



Q MONITOR

ONTARIO HEALTH QUALITY COUNCIL

2009
REPORT ON
ONTARIO'S
HEALTH
SYSTEM



Ontario

Ontario Health Quality Council

The quality of our health system is the responsibility of every Ontarian. We hope this report will help you understand the publicly funded health system better, and give you the information you need to keep up pressure for improvement.

After all, it's your health and your health system.

This report is prepared in
partnership with



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1 INTRODUCTION AND SUMMARY

There are almost 13 million people in Ontario, of every age and in every stage of health. Those of us who don't need healthcare on any given day certainly know someone who does — often someone close to us, too often with serious needs. For them and for ourselves, we all want a high-quality, high-performing health system.

The Ontario Health Quality Council is an independent agency created by the province in 2004. Our mandate is to help improve the publicly funded health system by monitoring and reporting on its quality to the people of Ontario and by encouraging continuous improvement. Making consistent, system-wide upgrades in quality can only happen when plans for change are linked to clear targets and deadlines for improvement and progress toward those targets is measured and reported. By reporting the benefits of that progress — and the consequences when we still fall short — the Ontario Health Quality Council can encourage change and reinforce efforts to improve quality.

1.1 The report this year

This is our fourth annual report on the state of Ontario's publicly funded healthcare system. In it, we review and update previous findings and add some new indicators (aspects of healthcare we can measure and keep track of)

to give Ontarians an accurate picture of how the system is doing and where it needs to improve.

To prepare the report, we consult experts in various areas of health research to help choose good indicators that reflect the quality of care in Ontario and to understand what the results really tell us. These experts make up the Council's Performance Measurement Advisory Board and the Performance Measurement Peer Review Panel. We collect data from a variety of sources, including surveys by the government and independent organizations such as the Commonwealth Fund. Then we work with expert researchers at the Institute for Clinical Evaluative Sciences to analyze the data.

As in the past, the report presents information in categories, the “nine attributes” we distilled from what Ontarians told us a high-performing health system should be — accessible, effective, safe, patient-centred, equitable, efficient, integrated, focused on population health and with the appropriate resources to get the job done.

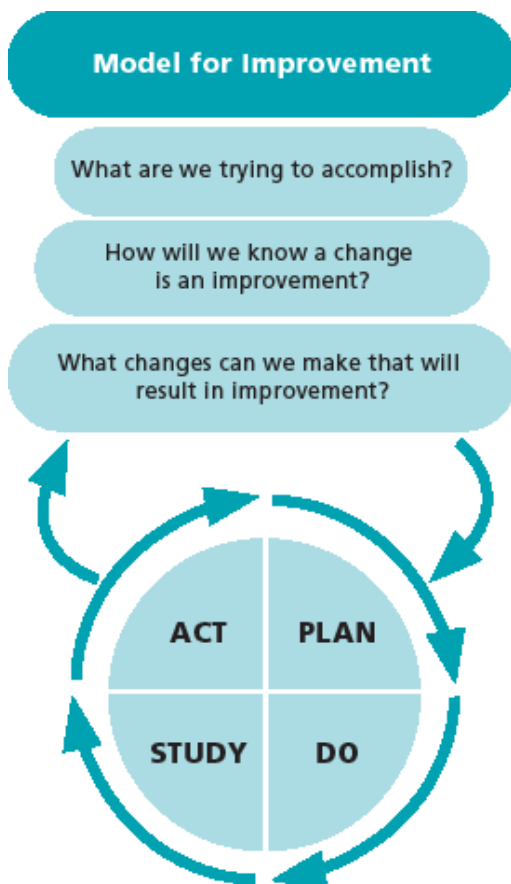
In previous years we have focused on particular areas we know need improvement. One year, it was the need for better information technology; other years it's been flaws in how we care for chronic disease. This year we are revisiting these two areas, but also adding new information on problems with access throughout the healthcare system.



1.2 Promoting quality improvement

Reporting on indicators and goals is an important part of improving quality, but the Council's work doesn't stop there. The second part of our mandate, to support continuous quality improvement, requires the Council to act as a catalyst for change. So the report also includes a series of examples of quality improvement initiatives around the province, which we call "success studies."

These are not just accounts of interesting ideas that have been implemented. We've used the "Model for Improvement" developed by the Institute for Healthcare Improvement, a not-for-profit organization in Cambridge, Massachusetts. The model says that, in order to succeed, quality improvement projects should have a clear aim and track specific measures that demonstrate whether specific changes lead to an improvement. This provides solid evidence to other organizations when they're looking for ways to improve quality.



The success studies are closely tied to the rest of the work we're doing to improve the health system and the overall health of the people of Ontario. You can learn more about it in our strategic plan but, briefly, we aim to co-ordinate our work with those who manage the healthcare system, so the measures of quality you see in this report will be the same ones leaders will be taking seriously in their day-to-day planning activities. We've also made a commitment to increase the healthcare system's capacity to improve by promoting the use of quality improvement tools, by bringing groups working on similar quality issues together and by encouraging decision makers to set improvement goals and plan the actions needed to achieve them.



1.3 Our key findings

Ontario's publicly funded healthcare system improves health and saves lives every day. It is staffed by well-trained professionals, many of whom keep working long shifts at tough jobs because they believe in what they're doing for their fellow citizens. Their hard work and our care come at a high cost: spending on healthcare in 2009/10 is expected to be \$42.4 billion, accounting for almost half of all provincial spending.

We know poor-quality care wastes money and increases suffering. The waste takes many forms, from a person getting sicker because they weren't monitored and given relatively simple treatments in time to avoid worse problems, or a person made ill because they were given the wrong prescription or caught an infection in hospital. The effect is the same: wasted resources are not available for anything else. It's our job to show where the system could do better and encourage quality improvement initiatives to focus on them. Here are the key messages drawn from our work this year:

Waits have decreased for many surgeries but people still wait too long for care in Ontario — including urgent cancer surgery, MRI scans, specialists and a space in a nursing home.

Although wait times for cancer surgeries have decreased in the past few years, challenges remain for those patients who need surgery urgently. Patients in the Priority 2 category should have their surgery within two weeks, but half wait longer than that and some wait as long as four weeks. One hospital in Ontario has found a solution. North York General looked at how it co-ordinated cancer care and now completes high-priority cancer surgeries within the two-week target.

Although there are many more MRI machines in the province and we're doing almost twice as many scans, we're far from the target wait time of 28 days. Waits have fluctuated between 90 to 120 days for almost four years, but overall, have not seen any major improvement since 2005. This can mean delayed treatment for the health problems MRIs reveal. This has gone on for some years and we seem no closer to understanding why.

Waits for specialists are also long. The majority of sicker adults in Ontario say they wait more than month to see a specialist after being referred. In contrast, only one in four people in Germany, the Netherlands and the US have to wait that long.

We're very worried that waits for places in long-term care have doubled in the past two years, from 49 to 106 days. People waiting to get into long-term care homes are too frail to live independently. If they are waiting at home, they likely aren't getting the care they need. If they are waiting in hospital, their condition may worsen because of immobility and lack of support to regain as much independence as they can. Families are stressed in either case. Other provinces have kept wait lists low while using fewer long-term care beds, by providing alternative living arrangements. Some places in Ontario are successfully getting people to return home with more support instead of going straight to long-term care. We can manage wait times better, just by spreading these good ideas across Ontario more effectively.

There's been real progress in some areas since the Ontario Wait Times Strategy was introduced in 2004. Waits for hip and knee replacements and cataract surgery are all down: knee replacements took 440 days in September of 2005. By December 2008, the wait was 189 days. Hip replacements used to take a 350-day wait, now it's 162 days. Cataract waits have dropped from about 310 days to about 103 in the same time. Waits for angiography and angioplasty have decreased steadily since 2005 and the large majority of patients for heart bypass surgery are treated within the target time.

The accuracy and completeness of your medical information is absolutely critical to the quality, safety and efficiency of the care you receive. Ontario healthcare is failing to use information technology to its full potential to deliver that care.

In 2007, just one in four family physicians in Ontario had electronic records, compared to 50% in Alberta, 98% in the Netherlands and 89% in the United Kingdom. Where 93% of UK doctors use their electronic records to send reminders to patients for follow-up care (such as cancer screening), only 8% of Canadian doctors do.

The Hospital Report, published in Ontario every year, scores hospitals on the extent of their use of information technology. A fully integrated system serving every part of the hospital would score a full 100 points. In the past two years, the biggest teaching hospitals have reached close to 80 points while small hospitals are scoring just below 50%. More important, fewer than 20% could share information with physicians or organizations in the community. These poor scores mean Ontario hospitals probably don't have all the information systems they need to manage complex healthcare.

This inadequate use of technology is one of the biggest barriers to high quality care we face in Ontario. Without integrated information technology, data moves haphazardly and professionals may lack crucial information. At worst, that puts patients at increased risk of oversights and mistakes. Certainly, care can be disorganized, efficiency suffers and patients feel their time is wasted.

We're concerned that wasted time may undermine trust in the healthcare system. One survey found 33% of sicker Ontarians* felt their time was wasted because of poorly organized care. That was worse than the rest of Canada and worse than six of eight countries; in the Netherlands and the UK only 20% felt their time was wasted by disorganization. As well, 18% felt their time had been wasted because their test results, medical records or referrals were not available at the time of their scheduled appointment. Only 9% of people in the Netherlands did. Finally, 11% of people surveyed said they had unnecessary repeat tests, while only 4% of Dutch people did. It's worth noting here that almost 100% of family practices in the Netherlands keep their patient records on computers.

We are pleased to see the launch of eHealth Ontario — the new agency created to provide a coherent, province-wide strategy for using information technology to improve patient care. eHealth has until 2015 to meet the government's pledge of an electronic health record for every person in Ontario. Its other goals include improving access to care, making patients safer and helping them manage their own care.

A true electronic health record is centred around the patient and integrates information from different sources into one place. Individuals must be able to access their health information, because it is a fundamental right and because it enables them to be active participants in care decisions. While government has set a clear date for delivering an electronic health record, we have yet to see details of how this vision will be accomplished. To safeguard taxpayers' investment in this project, there must be a clear definition of what the final product will be, milestones that can be tracked along the way and reporting to let the public know how the implementation is progressing in achieving each of the milestones. We would also expect to see some opportunities for the public to have input into its design and implementation.

Although we see some small improvements, people with chronic diseases — including diabetes, heart disease and asthma — are not getting the full range of care they need.

Nowhere is our lack of information technology a bigger issue than in looking after people with chronic diseases. People can live quite normally for years with chronic diseases, if they're carefully monitored so symptoms are spotted and dealt with before they make the patient seriously ill.

But there are major gaps in the careful monitoring, rigorous drug therapy and professional support the chronically ill need to help them manage their own conditions and the cost of our failure in that area is tremendous. Last year we estimated nearly 8,000 lives could be saved every year and the lives of many more improved, if we did a better job of managing chronic disease. Fewer than half of Ontarians with diabetes have their blood sugar or blood pressure under control. This year, we found there is still major room for improvement, particularly in making sure patients with diabetes, a history of heart attacks or congestive heart failure are getting the right medications. The rates of use of individual drugs to manage these conditions (statins, beta-blockers and ACEI/ARBs) range from 65 to 82%, but should be 90% or better.

Keeping track of the monitoring, tests and prescriptions that chronically ill patients need has to be routine and thorough at a level that can really only be achieved with electronic health records. Computerized health records can remind caregivers when it's time for tests or follow-up visits, track results and send alerts when there's a problem. Ontarians with diabetes are much less likely than people in other countries to get regular foot and eye exams, and countries that have the best rates of monitoring, like the Netherlands, are also ones which have the greatest use of electronic medical records.

To optimize health, healthcare providers must engage people living with chronic disease to take control of their care, but only one in three chronically ill Ontarians said their healthcare providers asked them about their personal goals for managing their care.

* Our source for public experiences with healthcare this year was the Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008. It interviewed only people who described their health as "fair" or "poor" because of an illness, injury, or disability that has required a lot of medical care or hospitalization or surgery in the past two years. If the system isn't working for these particularly vulnerable people, it suggests serious problems with quality for everyone.

We have to emphasize, of course, that being healthy is not achieved solely through a good healthcare system. Many different factors contribute to good health, some of which we can control. We would like to see Ontarians take more responsibility for their own health, by leading healthier lives, including eating more fruit and vegetables, losing weight, exercising more and quitting smoking. There was progress in reducing smoking from 2001 to 2005, but there's been none since then and obesity and physical inactivity increased slightly from 2005 to 2007.

It is good news, however, that cholesterol-lowering drugs called statins are being prescribed to many more people with diabetes, to reduce the risk of heart attacks, strokes and death (although rates could still be higher). Also good news is fewer people going to hospital for asthma and there are signs Ontario's Primary Care Asthma Program is working well — after 12 months, participants reported a 30% drop in asthma attacks, a 34% drop in daytime asthma symptoms and a 49% drop in missed school days.

Access to family doctors has not improved.

The proportion of Ontario adults who don't have a regular family doctor has stayed the same over the past two years. About 7.4% of adults in Ontario don't have a family physician and about half that number, or 400,000 people, are seeking one, without success. There has been no improvement in these figures over the past two years.

Having a regular doctor is no guarantee of timely access to care. Only about one in three people in Ontario (and across Canada) can see their doctor the same or the next day when they're sick and need care. People in the Netherlands, the best-performing country, are twice as likely as Ontarians to see a doctor promptly when they're sick.

Ontario's healthcare system is not as safe as it should be.

We know many common medications can be dangerous for frail seniors, who are likely to be more sensitive to their side effects. Many lead to dizziness and falls, which can kill old people. Last year, one out of every 25 Ontario seniors got prescriptions for drugs that had the potential to harm them, although safer alternatives exist. Prescribing these drugs to seniors has decreased in the past six years, but it's still too high.

