorporating wait times data elements into emerging data sets, such as the Home Care Reporting System.
Analysis	Information on what we know and don't know about wait times included in *Health Care in Canada* reports since 2000. Analysis of waits for inpatient rehabilitation. Analysis of non-financial barriers to access.	*Waiting for Health Care in Canada: What We Know and What We Don't Know.* Profile of family doctors who are accepting new patients. *Understanding Emergency Department Wait Times.*	More analysis of waits for joint replacements, transplants and emergency department care. Broader examination of access issues, including rural health report.

Understanding Wait Times

Although work on wait times is underway across the country, there is no Canada-wide waiting list for care. Comparable data about who is waiting for what, for how long and the factors that influence waiting are more common than in the past, but still far from comprehensive. We also know relatively little about how waiting for surgery, chemotherapy or other treatment affects patient outcomes in the long term. Even within many regions and hospitals, wait lists exist in multiple places. Often they are not integrated so that it is hard to tell which patients or how many are waiting for different types of services.[5] Furthermore, there are many different ways of tracking wait lists and wait times, making comparisons and analysis difficult or impossible.[6, 7]

First, **different wait lists cover different types of patients**. Some include or exclude emergency cases, planned follow-up care, children, people who don't live in a particular area or other groups. It is not always clear who is eligible to be counted on a list, nor whether the definitions used are consistent. For example, one hospital's "emergency" case is another's "urgent" patient. In addition, sometimes patients' health care needs or other circumstances dictate a wait. For example, they may need to recover from chemotherapy before beginning radiation therapy, or they may choose to defer surgery until they are better prepared to have it. Some measures of waits include these periods of time; others do not.

Second, **wait times can be defined differently**. For example, the starting point of a wait for bypass surgery could be the date of cardiac catheterization or the date when the surgeon and patient agree to proceed with surgery. Neither is "correct." There are advantages and disadvantages to each approach, depending on how the information is to be used. Canadian researchers surveyed health care providers in 1998 and found that 23% started the wait time "clock" for a coronary artery bypass graft when a patient is referred to a cardiac specialist, 54% when the treatment decision is made and 15% when a booking slip is sent to the surgical centre.[7]

In all cases, these times may represent only a portion of the total wait from the patient's point of view. For instance, patients may think about how long they waited to see their family physician, for a referral to a specialist, for preliminary tests and for other services. We cannot know if some patients are waiting longer than others for services until we know that the start and stop times used to measure wait times are the same.[8, 9]

Third, **there are also different ways to measure wait times**. One option is to track wait times prospectively, following the patient forward from when the "clock starts ticking." This approach allows us to look at how many patients are currently on the list and how long they have been waiting. Prospective tracking of wait times enables organizations to intervene should waits become too long. However, accurate information depends on active management of the wait list. For example, reviews of British Columbia wait lists in the spring and fall of 2004 found that 5,000 to 6,000 patients listed likely no longer needed care.[10] International research shows that up to 30% of people on wait lists are inappropriately included.[11–13] Either they got the procedure elsewhere, were counted on multiple wait lists, no longer needed the procedure, no longer wanted it, had died or never knew they were on the list.

Another option is to collect data retrospectively, tracking back from a procedure to find out how long the patient waited for care. This has the advantage of reflecting actual patient experience, but only captures those who have received care in a given time period. Alternatively, it is possible to ask patients at one point in time, "How long have you been waiting?" This cross-sectional approach depends on recall and the findings may vary based on survey sampling approaches and response rates. These issues may also affect surveys of doctors, clinics or other care providers that ask how long they expect that a patient would wait for a particular type of care.[14, 15]

Similarly, different summary measures may be used to explain the distribution of wait times but can complicate comparisons. For example, some report average waits. Others look at the proportion treated within a given time (e.g. one to three months) or how long it took for those with the longest waits to receive care.

Different methods for monitoring wait times can yield different results. Each has strengths and weaknesses, but data generated from different methods often cannot be combined to make valid comparisons.

The Context of Waits

Wait times are affected by many factors, including changes in the burden of disease, indications for surgery, the availability of doctors and other health professionals, referral patterns, patient preference, operating time or other resources and management strategies.[7] Even if we had comparable wait time data over time and by region, it would be important to take these and other factors into account when interpreting wait times and identifying opportunities to reduce waits.

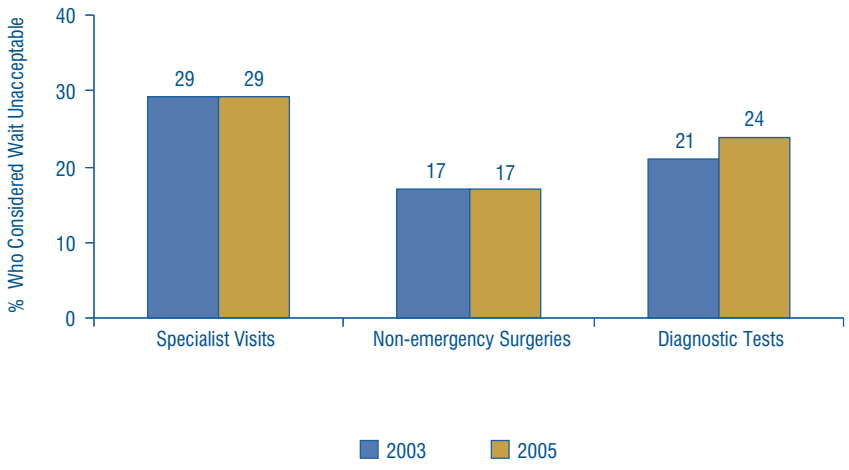
Perhaps most challenging is the issue of urgency. In some cases, a delay of minutes counts. For example, a patient who is bleeding severely needs emergency care. But often, waiting is not immediately life-threatening. Determining medically safe waiting periods is difficult. So is weighing the impact of anxiety, missed work, pain or other consequences that patients or their families may experience while waiting.

Many would agree that the sickest patients should get treatment first. Prioritization schemes are used in a few parts of the country for some types of care, but have not been universally agreed upon or implemented. Among the challenges is gaining consensus about what constitutes a reasonable or excessive wait. Several recent initiatives—by researchers, professional organizations and governments (e.g. Canadian Cardiovascular Society Working Group,[16] Wait Times Alliance,[17] provinces and territories[4])—have proposed "benchmarks" or "targets" for how long patients should wait for given procedures. The ways benchmarks or targets are established vary widely, sometimes by clinical consensus, other times based on research on the impact of waits or administrative judgment.

The Canadian Institutes of Health Research recently commissioned studies that illustrate the challenges of establishing maximum acceptable waiting times.[18] Researchers reported that wait times can have an impact on patients' health, but the extent of the impact depends on a range of factors that differ from patient to patient and by type of condition. For example, cancer is not a single disease and even within the same disease category cancers grow differently in each individual. Waiting may pose different risks depending upon the type of cancer and stage of growth. Likewise, for joint replacements and vision restoration, researchers stressed the need for benchmarks that reflect the relative urgency of need, but identified a paucity of evidence on which to base such recommendations.

3 What Patients Say

Statistics Canada recently asked Canadians who waited for specialized services whether their waits were acceptable. Most said yes, as they had when a similar question was asked in 2003. Others did not consider their waits acceptable: 29% for waits for specialist visits for a new illness or condition, 24% for selected diagnostic tests (non-emergency MRIs, CT scans and angiographies) and 17% for non-emergency surgery other than dental surgery.



Source: Health Services Access Survey, Statistics Canada, 2003 and 2005 (first six months data).

In some cases, there is also debate about who should have a particular type of treatment. Recommended care may differ from professional to professional and place to place. In fact, variation in practice patterns may be one of the most crucial aspects to understanding wait times. There are few standards or coordinated mechanisms by which patients get referred to specialists or surgery. A physician's individual referral networks or practice patterns may influence how long a patient waits. For example, the Alberta Bone and Joint Institute has examined a new approach to the delivery of care for hip and knee replacements. By implementing a standardized referral tool and a single referral point of entry, wait times from referral to first consult by an orthopedic specialist were reduced from 35 to less than 6 weeks. Once a decision to operate has been made, waits for surgery were reduced from 47 to less than 5 weeks by optimizing patients' conditions and implementing a comprehensive plan.[19] Likewise, younger Canadians are much more likely to have joint replacements than in the past.[20] These types of changes may affect who is put on a waiting list and how long they wait—as well as outcomes of both care and waiting.

Another challenge is identifying what factors may be causing longer (or shorter) waits. For example, it can be misleading to look at waiting times for a single procedure in isolation. If a hospital provides more emergency angioplasties, that may affect its ability to treat elective patients. However, some of the patients treated on an emergency basis will then not need bypass surgery, potentially influencing waiting times for the surgery. Because the use of emergency angioplasty is not uniform across the country, differences may affect wait time comparisons.

Although the picture is not yet complete, examples of other factors that affect wait times include what type of care you need, whose list you are on and where you are waiting, when you are waiting, how processes of care and wait lists are managed and special factors related to individual patients or conditions. These and other factors will be explained in the following chapters.

For More Information

1 Supreme Court of Canada, *Chaoulli vs. Quebec* (Attorney General; Docket 29272), [online], last modified 2005, cited January 2, 2005, from <http://www.lexum.umontreal.ca/csc-scc/en/pub/2005/vol1/html/2005scr1_0791.html>.

2 Canadian Intergovernmental Conference Secretariat, *A 10-Year Plan to Strengthen Health Care*, [online], cited December 2, 2005, from <http://www.scics.gc.ca/cinfo04/800042005_e.pdf>.

3 Canadian Intergovernmental Conference Secretariat, *Asymmetrical Federalism That Respects Quebec's Jurisdiction*, [online], cited December 2, 2005, from <http://www.scics.gc.ca/cinfo04/800042012_e.pdf>.

4 Ministry of Health and Long-Term Care, *First Ever Common Benchmarks Will Allow Canadians to Measure Progress in Reducing Wait Times*, [online] last modified December 12, 2005, cited December 12, 2005, from <http://www.health.gov.on.ca/english/media/news_releases/archives/nr_05/nr_121205.html>.

5 L. Sicilliani and J. Hurst, "Explaining Waiting Times Variations for Elective Surgeries Across OECD Countries," *Health Working Papers* (Paris: Organisation for Economic Co-operation and Development, 2003), [online], from <http://www.oecd.org/dataoecd/31/10/17256025.pdf>.

6 Canadian Institute for Health Information, *CIHI Wait Times Measurement Symposium Synopsis* (Ottawa: CIHI, 2005).

7 P. MacDonald, S. Shortt, C. Sammartin, M. Barer, S. Lewis and S. Sheps, *Waiting List and Waiting Times for Health Care in Canada: More Management!! More Money??* (Ottawa: Health Canada, 1998).

8 S. Lewis, M. Barer, C. Sammartin, S. Sheps, S. Shortt and P. MacDonald, "Ending Waiting-List Mismanagement Principles and Practice," *CMAJ* 162 (2000): pp. 1297–1300.

9 C. Sammartin, S. Shortt, M. Barer, S. Sheps, S. Lewis and P. MacDonald, "Waiting for Medical Services in Canada: Lots of Heat, But Little Light," *CMAJ* 162 (2000): pp. 1305–10.

10 British Columbia Ministry of Health, *Median Wait Times and Waitlists*, [online], last modified November 24, 2005, cited December 5, 2005, from <http://www.healthservices.gov.bc.ca/cpa/mediasite/waittime/median.html>.

11 G. J. Elwyn, L. A. Williams, S. Barry and P. Kimnnersley. "Waiting List Management in General Practice: A Review of Orthopaedic Patients," *BMJ* 312 (1996): pp. 887–8.

12 J. Schou, A. L. Plousen and J. Nording, "The Anatomy of a Prostate Waiting List: A Prospective Study of 132 Consecutive Patients," *British Journal Urology* 74 (1994): pp. 57–60.

13 G. G. Fraser, "An Audit of Surgical Waiting Lists," *New Zealand Medical Journal* 104 (1991): pp. 385–6.

14 J. Lomas, "When Methods Make a Difference," presented at the *CIHI Wait Times Measurement Symposium* in Toronto, Ont., on October 5, 2005.

15 Canadian Health Services Research Foundation, *Evidence Boost: Manage Waiting Lists Centrally for Better Efficiency*, [online], last modified March 2005, cited December 2, 2005, from <http://www.chsrf.ca/mythbusters/pdf/boost1_e.pdf>.

16 P. W. Armstrong, P. Bogaty, C. E. Buller, P. Dorian and B. J. O'Neil, "The 2004 ACC/AHA Guidelines: A Perspective and Adaptation for Canada by the Canadian Cardiovascular Society Working Group," *Canadian Journal of Cardiology* 20, 11 (2004): pp. 1075–9.

17 Wait Times Alliance for Timely Access To Health Care, *It's About Time* (Ottawa: Wait Time Alliance, 2005).

18 Canadian Institute for Health Research, *CIHR Releases Research Results to Inform the Development of Benchmarks for Wait Times*, [online], last modified November 16, 2005, cited December 2, 2005, from <http://www.cihr-irsc.gc.ca/e/29902.html>.

19 Alberta Bone and Joint Health Institute, *Alberta Hip & Knee Replacement Project: Interim Results, December 2005* (Calgary: Alberta Bone and Joint Institute, 2005).

20 Canadian Institute for Health Information, *Total Hip and Total Knee Replacements in Canada, 2005* (Ottawa: CIHI, 2005).

2

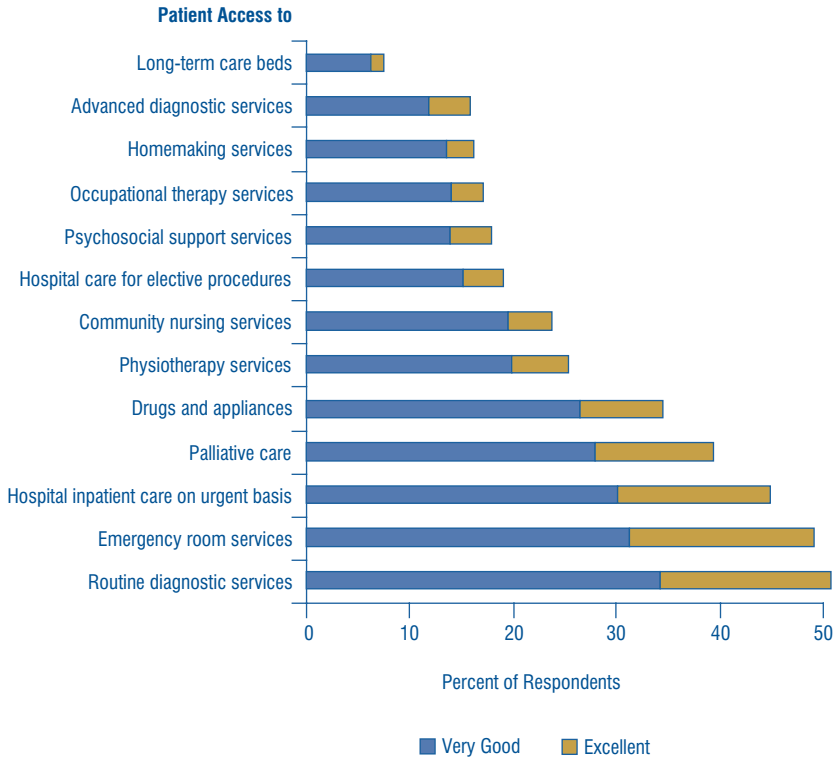
Assessment and Diagnosis

Chapter 2. Assessment and Diagnosis

In doctors' offices, pharmacies, schools, hospitals, nursing homes and elsewhere, most Canadians use some type of health care each year. Access is easy for some; but others face challenges in navigating a complex health system. These challenges may be related in part to the type of health service a patient requires. As part of the 2004 National Physician Survey, doctors were asked to rate patient access to different clinical services.[1] In assigning their rating, physicians may have considered a broad range of issues including whether they or their patients knew when and how to seek services, could find an appropriate health care provider or could obtain care where and when needed. Clearly some, but not all access difficulties are related to waiting for care. Within this broad context, this chapter focuses on what we know about waits for routine care, referral to specialists and diagnostic tests.

4 What Physicians Think About Access

Queues and other access challenges exist in many parts of the health system. In 2004, family physicians and other specialists were asked to rate accessibility of various services for their patients. Perceived accessibility varied considerably from service to service. The graph below shows the proportion who said that access to each service was excellent or very good. (Excludes "not applicable" and not answered.)



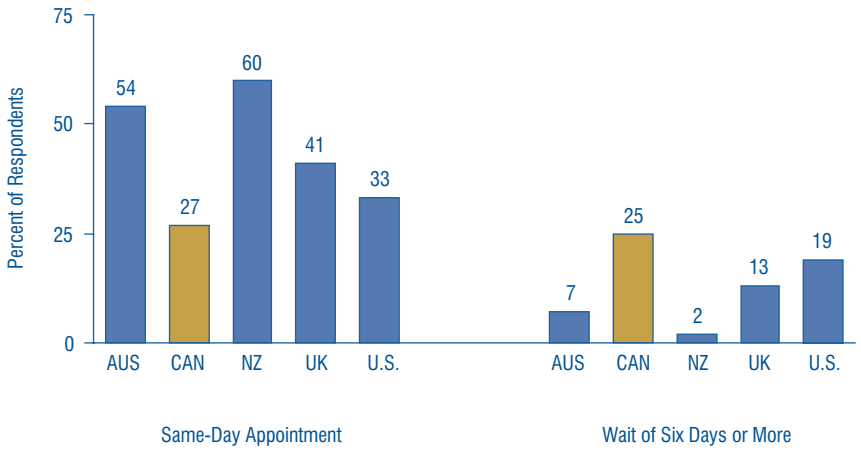
Source: The Royal College of Physicians and Surgeons of Canada. The College of Family Physicians of Canada, The Canadian Medical Association, National Physician Survey, 2004.

Access to Routine Care

Fever, loss of appetite, diminishing vision . . . any of these symptoms, and a myriad of others, may prompt Canadians to seek care. In 2005, over half of Canadians (56%) said they needed routine or ongoing care.[2] Of that group, one in six (16%) reported difficulties accessing services. The most common barriers reported were difficulties getting an appointment, waiting too long for an appointment, waiting too long in the doctor's office and difficulties contacting a physician. The proportion of Canadians reporting difficulties and the nature of their access challenges are unchanged from the 2003 survey.