While outbreaks of infectious diseases in hospitals are a worrying trend, we were pleased to see the province respond to public concern by ordering regular public

reporting of infection rates. Publishing this information makes both patients and providers more aware of the dangers of poor hygiene and encourages hospitals to work hard to stop the spread of infection.

We're distressed to see workers in healthcare have higher injury rates than miners or firefighters — and workers in long-term care homes are hurt the most, often by lifting or moving patients. Better training and equipment would do a lot to reduce these rates.

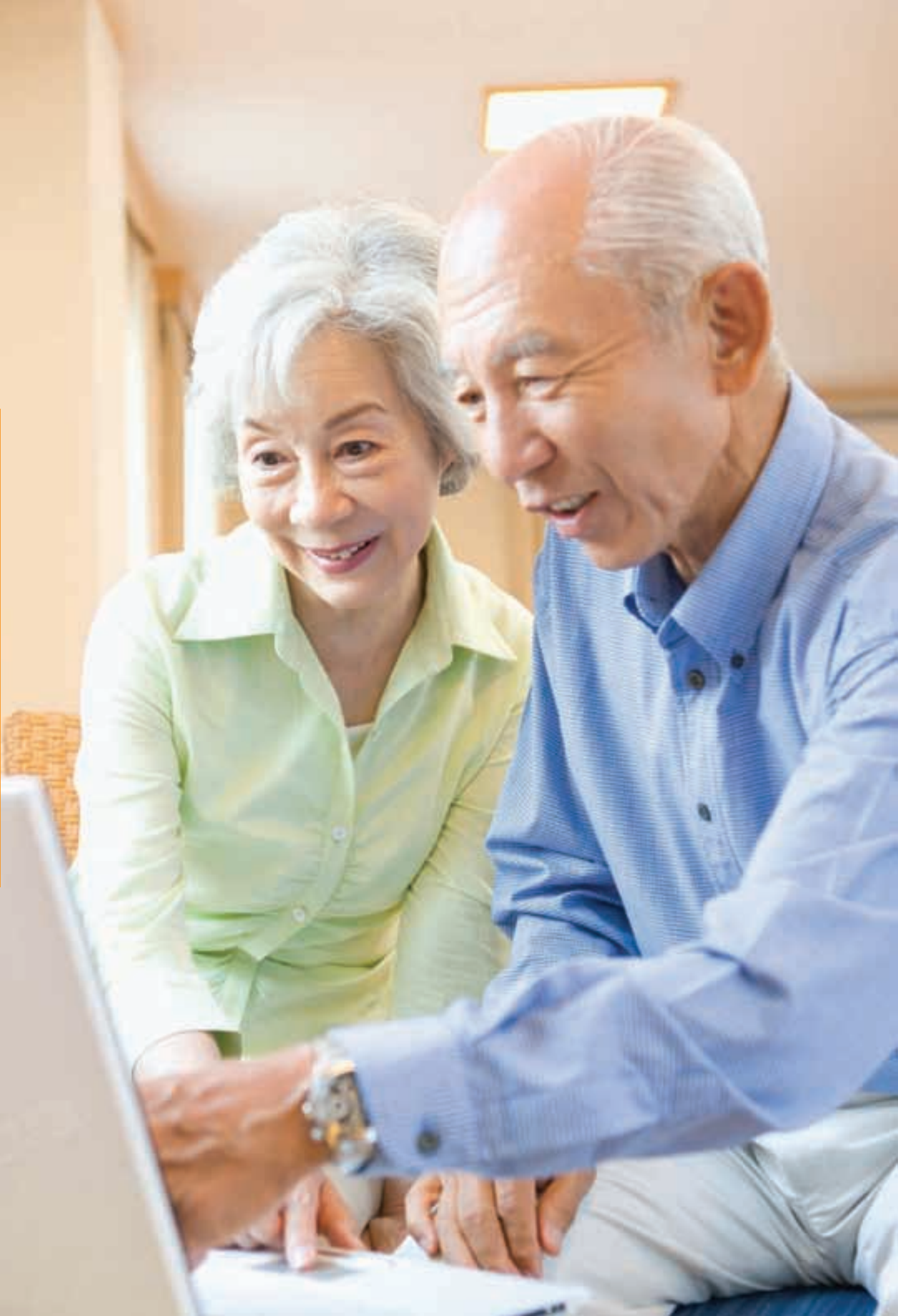
Ontario has begun the process of making improvements, but the pace must be accelerated.

There have been some modest improvements in quality in our health system and for that we are thankful. However, progress is far too slow and in some cases has stalled. Ontario researchers working on the Quality by Design project funded by the Ministry of Health and Long-Term Care have recently published an analysis of healthcare systems around the world that have the best results on quality.¹ Their case studies show getting rapid improvements across a system takes strong leadership, a culture of quality improvement, staff skilled at managing change, incentives and recognition for quality and real-time information on how the system is performing and where it needs to improve. In our report, we spotlight specific examples of performance in Ontario and elsewhere where there's proof better results are possible. We encourage health providers, planners and policy-makers to learn from proven practices and apply the lessons.

1.4 How we gather, assess and interpret data for this report

The Ontario Health Quality Council report is based on data gathered from numerous sources. The main ones are the Ontario Ministry of Health and Long-Term Care's administrative records, data gathered by the Institute for Clinical Evaluative Sciences and the Canadian Institute for Health Information and patient interviews conducted by the Commonwealth Fund in its International Survey of Sicker Adults. A detailed description of the methodology and data sources is available in the technical report on our website: <http://www.ohqc.ca/en/yearlyreport.php>

2



2 ACCESSIBLE

People should be able to get the right care at the right time in the right setting from the right provider.

2.1 Introduction

All of the nine attributes of high quality healthcare are important, but accessibility is probably the one people notice most. Whether we can get the care we need, when we need it, is often the first thing most of us think about when we're judging whether the healthcare system is working.

Accessibility means people have family doctors (often working in a team with nurses and other healthcare workers) they can count on for day-to-day care. The doctor and team know their medical history, monitor their chronic conditions, offer preventive health services and co-ordinate referrals to specialists when needed. Accessibility also means when an individual needs a particular service, he or she doesn't have to wait an unreasonable amount of time to get it.

To measure accessibility in Ontario, we looked at:

- How many people in Ontario have a regular family doctor
- How many say they're looking for a family physician
- Waits to see specialists
- Waits for some common operations including cancer surgeries
- Whether home care is available
- Waits for placement into long-term care
- How long it takes to complete treatment in the emergency department

Some of our measures are a bit different from last year, because the research questions changed slightly and we got much better detail on cancer care than we had before. We found some positive changes — and a few very worrying trends.

2.1.1 Key findings about access

- Waits for many surgeries have decreased and we are meeting wait-time targets for cataract surgery, most cancer surgeries and coronary bypass grafts. But cancer patients who have more urgent needs for surgery are still waiting too long. Waits are also too long for hip and knee replacements and CT and MRI scans.
- About 800,000 adults in Ontario — 7.4% — don't have a family physician. Of those, some 400,000 people are actively seeking one. There has been no improvement in these figures over the past two years.
- Having a doctor is no assurance you'll get the care you need when you need it. Compared to seriously ill people in other countries, sicker adults in Ontario wait much longer to see their regular family doctor when they are sick and also wait longer to see a specialist — over one month on average.
- It takes too long to get a place in a long-term care home. People often wait for months and even then, most don't get into their first choice of home. Delays in placement can be stressful for the individual as well as causing a heavy burden for caregivers at home. People waiting in hospital for long-term care can keep other patients from hospital beds and worsen overcrowding in emergency departments.

THE 2008 COMMONWEALTH FUND SURVEY OF SICKER ADULTS

You'll find many references to the experiences of "sicker adults" in this report. That's because one of our major sources of information was the Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008. It interviewed only people who described their health as "fair" or "poor" because of an illness, injury, or disability that has required a lot of medical care or hospitalization or surgery in the past two years. If the system isn't working for these particularly vulnerable people, it may suggest serious problems with quality.

2.2 Access to emergency departments

2.2.1 Why is this important?

Emergency departments are often the first contact with the health system for people who need care urgently. They are heavily used — there are about four emergency visits per year for every 10 people in the province.² Unnecessary delays in emergency are inconvenient, leave patients dissatisfied with the system and may lead people to leave the hospital without being seen.³

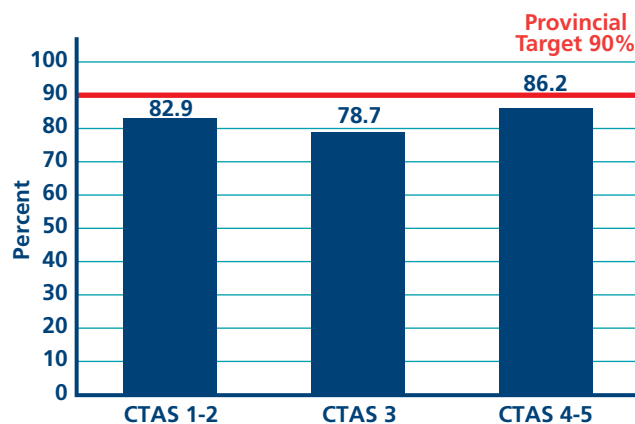
Long waits in emergency departments may also be a sign of overcrowding, where the emergency department is so busy, ambulances must be diverted to other hospitals. This is particularly dangerous for some of the most urgent conditions, such as chest pain, because any delay in treatment increases the risk of death.⁴

This year we looked at two key measures of how emergency departments in Ontario are performing: how long it takes to get your treatment completed and the total time from when you enter emergency to when you leave (whether that's to go home or on to a hospital ward). The Ontario government has set benchmarks for how long patients should spend in emergency, based on the severity of their illness (as defined by the Canadian Trauma Acuity Scale, or CTAS; the most urgent patients are ranked 1, down to 5, the least ill). The goal is to complete treatment for 90% of patients within those timeframes. The way data were collected changed in 2007/08, so we can't look at trends on how long it takes to complete treatment.

2.2.2 What did we find?

The most recent data available show that regardless of how ill patients in emergency are, there is room for improvement in meeting the provincial target for completing their care. We do a relatively better job for less severely ill patients, (in groups 4 and 5), but more of the acute cases, ranked 1 or 2, should be seen within the recommended time.

Percent of emergency department patient care completed within recommended timeframes in Ontario, 2007/2008

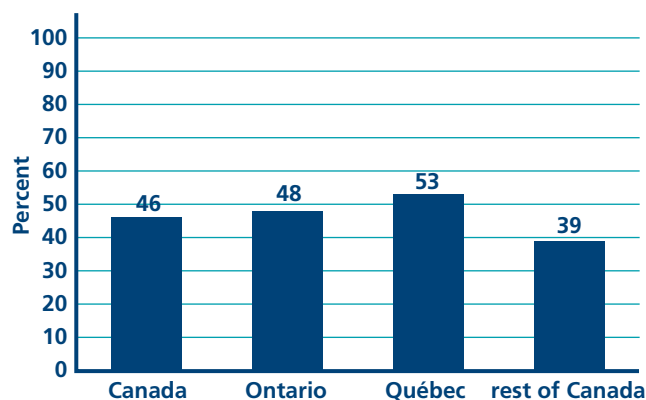


Source: Institute for Clinical Evaluative Sciences – Health system data

CTAS Priority levels	1-2 (high)	3	4-5 (low)
Recommended time for completing visit	8 hours	6 hours	4 hours

Although we are close, we are below the goal of completing 90% of emergency visits within the recommended timeframe.

Percent of sicker adults who waited two or more hours for treatment after arriving in the emergency department in Canada and select provinces, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

About 50% of sicker adults in Ontario wait two hours for treatment in emergency. That is lower than in Québec but higher than in the rest of Canada.

2.2.3 Why are there waits in emergency?

- Slow transfer of patients who are ready to leave.** When all of a hospital's beds are full, patients can't move up from emergency so they wait there, sometimes for days. This decreases space for new patients and adds to waits. Directors of emergency departments say this is their most important problem, and one Canadian study found this problem accounted for two-thirds of unnecessary waits in emergency.⁵ Hospital beds are full because there are patients ready to be discharged, but the services they need in the community — such as long-term care or home care — are not yet available. The technical name for these people is “alternate level of care” (ALC) patients.
- Poor co-ordination.** A visit to emergency involves multiple steps, including seeing nurses and doctors and having tests or procedures done. Sometimes there are long delays between these steps, caused by poor communication or co-ordination, or because staff, supplies or equipment weren't available when needed.
- Unnecessary demand.** Some emergency visits aren't urgent and could be handled in a doctor's office or clinic. Patients without family doctors, or patients who can't get in to see their family doctor, may wind up in emergency.

2.2.4 What has been done elsewhere to reduce emergency department waits?

Long waits and overcrowding in emergency departments are a problem across Canada and the US. There's no single solution; fixing it takes work on multiple fronts. Reducing the number of patients waiting for discharge to alternate care is critical. Strategies to do that include improving home care, providing supportive housing with on-site nursing for seniors, and providing physicians with computerized decision tools to help them assess when an admission or discharge is appropriate.

There are many ideas for improving how emergency departments work⁶ including: streamlining the steps in delivering care, creating a fast-track area for less-serious cases, opening special units for patients who need to be under observation for several hours, and scheduling elective cases evenly throughout the week (which helps make sure there is always some extra operating room capacity to handle cases coming from emergency). Other approaches include developing special management plans for when the hospital is full, introducing flexible scheduling (so extra staff can be brought in at peak periods or stay home when it's quiet) and setting up information systems to track where patients are at any moment and flag when it's time for action.

2.2.5 What are we doing in Ontario?

In May of 2008, the province announced a strategy to improve care and reduce waits in emergency, promising to spend \$109 million on it in 2008/09. That spending includes \$39.5 million for a hospital performance fund to improve performance in the 23 emergency departments with the longest waits and to implement information technology enhancements and system efficiencies. The provincial strategy includes \$38.5 million for more home care, personal support and homemaking and \$22 million for the local health integration networks to create their own solutions to get recovering patients out of hospital faster.⁷ In addition, this investment includes: \$4.5 million for new nurse-led outreach teams to provide more care to patients in long-term care homes to avoid transfers to the emergency department and \$4.5 million for dedicated nurses to care for patients who arrive at emergency departments by ambulance to ease ambulance offload delays.