5 How Quickly Can You See a Doctor?

In 2004, a Commonwealth Fund survey asked residents in five countries about how quickly they got a doctor's appointment the last time they were sick or needed medical attention. Canadians and Americans were less likely than those in other countries to report same-day access and more likely to say that they had waited six days or longer for an appointment.



Source: Primary Care and Health System Performance: Adults' Experiences in Five Countries, Commonwealth Fund, 2004.

Family physicians' offices are the most common point of first contact for many health care services. Most Canadians have a family doctor—86% of adults in 2003, virtually unchanged since 1994.[3] But for some, challenges in accessing the health care system begin here. More than 1.2 million Canadians aged 15 and over were unable to find a family doctor in 2003.[4]

This challenge persists even though the number of family physicians has increased slightly over the past few years, even when adjusted for population growth.[5] Many other factors affect Canadians' access to care. For example, fewer family physicians are accepting new patients than in the past. In 2004, 1 in 5 did so without restrictions, a drop of 3.5% from 2001.[6] Even here, the situation varied significantly across the country: 1 in 2 family doctors in Saskatchewan accepted new patients in 2004, compared to 1 in 12 in Prince Edward Island. Other reasons affecting access to routine care include physicians' hours of work, their scope of practice, how care is organized, regional variations in physician supply, the mix of services provided by other health professionals and changes in population needs.

New Models to Improve Access to Care

How best to organize and deliver everyday health services is an enduring health policy challenge. Primary health care renewal is at the heart of plans to reform health care for the 21st century because it is seen as a way to achieve better use of resources, access, coordination and quality of care.[7] A variety of initiatives are underway across the country. For example, the Eskasoni First Nation in Nova Scotia partnered with the federal and provincial governments and Dalhousie University's Department of Family Medicine to implement a Primary Care project in 1999.[8] The project changed a 30-year tradition of a family doctor holding regular clinics to an integrated public health/primary care model. Care is provided by a multidisciplinary team of physicians, a primary care nurse, community health nurses, a prenatal care coordinator, a pharmacist and a health educator/nutritionist. According to an evaluation report, the number of physician visits decreased by two-thirds between 1997 and 2000. Outpatient and emergency visits at the regional hospital fell by about 40%. In contrast, prenatal and diabetes care were received by many more, while the costs of prescribed items and medical transportation fell. Importantly, community members also think the new model works: 89% of patients surveyed in 2000 said that they thought the quality of health services had improved compared to five years earlier.

While family doctors' offices are the leading place for care during regular office hours, Canadians who need immediate care for a minor health problem on weekends and evenings are most likely to go to a walk-in clinic or an emergency department. If problems arise in the middle of the night, almost everyone seeks help at a hospital emergency department.[2]

Access to one type of care may have an effect on use of, and waits in, other parts of the system. For example, countries whose citizens report comparatively quick access to physicians, such as Australia and New Zealand, had lower rates of emergency room use when compared to Canada and the U.S.[9] Their residents were also less likely to say that they had gone to an emergency department although their regular doctor could have treated them if that service had been available. In addition, Canada had a higher percentage of patients who said that they waited two hours or more in the emergency department before being treated during their last visit.

6 Five Countries Report on Emergency Department Use and Waits

In 2004, the Commonwealth Fund asked adults in five countries about their experiences with primary health care, including their use of emergency departments for care. Canada had the highest reported use of emergency departments, as well as the highest percentage of adults who said that they waited more than two hours to be treated.

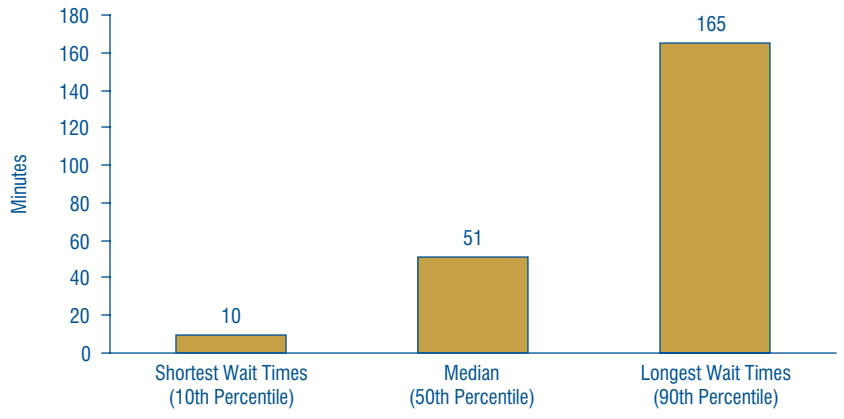
	Australia %	Canada %	New Zealand %	UK %	U.S. %
Went to the emergency department in the last 2 years	29	38	27	29	34
Went to the emergency department, but felt they could have been treated by regular doctor if available	9	18	7	6	16
Reported waiting >2 hours before being treated	29	48	27	36	34

Source: Primary Care and Health System Performance: Adults' Experiences in Five Countries, Commonwealth Fund, 2004.

Understanding waiting times in emergency departments (EDs) is challenging because of the wide range of factors that can affect how busy EDs are, how quickly health professionals can assess patients and how long it takes before patients can leave the ED. Detailed data mostly from Ontario suggest that people can have very different experiences when waiting to see a doctor in the emergency department.[10]

7 Waits to See a Physician in EDs

In 2003–2004, half of all patients in emergency departments, as reported in the National Ambulatory Care Reporting System (NACRS), waited 51 minutes or less before being assessed by a doctor. Waiting times varied significantly. For example, one in ten patients waited 10 minutes or less, while another 10% waited just under three hours (165 minutes) or more.



Note: NACRS data represent visits to 163 Ontario-based emergency departments, as well as participating sites located in Nova Scotia (n = 4), British Columbia (n = 3) and Prince Edward Island (n = 1).

Source: National Ambulatory Care Reporting System, CIHI.

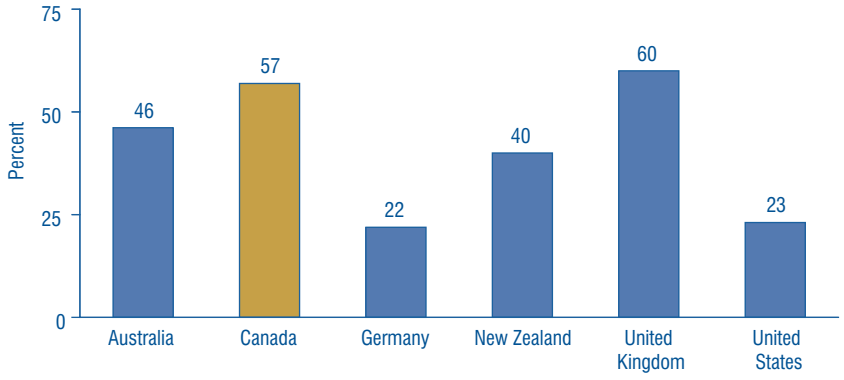
Some are seen within minutes, while the 10% who waited the longest in 2003–2004 were in the emergency department for more than 2 hours and 45 minutes before a doctor assessed their condition. Similarly, while one in five patients (21%) left the ED within an hour, about 3% stayed 12 or more hours. Some of this time may be spent waiting, perhaps for an inpatient bed or other specialized resource to become available. Other patients with long visits may have needed to spend prolonged periods while their condition is being assessed and monitored.

Access to Specialized Care

While most health issues are managed in primary health care settings, some require referral to a physician specialist. Many of these patients experienced a wait for their appointment. For most, the wait for specialist services will be longer than a typical wait for routine and ongoing care.

8 How Does Canada Compare?

In 2005, the Commonwealth Fund surveyed adults with health problems in six industrialized countries. Residents of Canada and the United Kingdom were more likely to report waiting more than four weeks for an appointment the last time they needed to see a specialist than respondents in the other countries surveyed.



Source: 2005 International Health Policy Survey, Commonwealth Fund.

In 2005, the Commonwealth Fund asked adults with health problems in six countries about their experiences in accessing specialist care.[11] Across all nations, about 7 in 10 (69%–79%) reported having seen a specialist in the past two years. Respondents in Canada and the UK were more likely to have experienced longer waits for specialists than those in other countries surveyed.

The Statistics Canada Health Services Access Survey provides more detail on Canadians' waits for specialist care. In the first six months of 2005, 12% of Canadian adults (or more than 3 million people) reported that they had required a visit to a medical specialist for a new illness or condition within the past year.[2] One in five (18%) of this group reported experiencing difficulties. When asked what type of barriers they had faced, almost two-thirds (65%) said that they had waited too long for an appointment. While the number of Canadians reporting difficulties has decreased slightly since 2001, waiting too long for an appointment continues to be the main challenge reported to accessing care.

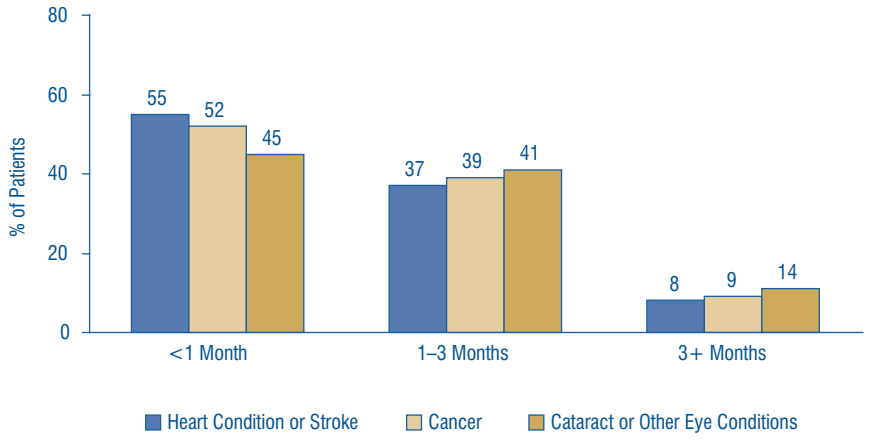
How long was the wait? In 2005, half of respondents reported waiting four weeks or less to see a specialist.[2] Eighty-eight percent of those who had seen a specialist in the last year had waits of three months or less. This is the same as in 2003. More detailed data for that year suggest that the waits for specialist visits in three of First Ministers' priority areas (cardiac, cancer and sight restoration) show a relatively consistent pattern.

Specialist Waits: Part of a Bigger Picture

From a patient's point of view, waits for specialist appointments and diagnostic services are just part of the journey from the onset of symptoms to the completion of care. For example, a recent study of patients in southeast Toronto measured waits from the time a family doctor suspects lung cancer to the time a definite diagnosis is made.[12] At the outset of the project, patients with a suspicious chest X-ray on average waited over 18 weeks from the time of a suspicious X-ray until a decision was made regarding whether they required treatment. During this time, patients typically waited over five weeks to see a specialist, over seven weeks to have a CT scan and more than five weeks for the results of the CT scan to be reviewed and a diagnosis made. With changes to scheduling and referral practices, adoption of performance standards and improved multidisciplinary communication, total waits for lung cancer patients were reduced by 71%. This involved changes at several points in the assessment and diagnosis process.

9 Wait Times for Specialist Visits

The 2003 Health Services Access Survey asked Canadians how long they had waited to see a specialist for specific new medical conditions. For heart conditions or stroke, cancer, and cataract or other eye conditions, about half of those who saw a specialist in the last year reported waiting less than a month. On the other hand, about one in ten waited three months or more.



Source: Health Services Access Survey, Statistics Canada, 2003.

Similarly, waits to see a specialist are just one component of the total wait for joint replacement surgery. How long is this segment of the wait? New data from the Canadian Joint Replacement Registry (CJRR) are beginning to provide some insight into this question.

Wait Times in the Canadian Joint Replacement Registry

The Canadian Joint Replacement Registry (CJRR) is a pan-Canadian registry that collects information on total hip and total knee replacement surgeries performed in Canada and follows joint replacement recipients over time to monitor their outcomes, including revision rates. Orthopedic surgeons submit data on a voluntary basis, with explicit consent from each patient.

In April 2005, the registry began collecting additional data to facilitate the calculation of wait times for primary joint replacements. New data elements include:

- date of referral (to orthopedic surgeon);
- date of first consultation (with orthopedic surgeon); and
- date of decision for surgery.

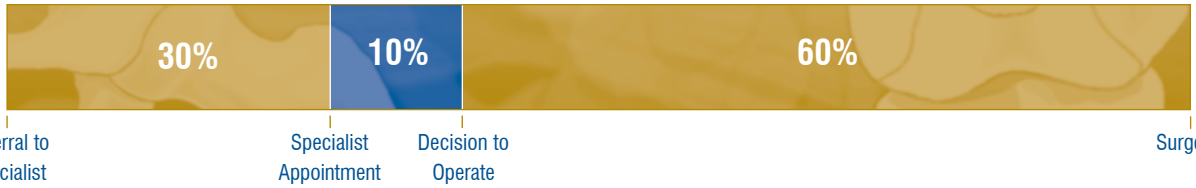
By December 2005, these dates were available for 1,078 knee replacement and 837 hip replacement patients. That's approximately one-third of patient records entered in CJRR since April 2005. Patients with wait time data came from Alberta (28%), British Columbia (22%), Saskatchewan (16%), New Brunswick (12%), Manitoba (11%), Quebec (5%), Nova Scotia (5%) and Newfoundland and Labrador (1%). Wait times for Ontario patients, collected until September 2005 through the Ontario Joint Replacement Registry, were not available for analysis in this report.

Patients who may need joint replacements are typically referred to an orthopedic surgeon for consultation. In some cases, the surgeon may make the decision to operate immediately. But for other patients, there may be a delay because of a need for additional diagnostic tests or specialist consultations, because the patient may not yet need or want surgery or as a result of other factors.

On average, CJRR data suggest that patients spend just under one-third (30%) of the total time between the referral to a specialist and the surgery waiting to see the orthopedic surgeon. Another 10% passes before the decision is made to proceed with surgery. The wait for surgery, which may last several months, constitutes about 60% of the total wait on average.

10 Where Are the Waits?

The Canadian Joint Replacement Registry, reflecting data for 1,915 patients entered between April and December 2005, highlights where the waits are for joint-replacement patients. On average, about 40% of the wait is spent between referral to an orthopedic specialist and the decision to proceed with surgery, and 60% is spent waiting for the surgery itself.



Source: Canadian Joint Replacement Registry, CIHI.

The proportion of the wait spent in each segment was similar regardless of the patients' gender and whether they resided in a city or elsewhere. The findings were also similar for both knee and hip replacements.

Access to Diagnostic Tests

Throughout history, a variety of approaches have been used to diagnose and treat patients. Today, we have access to a broad array of tools, including a range of medical imaging, laboratory tests and other technologies.

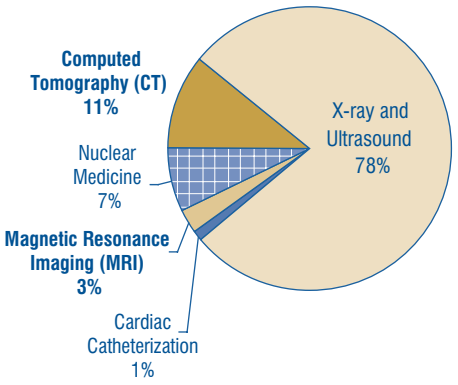
In their *Ten-Year Plan*, First Ministers focused on improving access to diagnostic imaging. Clinicians today use dozens of types of imaging, often as early diagnostic steps that may precede or preclude other health care services. According to the World Health Organization (WHO), diagnostic imaging is needed in some 20% to 30% of medical cases worldwide, as clinical considerations alone are not sufficient to make a correct diagnosis.[13] Of those cases that require diagnostic imaging, WHO estimates that up to 90% of diagnostic problems can generally be solved using "basic" X-ray and/or ultrasound examinations. These services are widely available across Canada.

MRI and CT Scans

Magnetic resonance imaging (MRI) and computed tomography (CT) scans represent a small proportion of imaging volume, but these less common procedures are often the focus of wait times reduction efforts.

11 MRI and CT Exams in Hospitals

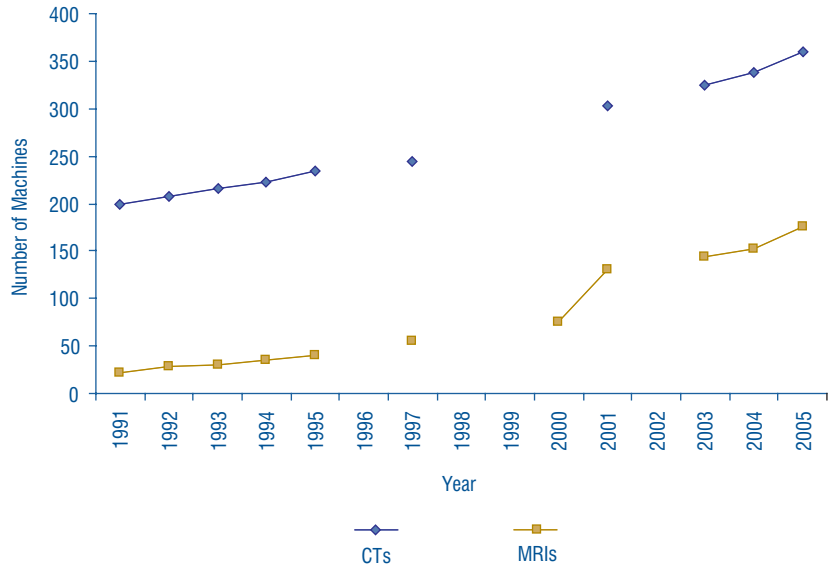
The 2003–2004 data from three provinces help provide context for the relative volume of MRI and CT scans within the broader category of diagnostic imaging. MRI and CT scans represent 14% of imaging exams in British Columbia, Nova Scotia and Ontario hospitals. These figures likely overestimate the total proportion of MRI and CT work, as X-ray and ultrasound tests are more likely to be performed in non-hospital settings than are MRI and CT scans.



Source: Canadian Management Information Systems Database, CIHI.

12 Growing Numbers of MRI and CT Machines

The number of MRI and CT machines has increased significantly in Canada in the past 15 years.



Sources: National Inventory of Selected Imaging Equipment, Canadian Coordinating Office for Health Technology Assessment (MRIs in Hospitals, 1991–2001); National Survey of Selected Medical Imaging Equipment, CIHI 2003, 2004 and 2005.