The Emergency Department Strategy also includes the Process Improvement Program, to improve the flow of patients and care in and around the emergency department.⁸ This strategy is supported by the Emergency Department Reporting System (EDRS), now implemented in 128 emergency departments across Ontario, which tracks key information about where delays are occurring. Ontario's Wait Time Information System is also being updated to capture data on alternate level of care patients who are waiting for transfer to a more appropriate level of care, including where they are waiting and what they are waiting for.



2.2.6 Success study: Saving time and making patients safer by improving flow in North York General's emergency department

Situation: North York General Hospital, a multi-site community teaching hospital, gets approximately 75,000 visits to its emergency department each year. With that many patients, emergency was often very overcrowded and patients weren't flowing through care as they should.

Good flow increases patient safety and satisfaction, reduces waits and improves staff satisfaction. The hospital identified four areas where flow needed to improve: in emergency, between emergency and general internal medicine, in general internal medicine and between the hospital and the community care access centre.

Aims: The hospital had three goals — to reduce waits in emergency, to improve patient satisfaction and to reduce the number of patients who leave emergency before they've been seen (target was 4%).

Measures: Measures included:

- Average length of stay
- Average wait to see a physician

- Average time from the decision to admit a patient to placement into an in-patient hospital bed

Changes: North York general used “Lean Tools,” a quality improvement method that emphasizes reducing waste in the work environment in its many forms to create a productive work environment and a journey through the system for the patient that is as smooth and efficient as possible. Quality improvement teams organized a series of “Kaizen” events where staff put aside several days away from their regular duties to analyze the root causes of problems with quality, map the steps that take place in the delivery of care and think about how to eliminate processes that waste time, space or other resources. Following each Kaizen event, teams would then test out or refine each of the different ideas for improvement they came up with. This work took place from the November 2006 to 2008.

The emergency department was redesigned into three zones — the ambulatory care/green zone, for those least sick (sprains, strains, minor injuries, or sutures), the sub-acute/yellow zone (abdominal pain, non-cardiac chest pain, back pain, etc.) and an acute zone (e.g., for cardiac patients). North York General identified the following problems and proposed solutions:



Unnecessary wait and its cause	What North York did...
<p><i>Patients in the waiting room that could be seen by the doctor weren't, because there was no examining room available.</i> Often, a bed is needed only for a few minutes while the doctor or nurse is examining the patient. In the old system, a patient would be put in the bed while waiting for the doctor and stay there while waiting for lab results.</p>	<p>They created special areas within each zone with chairs where patients could sit while waiting in between doctor or nurse assessments, or while receiving treatments like intravenous therapy. Even patients who were feeling fine but needed to be on a cardiac monitor for a few hours could use chairs. The exam room and bed were used only for the brief examination or if a special procedure needed to be done.</p>
<p><i>There is a "faster way" of doing things but not everyone does it.</i> Often, different people have their own ways of doing things.</p>	<p>They developed standardized procedures and worked with staff to make sure they were all comfortable with them. For example, a standard protocol tells nurses when they can order certain lab tests or X-rays even before a doctor sees the patient, to speed things up.</p>
<p><i>Lab or X-ray results have come back but the doctor isn't aware they're back.</i> The patient waits needlessly.</p>	<p>They set up a visual control system for each zone where all the charts are organized in a rack in a special way so that just by looking at the system, the doctor can tell he or she has results to review.</p>
<p><i>Patients admitted to hospital wait for a porter to be available to move them to the floor.</i></p>	<p>Staff calculated it was cost-effective to have a dedicated porter for emergency department patients during peak hours.</p>
<p><i>It takes too much time to find the right devices (such as walkers) for patients to help them get around safely when they are discharged.</i></p>	<p>They set up a "walker mart" next to the emergency department.</p>
<p><i>People wait longer for certain types of services (such as X-rays) during peak periods.</i></p>	<p>They organized their staffing so more staff were scheduled during peak periods.</p>
<p><i>When doctors change shift and have to pass the care of the patient from one doctor to the next, that adds to the patient's delay and creates extra work.</i></p>	<p>They redesigned scheduling so that the doctor spends the first part of the shift in the acute and subacute zones and last part in the ambulatory zone (minor cases) with 'clean-up' times in between. During the clean-up times, the emergency department doctor does not see new patients but tends to the ones he has seen. This minimizes the impact if there are hand-offs to another doctor. Shifts are staggered to coincide with the 24-hour incoming patient flow patterns.</p>
<p><i>Once a decision in the emergency department to admit a patient has been made, staff waste time calling to different wards to find out if a bed is available.</i></p>	<p>They implemented a bed control system which now gives real-time information on the status of each bed. This eliminates the wasted time of calling around to different wards. The system also anticipates when beds will be available and incoming demand.</p>
<p><i>Staff waste time determining where to place a patient admitted from the emergency department to an inpatient unit.</i></p>	<p>They created a standardized decision priority matrix which suggests the best choice of wards to put different types of patients in and got support from staff for this tool.</p>
<p><i>Beds sit empty waiting to be cleaned.</i></p>	<p>The new bed management system, coupled with pagers for housecleaning staff, help eliminate this problem.</p>

North York General staff note there were many other changes made throughout the patient's journey, including a more efficient discharge process, which all contribute to lower wait times in emergency.

Results: Between November 2006 and September 2008, North York General achieved the following:

- The average length of stay dropped from 8.3 to 6.3 hours for sub-acute patients and from 3.1 to 2.7 hours in ambulatory care
- The average time to see a physician in sub-acute care decreased from an average 3.3 hrs to 2.8 hrs in sub-acute care and from 2.2 hours to 1.7 hours in ambulatory care
- The average time from the decision to admit a patient to placement into an in-patient hospital bed decreased from 11.5 hours to 4.6 hours
- The number of patients left without being seen decreased by 7%

North York General won the 2008 Canadian Healthcare Excellence in Quality Award for its groundbreaking work in reducing emergency department waits.

Next steps: From here, two goals have been set:

- The Physician at Triage Event in Spring 2009 aims to reduce the time to see a physician and total length of stay of emergency visits. The event is a week-long process. The team will create what the work flow will look like for the physician who will work in tandem with the triage nurse.
- North York General hopes to work with community agencies, such as community care access centres, St. Elizabeth Health Care, rehab centres and clinics to cut the number of people coming to emergency and avoid putting people in hospital. The improvement team continues to develop their corporate plan for improving patient satisfaction.

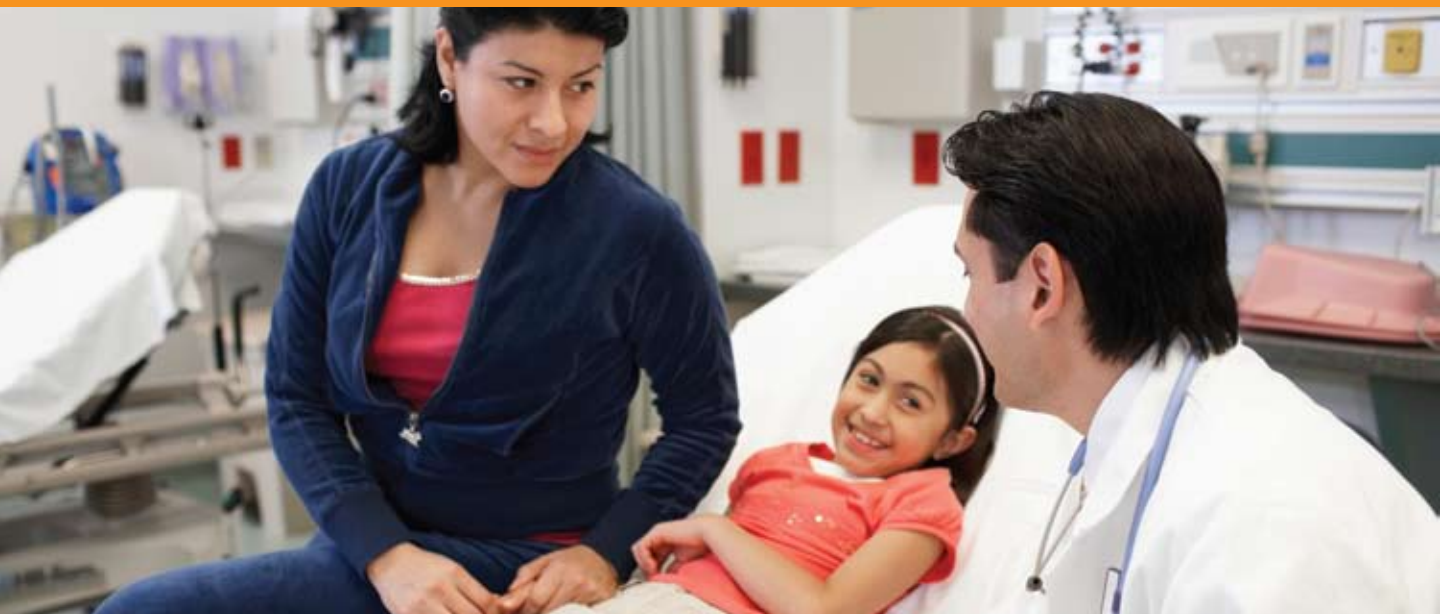
2.2.7 What can you do?

If you're not sure if you need to go to emergency, call your doctor or Telehealth Ontario (1-866-797-0000) for advice.

You can visit www.ontariowaittimes.com for emergency department wait times, or go to www.yourhealthcareoptions.com for options or alternatives to emergency department visits.

Come to the emergency department prepared: have a list of your medical conditions, current medications and allergies with you at all times.

Get a flu shot — flu epidemics can overwhelm emergency departments.



2.3 Access to primary care

2.3.1 Why is this important?

Primary care is basic, life-long care and includes preventive services (such as immunizations and advice on healthy living) as well as identifying and treating health problems, whether they're new symptoms or long-term conditions such as diabetes or heart disease. Most people in Ontario get their primary care from a family physician.

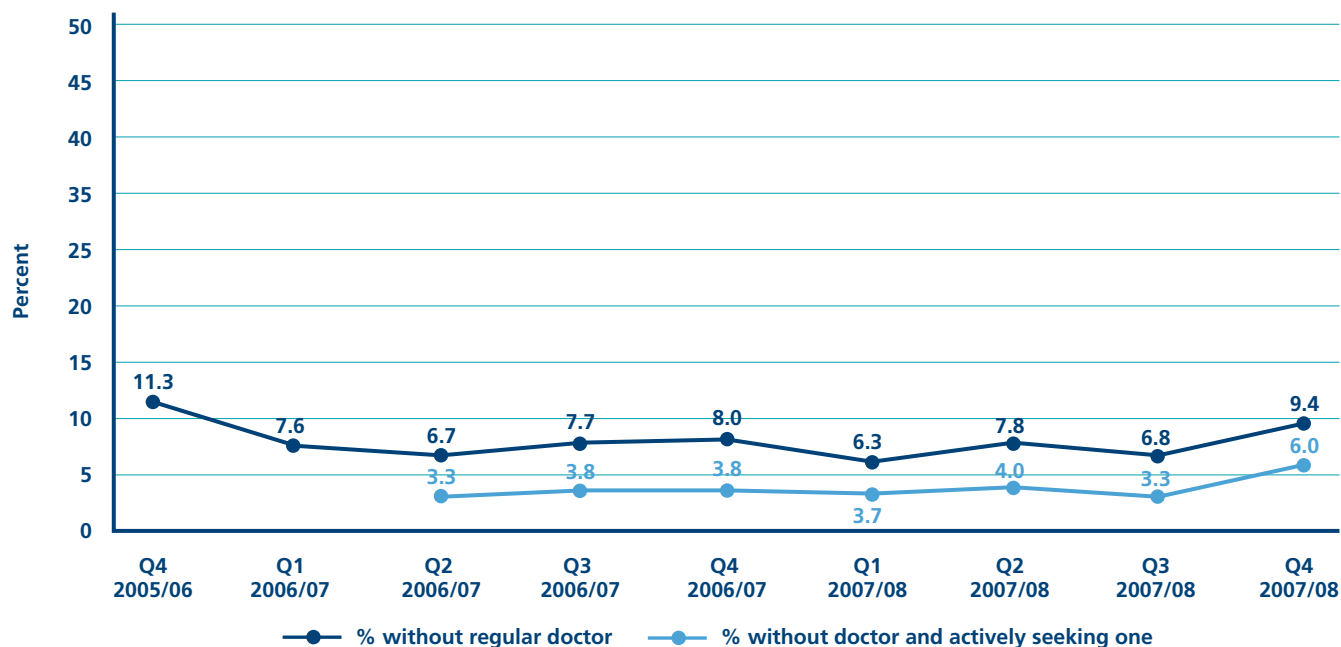
Primary care professionals are “gatekeepers,” making referrals and co-ordinating any specialty care you might need. If you don't have well-organized primary care, such as a regular family doctor, or you can't see your family doctor when you need to, you may have to choose between seeing a doctor who doesn't know your health history, going to emergency, or waiting and getting sicker. Any of those can be bad for your health and waste your time and may not use healthcare dollars wisely.



2.3.2 What did we find?

Ontario still has major challenges ensuring good access to primary care. There has been no improvement in the past two years.

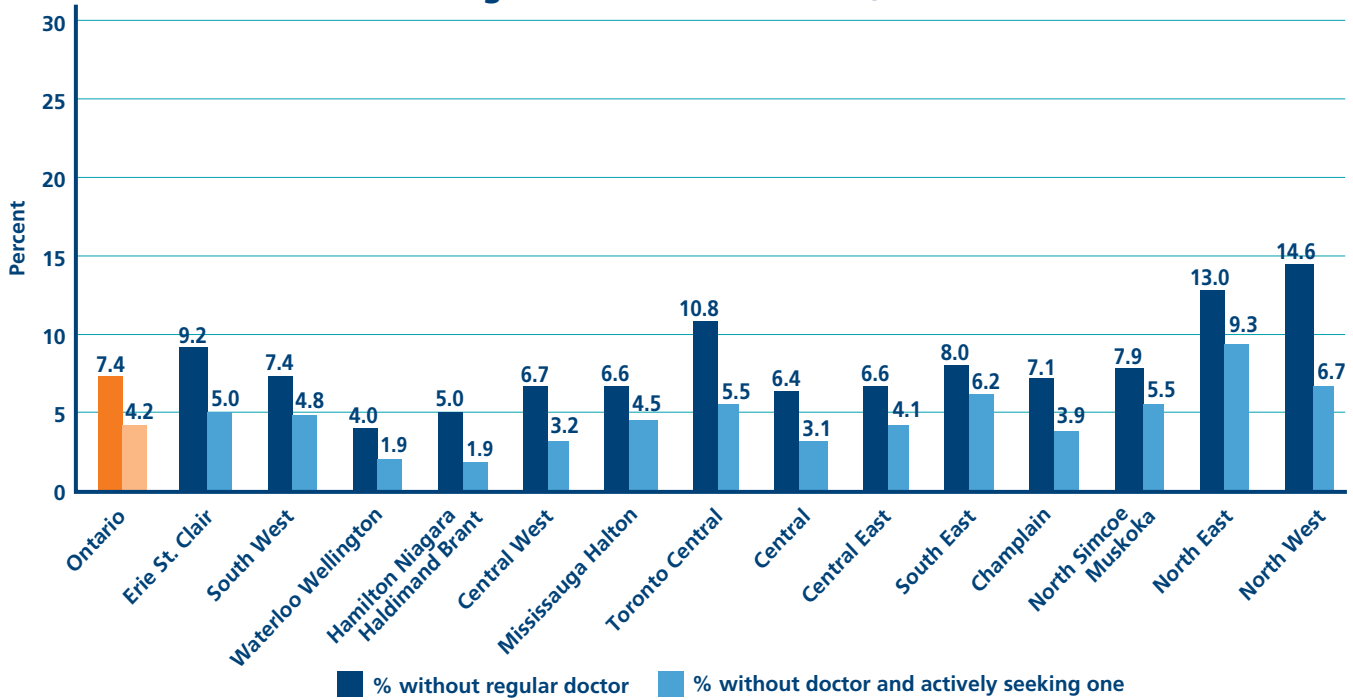
Percent of adults (aged 18+) without a regular doctor and of those the percent who are actively seeking a doctor in Ontario, 2005/2006 to 2007/2008 fiscal quarters



Source: Institute for Clinical Evaluative Sciences - Primary Care Access Survey (phone survey of Ontarians 18 years and older)

The proportion of Ontario adults who don't have a regular family doctor has stayed the same over the past two years. In 2007/2008, 7.4% of adults, or about 800,000 adults in Ontario don't have a family physician and just over half of them are actively seeking one without success. There has been no improvement in these figures over the past two years.

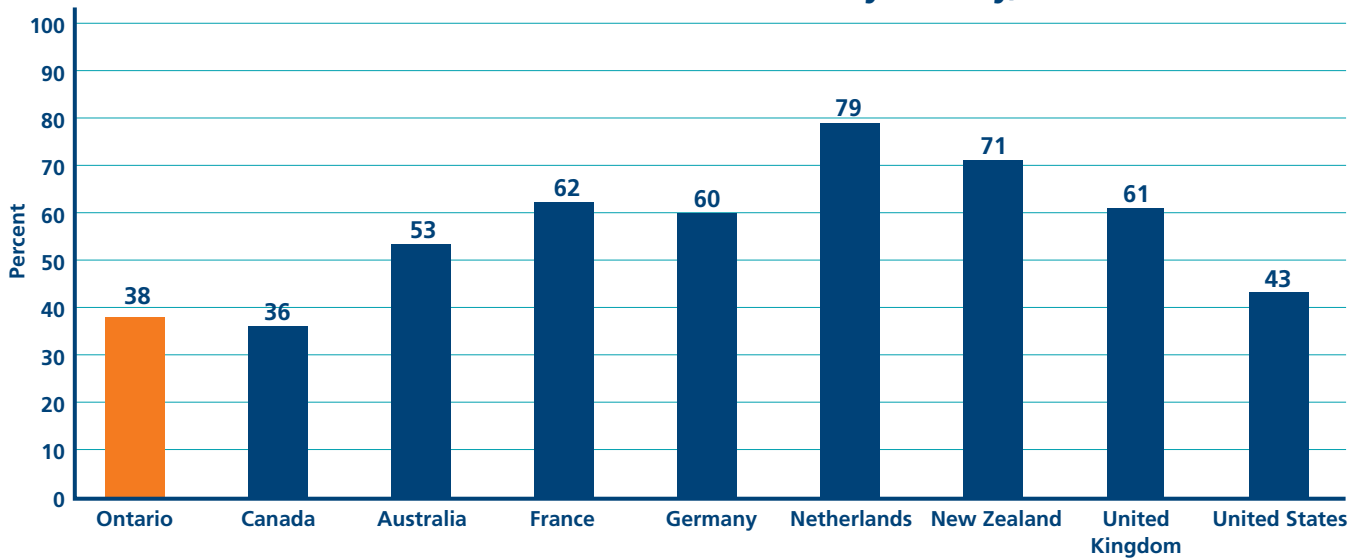
Percent of adults (aged 18+) without a regular medical doctor and of those the percent who are actively seeking a doctor across Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences - Primary Care Access Survey (phone survey of Ontarians 18 years and older)

How difficult it is to find a family doctor varies across the province; it's hardest for residents of northeastern and northwestern Ontario.

Percent of sicker adults who were able to see their doctor on the same or next day the last time they were sick or needed medical attention in Ontario and by country, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

People in Ontario and across Canada are much less likely than those in other countries to see their doctor the same or next day when they are sick and need care. People in the Netherlands, the best-performing country, are twice as likely as Ontarians to see a doctor promptly when they're sick.

2.3.3 Why don't all Ontarians have family doctors?

- **Demand.** Ontario's population is growing and the average age of Ontarians is increasing — and with age come health problems, which means doctors are busier. There are also many situations where physicians' time isn't well-used — for example, when they see a patient in the office for something that could be handled over the phone, or would not have arisen if patients were better educated about their conditions.
- **Supply.** One possibility is there are not enough family physicians in Ontario and the problem is worse in some areas than others. The number of family physicians per capita has increased, but only slightly since 2002 (see section 8.3.6) and the increase may still not be enough to meet population needs.
- **Not enough primary care teams.** Canada lags far behind other countries in creating teams where family doctors work alongside nurses, nurse practitioners and others.⁹ These teams share care by assigning particular problems to whomever is best suited to handle a patient's issue. Team care decreases demand on family physicians and lets them take on more cases.
- **Changing physician lifestyles.** Younger doctors want different lives, with more time for family than older physicians.¹⁰ There is also a higher proportion of female physicians in the workforce, many of whom try to work fewer hours because they are also principal caregivers for their families.¹¹
- **Some Ontarians may think they don't need a family doctor.** People who are young and otherwise healthy may not look for a physician. The potential downside to that is they may not get preventive care like flu shots or healthy lifestyle counselling.

Why do Ontarians have to wait to see their doctors when they have one?

- **Practices are too big.** Some doctors have many more patients than they can manage, especially at peak times, like flu season.
- **Poor management.** Many physicians have a reasonable number of patients, but are not managing patient flow and demand the best way possible. There are more efficient ways to run practices that ensure people who need to see doctors do so promptly.

2.3.4 Who is better at access?

Physicians can drastically cut waits for their patients by switching to a scheduling system known as “advanced access” or “improved office efficiency.” Like most quality improvement projects, it starts with taking baseline measurements. The office determines when demand is highest and slots appointments to match. Physicians who are really behind can work longer hours or bring in extra staff to clear backlogs. Research shows fewer people miss appointments if they aren't booked far in advance and that also creates more room in the schedule.

In Britain, the National Primary Care Collaborative used advance access to take on delays in primary care. More than 5,000 practices, caring for 34 million patients, were involved. They adjusted their hours and scheduling and gave more advice over the phone and by e-mail. In those practices, waits to see a doctor improved by 70%, dropping from five days to less than one day and waits to see a nurse went down 60%.¹²

2.3.5 What are we doing in Ontario?

The Quality Improvement & Innovation Partnership (QIIP) is helping family health teams improve access, using improved office efficiency. About 10% of Ontario's primary care practices are participating in the partnership.

The Healthcare Connect program, announced in fall 2008 by the province, will refer patients without a family doctor to a family healthcare provider in their region.

The Ministry of Health and Long-Term Care has invited proposals to open nurse-practitioner clinics in Sault Ste. Marie, Erie-St. Clair (near Windsor) and the Northwest Local Health Integration Network. Nurse practitioners can provide many primary care services, from vaccinations to helping people with chronic diseases (such as heart failure) stay healthy. Family physicians who work with nurse practitioners can care for more patients than when they work alone.

The ministry worked with Ontario medical schools to create 151 new family medicine training positions between 2004/05 and 2007/08, an expansion of 75%. Further increases in family medicine teaching capacity are planned. The ministry is also promoting new models of practice to enhance work-life balance and make family medicine a more attractive career choice.

2.3.6 Success study: Cutting the wait for care by 63%

Situation: The New Vision Family Health Team in Kitchener is a busy primary care practice that includes physicians, nurses, nurse practitioners, pharmacists, dietitians, social workers and educators. The lead physician, Dr. Mel Cescon has 2,600 patients, a commitment to delivering babies and a professorship in family medicine at McMaster University. But Dr. Cescon's patients had a hard time getting a timely appointment — the average wait was 13.5 days, which created a bottleneck in the flow of patients through the clinic and affected access to care.

Aim: Reduce wait times to within seven days.

Measures: New Vision measured the wait until the third next available appointment. Third appointments are the standard way of counting office wait times; they're considered more reliable than measuring the next available appointment, because a sudden cancellation can make long waits appear suddenly short, though they quickly lengthen once the cancellation is filled.

Changes: The team at New Vision introduced several efficiencies, including shifting some of the work from Dr. Cescon to other members of the team, booking all prenatal visits on one day each week and dedicating a nurse to the prenatal clinic, to take advantage of the nurse's skills so the doctor could see more women in less time.

New Vision also temporarily added two one-hour clinics a week to Dr. Cescon's schedule to clear the backlog of

patients, and they conduct weekly reviews of his schedule to identify unnecessary appointments, such as patients whose needs could be met by someone else on the team. Other efficiencies include making it standard practice to get regular bloodwork for patients over age 50 done before they see the doctor and make sure all recent ultrasounds and other test results are in a patient's chart before their visit. New Vision use the Plan-Do-Study-Act quality improvement model when they're making changes, testing each idea on a small sample and adapting it if necessary to work best in their office.

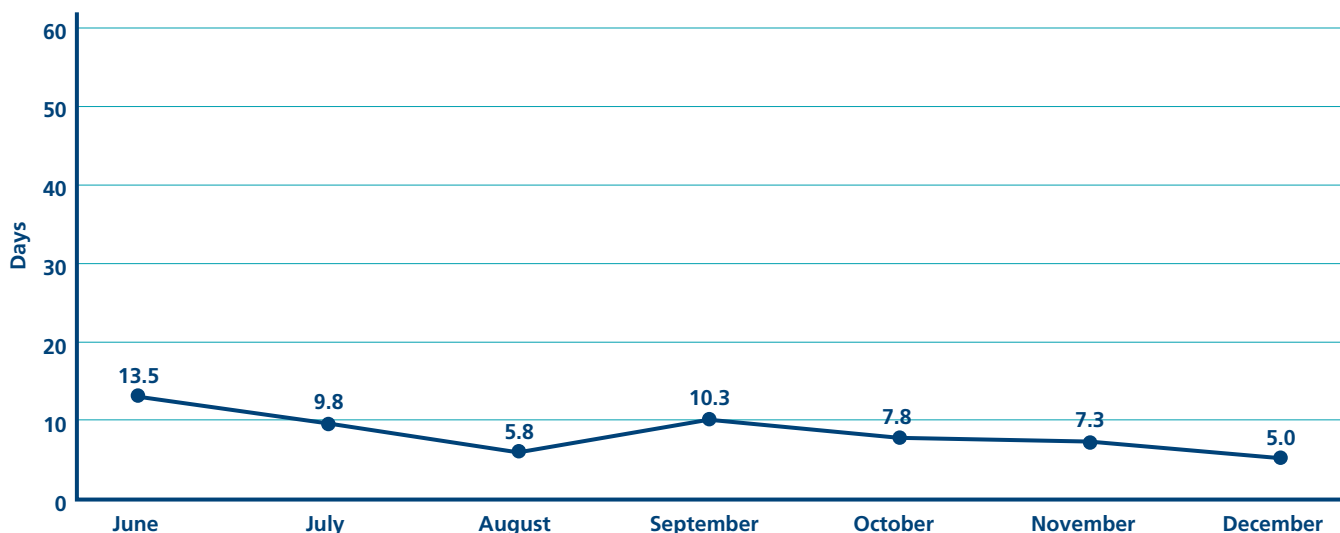
Results: Within two months, waits for appointments dropped by 63% to 5.8 days, which was better than their target.

Next steps: New Vision plans to continue efforts to reduce the backlog and improve the flow of patients. They'll also look for more ways to improve access to care, testing them with Plan-Do-Study-Act cycles.