The numbers of MRI and CT machines have increased significantly in Canada over the past 15 years. While much attention is focused on the availability of equipment, comprehensive information on imaging services is less readily available. The limited data on the use of MRI and CT services are difficult to untangle, as studies use different data collection approaches, different definitions and cover different time frames. They agree that the number of MRI and CT scans has increased substantially in recent years. Recent estimates of average annual growth range from 9–14%.[3, 14]

Even as the numbers of machines and scans are growing, some patients continue to wait for these services. The Statistics Canada Health Services Access Survey collects information on non-emergency angiography, MRI and CT services for Canadians aged 15 and older. In the first six months of 2005, 15% of those who had received a non-emergency imaging test in the past year reported experiencing difficulties in accessing the service.[2] Of that group, over half (58%) indicated that waiting too long for an appointment was the source of their difficulty.

While some Canadians received these services very quickly, Statistics Canada found that the median wait over the first six months of 2005 was three weeks.[2] Ninety percent of patients reported that their test occurred within four months. These median wait times are unchanged from a previous survey in 2003.

Waiting for Tests, Waiting for Results

There are at least two components to the wait for diagnostic tests: waiting for the test itself and waiting for the result. While most of this section focuses on waiting for the test, waiting for the result also matters to patients and health care providers. An international survey in 2004 estimated that 8 in 10 Canadian adults had had a blood test, X-ray or other test in the past two years.[9] Of those, 9% said that they had experienced delays in being notified about abnormal test results. (In addition, 28% said that they did not receive the results of their test or the results were not clearly explained. That's the highest level among the five countries surveyed.)

13 CT and MRI Scan Wait Times Reported by Province[1]

Among provinces that report wait times for diagnostic imaging, four provinces are able to report more comprehensive data on waits for MRI and CT scans. Wait times for non-emergency MRI scans were longer than those for CT scans in all jurisdictions providing estimates.

	N.S.	Ont.	Man.	Alta.
Wait Segment	From when request arrives in diagnostic imaging department to the next available day with three open appointments	From date exam ordered to date exam completed	From decision-to-treat to treatment	From decision-to-treat to treatment
Summary Measure	Number of days by facility[2]	Median, Mean, 90th Percentile	Mean	Median[3]
Emergency Cases Excluded	Yes	Yes	Yes	Yes
Perspective	Prospective	Retrospective	Prospective	Retrospective
Time Frame	Oct. 2005	July 2005	Oct. 2005	90 days, ending Oct. 31, 2005
CT Wait Estimates	Range: 5 to 80 days	13 days, 28 days, 71 days	91 days[4]	17 days[4]
MRI Wait Estimates	Range: 40 to 95 days	31 days, 53 days, 117 days	112 days[4]	63 days[4]

Sources:

1. Information retrieved from provincial Web sites on December 1, 2005.
2. The ranges for Nova Scotia represent facility-specific estimates.
3. Alberta also reported proportions within time periods.
4. Estimates were reported in weeks. These were converted to days.

Factors Influencing Longer or Shorter Waits

To better understand the factors influencing wait times for diagnostic imaging, CIHI conducted two "snapshot" surveys of MRI and CT activity across Canada. The intent was to identify patterns in wait times and the factors that affect wait times, as well as to explore challenges in measuring MRI and CT waits. The survey was not designed to produce definitive Canadian wait times estimates.

The snapshots were conducted over two-day periods in June and October 2005. All MRI and CT facilities, public or private, were invited to participate. Sixty-nine facilities scattered across 10 provinces participated in one or both of the snapshots.

Although the two snapshots contained different facilities with different representation across the country, the results showed similar patterns. For example, both snapshots suggested that Canadians wait longer for MRI than CT scans. Likewise, both suggested that a patient's age did not have a major influence on waits for a scan, although younger outpatients (under 30 for CT scans, under 20 for MRI scans) did tend to have somewhat shorter waits, as did outpatients aged 70 and over for CT scans. Other findings are described in the following text.

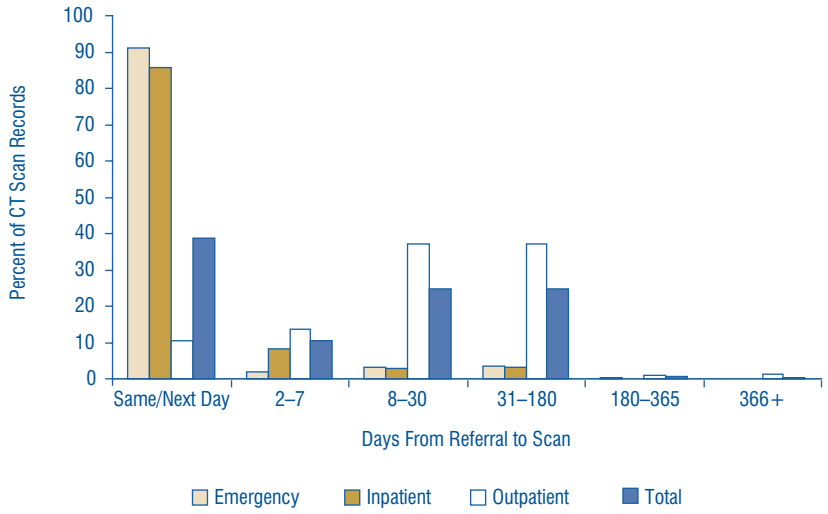
Follow-up patients: a separate group—In general, there are two broad categories of patients who receive MRI and CT scans: those who are having a clinical/diagnostic test for a new concern and those who are having scheduled follow-up tests after an initial diagnosis or treatment. For example, patients who have had a chest nodule removed may receive periodic follow-up scans to ensure there is no re-growth.

Only 1 in 10 patients in the snapshots were receiving follow-up scans. However, this relatively small group of patients may have a substantial impact on reported average wait times. For example, the median waits for follow-up CT patients are almost four times those for initial clinical/diagnostic scans. Given the substantial differences in these two groups, the rest of the analysis in this chapter focuses on initial clinical/diagnostic scans.

Inpatients and emergency patients differ from outpatients—Among patients receiving initial clinical/diagnostic scans, two separate groups emerged. Most have their scan as part of an outpatient visit to a hospital or free-standing imaging facility. This was the case for 2 in 3 CT scans and 9 in 10 MRIs. Fewer patients receive MRI or CT scans while an inpatient or through the emergency department. Emergency patients and inpatients typically wait less than a day for their scans. The median wait for outpatients, in contrast, was several weeks. A number of factors may explain these differences, including the fact that speedy diagnostic information may be critical for determining appropriate treatment for some acutely ill patients (e.g. those with strokes).

14 How Long Different Types of Patients Wait for CT Scans

Two snapshots conducted in 2005 suggest that wait times for emergency department inpatients and outpatients differ considerably. The graph below shows the proportion of emergency, inpatient and outpatient CT scans conducted over different periods of time from referral for a scan to when the test was conducted.



Note: Does not include follow-up scans.

Source: Diagnostic Imaging Snapshots 2005, CIHI.

Body sites scanned—The snapshots showed limited variation in waits for scans of different body sites. For example, scans of four body sites represented over 90% of all CT scans for clinical outpatients. Median wait times were similar for head, abdomen and chest scans, but slightly longer for spine scans. For MRIs, scans of the head, spine and extremities accounted for over 80% of all scans for clinical outpatients. The median waits for spine and extremities scans were a few days longer than waits for head scans.

Referral source—Are there different queues for patients being referred by specialists and for those referred by a general or family practitioner? We looked only at waits for outpatients seeking initial clinical/diagnostic scans. For CT patients, participating facilities were equally likely to report longer median waits for patients referred by specialists as they were to report shorter waits. For MRI, the picture is clearer. One in three participating facilities had virtually all (more than 95%) referrals from specialists. Of those that accept referrals from both GPs and specialists, five times as many facilities report that patients referred by specialists have shorter median waits.

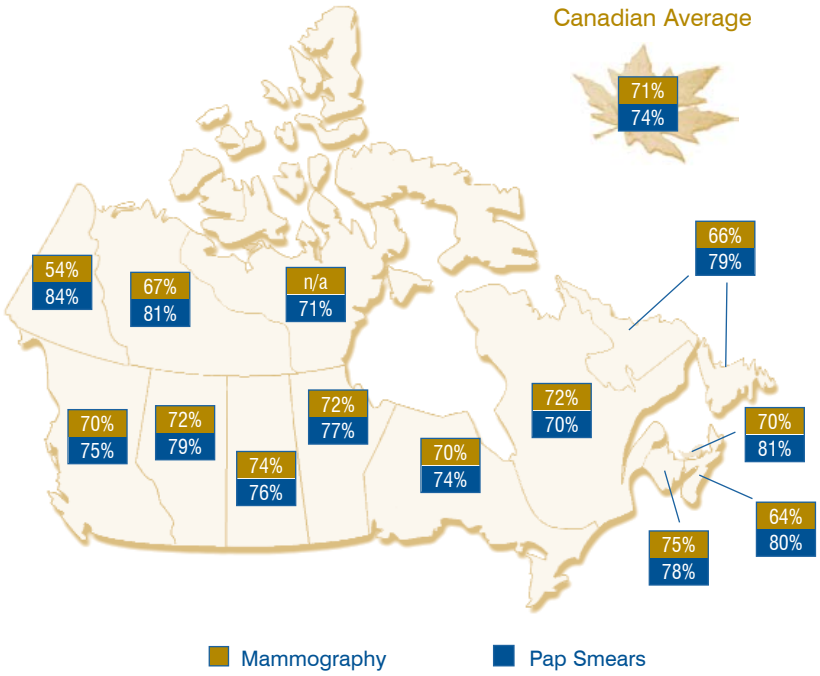
Mammography Screening and Pap Smears

While those who have difficulties obtaining non-emergency MRI, CT and angiography tests are most likely to cite long waits as a barrier to access, waits are not the most common access challenge for all types of tests. For example, women who have not had a pap smear or mammogram were more likely to say the barrier to access was because they didn't think it was necessary, they hadn't gotten around to it or the doctor didn't think it was necessary.[2]

In the late 1990s, an outreach program in Manitoba attempted to overcome obstacles to accessing mammography.[15] The Manitoba Breast Screening Program organized special vans to travel to 50 rural and northern communities to offer breast-screening services. Local communities publicized the clinic-on-wheels and booked appointments. By removing transportation and cultural barriers, among other changes, participation rates increased from 20% in 1995 to 45% in 1999 across the province. The program improved screening rates across the board, with gains for all income groups. Improvements were particularly strong in rural areas, almost eliminating disparities in access between women at the top and bottom of the income scale.

15 Getting Tested

The graph shows the percentage of women aged 50 to 69 in 2003 who reported having had a mammogram for any reason in the past two years, as well as the proportion of those aged 18 to 69 who say that they had a pap smear in the past three years.



Note: Mammography data for Nunavut are not available due to sampling variability.

Source: Canadian Community Health Survey, Statistics Canada, 2003.

After weighing the research, the Canadian Task Force on Preventive Care indicates that there is good evidence to support mammography screening and pap smears for some women. This includes women aged 50 to 69 for mammograms (at least every 2 years) and women aged 18 to 69 for pap smears (at least every 3 years). Health Ministers selected these groups and time periods as part of the wait times benchmarks that they set in December 2005.[16] More than 7 in 10 received mammography or pap smears within these periods.

Assessment and Diagnosis: Where We Stand

What We Know—Some Examples

- Most Canadians said that they were able to get the care they needed in the past year. The proportion who report access challenges varies significantly for different types of health services. Waits are the most frequent access challenge cited for some types of care (e.g. routine and specialist care) but not for others (e.g. mammography and pap screening).
- Waits for specialist services tend to be longer than those for routine and ongoing care.
- For some types of care, such as joint replacement surgery, a significant portion of the total wait is spent in the assessment and diagnostic phases before a decision-to-treat is made.
- Waits may persist even though supply, such as diagnostic imaging machines, has increased. This points to factors other than "crude" supply influencing access to service.
- Analysis of diagnostic imaging data reveals substantial differences between waits for patients in hospital beds or emergency departments and those who receive diagnostic services on an outpatient basis.

What We Don't Know

- Are waits for routine care, assessment and diagnostic services increasing or decreasing? Why? What strategies are effective in reducing waits for these types of care?
- What are the waits for outpatient and community based services, such as speech language services and children's mental health care?
- What proportion of the total time between identification of symptoms and definitive treatment is spent in the assessment and diagnosis phase? How does this vary across the country and for different clinical conditions? What factors explain these variations?
- How will a heightened focus on reducing surgical and major diagnostic waits affect access to pre- or post-treatment care?
- Under what circumstances do longer or shorter waits for one service contribute to longer or shorter waits for another service?

For More Information

1 The Canadian Medical Association, The Royal College of Physicians and Surgeons of Canada and College of Family Physicians of Canada, *National Physicians Survey, 2004,* [online], last modified August, 2005, cited January 5, 2006, from <http://www.cfpc.ca/nps/English/pdf/Physicians/Family_Physicians/Tables/Summary-Table/Q16.pdf>.

2 Statistics Canada, *Specialized Data Tables From Health Service Access Survey, 2001, 2003 and First 6 Months of 2005* and *Access to Health Care Services in Canada,* 2001.

3 C. Sammartin, F. Gendron, J. M. Berthelot and K. Murphy, *Access to Health Care Services in Canada, 2003* (Ottawa: Minister of Industry, 2004).

4 Statistics Canada, "Canadian Community Health Survey," *The Daily*, [online] last modified June 15, 2003, cited December 13, 2005, from <http://www.statcan.ca/Daily/English/040615/d040615b.htm>.

5 Canadian Institute for Health Information, *Supply, Distribution and Migration of Canadian Physicians, 2004* (Ottawa: CIHI 2005).

6 Canadian Institute for Health Information, *Analysis in Brief: Family Physicians Accepting New Patients: Comparison of 2001 Janus Survey and 2004 National Physician Survey Results*, [online], last modified August 2005, cited December 8, 2005, from <http://secure.cihi.ca/cihiweb/en/downloads/PDAB2-2005_FP_accept_new_pt_e.pdf>.

7 Commission on the Future of Health Care in Canada, *Building on Values: The Future of Health Care in Canada* (Ottawa: Commission on the Future of Health Care in Canada, 2002).

8 Canadian Institute of Health Information, *Improving the Health of Canadians, 2004* (Ottawa: CIHI, 2004).

9 C. Schoen, R. Osborn, P. T. Huynh et al., *Primary Care and Health System Performance: Adults' Experiences in Five Countries* (New York: Commonwealth Fund, 2004).

10 Canadian Institute for Health Information, *Understanding Emergency Department Wait Times, 2005* (Ottawa: CIHI, 2005).

11 C. Shoen, R. Osborn, P. T. Huynh et al., *Taking the Pulse of Health Care Systems: Experiences of Patients With Health Problems in Six Countries* (New York: Commonwealth Fund, 2005).

12 J. Meharchand, I. Fraser and R. Zeldin, "Time to Treat: Lung Cancer," presented to *Cancer Care Ontario*, in Toronto, Ont., on December 1, 2005.

13 World Health Organization, Department of Essential Health Technologies, *Essential Diagnostic Imaging*, [online], cited December 8, 2005, from <http://www.who.int/eht/en/DiagnosticImaging.pdf>.

14 Canadian Institute for Health Information, *Medical Imaging in Canada, 2005* (CIHI: Ottawa, 2006).

15 Canadian Institute for Health Information, *Improving Access to Care Improves Participation in Prevention Health*, *New Study Shows*, [online], last modified December 9, 2003, cited December 12, 2005, from <http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_09dec2003_e>.

16 Ministry of Health and Long-Term Care, *First Ever Common Benchmarks Will Allow Canadians to Measure Progress in Reducing Wait Times,* [online], last modified December 12, 2005, cited December 12, 2005, from <http://www.health.gov.on.ca/english/media/news_releases/archives/nr_05/nr_121205.html>.

3

Surgery

Chapter 3. Surgery

Waits for surgery are one of today's most prominent health policy issues in Canada and many other countries. The media, the public, health care providers, governments and the courts are all paying considerable attention to how long Canadians wait for surgery and to how wait times might be reduced. Often, as was the case with the Supreme Court's Chaouilli decision, these discussions centre on the experiences of individual patients.

Increasingly, however, pockets of statistical information are emerging that summarize the experiences of hundreds or even thousands of patients. Provincial data on how long patients wait for different types of surgery are growing. In some cases, it is possible to compare waits by health region, facility or clinician, although comparing waits across jurisdictions and over time remains a challenge. Considerable variation exists in how data are collected, the start/stop times used for wait times measurement, which procedures are captured, what measures of waits are reported and which cases are included. Recent commitments to common indicators are intended to help resolve these questions over time. (For more information on the challenges of achieving comparable wait times measurement and interpreting the results, see Chapter 1).

While information about surgical wait times is not as complete or comparable as it might be, it does provide some insight into the state of wait times across the country. This chapter begins with an overview of what patients say about waits for non-emergency surgery, along with a comparison of waits and benchmarks. A profile of waits for four priority areas identified in the First Ministers' *Ten-Year Plan* (cancer, sight restoration, orthopedic and cardiac care) follows.[i] Additional information about rates of surgery and wait times data available province by province for these four areas is in the supplement, which begins on page 48.

i. In the companion agreement on *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.[1]

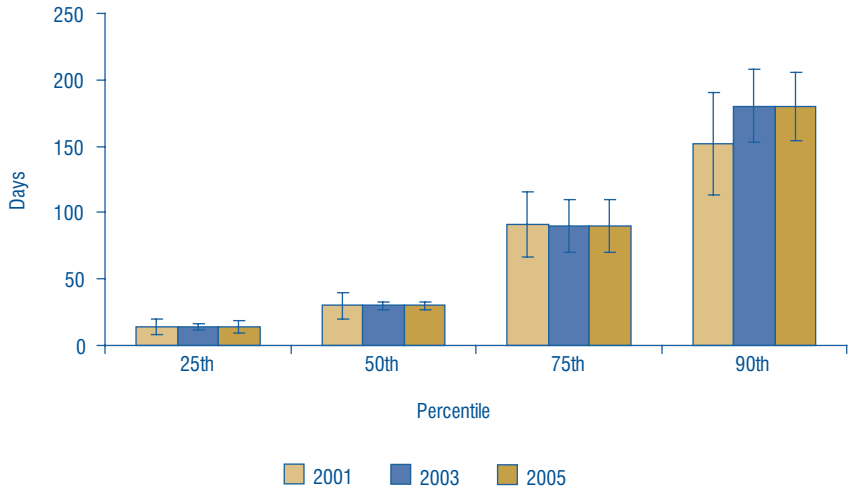
Waits for Surgery: What Canadians Say

Large "H" signs continue to dot Canada's roads, but the mix of services available at hospitals across the country is changing. For example, overnight stays in hospital have become less common over the last decade and day-surgery programs are growing. Hospitals cared for almost 57% more day-surgery patients in 2002–2003 than in 1995–1996.[2]

The types of surgeries Canadians have, and the waits they experience, vary considerably. Most surgery is planned in advance. Wait times for these operations tend to be longer than those for emergency surgery. According to Statistics Canada, most waits for non-emergency surgery are under a month.[ii] Adults who said that they had non-emergency surgery in the past year had a median wait of 30 days for their operation according to the 2005 survey.[3] But 10% said that they waited six months or more. In both cases, the waits were virtually the same as in 2003. (An earlier 2001 survey that collected data slightly differently reported a very similar median wait time.)

16 Non-Emergency Waits

In 2001, 2003 and 2005, Statistics Canada asked adults aged 15 and over who had had non-emergency surgery other than dental surgery in the past year how long they had waited for care. The graph below shows the 25th, 50th (median), 75th and 90th percentile wait times in the three years. The 25th percentile is the point at which a quarter of all patients had shorter waits and three-quarters had longer waits. The vertical bars show the 95% confidence intervals around the wait time estimates. The true wait time is expected to fall within this range 19 times out of 20.



Notes:
1. 2001 data were collected using a different survey approach, and comparisons with the 2003 and 2005 data should be made with caution.
2. The 25th percentile estimates for 2001 and 2005 need to be interpreted with caution due to high sampling variability.

Source: Health Services Access Survey, Statistics Canada, 2001, 2003 and first six months of 2005.

Statistics Canada estimates that 162,000 adults experienced difficulties getting non-emergency surgery in 2005. That represents 10.5% of those who had such surgery, down from 12.9% in 2003. The most common barrier reported in both years was "waited too long for surgery." About 8 in 10 of those who reported difficulties in 2005 cited this reason, up from 6 in 10 in 2003.

ii. Results for 2005 are preliminary, based on data collected from Canadians aged 15 and over during the first half of the year. Information on survey methodology and data quality can be found at www.cihi.ca.

Mixed Messages

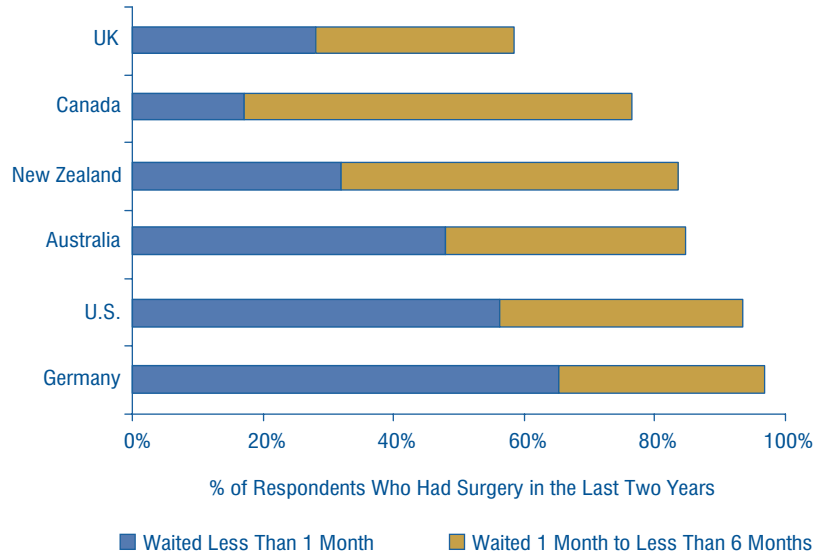
In Canada and elsewhere, people tend to give higher ratings to the care that they receive than to the health care system in general. There appears to be a similar mismatch for non-emergency surgery wait times. A 2005 survey asked the Canadian general public, physicians, pharmacists, nurses and health care managers whether they thought that wait times for elective surgery had become longer in the previous two years.[4] Between 43% and 66% said yes.

In contrast, Statistics Canada data suggest that waits were stable over this period. In 2003 and 2005, the Health Services Access Survey asked a sample of adults who had non-emergency surgery in the past year how long they had waited for care.[3] The results suggest little to no change in average wait times. In both years, 4 in 10 of those who had operations reported waiting less than a month; about the same number waited between one and three months; and 2 in 10 waited more than three months. The proportion who considered their wait time "unacceptable" was also the same in both years (17%).

On the other hand, Canadians responding to a recent international survey about waits for non-emergency surgery received in the past two years tended to report longer waits than those who participated in the Statistics Canada survey. There are a number of possible explanations for this discrepancy, including the slightly different questions asked, the different samples (the international survey focused on adults with health problems and included fewer people) and other variations in survey methodology.

17 Wait Times Compared

In 2005, an international survey asked adults with health problems in six countries a series of questions about their health and health care. Most of those who said that they had had non-emergency surgery in the past two years had some wait—short or long—for their operation. In all countries, three-quarters of respondents or more said that they had waited at least a week. But the proportion that waited less than a month or less than six months varied considerably from country to country, as the chart below shows.



Note: The figures shown above exclude respondents who said that they did not know how long they had waited (1% or less in all countries) and those who declined to answer the question (5% in Canada, 8% in Germany, 9% in the UK, 4% in the U.S. and less than 0.5% in Australia and New Zealand).

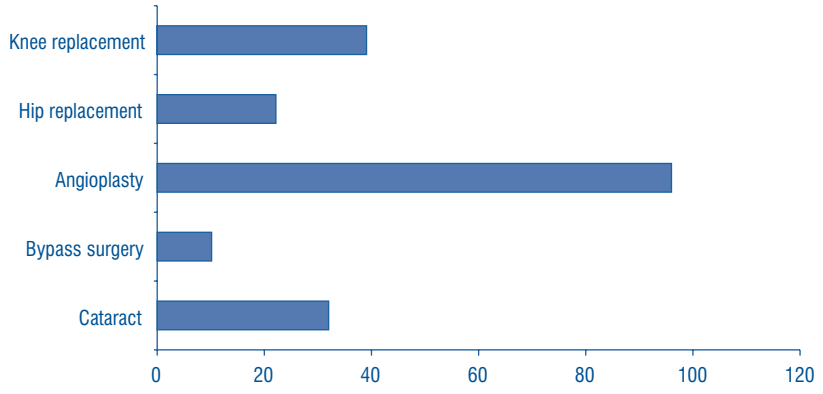
Source: 2005 International Health Policy Survey, Commonwealth Fund.

The "Big Four": Surgical Waits in First Ministers' Priority Areas

Of the dozens of types of surgery that exist, recent pan-Canadian efforts to reduce surgical wait times have focused on four areas: cancer, sight restoration, orthopedic and cardiac care. In recent years, there has been growth in some of the most common procedures in the four areas. These increases often occurred more quickly than can be explained by population growth and ageing alone. For example, total knee replacement rates increased for all age groups between 1994–1995 and 2002–2003.[5] However, rates grew much more quickly than the average for those aged 45-54, suggesting a shift in the types of patients receiving surgery. Among other factors, differences in who is recommended for surgery may also partly explain why rates vary so much from place to place. For instance, rates of bypass, cataract and hip or knee replacement surgery differ by 80–105% across provinces, even after taking into account the fact that some jurisdictions have older populations than others. Even larger differences were observed at a sub-provincial level.

18 Growth in Surgical Volumes 1997–1998 to 2002–2003

Many, but not all, types of surgery have become more common in recent years. The graph below shows the percent change in the volume of selected types of surgery from First Ministers' priority areas performed in Canadian hospitals between 1997–1998 and 2002–2003. Since many different surgeries are performed for the different types of cancer (and the same surgery can be used to treat health problems other than cancer), cancer surgeries are not shown.



Source: Discharge Abstract Database, Hospital Morbidity Database and National Physician Database, CIHI.

Comparing Waits

In spite of increases in surgical volumes, provincial data suggest that waits persist in many parts of the country. There are also striking variations in wait times within jurisdictions or facilities. For example, while 14% of cataract surgery patients in Saskatchewan in June 2005 had waited three weeks or less for their surgery, 12% had waited more than a year. Likewise, while half of all patients who had knee replacements in Ontario in July 2005 had waited 4.9 months or less, 1 in 10 had waited 14.7 months or more.

While many of the reasons for longer or shorter wait times are not well understood, the data point to several factors that influence waits, including:

- **What type of care you need:** Across First Ministers' priority areas, surgical wait times tend to be longest for joint replacements, followed by cataract surgery. Typical wait times for cardiac and cancer surgery tend to be shorter, even when emergency cases are excluded. This is supported by a Statistics Canada survey conducted in the first six months of 2005 that found that 9 in 10 of those who had had non-emergency cardiac or cancer surgery in the past year waited three months or less for their surgery.[iii, 3] That was true for fewer—6 in 10—of those who had joint replacement and cataract surgery. Even within the priority areas, the type of care you need matters. For example, waits for knee replacements tend to be longer than those for hip replacements, regardless of differences in how waits are measured.

- **Whose list you are on and where you are waiting:** Health regions, hospitals or physicians usually manage their own wait lists. Where comparable data exist, there are often significant variations in wait times between care providers. For example, median eye surgery wait times in British Columbia between July and September 2005 ranged from 4 to 358 days depending on which surgeon patients saw.[6] Similarly, Quebec reports that transfers between institutions helped 300 patients who were waiting for radiation therapy receive treatment within the province's maximum wait times in 2004–2005.[7] Waits for radiation therapy also vary across Ontario.[8] For eight of the nine types of cancer reported, typical waits varied by more than three and a half weeks depending on which radiation centre provided care.

- **How urgently you need care:** For several types of surgery, unplanned operations have shorter waits than planned ones. For instance, typical waits for patients with broken hips are measured in hours or days. Typical waits for planned hip replacements are measured in weeks or months. Likewise, average waits for non-emergency cardiovascular surgery in Nova Scotia in October 2005 ranged from 28 to 188 days depending on the priority level (see supplement). In part, these variations in waits may reflect the fact that there may be very different processes in place to serve different types of patients.

- **When you are waiting:** Some waits vary by time of day, day of the week or season of the year. For example, patients admitted to hospital with a broken hip on the weekend are somewhat more likely to have surgery on the same day or next day than those admitted during the week.

iii. These estimates should be interpreted with caution due to high sampling variability.

- **Special factors related to individual patients or conditions:** A patient's condition, characteristics or circumstances may also affect his wait times. For example, critically ill patients may need to be stabilized before they have surgery. In the case of elective surgery, on the other hand, patients may wish to schedule the procedure to take work or family events into account. Other patients may prefer to wait for a surgeon of their choice. In addition, a range of other factors may play a key role for some types of care. Wait times for transplants, for instance, depend heavily on the availability of appropriate organs.

How Long Is Too Long?

Being told that you need surgery can be unsettling at the best of times. When emergency care is needed, even a brief delay can make a difference. Waiting may also change a patient's chances of benefiting from a non-emergency procedure. For example, Canadian researchers recently looked at the evidence on how waits for hip and knee replacement surgery affect patients.[9] They found that those waiting six months or more may experience a decline in health and that waits of a year or more may result in worse outcomes after surgery. That said, the researchers pointed out that the risks are not the same for all patients. Across the broad range of health services, sometimes we know what the clinical impact of waiting is; more often, we do not.[10]

Even for patients who have a low risk of worsening clinical outcomes, waiting can have an impact. In 2003, about one in ten adults who had waited for non-emergency surgery told Statistics Canada that they were affected by their wait.[11] The most common issues reported were worry, anxiety, stress and pain.

According to research by the Western Canada Waiting List Project, maximum acceptable waits vary depending on your perspective.[12] For example, patients said that waits for the least urgent hip and knee replacements should be no more than 12 weeks. Clinicians averaged 26 weeks, while results from a sample of adults who had not had the surgery suggested 147 weeks.[iv] Consensus opinion, of these groups or others, is one way to set wait times benchmarks or targets. Research on how patients' health or risk changes while waiting or other potential impacts of waiting (e.g. anxiety, pain or time off work) may also be used. So may information on actual waits or system capacity.

iv. Given that the general public respondents had less direct experience, researchers solicited their views in a different way than for patients and clinicians. This difference may affect the comparability of results.

Several groups have recently recommended benchmark wait times for different clinical conditions or procedures. For example, a coalition of professional organizations published a set of benchmarks in the fall of 2005.[13] More recently, Health Ministers issued wait times benchmarks for seven procedures.[14] The governments defined benchmarks as "evidence-based goals that each province and 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." They focus on the period after a need for treatment has been established and the patient is ready to receive care, rather than earlier waits for specialist consultations or diagnostic tests.

In addition to benchmarks for cancer screening, Ministers of Health committed to strive to provide:

- radiation therapy to treat cancer within four weeks of patients being ready to treat;
- surgical repair of hip fracture within 48 hours;
- cardiac bypass surgery within 2–26 weeks, depending on how urgently care is required;
- hip replacements within 26 weeks;
- knee replacements within 26 weeks; and
- surgery to remove cataracts within 16 weeks for patients who are at high risk.[v]

The intent is that each jurisdiction will set its own targets for working towards the benchmarks in the future.

Current data on wait times were collected before these benchmarks were set and were not designed to track progress against them. Accordingly, it is not possible to comprehensively assess how close we are to meeting these goals. What do we know? Many—in some cases most—patients receive care within the new benchmarks. But not all do. In fact, some patients (exactly how many is not clear) face significantly longer waits.

Why do these patients have much longer waits than others? A lack of capacity (e.g. health professionals, equipment, facilities or money) is often cited as a reason for long waits. But so are failures to help patients move smoothly through multi-step care paths; challenges in coordinating access to and the delivery of complex care; difficulties in understanding who could benefit most from surgery; delays in adapting the health system to changing needs, evolving therapies and new technologies;

v. The Communiqué indicated that these benchmarks do not apply to emergency procedures. Ministers indicated that patients needing emergency care will continue to be seen as soon as possible

and problems in ensuring that wait lists (and therefore wait times) are kept up-to-date and accurately reflect patients who are ready for and want treatment. No doubt the answer lies in some combination of these and other explanations—a balance that likely differs over time and from place to place. Emerging research and efforts to reduce wait times are beginning to provide some clues, but there remains much work to do in disentangling and understanding the relative impact of these and other factors.

What the Data Say

The sections that follow provide more information about rates of surgery and waits for cancer, sight restoration, orthopedic and cardiac care. They summarize provincial data, as well as those from pan-Canadian sources. While the data included are better than have ever been available before, in some areas the information is basic, and limited conclusions can be drawn. Today's data systems were developed primarily to meet regional or provincial needs and so predate recent agreements on comparable indicators of access. Accordingly, it is challenging to compare waits for surgery over time or across jurisdictions. For example, some provinces report average waits (means). Others present medians, the point at which half of all patients wait less time and half wait longer. Given that often a few patients have very short waits (perhaps because they need emergency surgery) or significantly longer waits than the average, means and medians are difficult to compare. A variety of other challenges also exist, as described in Chapter 1.

In other areas, such as cardiac and joint surgery, standardized, comprehensive data collection allows for a more in-depth exploration of waits. For example, data permit a good examination of how long heart attack patients wait for cardiac procedures. In the future, this type of analysis could be examined at a provincial and regional level, or eventually combined with outcomes and appropriateness information. This illustrates the opportunities for understanding and improving the health care system when comparable data are available.

The icon S in the text identifies areas where more detailed data are available in the supplement at the end of this chapter on page 48.

Cancer Therapy—Cancer affects thousands of Canadians each year. From assessment to treatment and beyond, cancer patients often face a complex multi-step health care journey. Their care typically involves a range of treatments, alone or in combination with each other, including surgery, radiation therapy and chemotherapy. As a result, patients may experience waits at multiple points along this path.

For many cancers, surgery is a vital part of the treatment plan. Surgery can be used to remove small tumours or precancerous cells, to shrink tumours in preparation for radiation therapy or chemotherapy or to provide palliative relief from pain.

Nine in ten respondents to a 2005 Statistics Canada survey who reported having had non-emergency cancer or cardiac surgery in the past year said that they waited three months or less for their operation.[vi, 3] Nova Scotia data on gynecological cancer surgery and Ontario data on surgery for a broader range of cancers suggest that median waits are less than a month. (Some other provinces also track waits for types of surgery that would be used to diagnose and/or treat cancer, such as lung surgery or hysterectomies, but they do not separate out procedures performed because of cancer from those performed for other reasons.)

Doctors also recommend other types of treatment for many cancer patients. Radiation therapy uses high-energy X-rays to target and damage or destroy cancer cells. It may be used in conjunction with surgery or chemotherapy, or on its own. Chemotherapy, the use of drug therapy to slow the growth of cancer cells, may also be a necessary step.

More provinces track wait times for radiation therapy than for cancer surgery or chemotherapy. In December 2005, Health Ministers agreed to work towards providing radiation therapy within four weeks of patients being ready to treat.[14] Wait times reported by six provinces suggest that median waits are currently below this point for at least some facilities and body sites in each jurisdiction. That said, radiation therapy waits appear to vary by facility and body site within several provinces. The proportion of patients whose waits exceed four weeks is not known.

19 Waiting for Radiation Therapy (S)

Six provinces report wait times for radiation therapy for a wide range of different types of cancer. The chart below shows median wait times reported by provinces for cases completed within the time periods indicated, as well as key features of the waits measured. (Alberta reports prospective wait times for a more limited number of cancer sites and so is not included in this table.)

	Ont.	B.C.	P.E.I.	Man.	N.S.
Wait Segment(s) Measured	Referral to cancer centre to treatment	Medically able to receive to treatment	Decision-to-treat and medically able to treatment	Decision-to-treat to treatment	
Summary Measure	Median by facility and body site[1]	Median			Mean by region and priority level[2]
Emergency Cases Excluded	No		Yes		
Time Frame	July–Sept. 2005	Aug.–Oct. 2005	FY 2002–2003	July–Sept. 2005	October 2005
Estimates	Range: 0.6 to 12.9 weeks[2]	1.0 weeks	3 weeks	1.0 weeks	Range: 0.7 to 5 weeks[1]

Notes:

1. Ontario reported separately for each facility and nine body sites (breast, central nervous system, gastrointestinal, genitourinary, gynecologic, hematology, head and neck, lung, and sarcoma). The range represents the facility and site-specific values.
2. Nova Scotia reported separately for four priority levels, including emergency. Nova Scotia also reported separately for two regions that provide radiation therapy services. The range shown above excludes the emergency waits and includes urgent, semi-urgent and less urgent cases. The range represents the region and priority level-specific values with the reported number of days converted to weeks.