2.3.7 What can Ontario residents do?

You can register with the Ministry's Health Care Connect Program by calling 1-800-445-1822 toll-free. Soon, Ontarians will have the option to register online through the ministry's "Your Healthcare Options" website (www.ontario.ca/healthcareoptions). This website will also contain information about local healthcare resources, such as family physicians, urgent care centres and walk-in clinics.

Number of days until third next available appointment at New Vision Family Health Team, 2008



Source: New Vision Family Health Team, Ontario, 2008

2.4 Waits for specialized procedures, tests and surgery

2.4.1 Why is this important?

Waits for specialized surgery and high-tech imaging (CT and MRI) have made headlines for a decade. Long waits for hip or knee replacements mean people suffer longer from severe pain. Long waits for cataract surgery mean people suffer longer from poor vision and experience more falls.¹³ Long waits for cancer surgery, cardiac bypass, angioplasty, CT or MRI could result in a patient’s medical

condition getting worse so he or she is at risk of complications or even death. There are about 200,000 operations done per year in Ontario¹⁴ and excessive waits lead to needless anxiety for the patient.¹⁵

In 2003, the provinces and the federal government responded to concerns over waits by agreeing to reduce them. In 2004, Ontario implemented its Wait Times Strategy, which increased the number of surgeries performed, set targets for wait times (see Table below), created an information system to track waits and report to the public and fostered innovative models of care aimed at improving efficiency and quality.

Wait time targets for Ontario

Procedures	Priority 1 (immediate urgency)	Priority 2 (high urgency)	Priority 3 (medium urgency)	Priority 4 (low urgency)
Cataract surgery	Immediate	6 weeks	12 weeks	26 weeks
Hip and knee replacement	Immediate	6 weeks	12 weeks	26 weeks
Cancer surgery	Immediate	2 weeks	4 weeks	12 weeks
MRI/CT scan	Immediate	48 hours	2 to 10 days	4 weeks
Cardiac surgery (Angioplasty, angiography and bypass)	Wait time targets are specific to each patient.			

Source: Ministry of Health and Long-Term Care, Ontario Wait Times Strategy and Cardiac Care Network

Note: The wait for surgery is defined as starting the day the surgeon decides to operate and the patient agrees, to the day the surgery is performed. Target wait times vary depending on the priority score, indicating the seriousness of the conditions, assigned by the main physician.

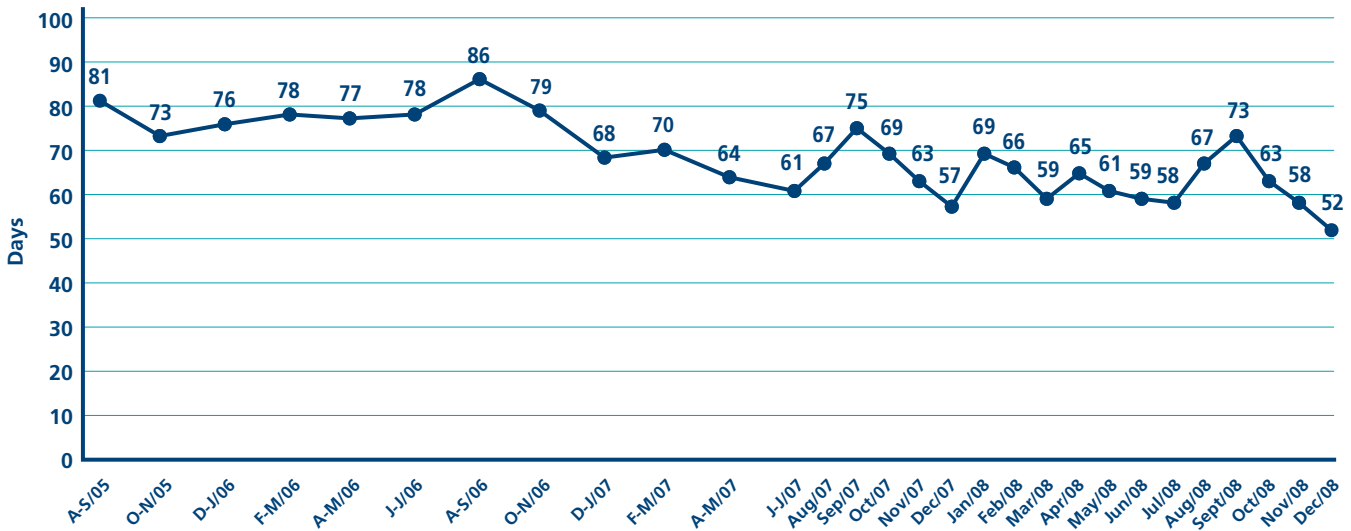


2.4.2 What did we find?

Waits have decreased significantly for many types of surgery and high-tech imaging, but in some cases we're still not meeting targets for acceptable waits. Our greatest concern is with failure to shorten waits for high-priority cancer cases and MRI scans.

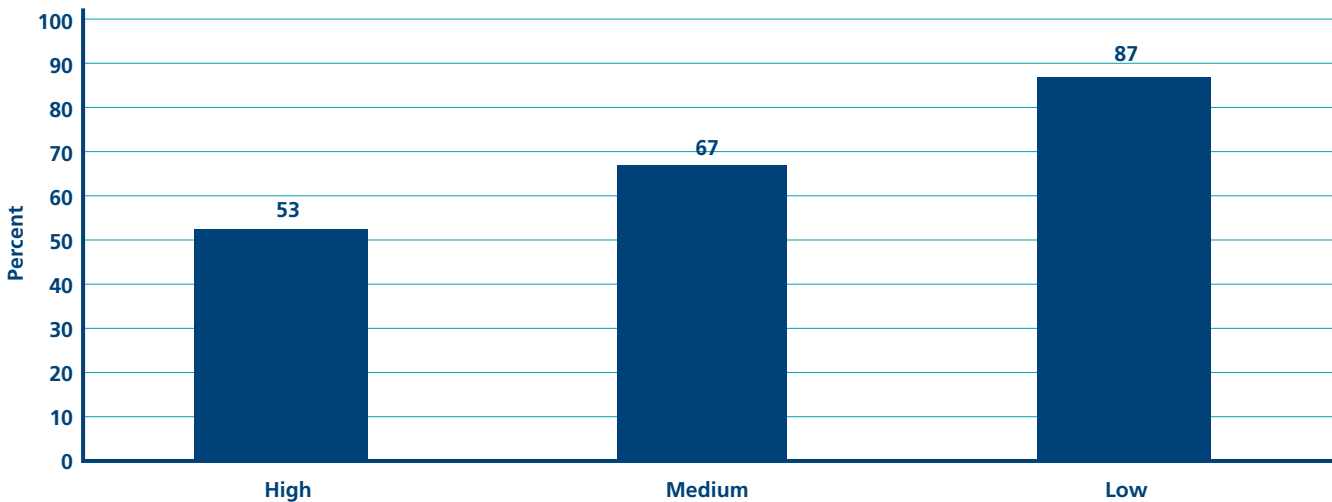
Waits for cancer surgery decreased from 2005 to the end of 2008, but those cancer patients who have more urgent need for surgery are still waiting too long. High-priority cases are the biggest problem: only about half of cancer patients who need surgery urgently (within two weeks) are getting it done on time. As of December 2008, wait times at the 90th percentile for high-priority cases were 29 days — twice as long as the target (14 days). For medium

90th percentile wait time for cancer surgeries in Ontario, August/September 2005 to December 2008



Source: Wait Times Information System, Ministry of Health and Long-Term Care

Average monthly proportion of patients getting cancer surgery within target timeframes by priority in Ontario, 2008



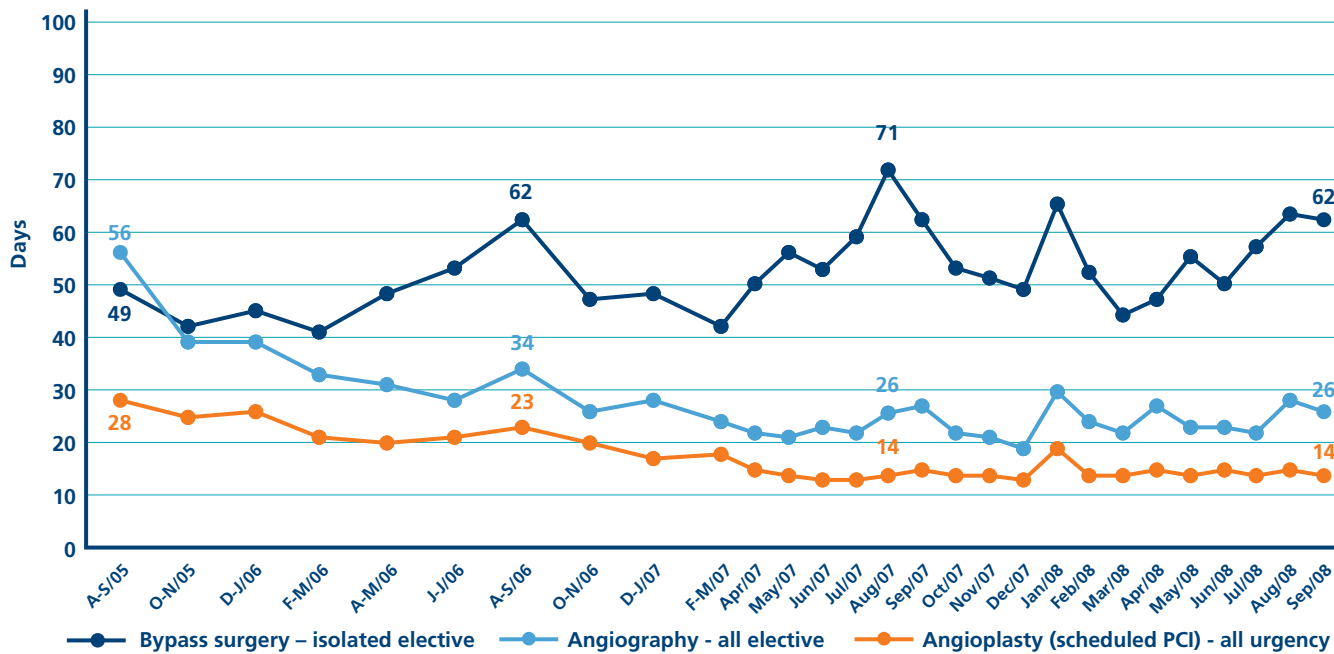
Source: Wait Times Information System, Access to Care Program, Cancer Care Ontario



priority, the 90th percentile wait was 44 days — far higher than the target of 28 days. While some waiting is reasonable and even necessary to plan appropriate treatment,

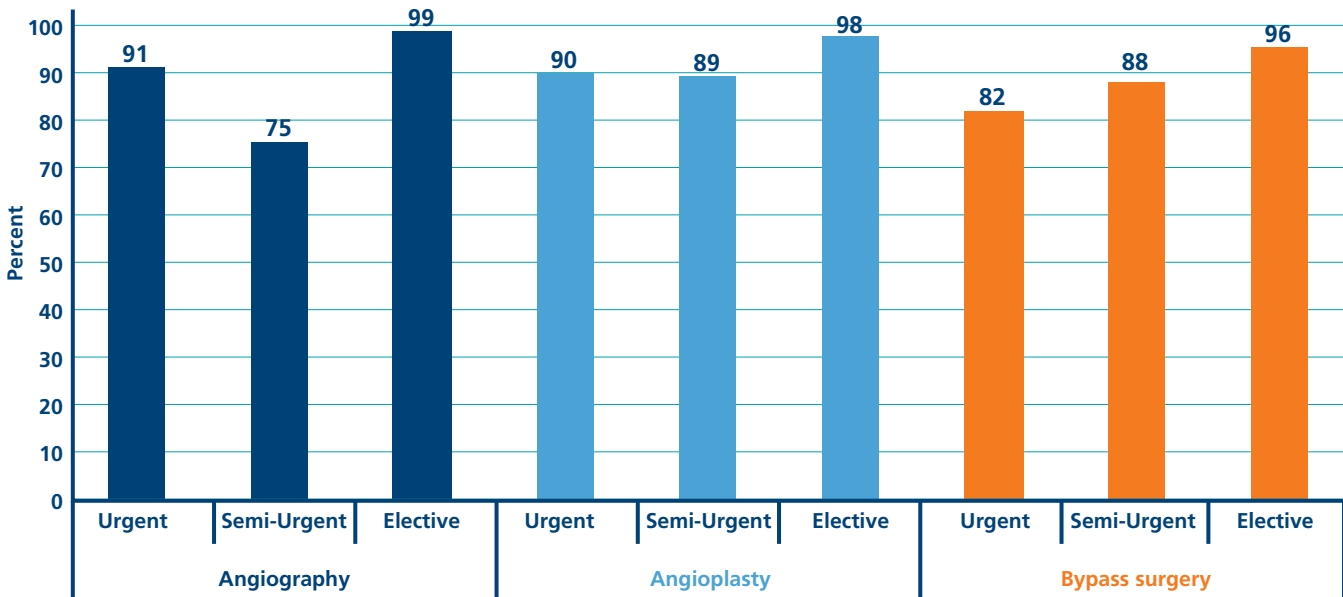
people should get care within the recommended time for the best results and to minimize their anxiety. We need to reduce waits for cancer surgery further.

90th percentile wait time for cardiac surgeries in Ontario, August/September 2005 to September 2008



Source: Cardiac Care Network

Average monthly proportion of patients getting angiography, angioplasty and bypass surgery within RMWT target timeframes by priority in Ontario, January to October 2008

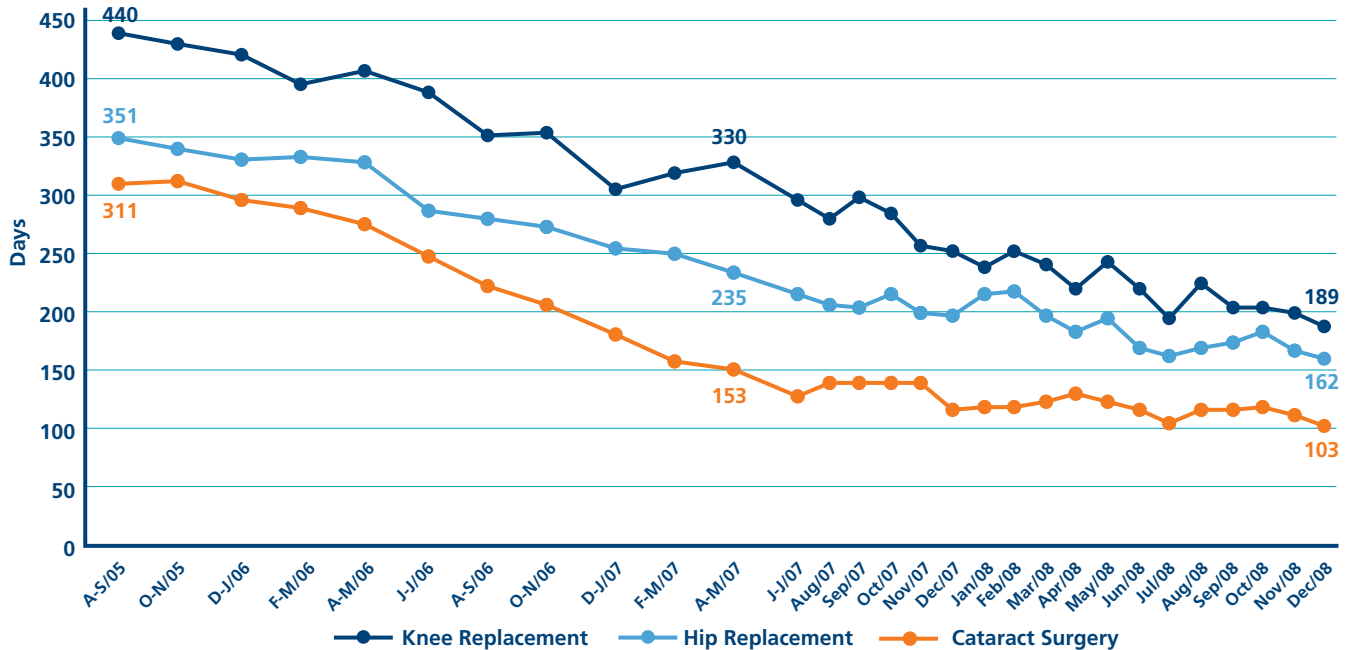


Source: Cardiac Care Network
 Note: RMWT – Recommended Maximum Waiting Time

Results of the Wait Times Strategy are better in cardiac care than in some other areas. Waits for angiography and angioplasty have decreased steadily since 2005 and have stayed about the same for coronary bypass surgery. Overall, the large majority of patients for cardiac procedures are treated

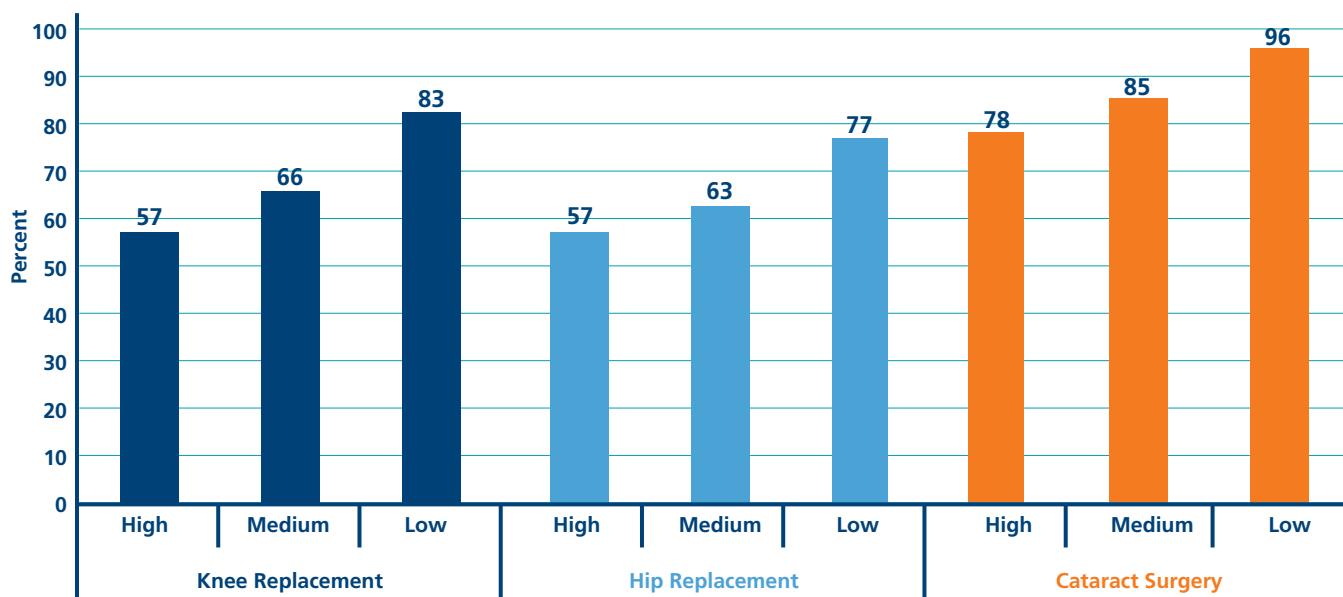
within the target time. While the data suggest waits for cardiac bypass surgery could be improved for urgent patients, it often takes time to stabilize them prior to surgery. In the majority of urgent cases, patients are monitored closely in hospital while waiting for their procedure.

90th percentile wait time for hip replacement, knee replacement and cataract surgeries in Ontario, August/September 2005 to December 2008



Source: Wait Times Information System, Ministry of Health and Long-Term Care

Average monthly proportion of patients getting hip replacement, knee replacement or cataract surgery within target timeframes by priority in Ontario, 2008



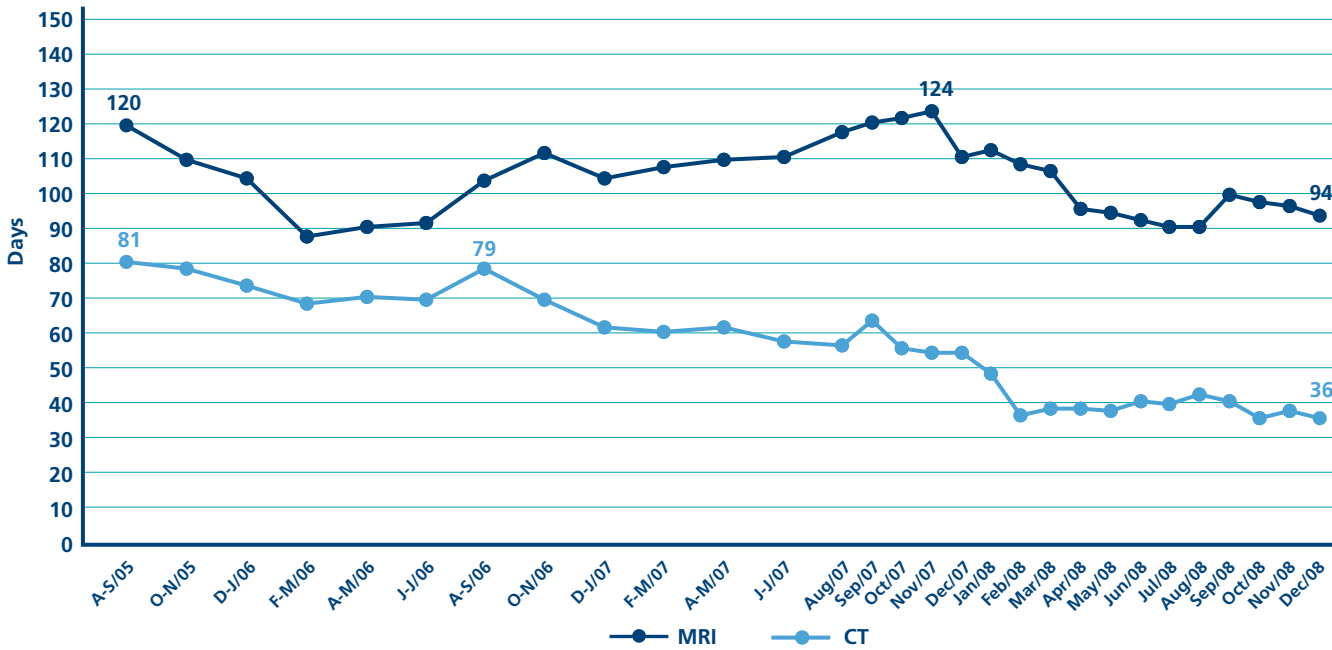
Source: Wait Times Information System, Ministry of Health and Long-Term Care

Waits for hip and knee replacements have been decreasing steadily since 2005. However, we need to shorten waits further to meet our targets, especially for high-priority cases. Waits for cataract surgery decreased from 2005 to

2007 and have remained relatively stable since. Cataract surgery is the one area where the large majority of patients get their surgery within the target time.

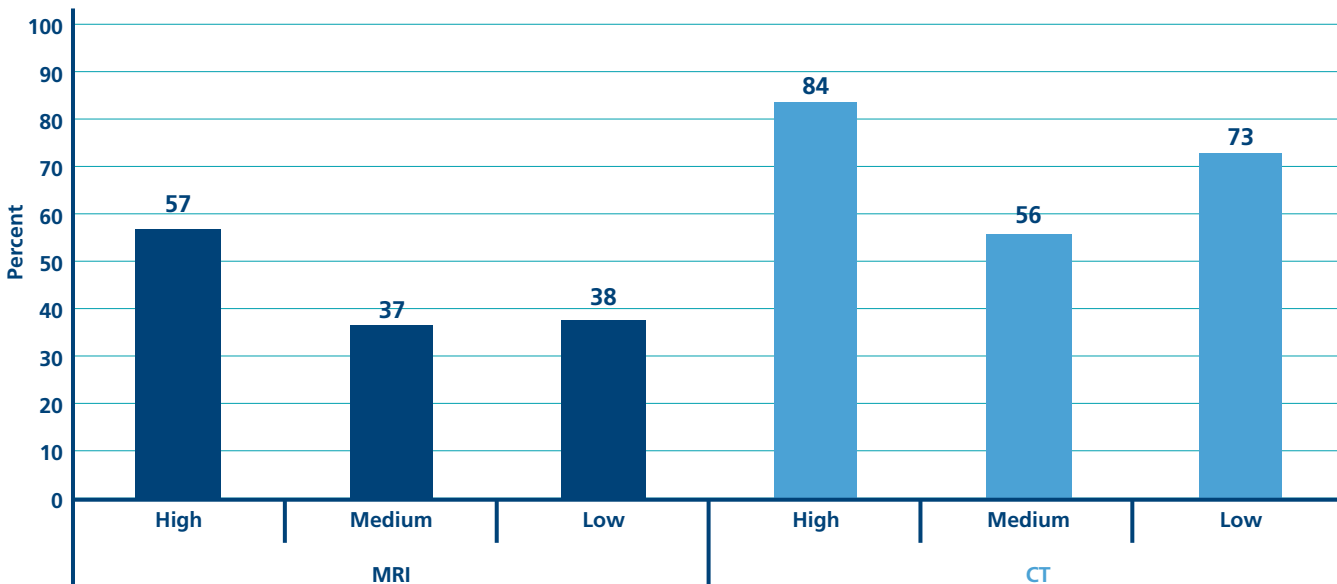


90th percentile wait times for MRI or CT scans in Ontario, August/September 2005 to December 2008



Source: Wait Times Information System, Ministry of Health and Long-Term Care

Average monthly proportion of patients getting MRI or CT scans within target timeframes by priority in Ontario, 2008



Source: Wait Times Information System, Ministry of Health and Long-Term Care

Wait times for CT scans decreased steadily from 2005 to 2007, but remained constant in 2008. Wait times for MRI have gone up and down in the past four years but overall,

have not seen any major improvement since 2005. Less than half of MRI patients and about two-thirds of CT patients get their scans within the recommended time.

2.4.3 Why are waits still too long?

- **Inappropriate care.** It's possible some of the services we're providing are not actually needed, because the patient's condition is not severe enough, or another treatment or test would do. Treating people unnecessarily delays care for people who need it. There are guidelines for deciding when cataract removal¹⁶ or a hip or knee replacement¹⁷ is necessary, but not for CT and MRI.
- **Poor co-ordination.** Delays may arise because of poor co-ordination of all the pieces that need to be in place to support care. The lack of co-ordination in scheduling different kinds of tests or handing off a patient from one care provider to another can also contribute to long waits. This is compounded by the lack of information technology to co-ordinate planning. Co-ordinating surgery requires scheduling operating room times with the appropriate staff including surgeons, nurses, technicians and anesthesiologists and ensuring intensive care and surgery ward beds are available.
- **Not enough services.** If the rate of requests for a procedure is higher than the number that can be done, we would expect waits to increase over time. But we shouldn't conclude we're not doing enough until we've first tried to eliminate inappropriate services.
- **There's a backlog.** It's possible we're doing the right number of services now, but a backlog has built up. Imagine it this way: there's a full bathtub with water flowing in at the same rate it's draining, leaving a constant pool of water waiting a long time to drain. To fix it, we'd have to increase the amount of water we drained until the bathtub was empty and then switch back to the previous rate of drainage. In other words, if there's a backlog, we have to temporarily increase the number of procedures being done to catch up and then we can eliminate waits altogether.

2.4.4 What are we doing in Ontario?

Part of the Wait Times Strategy was creating the Wait Times Information System, a database that both reports waits to the public (www.ontariowaittimes.com) and is used as a planning and quality improvement tool by the ministry, local health integration networks and individual institutions as they try to achieve their performance targets, which are set together by the ministry and the networks.