Source: Information retrieved from provincial Web sites in December 2005.

vi. Preliminary estimate based on data collected during the first six months of 2005. This estimate should be interpreted with caution due to high sampling variability.

Cataract Surgery—A cataract is a clouding of the lens in the eye that affects vision. Cataracts are one of the more common age-related health problems. While a new eyeglass prescription or other steps may help to improve vision for some of those with cataracts, surgery may be suggested when reduced vision interferes with a patient's ability to carry out daily activities. In addition to the impact on quality of life, research shows that visual impairment due to cataracts may lead to an increased risk of falls and fractures.[15–17]

Cataract surgery is the highest volume sight restoration procedure conducted in Canada. In the past, it involved general anesthetic and a week-long hospital stay.[18] Now, it is usually a day surgery performed in a hospital or outpatient clinic. Over a quarter of a million patients had cataract surgery in 2002, up 32% from 1997. Research from the Vancouver area suggests that there is a wide variation in how well patients see before cataract surgery, as well as in the degree to which eyesight improves after surgery.[19] Not without controversy, this study found that 26% of patients had worse health-related quality of life after their operation than before in 1999–2000. S

In December 2005, Health Ministers agreed to strive to provide cataract surgery within 16 weeks for patients who are at high risk.[14] Although six provinces currently report wait times or wait lists for cataract surgery, there is considerable variation in what they report. None currently provides wait times by risk group, so the proportion of "high risk" cases in each jurisdiction or how long they wait is not known. In addition, some provinces start counting from a "decision-to-treat" time, others from the time of the hospital booking, the order being signed or the first previous appointment with the ophthalmologist. It is unclear to what extent these differences affect the comparability of results. Provinces also report a mix of proportional measures, means and medians. S

In provinces that report median waits for cataract surgery, more than half of all patients receive their operation within the 16 week goal set by Health Ministers. A smaller proportion of patients, however, wait considerably longer. For example, Saskatchewan data suggest that 12% of those who had cataract surgery during this period had waited a year or more. These findings are broadly consistent with those from Statistics Canada's Health Services Access Survey. In the first six months of 2005, the 75% of respondents with the shortest waits for non-emergency cataract or other eye surgery in the previous year said that they waited four months or less for their operation.[vii, 3]

vii. This estimate needs to be interpreted with caution due to high sampling variability.

20 Waiting for Cataract Surgery (S)

The chart below shows the median wait reported by provincial governments for cases completed within the time periods indicated, as well as key features of the waits measured. (Quebec reports the number of patients waiting so is not included in this table.)

	Ont.	Alta.	N.S.	B.C.	Sask.
Wait Segment(s) Measured	Decision-to-treat to surgery		1st previous appointment with specialist to surgery	Booking received to surgery	
Emergency Cases Excluded	Yes				No
Time Frame	July 2005	Aug.–Oct. 2005	Jan.–June 2005	July–Sept. 2005	April–Sept. 2005
Estimates of Median	85 days	93 days[1]	30-60 days[2]	93 days	120–180 days[3]

Notes:

1. Alberta also reported separately for day surgery and inpatient groups.
2. Nova Scotia's Web site reports the distribution of waits across defined time periods. Medians were derived from these distributions (54% of patients in the province received their cataract surgery within 60 days).
3. Medians for Saskatchewan were derived from the wait time distributions provided (59% of patients in the province received their cataract surgery in under six months). Saskatchewan's Web site presents data for the regions where cataract surgery is performed. The provincial distribution was obtained from Saskatchewan Health and was calculated using the same data.

Source: Information retrieved from provincial Web sites in December 2005.

Lessons From Manitoba on Wait Times

Perhaps not surprisingly, patients who say that they are satisfied with their wait times tend to have had shorter waits than those dissatisfied.[11, 20] To determine what proportion of patients would be willing to pay to have surgery more quickly, researchers surveyed patients waiting for cataract surgery in Manitoba in the mid-1990s.[21] Although 45% felt that it was acceptable for patients to pay out-of-pocket to receive surgery more quickly, only about half that amount said that they would personally be willing to pay $1,000 or more to have surgery performed with a month.

At the time, it was possible to do so in the province. Some Manitoba eye surgeons operated only in the public system, while others had both public and private patients. Either way, the provincial health plan paid the surgery bill, but an additional out-of-pocket fee was levied against private patients. The Manitoba Centre for Health Policy found that wait times were indeed shorter in private clinics than in public hospitals: 4 weeks versus about 18 weeks in 1996. But the public sector pattern was very different, depending on where physicians worked. Surgeons who operated only in the public sector had an average wait of about 7 weeks in 1993–1995, increasing to 10 weeks in 1996. But those who performed both private and public procedures had average waits for public patients of about 14 weeks in 1993–1994, rising to 23 weeks in 1996.[22]

Orthopedic Surgery—More and more Canadians are undergoing orthopedic surgery each year. Joint replacement surgery is now one of the most common operations in Canada. Most hip and knee replacements are performed to alleviate the symptoms of osteoarthritis. This condition is characterized by degeneration of joint cartilage and adjacent bone, and can be the source of chronic, even debilitating pain.

Hip and knee replacement rates have increased steadily in recent years. While seniors account for the majority of surgeries, growth has been particularly strong among younger patients. Additionally, persons who are obese are also more likely

to have hip and knee replacements than those who are not.[23] Even after accounting for differences in population age structures, however, joint replacement rates vary widely from one part of the country to the other.

Waits for joint replacements persist despite the increases in surgical volumes seen in recent years. Patients who have joint replacements often have multi-stage waits. About 40% of the time is spent waiting for a specialist appointment or appropriate diagnostic tests. The rest of the wait comes after the decision to operate has been made (see page 19). Most measurement efforts concentrate on the latter portion of the patient's care path. Health Ministers also chose to focus here when they set a goal of patients receiving needed hip or knee replacements within 26 weeks (6 months).[14]

As of December 2005, eight provinces reported estimates of wait times for hip and knee replacements, although the level of reporting and summary measures used differed. Those reporting wait time distributions (rather than just an average or median) showed that a portion of patients receive their surgery within a few weeks, while others wait a year or more. In all cases, estimated wait times for knee replacements were longer than those for hip replacements.

21 Waiting for Joint Replacements (S)

Most provinces with hospitals that provide hip or knee replacement surgery report wait times for this procedure. The chart below shows median wait times reported by provincial governments for non-emergency cases completed within the time periods indicated, as well as key features of the waits measured. (Quebec reports the number of patients waiting so is not included in this table.)

	P.E.I.	Man.	Ont.	Alta.	Sask.	B.C.	N.S.[1]
Wait Segment(s) Measured	Decision-to-treat to surgery				Booking to surgery		2nd previous appointment with surgeon to surgery
Includes Revision Surgery	Yes						No
Time Frame	FY 2002–2003		July 2005	Aug.–Oct. 2005	April–Sept. 2005	July–Sept. 2005	Jan.–June 2005
Hip Replacement Median Estimate	76 days[2]	133 days[2]	104 days	126 days[2]	<180 days[3]	132 days[2]	180 days[4]
Knee Replacement Median Estimate	91 days[2]	154 days[2]	146 days	167 days[2]	180–365 days[3]	175 days[2]	180–270 days[4]

Notes:

1. Nova Scotia reported separately for revision surgeries. These estimates are not included in the above table.
2. Estimates were presented in weeks. These were converted to days.
3. Medians for Saskatchewan were derived from the wait time distributions provided (66% of patients in the province received their hip replacement surgery in under 6 months and 58% of patients received knee replacement surgery within 12 months). Estimates were presented in months. These were converted to days. Saskatchewan's Web site presents data by region where joint replacement surgery is performed. The provincial distribution was obtained from Saskatchewan Health and was calculated using the same data.
4. Nova Scotia's Web site reports the distribution of waits across defined time periods. Medians were derived from these distributions. Just under half (49%) of patients received their hip replacement surgery in less than 180 days. Accordingly, 180 days is approximately but not exactly the median wait for this period of time. Likewise, the median for knee replacement falls between 180 and 270 days.

Sources: Information retrieved from provincial Web sites in December 2005.

This is consistent with findings from the Canadian Joint Replacement Registry. Based on data entered between April and December 2005, the Registry tracked wait times for 4,597 hip and knee replacement patients from eight provinces. The median wait after the surgeon and patient agreed on surgery was about four and a half months for hip replacement and seven months for knee replacement.

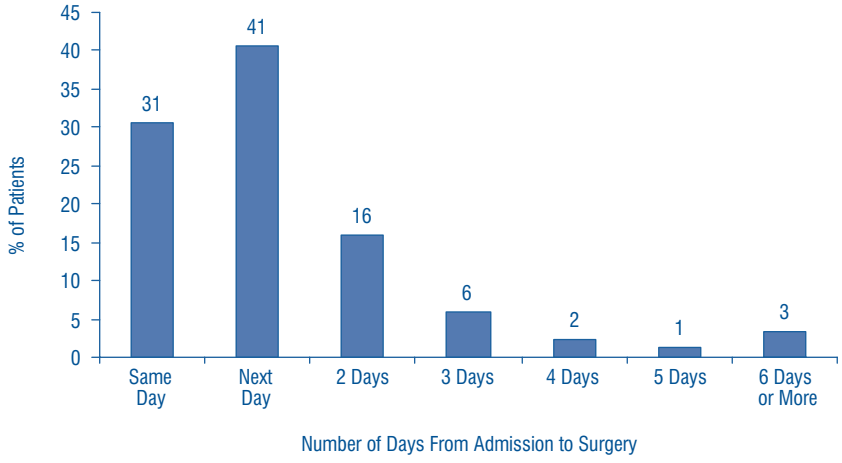
Unplanned hip surgery: an example to contrast—While most joint replacement procedures are elective, surgery to repair hip fractures is almost entirely unplanned. Eighty-seven percent of hip fracture patients enter the system through hospital emergency departments. Across the country in 2003–2004, over 24,000 patients had hip fractures that were followed by a surgical repair. This is an injury suffered predominately by older Canadians: 61% of patients were over 80 years old and another quarter were between 70 and 79.

Recent studies have shown that hospital mortality rises as surgical delay following hip fracture increases.[24] In December 2005, Health Ministers adopted a common goal of hip fracture fixation within 48 hours.[14] Analysis shows that many Canadians receive surgery on the same day as their admission to hospital or the next day. However, more than one in four (28%) wait longer for their surgery.

What factors influence how likely a patient is to have surgery on the same or next day? Earlier in this chapter, we identified that hip fracture admission on weekends was associated with shorter waits in 2003–2004. Patient age (or factors associated with age) also appears to matter. Older patients tend to wait longer. For example, 78% of patients aged 69 and under received same or next day surgery, compared to 70% of those aged 70 and above. Yet another factor is hospital size. The proportion of patients having surgery on the same day as their admission or the next day decreased as hospital size increased, with teaching facilities having the highest percentage of patients waiting two days or more.

22 Waits for Hip Fracture Repair

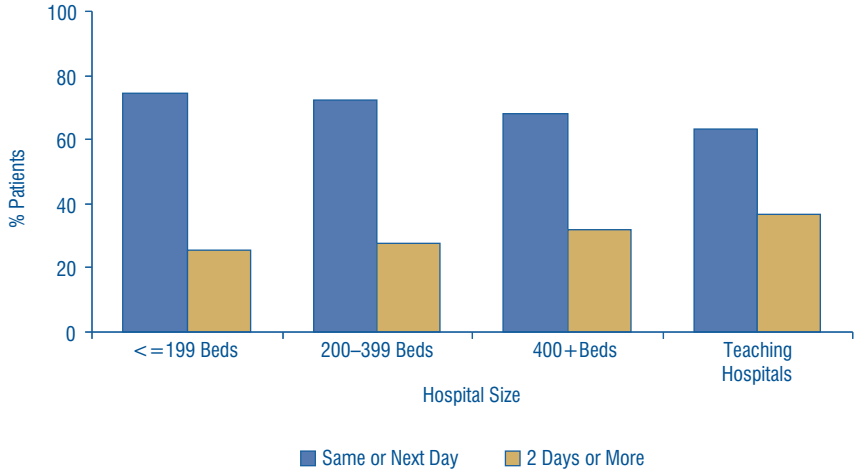
In 2003–2004, over 24,000 Canadians were admitted for surgery following a broken hip. Their wait was calculated by looking at the date of hospital admission and the date the surgery was performed.



Source: Hospital Morbidity Database, CIHI.

23 Hip Fracture Waits by Hospital Size

In 2003–2004, the proportion of patients whose hip fractures were repaired on the same day as admission or next day declined with hospital size. Note that hospitals in Quebec and some Manitoba facilities were excluded from this analysis, as hospital size data were unavailable.



Source: Hospital Morbidity Database, CIHI.

Cardiac Surgery—Heart disease is the leading cause of death among Canadians. One of its main forms is coronary artery disease, which occurs when the blood vessels supplying the heart become blocked. Some patients with this condition need revascularization procedures, such as angioplasty or bypass surgery. Angioplasty uses a balloon device to reduce or clear an arterial blockage. Bypass surgery is a more invasive procedure. Artery or vein grafts from other parts of the body are used to reroute blood around clogged arteries. Doctors usually determine whether a patient needs a revascularization procedure using a diagnostic test called cardiac catheterization. Some patients may benefit from either procedure; a few need both. For others, one of the two procedures may be indicated.

Use of both procedures varies across the country and has changed over time. For example, even after adjusting for differences in population age and sex, bypass rates in some of Canada's large health regions are more than twice those in other parts of the country. The same is true for angioplasty.

Overall, Canada's bypass surgery rate has stayed fairly constant in recent years, but angioplasty rates are on the rise.[2] S The Institute for Clinical Evaluative Sciences suggests that a number of factors may explain the increased use of angioplasty since the late 1990s, including improved availability of the technology, a greater understanding of its benefits and a broadened range of patients deemed eligible for the procedure.[25]

Even though there has been considerable growth in overall revascularization rates, managing wait lists for these procedures remains a challenge. Both angioplasty and bypass surgery have been the focus of a number of initiatives to manage and reduce wait times.

Thinking Outside the Region

The Cardiac Care Network of Ontario (CCN) is one of the country's longest-running efforts to improve access to care. It was created in 1990 and now advises the Ontario government on cardiac services and coordinates access to cardiac angiography, angioplasty and bypass surgery. Recently, a province-wide registry enabled CCN to identify important regional disparities in access to cardiac care. The Network then launched a plan to better match patient need to region-wide service availability. A goal is to make it easier for patients who may face longer waits to get care outside of their local region. (A recent survey found that one in five patients who need cardiac care would consider travelling to have their procedure more quickly.)[26] In doing so, CCN hopes to reduce overall waits for cardiac procedures and decrease variation in access.

The strategy focuses on achieving meaningful gains by 2006, but CCN is already reporting reductions in wait times. Their data show that the median wait time for bypass surgery in Ontario was 1 day less for urgent and semi-urgent cases (a 13% drop) and 6 days less for elective cases (down 25%) in the first quarter of 2005, compared to the previous year. For catheterization, median wait times dropped by 3 days for urgent or semi-urgent cases (down 23%) and 7 days for elective cases (down 32%).[27]

As of December 2005, seven provinces reported wait times for bypass surgery. As expected, wait times tend to be longer in provinces that track wait times for elective cases only, compared with those that capture waits for all bypass surgeries. Fewer provinces tracked wait times for angioplasty and cardiac catheterization.

24 Waiting for Bypass Surgery (S)

Most provinces with hospitals that provide bypass surgery report wait times for this procedure. The chart below shows median wait times reported by provincial governments for cases completed within the time periods indicated, as well as key features of the waits measured. (Quebec and Nova Scotia Web sites reported waits for the broader categories of cardiac and cardiovascular surgery respectively and so are not included in this table.)

	Ont.	Alta.	N.L.	Man.	N.B.	B.C.	Sask.
Wait Segment(s) Measured	Decision-to-treat to treatment				Catheterization to bypass surgery		Booking received to treatment
Emergency Cases Excluded	Yes		No				
Time Frame	July 2005	Aug.–Oct. 2005	FY 2002–2003				Apr.–Sept. 2005
Estimates of Median	21 days	20 days[1]	10 days	11 days	8 days	24 days	2–21 days[2]

Notes:

1. Alberta reported the median wait time in weeks, which was converted to days.
2. The median for Saskatchewan was derived from the distribution provided and lies within the 2–21 day period. Saskatchewan's Web site presents data for the two regions where bypass surgery is performed. The provincial distribution was obtained from Saskatchewan Health and was calculated using the same data.

Source: Information retrieved from provincial Web sites in December, 2005.

As for other types of care, differences in measurement make it somewhat difficult to compare these wait times across jurisdictions. Given provinces' recent commitment to move towards comparable indicators, however, this may change over time as wait time strategies evolve and information collection becomes more consistent. Enhanced wait time data with urgency scores might also allow assessments of the extent to which wait times for bypass surgery meet the aims set out by governments.[14] In December 2005, Health Ministers committed to strive to provide care to:

- non-emergency level I patients (e.g. those admitted to hospital with a small or moderate heart attack who are at risk of another larger attack) within 2 weeks;
- level II cases (e.g. those admitted to hospital with a small or moderate heart attack who are at low-to-moderate risk of another attack) within 6 weeks; and
- level III (e.g. those with mild or moderate symptoms who are stable) within 26 weeks.

Ministers also stressed that emergency cases would continue to be seen as soon as possible. No similar benchmarks were established for angioplasty.

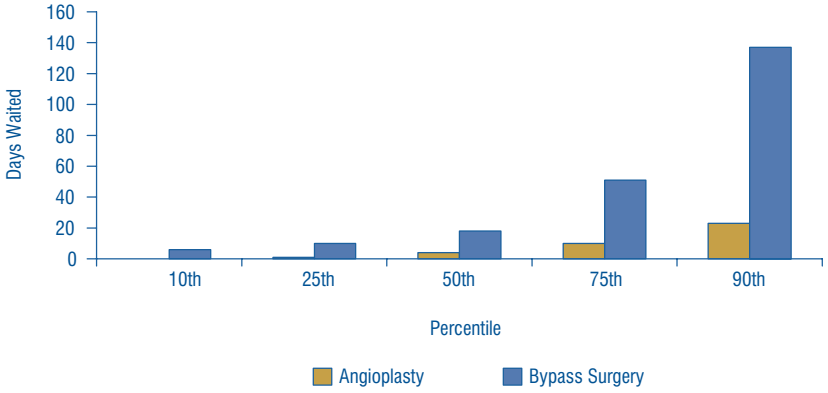
After a Heart Attack: Doing More With Data

In many parts of the country, good data exist on waits for revascularization procedures such as bypass surgery and angioplasty following a heart attack or acute myocardial infarction (AMI). CIHI's analysis builds on a study by Alter et al., which examined revascularization waits for Ontario heart attack patients between 1994 and 1998.[28] We examined patients with a new AMI who were admitted to a Canadian hospital between 2001–2002 and 2004–2005 and received revascularization within one year of their initial admission.

Due to differences in data collected in Manitoba, the territories and Newfoundland and Labrador, data from these jurisdictions were not included in the analyses. Quebec patients were included for the first two years only. Data on outpatient angioplasties are not available for Alberta and Quebec, but we expect that is unlikely to influence overall results. More details about our analytic approach are available at www.cihi.ca.

Revascularization Waits in General—Among the patients studied, 40% of those with a new heart attack received a revascularization procedure within a year, and three-quarters of these patients had an angioplasty. Those who had angioplasty tended to have their procedure sooner than bypass surgery (median 4 days for angioplasty as compared to 18 days for bypass surgery). However, over 25% of patients waiting to receive angioplasty or bypass surgery had significantly longer waits than the medians.

Different Angioplasty Patients Have Different Waits—Wait times varied according to the type of angioplasty patient. For example, those who had primary procedures (22% of all angioplasties) received revascularization on the day of admission. A second group of patients (60%) had their angioplasty during the initial hospital stay, with a typical wait of less than 5 days. The remaining group were discharged and had a median wait of 50 days.



Note: Excludes Manitoba, the territories and Newfoundland and Labrador. Quebec patients were included for the first two years only.

Source: Discharge Abstract Database, CIHI.

Revascularization Waits and Location—In our analyses, where a patient initially received heart attack care was found to be a significant factor in revascularization waits. The hospital to which patients are initially admitted is an important predictor of whether patients receive revascularization within a year, as well as how long they must wait for that care. In hospitals with on-site services, half (52%) of the patients with a new AMI are revascularized within a year, compared to 1 in 3 patients (35%) in hospitals without these services. Median waits for angioplasty were one day if the admitting hospital had on-site angioplasty services and seven days if it did not. Likewise, waits for bypass surgery were also considerably shorter if on-site revascularization was available (median wait 12 days versus 20 days). Even in hospitals without revascularization services, 75% of patients had their angioplasty within 15 days. For bypass patients admitted to these same facilities, 75% received their procedure within 65 days.

The association between location and AMI care confirms previous Canadian studies [29–32] and is consistent with the trend towards having revascularization procedures concentrated in large regional referral centres—research has shown that high volumes are associated with better outcomes. (In 2004–2005, fewer than 40 facilities in Canada provided angioplasty. All but seven of these centres also provided bypass services.)

Surgery: Where We Stand

What We Know—Some Examples

About one in ten Canadians who need non-emergency surgery report difficulties getting their operation. Long wait times are the most common barrier cited.

Wait times may vary depending on what type of care you need, whose list you are on and where you are waiting, how urgently you need care, when you are waiting, special issues related to individual patients or conditions and other factors.

Most provinces monitor some surgical wait times, but the extent and level of tracking vary greatly. Methods of calculating and presenting waits are also often different, limiting the ability to assess how wait times vary across the country and over time.

Across the four priority areas set by First Ministers, wait times tend to be longest for knee and hip replacements, followed by cataract surgery. Cancer and cardiac care tend to have shorter wait times. Waits for knee replacements tend to be longer than those for hip replacements.

Median waits in most provinces that report data appear to be within the benchmarks set by Health Ministers for cataract surgery, hip replacements and surgery to repair hip fractures. For knee replacements and radiation therapy, median waits were under the benchmark in some provinces and over in others.

What We Don't Know

How do wait times for different types of care compare across Canada, with other countries and over time?

Other than for surgical repair of hip fractures, to what extent is care provided within benchmarks?

How many patients have multi-step waits for different types of care? How significant are different segments of the wait? What factors explain differences in a patient's journey through the health care system?

How does the length of the wait for surgery affect patients and their families, post-operative outcomes, subsequent health care services and health care costs?

How do those who manage wait lists determine which patients receive care first?

Which strategies produce the best outcomes and shortest waits?

For More Information

1 Canadian Intergovernmental Conference Secretariat, *Asymmetrical Federalism That Respects Quebec's Jurisdiction*, [online], cited December 2, 2005, from <http://www.scics.gc.ca/cinfo04/800042012_e.pdf>.

2 Canadian Institute for Health Information, *Health Care in Canada*, 2005 (Ottawa: CIHI, 2005).

3 Statistics Canada, *Specialized Data Tables From Health Service Access Survey, 2001, 2003 and First 6 Months of 2005*.

4 Pollara, *Health Care in Canada Survey 2005: 8th Annual Report*, [online], cited January 11, 2006, from <http://www.pollara.ca/Library/Reports/HCIC8.pdf>.

5 Canadian Institute for Health Information, *2005 Report—Total Hip and Knee Replacements in Canada* (Ottawa: CIHI, 2005).

6 British Columbia Ministry of Health, *Surgical Wait Times*, [online], last modified December 9, 2005, cited December 19, 2005, from <http://www.healthservices.gov.bc.ca/waitlist/>.

7 Ministère de la Santé et des Services sociaux, *Report on the Progress Made Regarding the Bilateral Agreement Entered Into During the Federal-Provincial-Territorial Meeting of the First Ministers on Health*, September 2004 (Quebec: Ministère de la Santé et des Services sociaux, 2005).

8 Cancer Care Ontario, *Radiation Wait Times*, [online], cited November 29, 2005, from <http://www.cancercare.on.ca/index_waittimesRadiation.asp>.

9 "Toward Canadian Benchmarks for Acceptable Waiting Times for Joint Replacement Surgery,"[grant application] (Ottawa: CIHR, October 14, 2005).

10 Canadian Institute for Health Research, *CIHR Releases Research Results to Inform the Development of Benchmarks for Wait Times* (Ottawa: CIHR, 2005), [online], last modified November 16, 2005, cited December 19, 2005, from <http://www.cihr-irsc.gc.ca/e/29904.html>.

11 C. Sammartin, F. Gendron, J. M. Berhelot and K. Murphy, *Access to Health Care Services in Canada, 2003* (Ottawa: Minister of Industry, 2004).

12 Western Canada Waiting List Project, *Final Report: Moving Forward* (Calgary: WCWL, 2005).

13 Wait Time Alliance for Timely Access to Health Care, *It's About Time* (Ottawa: Canadian Medical Association, 2005).

14 Ontario Ministry of Health and Long-Term Care, *First Ever Common Benchmarks Will Allow Canadians to Measure Progress in Reducing Wait Times*, [online], last modified December 12, 2005, cited December 19, 2005, from <http://www.health.gov.on.ca/english/media/news_releases/archives/nr_05/nr_121205.html>.

15 C. Owsley, B. Stavley, J. Wells, M. E. Sloane, "Older Drivers and Cataract: Driving Habits and Crash Risk," *Journal of Gerontology Series A, Biological Sciences and Medical Sciences* 54, 4 (1999): pp. M202–M211.

16 S. Brannan, C. Dewar, J. Sen, D. Clarke, T. Marshall and P. I. Murray, "A Prospective Study of the Rate of Falls Before and After Cataract Surgery," *British Journal of Ophthalmology* 87,5 (2003): pp. 560–2.

17 R. M. Harwood, A. J. Foss, F. Osborn, R. M. Gregson, A. Zaman and T. Masud, "Falls and Health Status in Elderly Women Following First Cataract Surgery: A Randomized Controlled Trial," *British Journal of Ophthalmology* 89, 1 (2005): pp. 53–9.

18 C. M. Bell, W. V. Hatch, G. Cernat, P. M. Slaughter, S. Singer and J. V. Tu, *Access to Health Care Services in Ontario: ICES Atlas*, Cataract Surgery (Toronto: ICES, 2005).

19 C. J. Wright, G. K. Chambers and Y. Robens-Paradise, "Evaluation of Indicators for and Outcomes of Elective Surgery," *CMAJ* 167, 5 (2002): pp. 461–6.

20 B. L. Conner-Spady, S. Sanmugasunderam, P. Courtright, J. J. McGurran and T. W. Noseworthy and the Steering Committee of the Western Canada Waiting List Project, "Determinants of Patient Satisfaction With Cataract Surgery and Length of Time on the Waiting List," *British Journal of Opthamology* 88 (2004): pp. 1305–1309.

21 G. Anderson, C. Black, E. Dunn, J. Alonso, J. Christian-Norregard, T. Folmer-Anderson and P. Bernth-Peterson, "Willingness to Pay to Shorten Waiting Time for Cataract Surgery," *Health Affairs* 16, 5 (1997): pp. 181–90.

22 C. De Coster, K. C. Carrière, S. Peterson, R. Walld and L. MacWilliam, *Surgical Waiting Times in Manitoba* (Winnipeg: Manitoba Centre for Health Policy and Evaluation, 1998).

23 Canadian Institute for Health Information, *Obese Are Three Times as Likely to Need a Hip or Knee Replacement*, [online], last modified August, cited December 19, 2005, from <http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_17aug2005_e>.

24 I. Weller, E. K. Wai, S. Jaglal and H. J. Kreder, "The Effect of Hospital Type and Surgical Delay on Mortality After Surgery for Hip Fracture," *Journal of Bone and Joint Surgery* [British Edition] 87–B, 3 (2005): pp. 361–366.

25 D. Alter, E. A. Cohen, G. Cernat, K. Glasgow, P. M. Slaughter and J. V. Tu, *Access to Health Services in Ontario: ICES Atlas, Cardiac Procedures* (Toronto: ICES, 2005).

26 J. Geddes, "Bypassing Your Doctor," *MacLean's Magazine*, [online], last modified October 12, 2005, cited December 20, 2005, from <http://www.macleans.ca/topstories/health/article.jsp?content=20051017_113453_113453>.

27 Cardiac Care Network, "10 Point Plan for Action," *E.News*, (September 2005), [online], last modified September 2005, cited January 11, 2006, from <http://www.ccn.on.ca/pdfs/CCNnewsSept05.pdf>.

28 D. Alter, J. Tu and D. Naylor, "Waiting Times, Revascularization Modality, and Outcomes After Acute Myocardial Infarction at Hospitals With and Without On-Site Revascularization Facilities in Canada," *Journal American College of Cardiology* 42, 3 (2003): pp. 410–419.

29 H. S. Luft, J. P. Bunker and A. C. Enthoven, "Should Operations Be Recognized? The Empirical Relationship Between Volume and Mortality," *New England Journal of Medicine* 137, 6 (2002): pp. 1364–69.

30 E. A. M. Halm, C. M. Lee, M. R. M. Chassin, "Is Volume Related to Outcome in Health Care? A Systematic Review and Methodologic Critique of the Literature," *Annals of Internal Medicine* 137, 6 (2002): pp. 511–20.

31 J. D. Birkmeyer, A. E. Siewers, E. V. Finlayson et al., "Hospital Volume and Surgical Mortality in the United States," *New England Journal of Medicine* 346, 15 (2002): pp. 1128–37.

32 J. D. Birkmeyer, F. L. Lucas and D. E. Wennberg, "Potential Benefits of Regionalizing Major Surgery in Medicare Patients," *Effective Clinical Practice 2* (November/December 1999): pp. 277–83.

Supplementary Provincial/Territorial Information

Individual provinces have made substantial strides towards providing the Canadian public with wait times information. Particular effort has been paid to measuring wait times for the five priority areas identified in the *10-Year Plan to Strengthen Health Care*:[i] cancer, cardiac, diagnostic imaging, joint replacement and eye services. The tables in this section provide a snapshot of publicly available information on wait times across the country. The data were obtained through provincial Web sites and reports as of December 2005 and each province has had an opportunity to validate the information presented. The territorial governments do not maintain wait times for major surgery because residents often have to travel south for complex care. The tables illustrate the methodological differences and similarities in wait times measurement across provinces. Cross-provincial comparisons of the estimates must be done cautiously and with consideration to these caveats.

Wait times measurement is dynamic. For this reason, most provinces update their wait times estimates quarterly or monthly on their Web sites. Some provinces have further plans to refine or begin reporting on these and other wait times in 2006. For example, New Brunswick and P.E.I. will begin reporting on public Web sites in 2006. Please refer to the provincial Web sites on an ongoing basis for current provincial and regional wait times estimates.

25 Counting the Queues

All provinces report some information on wait times, but the nature and level of reporting vary greatly. The table below shows the number of provinces that reported wait times for one or more of First Ministers' priority areas at the provincial level and/or by health region, facility or clinician as of December 2005. (Note: some jurisdictions reported at more than one level.) For details see the following provincial tables.

Level of Reporting	Cardiac Surgery	Cancer Treatment	Cataract Surgery	Joint Replacement	MRI/CT
Province	8	4	5	7	3
Geographic Region	4	2	3	3	2
Facility	2	2	3	3	4
Physician	2	0	2	2	0

Source: Compiled by CIHI from provincial government Web sites and reports, December 2005.

i. In the companion agreement on *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.

1.0 Cancer Therapy

1.1 Specific Cancer Services Reported by Province and Reporting Unit[1]

Service	N.L.	P.E.I.	N.S.	N.B.	Que.[2]	Ont.[3]	Man.	Sask.[2]	Alta.	B.C.
Services Reported										
Radiation		●[4]	●			●[5]	●		●	●
Cancer Specialist			●						●	
Cancer Surgery			●[6]			●				
Chemotherapy						●			●	●
Level of Reporting										
Province		●				●[7]	●			●
Geographic Region			●			●[7]				
Facility						●[5]			●	
Physician										

Note: Some provinces also reported on wait times for types of surgery that might include procedures for persons with cancer (e.g. gynecological surgery) but do not separate these patients out in reporting.

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Quebec is considering cancer surgery reporting and Saskatchewan plans to begin reporting on cancer surgery waits in the near future.
3. Cancer Care Ontario will be implementing new targets and definitional changes to its wait times measures on April 1, 2006.
4. Breast cancer only. Information obtained from the *Comparable Health and Health System Performance Indicators for Canada, the Provinces and Territories*, November 2004: http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=prtwg_2004_e.
5. Radiation and chemotherapy only. Information obtained from Cancer Care Ontario.
6. Gynecological cancer only.
7. Surgery only.

1.2 Radiation Therapy Wait Times Reporting Methods and Wait Times Estimates by Province[1]

	P.E.I.	N.S.	Ont.	Man.	Alta.	B.C.
Wait Segment(s) Measured	From decision-to-treat and medically able to treatment	From decision-to-treat to treatment	From referral to cancer centre to treatment	From decision-to-treat to treatment	From oncologist visit to treatment[2]	From medically able to receive to treatment
Summary Measure	Median	Mean by region and priority level[3]	Median by facility and body site[4]	Median	Expected time from last day of the previous month by facility and body site[5]	Median
Emergency Cases Excluded	Yes	Yes	No	Yes	Yes	No
Perspective	Retrospective	Retrospective	Retrospective	Retrospective	Prospective	Retrospective
Time Frame	FY 2002–2003	Oct. 2005	July–Sept. 2005[7]	July–Sept. 2005[7]	Oct. 31, 2005 to next available date	3 months ending Oct. 31, 2005
Estimates	3.0 weeks	Range: 0.7 to 5 weeks[3, 6]	Range: 0.6 to 12.9 weeks[4]	1.0 weeks	Range: <2 to 3.5 weeks[2, 5]	1.0 weeks

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Alberta presented the waits in two stages. To enhance comparability with other jurisdictions, the second wait segment(B) estimates are presented.
3. Nova Scotia reported separately for four priority levels, including emergency. Nova Scotia also reported separately for two regions that provide radiation therapy services. The range shown above excludes the emergency waits and includes urgent, semi-urgent and less urgent cases. The range represents the region and priority level-specific values.
4. Ontario reported separately for each facility and nine body sites (breast, central nervous system, gastrointestinal, genitourinary, gynecologic, hematology, head and neck, lung and sarcoma). The range represents the facility and site-specific values.
5. Alberta reported separately for each facility and two body sites (breast and prostate). The range represents the facility and site-specific values.
6. Nova Scotia reported number of days. This was converted to number of weeks.
7. Manitoba to report radiation therapy monthly in 2006.

1.3 Oncologist Wait Times Reporting Methods and Wait Times Estimates by Province[1]

	N.S.	Alta.
Wait Segment(s) Measured	From referral arrival in cancer centre to appointment	From referral to oncologist to appointment
Summary Measure	Mean by region and subspecialty[2]	Expected wait from last day of the previous month by body site and subspecialty[3]
Emergency Cases Excluded	Yes	Yes
Perspective	Retrospective	Prospective
Time Frame	Oct. 2005	From Oct. 31, 2005 to next available date
Estimates	Range: 1.4 to 5.1 weeks[2, 4]	Range: <1 to 5 weeks[3]

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Nova Scotia reported separately for regions that provide cancer specialist services and subspecialty (medical, radiation and gynecologic). The range represents the region and subspecialty-specific values.
3. Alberta reported separately for each facility, two body sites (breast and prostate), and subspecialty (medical and radiation). The range represents the facility, site and subspecialty-specific values.
4. Nova Scotia reported number of days. This was converted to number of weeks.

1.4 Cancer Surgery Wait Times Reporting Methods and Wait Times Estimates by Province[1]

	N.S.	Ont.
Wait Segment(s) Measured	From initial visit to gynecologic cancer surgery	From decision-to-treat to cancer surgery
Summary Measure	Mean wait[2]	Median, Mean, 90th Percentile
Emergency Cases Excluded	Yes	Yes
Perspective	Retrospective	Retrospective
Time Frame	Oct. 2005	July 2005
Estimates	21 days	22 days, 34 days, 69 days

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Nova Scotia only reported for gynecologic cancer surgery.