Cancer Care Ontario's Access to Care Informatics Division provides reporting and analytical support to the system and sends monthly reports on performance to the ministry and the LHINs. It also manages iPort Access, the tool that lets the ministry, integration networks and hospitals view their waiting-time data and analyze it according to their needs.

The provincial government announced targets for three more types of surgery in October and promised another \$11 million to pay for 8,240 additional general surgery operations. Waits are already meeting targets for general surgery, which includes gall bladder removal, hernia repair, anorectal and some intestinal surgery.¹⁸ The extra money is to keep it that way. Targets were also set for orthopaedic and ophthalmic surgery. We haven't heard of efforts to assess the appropriateness of operations or whether blitzes to clear up backlogs are being considered.

The 2008 budget announced an investment of \$17 million over the next three years to fund the operation of an additional five MRI machines, which should allow about 21,900 more scans per year.

Cancer Care Ontario is actively monitoring and managing wait times for all types of cancer surgeries. They have established pre-determined action plans and escalation clauses into their agreements with hospitals that provide cancer surgeries to ensure immediate intervention when surgery waits get too long.

2.4.5 Success study: North York General Hospital — Cancer waits

Situation: North York General Hospital is a community hospital that handles a variety of different surgeries for common cancers like breast, colon, lung and prostate. It has been involved in the ministry's Wait Times Strategy since 2006.

Aims: North York General aimed to decrease wait times in all priority levels for all cancer surgeries and meet or exceed provincial targets (as described above). It also aimed to meet a target set by the Central Local Health Integration Network that 90% of patients should have their surgery within 51 days.

Measures: Cancer surgery wait times by priority level, as described above.

Changes: The North York General made the following adjustments:

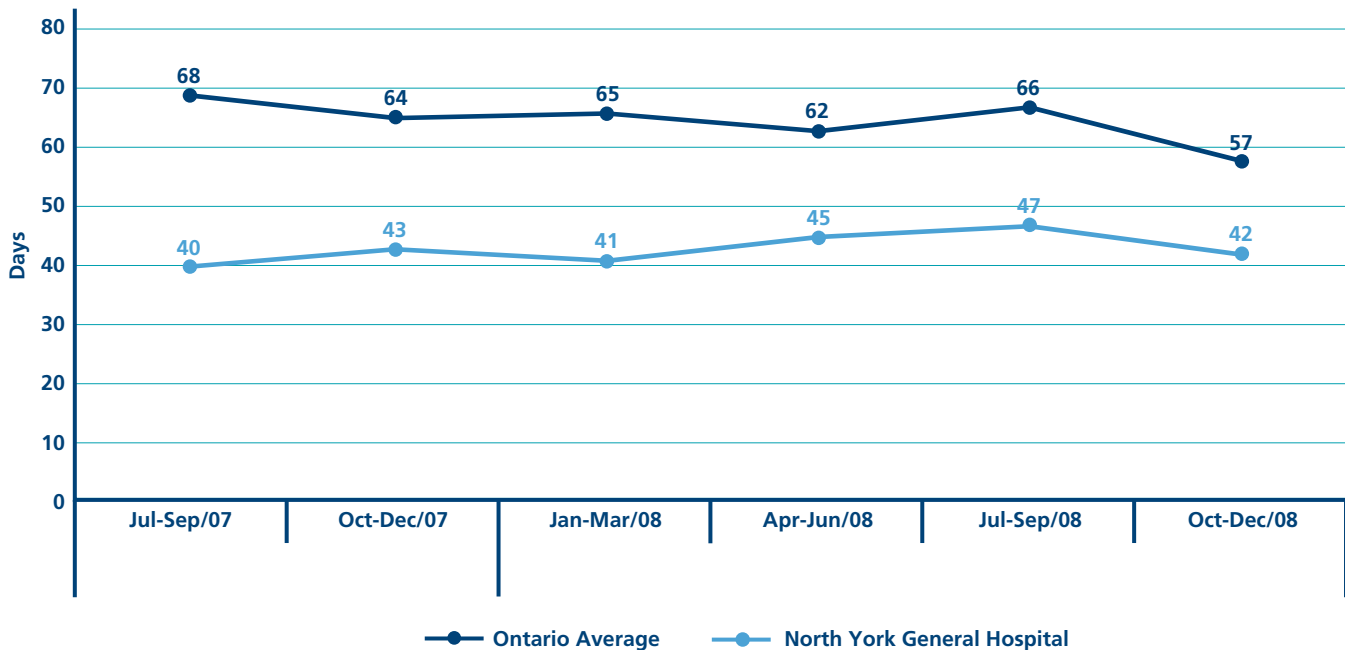
- The hospital added a wait time strategy co-ordinator who tracks all cancer surgery cases by priority level, monitors booking dates and whether targets have been missed, and helps develop action plans to support physicians and programs to meet identified targets.
- Operating room scheduling is closely monitored to make sure all wait-time surgery cases are done within benchmark targets. There are designated slots for cancer surgeries.
- Active multidisciplinary cancer conferences allow for case review to improve care and ensure the right care is provided at the right time.
- The hospital vigorously educates all staff, including

physicians about the Wait Times Information System and expectations for meeting targets.

- Leaders of the surgery program and cancer care program work closely together to track wait times.
- A comprehensive bed management system was set up that tracks which beds are available at any moment and standardized protocols have been established to put the right patient into the right bed (see also case study in section 2.2.6.) This has prevented situations where a surgery case is cancelled at the last minute because there are no beds available.

Results: In 2008, 97% of priority 2, 99.5% of priority 3 and 100% of priority 4 cases were completed within the target time frame. North York General’s wait times have remained stable over the past year-and-a-half and are well below the average for Ontario hospitals.

90th percentile wait time for all cancer surgeries in Ontario with a comparison from North York General Hospital, July 2007 to December 2008



Source: Wait Times Information System, Ministry of Health and Long-Term Care

2.4.6 What can you do?

If you’ve been told you need an operation, discuss options with your family doctor before you’re referred to a surgeon. There may be physicians or hospitals with shorter wait times. This information is available at www.ontariowaittimes.com.



2.5 Access to specialists

2.5.1 Why is this important?

Family doctors can't provide all the services patients need. For more advanced care they must refer people to specialists. This happens frequently — for every 10 people with a regular family doctor, there are about six specialist referrals per year.¹⁹

A wait to see a specialist can be stressful for the patient, especially if the appointment is to check out a worrisome possibility such as cancer. Delays of specific treatments, such as surgery, usually mean living longer with pain or physical limitations and with the fear the problem may worsen during the wait.²⁰ Delays may be even longer if a patient has no family doctor and goes to emergency or a walk-in clinic for care.

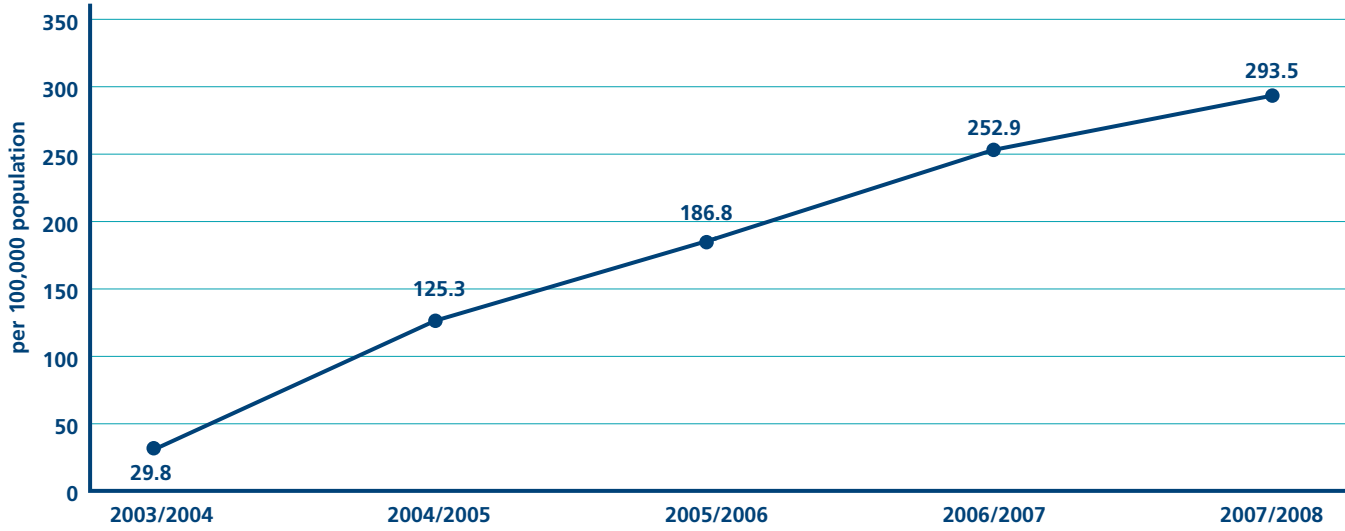
Many Ontarians have their access to specialists limited by distance. People who live in remote or rural areas often face long trips to see a specialist and the cost, time and difficulty of travelling can prevent them from getting all the care they need.

In this section we examine both ways to see specialists and use of telemedicine, which connects specialists with patients in distant areas by video conference.

2.5.2 What did we find?

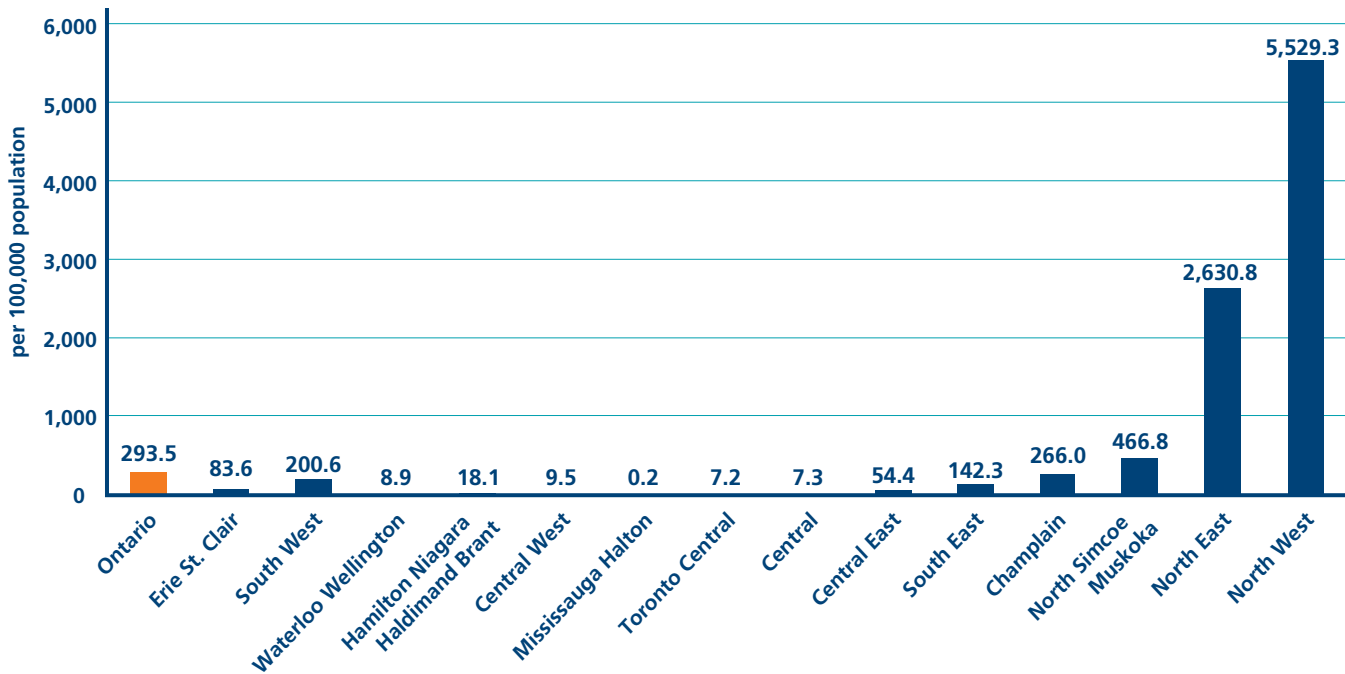
Use of telemedicine is growing rapidly, which greatly reduces travel and inconvenience for people who need to see a specialist. However, Canadians and Ontarians overall wait much longer than people in other countries to see a specialist.

Rate of telemedicine use for clinical patient consultations per 100,000 population in Ontario, 2003/2004 to 2007/2008



Source: Ontario Telemedicine Network and the Institute for Clinical Evaluative Sciences (for Ontario population files)

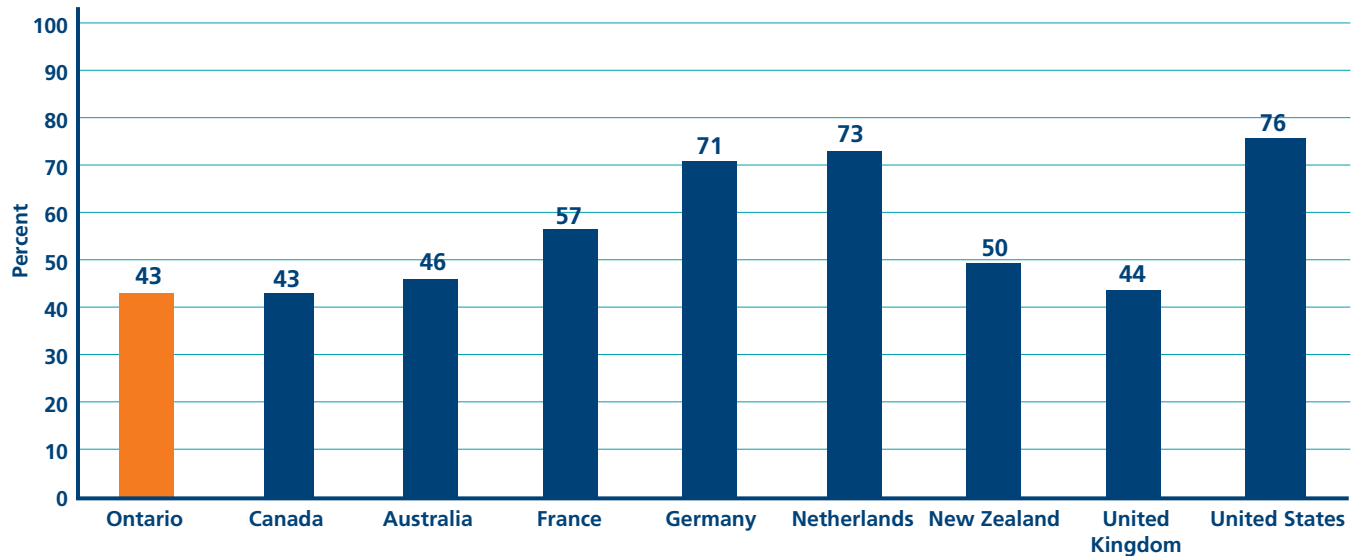
Rate of telemedicine use for clinical patient consultations per 100,000 population across Ontario, 2007/08



Source: Ontario Telemedicine Network and the Institute for Clinical Evaluative Sciences (for Ontario population files)

Use of telemedicine continues to expand rapidly in Ontario. Telemedicine use is highest in Northern Ontario, where the need for this service is greatest.