1.5 Chemotherapy Wait Times Reporting methods and Wait Times Estimates by Province[1]

	Ont.	Alta.	B.C.
Wait Segment(s) Measured	From referral to cancer centre to treatment	From oncologist visit to treatment	From medically able to receive to treatment
Summary Measure	Median by facility and body site[2]	Expected wait time from last day of the previous month by facility and body site[3]	Maximum
Emergency Cases Excluded	No	Yes	No
Perspective	Retrospective	Prospective	Retrospective
Time Frame	July to Sept. 2005	Oct. 31, 2005 to next available date	June 2005
Estimates	Range: 1.9 to 14.6 weeks[2]	Range: <1 week[3]	2 weeks

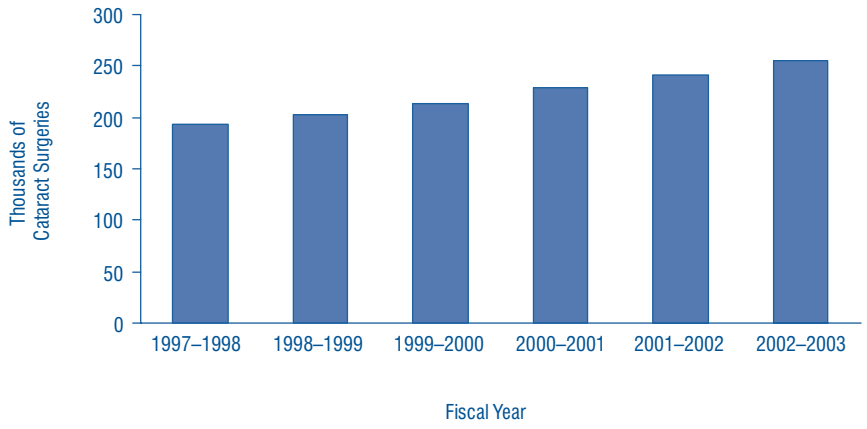
Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Ontario reported separately for each facility and nine body sites (breast, central nervous system, gastrointestinal, genitourinary, gynecologic, hematology, head and neck, lung, and sarcoma). The range represents the facility and site-specific values.
3. Alberta presented the waits in two stages. To enhance comparability with other jurisdictions, the second wait segment(B) estimates are presented. Alberta reported separately for each facility and two body sites (breast and prostate). All four estimates were the same at one week.

2.0 Sight Restoration

2.1 More and More Cataract Surgeries

Physicians billed provincial fee-for-service payment plans for more than 250,000 cataract surgeries in 2002, up 32% from 1997.

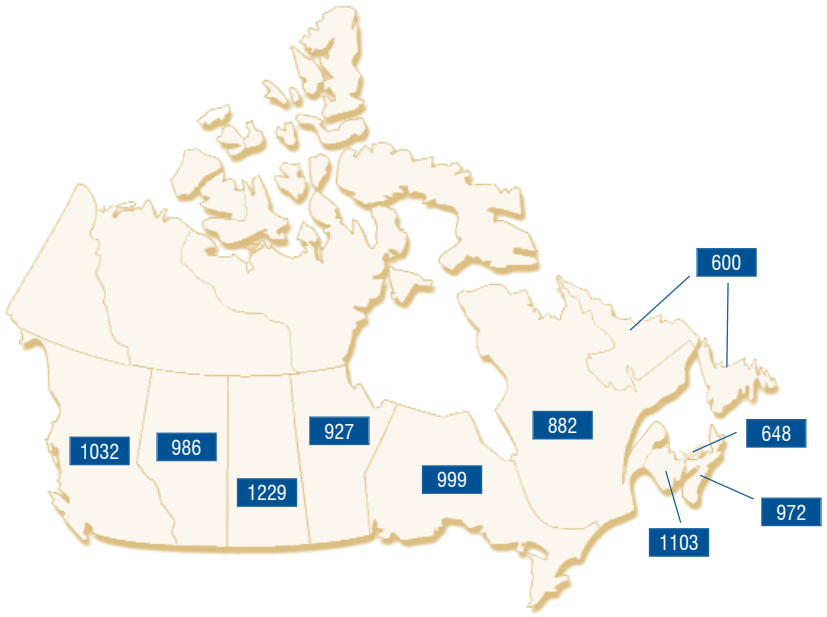


Note: Comparable data for the territories were not available.

Source: National Physician Database, CIHI.

2.2 Regional Variations

Like many other procedures, there is significant variation in the rates of cataract surgery across the country. The map below depicts age-standardized rates of cataract surgery per 100,000 population in 2002–2003.



Note: All data are from the National Physicians Database except P.E.I., where reciprocal billing issues have a material impact on results. P.E.I. data are from the Discharge Abstract Database. Comparable data are not available for the territories.

Source: National Physicians Database and Discharge Abstract Database, CIHI.

2.3 Specific Eye Surgeries Reported by Province and Reporting Unit[1]

Service	N.L.	P.E.I.	N.S.	N.B.[2]	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Services Reported										
Eye Surgery								●	●	●
Cataract Surgery			●		●	●		●	●	●
Level of Reporting										
Province			●			●		●[3]	●	●
Geographic Region			●			●		●		
Facility					●	●			●	
Physician									●	●

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. As of January 2006, New Brunswick will be reporting waits from last major consult to cataract surgery by regional health authority.
3. Eye surgery only.

2.4 Sight Restoration Wait Times Reported by Province[1]

	N.S.	Que.	Ont.	Sask.	Alta.	B.C.
Wait Segment(s) Measured	From 1st previous appointment with ophthalmologist to surgery	From hospital booking to surgery	From decision-to-treat to surgery	From booking form received to surgery	From decision-to-treat to surgery	From hospital booking to surgery
Summary Measure	Proportions within time periods	# Patients waiting 6 months or more, Total # waiting	Median, Mean, 90th Percentile	Proportions within time periods[2, 3]	Median[3, 4]	Median
Emergency Cases Excluded	Yes	Yes	Yes	No	Yes	Yes
Perspective	Retrospective	Cross-sectional	Retrospective	Retrospective	Retrospective	Retrospective
Time Frame	Jan.–June 2005	As of Oct. 15, 2005 (9/61 facilities reported on Nov. 12, 2005)	July 2005	Apr.–Sept. 2005	90 days ending Oct. 31, 2005	3 months ending Sept. 30, 2005
Eye Surgery Wait Estimate				18.6 weeks including emergency[7]	85 days[5]	48 days
Cataract Surgery Wait Estimate	<30d: 33% <60d: 54% <90d: 67% <180d: 90% <270d: 95% <360d: 99%	3,358 waiting 180 days or more, 17,340 waiting[6]	85 days, 139 days, 315 days[5]	1d or less: 2% 2d–3w: 9% 4–6w: 9% 7w–3m: 15% 4–6m: 24% 7–12m: 28% 13–18m: 9% >18m: 3%	93 days[5]	54 days

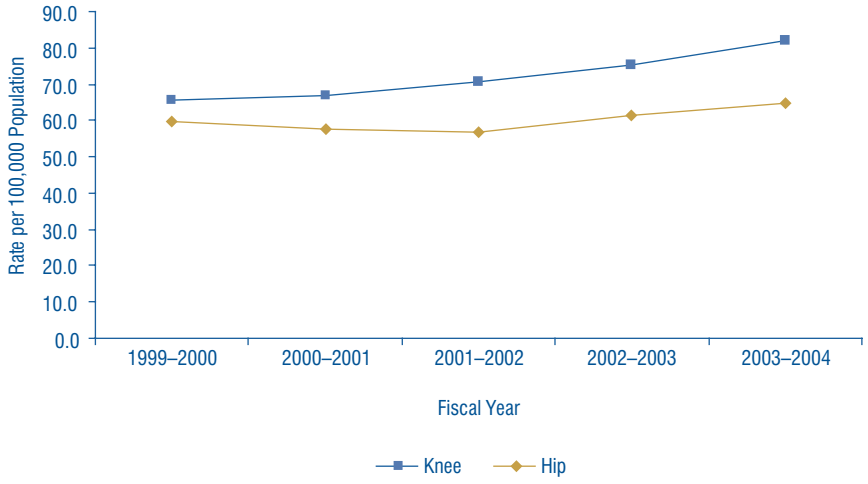
Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Saskatchewan reported the cataract surgery proportions separately by region. The provincial proportions were obtained from Saskatchewan Health and were calculated using the same data.
3. Alberta and Saskatchewan (for eye surgery) also reported proportions within time periods.
4. Alberta also reported separately for day surgery and inpatient groups.
5. Estimates presented in days. These were converted to weeks.
6. Quebec data are the sum of facility data.
7. For specialty, eye surgery, Saskatchewan does show medians with and without emergency cases.

3.0 Joint Replacement

3.1 Steady Increase in Joint Replacements

Between 1999–2000 and 2003–2004, age-standardized rates of hip and knee replacements increased by 9% and 25% respectively in Canada.

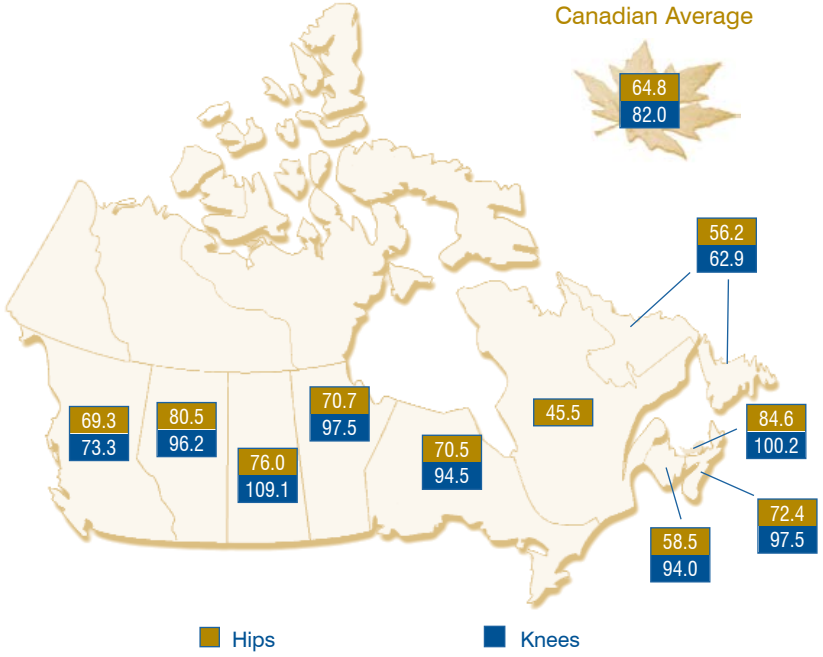


Note: Rates calculation was based on patients of all ages.

Source: Hospital Morbidity Database, CIHI.

3.2 Regional Variations in Joint Replacements

Large differences exist in how often joint replacement surgery is done in different parts of the country. The graph below shows age-standardized rates of hip and knee replacements per 100,000 population for Canada's provinces and territories in 2003–2004. There was even larger variation at a sub-provincial level. For example, among Canada's large health regions, knee replacement rates varied from 22 to 112 per 100,000 population in 2002–2003.



Notes:

1. Rates calculation was based on patients of all ages and was based on the patients' residence. Patients with unknown residence were excluded.
2. Yukon Territory, Northwest Territories and Nunavut rates were suppressed due to small numbers, but were included in the national average.

Source: Hospital Morbidity Database, CIHI.

3.3 Specific Joint Replacement Surgeries Reported by Province and Reporting Unit[1]

Service	N.L.	P.E.I.	N.S.	N.B.[2]	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Services Reported										
Orthopedic Surgery								●		●
Hip Replacement		●[3, 4]	●		●	●	●[3]	●	●	●
Knee Replacement		●[3, 4]	●		●	●	●[3]	●	●	●
Level of Reporting										
Province		●	●			●	●	●[5]	●	●
Geographic Region			●			●		●		
Facility					●	●			●	
Physician									●	●

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. As of January 2006, New Brunswick will be reporting waits from last major consult to hip and knee replacement by regional health authority.
3. Obtained from the *Comparable Health and Health System Performance Indicators for Canada, the Provinces and Territories*, November 2004: secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=prtwg_2004_e.
4. P.E.I. began reporting booking to surgery wait times on its provincial Web site in late December 2005.
5. Orthopedic surgery only.

3.4 Joint-Replacement Wait Times Reported by Province[1]

	P.E.I.	N.S.[2]	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Wait Segment(s) Measured	From decision-to-treat to surgery	From second previous appointment with orthopedic surgeon to surgery (excludes revisions)	From hospital booking to surgery	From decision-to-treat to surgery	From decision-to-treat to surgery	From booking form received to surgery	From decision-to-treat to surgery	From hospital booking to surgery
Summary Measure	Median	Proportions within time periods	# Patients waiting 3 months or more, total # waiting[3]	Median, Mean, 90th Percentile	Median	Median[4] (orthopedic surgery) Proportions within time periods (hip and knee)[5]	Median[4]	Median
Emergency Cases Excluded	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Perspective	Retrospective	Retrospective	Cross-sectional	Retrospective	Retrospective	Retrospective	Retrospective	Retrospective
Time Frame	FY 2002–2003	Jan.–June 2005	As of Oct. 15, 2005 (10/53 facilities reported Nov. 12, 2005)	July 2005	FY 2002–2003	Apr.–Sept. 2005	90 days ending Oct. 31, 2005	3 months ending Sept. 30, 2005
Orthopedic Surgery Wait Estimate						43 days including emergency[6, 7]		51 days[6]
Hip Replacement Wait Estimate	76 days[6]	<30d: 7% <60d: 15% <90d: 26% <180d: 49% <270d: 63% <360d: 75%	890 waiting 90 days or more;1,786 waiting in total[3]	104 days, 162 days, 341 days	133 days[6]	1d or less: 20% 2d-3w: 3% 4–6w: 5% 7w–3m: 18% 4–6m: 20% 7–12m: 16% 13–18m: 7% >18m: 11%[6]	126 days[6]	132 days[6]
Knee Replacement Wait Estimate	91 days[6]	<30d: 4% <60d: 9% <90d: 17% <180d: 40% <270d: 57% <360d: 74%	1,930 waiting 90 days or more; 3,231 waiting in total[3]	146 days, 202 days, 441 days	154 days[6]	1d or less: 1% 2d–3w: 1% 4–6w: 3% 7w–3m: 9% 4–6m: 20% 7–12m: 24% 13–18m: 9% >18m: 32%[6]	167 days[6]	175 days[6]

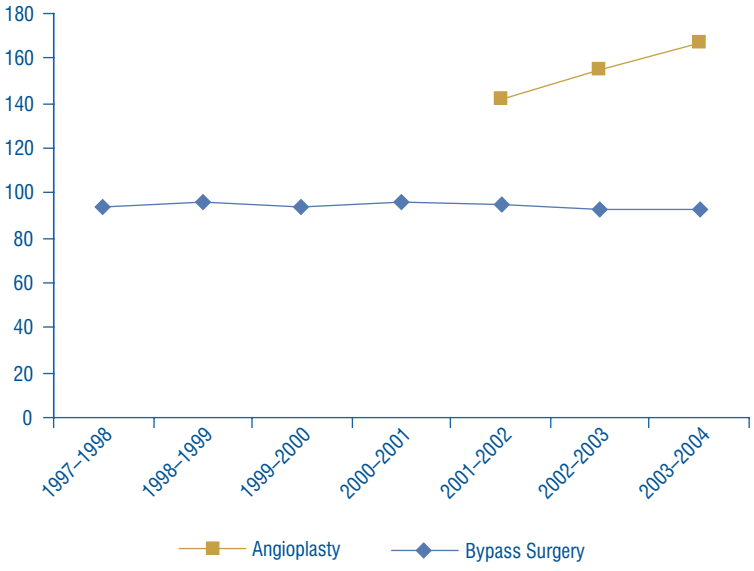
Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Nova Scotia reported separately for revision surgeries. These estimates are not included in the above table.
3. Quebec reported the number waiting by facility. These were summed to provide a provincial total.
4. Alberta and Saskatchewan (for orthopedic surgery) also reported proportions within time periods.
5. Saskatchewan reported proportions for hip and knee replacements by region. The provincial proportions were obtained from Saskatchewan Health and were calculated using the same data.
6. Estimates were presented in weeks. These were converted to days.
7. Saskatchewan includes partial hip replacements, usually emergency surgery. For specialty, orthopedic surgery, Saskatchewan does show medians with and without emergency cases.

4.0 Cardiac Surgery

4.1 Cardiac Surgery Trends

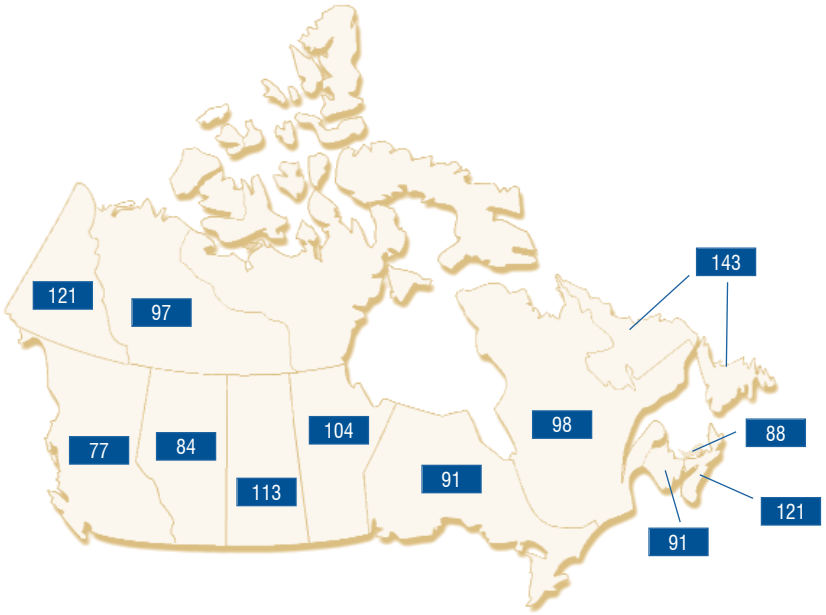
Age-standardized rates of bypass surgery have been relatively stable in recent years; angioplasty is becoming much more common.



Source: Hospital Morbidity Database, CIHI.

4.2 A Look at Cardiac Surgery

Rates of coronary artery bypass surgery (CABG) vary significantly across the country, as does the mix of procedures performed. The map below shows rates of inpatient surgery per 100,000 adults aged 20 and over in 2002–2003. These rates reflect where care was provided, not where the patients lived.



Note: Data from the territories are not shown due to small cell sizes.

Source: Hospital Morbidity Database, CIHI.

4.3 Specific Cardiac Services Reported by Province and Reporting Unit[1]

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Services Reported										
Cardiovascular Surgery			●					●		
Cardiac Surgery					●		●		●	●
Bypass Surgery	●[2]			●[2, 3]		●	●[2]	●	●	●[2]
Angioplasty			●		●	●				
Catheterization			●			●				
Level of Reporting										
Province	●		●	●		●	●	●[4]	●	●
Geographic Region					●	●	●	●		
Facility						●			●	
Physician									●	●

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Obtained from the *Comparable Health and Health System Performance Indicators for Canada, the Provinces and Territories*, November 2004: secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=prtwg_2004_e.
3. As of January 2006, New Brunswick will be reporting waits from last major consult to bypass surgery by regional health authority.
4. Web site reports provincial numbers for cardiovascular surgery only.

4.4 Cardiovascular/Cardiac Surgery Wait Times Reported by Province[1]

	N.S.[2]	Que.[3]	Man.[3]	Sask.[2]	Alta.[3]	B.C.[3]
Wait Segment(s) Measured	From decision-to-treat to treatment	From order signed to treatment	From decision-to-treat to treatment	From booking form received to treatment	From decision-to-treat to treatment	From booking to treatment
Summary Measure	Mean by priority level[4]	# Patients waiting 3 months or more, Total # waiting[5]	Median	Median[6]	Median[7]	Median
Emergency Cases Excluded	Yes	Yes	No	Yes	Yes	Yes
Perspective	Retrospective	Cross-sectional	Retrospective	Retrospective	Retrospective	Retrospective
Time Frame	Oct. 2005	As of Oct. 15, 2005 (1/17 facilities reported Nov. 12, 2005)	July to Sept. 2005	April to Sept. 2005	90 days ending Oct. 31, 2005	3 months ending Sept. 30, 2005
Estimates	Range: 28 to 188 days[4]	150 waiting 90 days or more, 562 waiting in total[5]	25 days	6 days non-emergent	24 days	67 days

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Reported on cardiovascular surgery.
3. Reported on cardiac surgery.
4. Nova Scotia reported separately for four priority levels, including emergency ("in-house urgent"). The range reported above excludes the emergency waits and includes semi-urgent A, semi-urgent B and elective cases. The range represents the priority level-specific values.
5. Quebec presented facility-specific numbers. These were summed. Quebec also specified that the cardiac surgery group included coronary artery bypass graft surgery and valve replacement/repair surgery.
6. Saskatchewan also reported proportions within time periods. For specialty, cardiovascular surgery, Saskatchewan does show medians with and without emergency cases.
7. Alberta reported the median wait time in weeks, which was converted to days. Alberta also reported separately for day surgery and inpatient groups. They also reported proportions within time periods.

4.5 Bypass Surgery Wait Times Reported by Province[1]

	N.L.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.
Wait Segment(s) Measured	From decision-to-treat to treatment	From catheter-ization to bypass surgery	From decision-to-treat to treatment	From decision-to-treat to treatment	From booking form received to treatment	From decision-to-treat to treatment	From catheter-ization to bypass surgery
Summary Measure	Median	Median	Median, Mean, 90th Percentile	Median	Proportions within time periods[2]	Median[3]	Median
Emergency Cases Excluded	No	No	Yes	No	No	Yes	No
Perspective	Retrospective	Retrospective	Retrospective	Retrospective	Retrospective	Retrospective	Retrospective
Time Frame	FY 2002–2003	FY 2002–2003	July 2005	FY 2002–2003	Apr. to Sept. 2005	90 days ending Oct. 31, 2005	FY 2002–2003
Estimates	10 days	8 days	21 days, 30 days, 70 days	11 days	1d or less: 32% 2d-3w: 46% 4-6w: 7% 7-3m: 13% 4-6m: 2% 7-12m: 0% 13-18m: 0% 18m or more: 0%	20 days	24 days

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Saskatchewan's Web site presents data for the two regions where bypass surgery is performed. The provincial distribution was obtained from Saskatchewan Health and was calculated using the same data.
3. Alberta reported the median wait time in weeks, which was converted to days. Alberta also reported separately for day surgery and inpatient groups. They also reported proportions within time periods.

4.6 Angioplasty Wait Times Reported by Province[1]

	N.S.	Que.	Ont.
Wait Segment(s) Measured	From decision-to-treat to treatment	From order signed to treatment	From decision-to-treat to treatment
Summary Measure	Mean by priority level[2]	# Patients waiting 2 months or more, Total # waiting[3]	Median, Mean, 90th Percentile
Emergency Cases Excluded	Yes	Yes	Yes
Perspective	Retrospective	Cross-sectional	Retrospective
Time Frame	Oct. 2005	As of Oct. 15, 2005	July 2005
Estimates	Range: 10 to 28 days[2]	Joint estimate for angioplasty and cardiac catheterization: 89 waiting 60 days or more, 553 waiting in total[3]	4 days, 9 days, 22 days

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Nova Scotia reported separately for three priority levels (urgent, semi-urgent and elective). The range represents the priority level-specific means.
3. Quebec reported the number waiting by facility. These were summed to provide a provincial total.

4.7 Cardiac-Catheterization Wait Times Reported by Province[1]

	N.S.	Que.	Ont.
Wait Segment(s) Measured	From decision-to-treat to treatment	From order signed to treatment	From decision-to-treat to treatment
Summary Measure	Mean by priority level	# Patients waiting 2 months or more, Total # waiting	Median, Mean, 90th Percentile
Emergency Cases Excluded	Yes	Yes	Yes
Perspective	Retrospective	Cross-sectional	Retrospective
Time Frame	Oct. 2005	As of Oct. 15, 2005	July 2005
Estimates	Range: 10 to 27 days[2]	Joint estimate for angioplasty and cardiac catheterization: 89 waiting 60 days or more, 553 waiting in total[3]	13 days, 18 days, 43 days

Sources:

1. Information retrieved from provincial Web sites in December 2005.
2. Nova Scotia reported separately for three priority levels (urgent, semi-urgent and elective). The range represents the priority level-specific means.
3. Quebec reported the number waiting by facility. These were summed to provide a provincial total.

4

Beyond Acute Care

Chapter 4. Beyond Acute Care

Much of the wait times focus has been on waits for assessment, diagnosis and treatment. But concern with access to care is not restricted to how long patients wait for a specialist or for surgery. Even after a hospital stay many patients may still require additional health care services. For example, patients who have bypass surgery may need cardiac rehabilitation, home care or other services when they leave hospital. Likewise, those who break a hip may need inpatient rehabilitation, continuing care or home care after surgery.

Smoothing the patient journey to improve access to care is a global challenge. In fact, approximately half of hospital executives in Australia, Canada, the United Kingdom and the United States said that limited availability of post-hospital care delays the discharge of patients often or very often in 2003.[1] And even after patients reach their post-hospital destination, challenges may remain.

Waiting to Leave the Hospital

More than two million patients stay overnight in Canada's acute care hospitals each year. When they leave, many need follow-up or ongoing services from rehabilitation facilities, long-term care, home care and other programs. Some are able to access these services immediately, but others must wait for the care they need.

One way to explore this issue is to look at how often patients ready for discharge to another type of care have to stay in hospital. Patients waiting for an "alternative level of care" (ALC) have finished the acute phase of their treatment, but remain in an acute care bed.

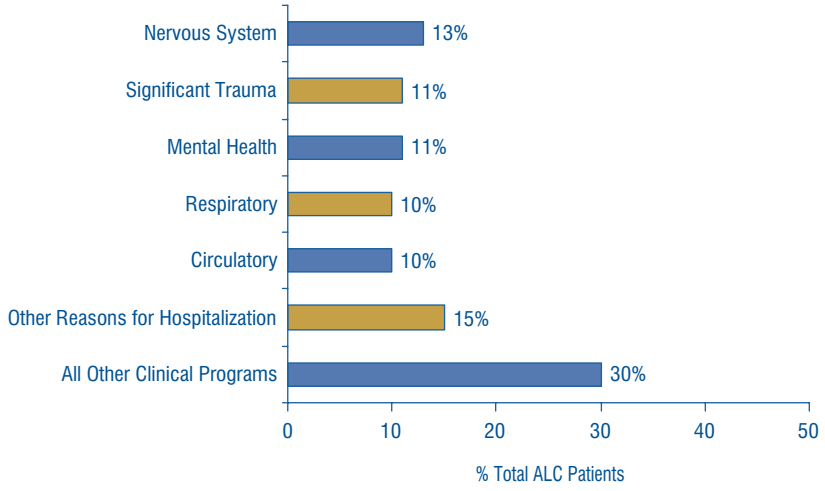
Most hospitals ask physicians (or other designated health professionals) to indicate when a patient occupying an acute care hospital bed is well enough to be cared for elsewhere.[i] In 2004–2005, care providers reported that more than 73,000 patients in provinces outside of Quebec and the territories spent some time in an acute care bed awaiting other services. That represents more than 3% of all overnight stays.

These patients have a mix of health problems. For example, patients who have experienced a stroke are among the most likely to have delayed discharges. They also account for a relatively large proportion of all stays with waits for an alternate level of care. Patients with HIV are also relatively likely to have to wait in hospital for other services, but their smaller total numbers mean that they account for less than 1% of all ALC patients. In contrast, pregnancy and childbirth are among the most common reasons for overnight hospital stays, but these patients rarely wait in hospital for other types of care.

i. Policies for identifying and tracking ALC patients differ somewhat from place to place and may change over time. The reported number of ALC cases likely underestimates the total number of people who spend time awaiting alternate levels of care.

26 Waiting for Other Types of Care

Over half of the patients whose health care providers said that they waited for an alternative level of care in 2004–2005 had a diagnosis that fell into one of five major clinical categories: nervous system disease, significant trauma, mental health, respiratory disease and circulatory disease. A further 15% were classified as "Other Reasons for Hospitalization." Most of the latter spent more of their hospital stay waiting for other types of care than they spent receiving acute care services.

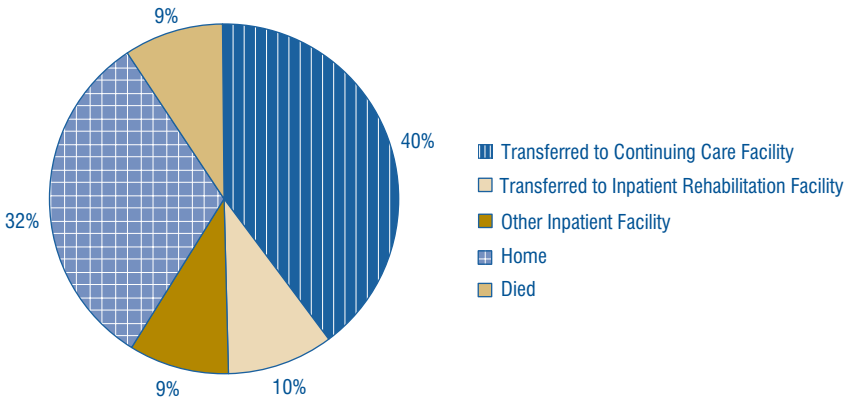


Note: These figures exclude Quebec and the territories because they do not report ALC days.

Source: Discharge Abstract Database, CIHI.

27 Where Waiting Patients Go

Forty percent of patients awaiting discharge from hospital to an alternative level of care were transferred to a continuing care facility in 2004–2005. Another one-third went home (at least 60% of these patients received home care). Nine percent of ALC patients died, but we do not know what percentage (if any) were waiting for a palliative bed compared to other services.



Note: These figures exclude Quebec and the territories because they do not report ALC days.

Source: Discharge Abstract Database, CIHI.

To better understand waits for alternative level of care, it is also important to know where waiting patients go when they leave hospital. Overall, most are discharged to a continuing care facility or home, with or without home care. But the profile of where patients go differs by health condition. For example, more than half of all patients treated primarily for mental health problems who waited in hospital for an alternative level of care went to a continuing care facility (56%), compared to 26% of patients with musculoskeletal conditions. For both groups of patients, approximately one in three were discharged home after their wait for an alternate level of care.

Thinking Differently About Access to Care

In Canada and elsewhere, many initiatives are underway to improve access to long-term care, although their relative effectiveness is not yet well understood. Some focus on increasing system capacity; others on reducing bottlenecks, achieving efficiencies or various factors that may affect access. A few also ask questions about how best to provide needed care. For example, in 1999 Veterans Affairs Canada began a pilot project to address waiting lists for long-term care beds.[2] Veterans who were on a waiting list for a bed were offered home care and treatment services for which they had previously been ineligible. When contacted, 90% of veterans said that they would rather remain at home with this support than accept a placement in a long-term care facility.

A Montréal-based project in the mid-1990s was also based on the assumption that a coordinated approach to care is essential for the effective management of patients with complex health problems, such as the frail elderly. To evaluate the program, researchers compared a group of patients who participated with one that did not.[3] They found that health outcomes and costs were similar in both groups. Participants had lower emergency department and long-term care costs, but these savings were offset by increased spending on home/community services. In addition, participants tended to:

- spend less time in acute care hospitals while waiting for housing;
- have fewer visits to emergency departments (and when they did go, they were more likely to return home instead of being admitted to hospital);
- make more visits to primary care practitioners and centres locaux de services communautaires (CLSCs), as well as to various community services (e.g. physiotherapy and occupational therapy); and
- perceive that they received better quality care.

More recently, as part of its reorganization of health care, Quebec developed a province-wide home support policy targeting seniors. The home support policy was designed to enable patients to return home sooner after an inpatient hospital stay, or to receive needed health care services, such as palliative care, in the home rather than in hospital.[4]

Special Focus: Who Waits for Inpatient Rehabilitation?

Sometimes people need specialized care to help them recover from an illness or injury. For example, patients who have a stroke or hip surgery may need help to learn to walk again or to regain strength and balance. Helping people recover these types of skills is a key goal of rehabilitation services. In 2004–2005, 84 inpatient rehabilitation programs scattered across 6 provinces tracked information on their services through the National Rehabilitation Reporting System.

28 Waits For Inpatient Rehabilitation by Surgery Type

Although most people do not wait, more than one in five patients admitted to inpatient rehabilitation after orthopedic surgery in 2004–2005 waited two or more days to enter the program. Those with unplanned cases (hip fractures) were somewhat more likely to wait than those with planned cases (hip or knee replacements).

Admitted	Hip Replacement	Knee Replacement	Hip Fracture
Same Day/ Next Day	2,190 (78%)	2,488 (80%)	1,484 (71%)
≥ 2 Day	632 (22%)	641 (20%)	615 (29%)

Note: These results are based on data reported by 84 inpatient rehabilitation programs in six provinces.

Source: National Rehabilitation Reporting System, CIHI.

Across these facilities, about half of all patients (52%) were admitted to inpatient rehabilitation on the day that they were considered ready for the service.[5] Another 16% entered the next day. At the other end of the scale, 10% waited over a week, with 2% waiting more than 30 days. Waits tended to be shortest for those admitted from inpatient acute units and longest for those referred by practitioners in the community.

About half of all patients admitted to rehabilitation beds have orthopedic conditions. For 2004–2005, we were able to examine waits for 8,050 patients who had either planned (total joint replacement) or unplanned (hip fracture) surgery. Specifically, we measured the difference between the date the patients were ready for admission to inpatient rehabilitation and their actual date of entry.

Of those who went on to a rehabilitation bed, most patients with either type of orthopedic surgery were admitted within one day of being ready for this type of care. Those who had hip fractures were somewhat more likely to have had a wait of two or more days to enter a program. Among those who had surgeries that are usually planned in advance, most do not wait, but over 20% had to wait two or more days for a spot in inpatient rehabilitation. The waits for inpatient rehabilitation, measured in days, are typically much shorter than the waits, measured in weeks or months, for accessing specialist and surgical care.

Rehabilitation is but one of the many kinds of institutional and community services that Canadians may require. Access challenges vary, depending on the type of care considered. For example, one in five Canadians with disabilities reported unmet needs for help in carrying out everyday activities.[6] Of this group, more than ten times as many said that getting help was too expensive than said that they were presently on a waiting list for services. Research also reminds us that long-term care residents sometimes face frustrating delays in getting the medicines they require, personal care, clinic appointments and other services.[7]

Beyond Acute Care: Where We Stand

What We Know—Some Examples

- For some patients there are challenges accessing post-acute services. The number of patients waiting and the services that they wait for depend in part on the patients' clinical profile.
- At least 3% of patients who have overnight hospital stays spend some time in an acute care bed awaiting other services. These patients are most likely to be transferred to a continuing care facility or to go home when they leave the hospital.
- For joint replacement surgery patients, the typical waits for inpatient rehabilitation are much shorter that the waits for specialist care, diagnostic tests and surgery.

What We Don't Know

- How long do patients wait for home care and other community-based services, nursing home and other long term care placements, inpatient mental health and addictions services and other types of care? Outside of hospitals, who is seeking these types of services?
- To what extent does waiting for these types of services affect patients and their families, outcomes of health services and health care costs?
- Why do patients wait after the acute care phase of their treatment is complete? Do certain types of patients wait longer than others for post-acute services? What strategies are most effective in getting patients into the alternative levels of care that they need?

For More Information

1 R. J. Blendon, C. Schoen, C. M. DesRoches, R. Osborn, K. Zapert and E. Raleigh, "Confronting Competing Demands to Improve Quality: A Five-Country Hospital Survery," *Health Affairs* 23, 3 (2004): pp. 119–35.

2 D. Pedlar and J. Walker, "Brief Report: The Overseas Service Veteran at Home Pilot: How Choice of Care May Affect Use of Nursing Home Beds and Waiting Lists," *Canadian Journal on Aging* 23, 4 (2004): pp. 367–9.

3 F. Béland, Bergman and P. Lebel, *Un Système de services integrés pour personnes âgrées en perte d'autonomie. Évaluation de la phase 1, juin 1999 à mai 2000,* (Health Transition Fund, Health Canada, 2001).

4 Ministère de la Santé et des Services sociaux, *Report on the Progress Made Regarding the Bilateral Agreement Entered Into During the Federal-Provincial-Territorial Meeting of the First Ministers on Health*, September 2004 (Quebec: Ministère de la Santé et des Services sociaux, 2005).

5 Canadian Institute of Health Information, *Inpatient Rehabilitation in Canada, 2003–2004* (Ottawa: CIHI, 2005).

6 Statistics Canada, *Disability Supports in Canada, 2001—Tables* (Ottawa: Statistics Canada, 2002).

7 G. J. Mitchell, F. B. Pilkington, C. Jonas-Simpson, F. Aiken, M. G. Carson, A. Fisher and P. Lyon, "Exploring the Lived Experience of Waiting for Persons in Long-Term Care," *Nursing Science Quarterly* 18, 2 (2005): pp. 163–70.