Percent of sicker adults who saw a specialist within four weeks of being referred, in Ontario and by country, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

The majority of sicker adults in Ontario say they wait more than a month to see a specialist after being referred. In contrast, only one in four people in Germany, the Netherlands and the US have to wait that long.

2.5.3 Why are waits for specialists so long?

The possible reasons people wait to see a specialist are the same as they are for specialized procedures and surgery. There may be inappropriate referrals of people who don't really need a specialist, or not enough specialists. It's possible some care routinely provided by specialists could be done by other care providers. Specialists could also try new strategies to improve how they book appointments and manage queues.

2.5.4 Who is doing this better?

A large group of surgeons in the United States Veterans Administration health system used "improved office efficiency" or advanced access (see section 2.3.4) to cut patient waits from 21 days to 10.²¹ Specialists in Jonkoping County in Sweden used the same techniques to cut waits from 80 days to seven in eight months and have kept these waits low for seven straight years.²²

2.5.5 What are we doing in Ontario?

The Ontario government is capitalizing on the experience with telemedicine in the north by expanding its reach throughout the province. Growth in telemedicine has been driven by the Ontario Telemedicine Network.

There are some advanced access initiatives in primary care, but we're not aware of any provincial initiatives to get specialists to do the same thing.



2.6 Access to long-term care

2.6.1 Why is this important?

People who are too frail to look after themselves, even with home care, often move into long-term care. There are 620 long-term care homes in Ontario, a mix of private, not-for-profit, charitable and municipal facilities, which are home to nearly 76,000 residents. Unlike retirement residences, long-term care homes offer 24-hour nursing care and supervision in secure settings. A long wait in the community for a place in a long-term care home may put a burden on families or friends and may mean a person is not getting necessary care. People who have to wait in hospital for a long-term care bed are also not getting the right care and they're using an acute-care bed, which can cause overcrowding in emergency.

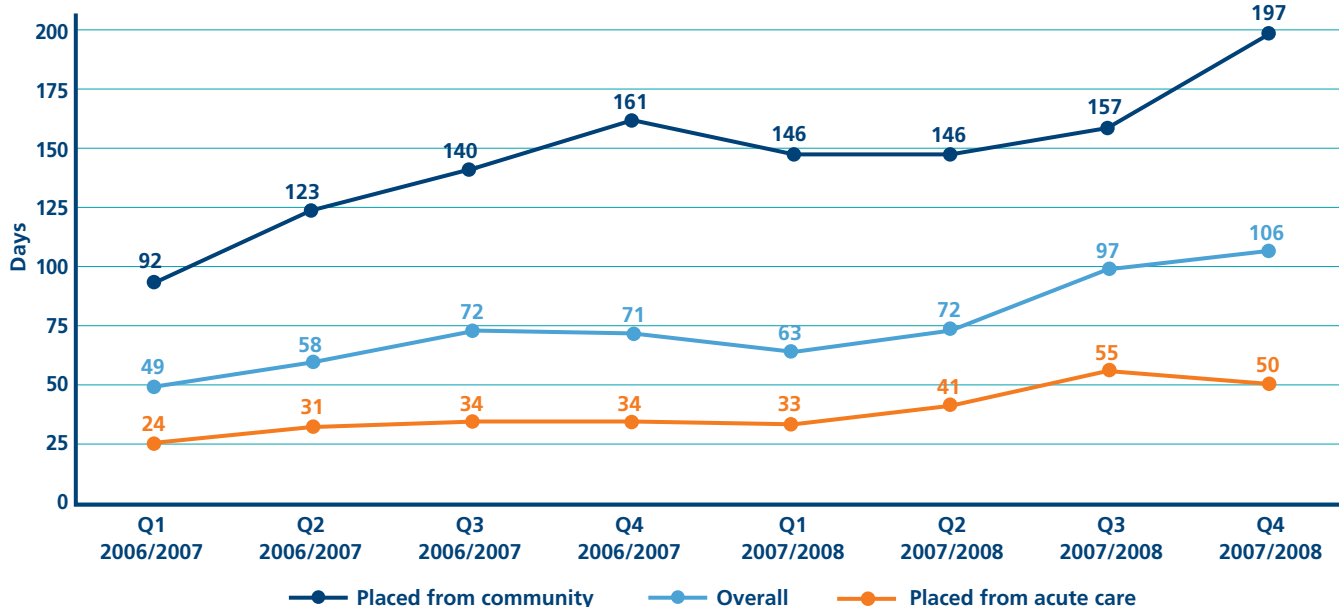
Because long-term care is not simply another health treatment, but actually home, choosing where to go is important. Ontarians who apply for long-term care are allowed to name three choices. If they're waiting in hospital, they have to go to the first of the three that has a place. There are limited opportunities to switch later, especially if it allows reuniting spouses living in different homes, or if a resident wants to move to a home focused on his religion, ethnicity or language. However, switching is not guaranteed and even if it happens, it can be inconvenient and disrupts the continuity of care. The best option is to get people into the home of their choice first.

2.6.2 What did we find?

Waits to get into long-term care have increased dramatically in the past two years.



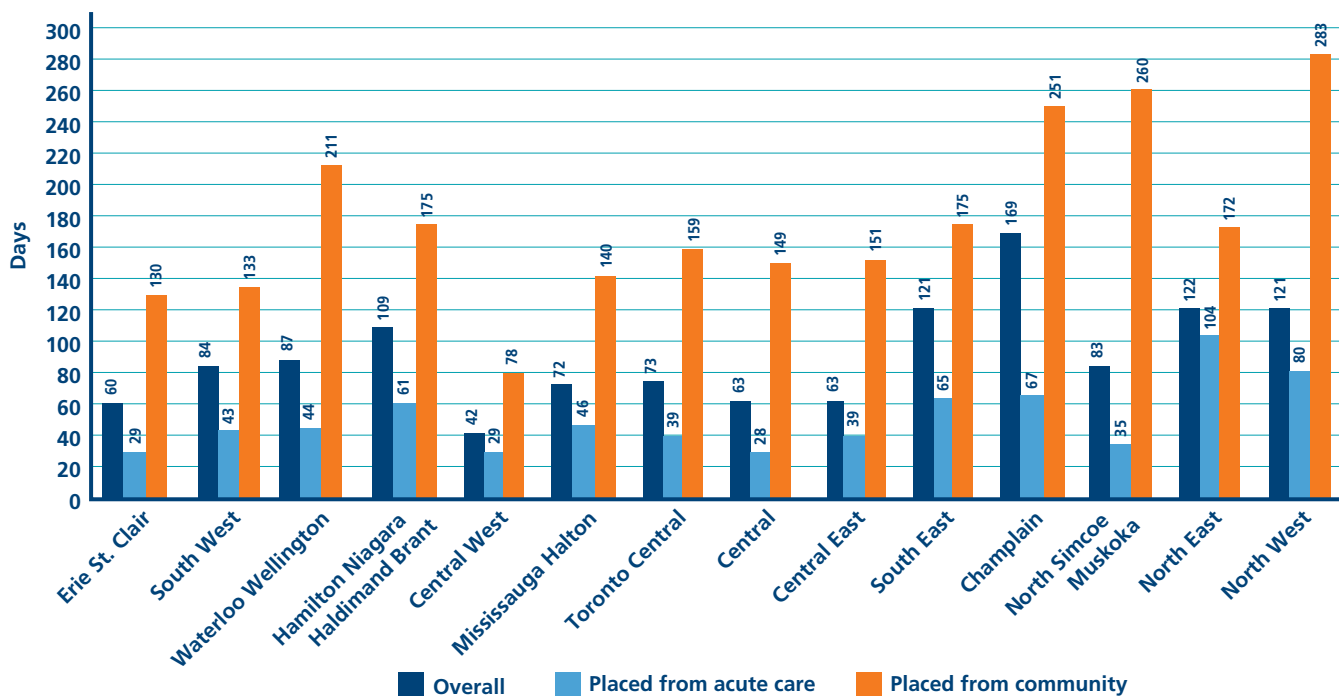
Median number of days to long-term care home placement from acute care, community and overall in Ontario, 2006/2007 to 2007/2008 fiscal quarters



Source: Health Analytics Branch, Ministry of Health and Long-Term Care

Overall, they've doubled, so patients in hospital now wait an average of almost two months and about half of people living at home wait more than half a year.

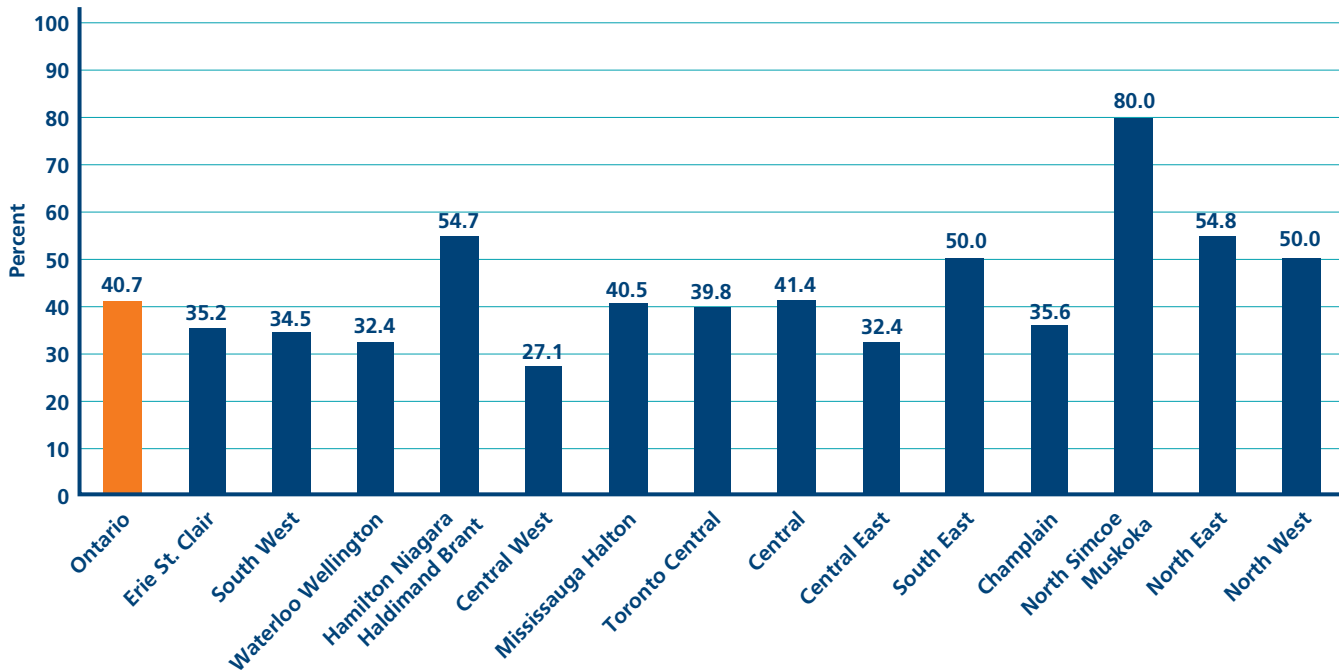
Median number of days to long-term care home placement from acute care, community and overall across Ontario, 2007/08



Source: Health Analytics Branch, Ministry of Health and Long-Term Care

Wait times vary by where you live. They are highest in the Champlain region (surrounding Ottawa), where the typical wait is close to six months.

Percentage of long stay residents who are placed in their first choice long-term care home across Ontario, August 2008



Source: Health Data Branch, Ministry of Health and Long-Term Care

Less than half the people moving into long-term care get into their first-choice home.

2.6.3 Why are there waits for long-term care?

- **Capacity.** One possibility is Ontario does not have enough long-term care beds. However, according to Statistics Canada, Ontario has more beds per population than the Canadian average and more than Alberta, BC or Quebec.²³ Its bed-to-population ratio is also about the same as in the United States,²⁴ where overall wait times are not as much of an issue and in fact, 16% of beds are vacant.
- **Appropriate use of long-term care.** Another possibility is we're too ready to send people to long-term care, without looking at whether there are other options, such as home care or supported apartments. A recent analysis by researchers at the University of Toronto concluded that 25% to 50% of people who go to long-term care could potentially be diverted to supportive housing or home care and still get all the healthcare they need, but at lower cost.²⁵ This study says one reason people end up in long-term care when they

could stay at home is because of problems arranging transportation or housekeeping. It's also possible we're not doing enough, quickly enough, to keep people's health from deteriorating to the point where they can't live independently. We must make sure we're making the right decisions about who goes into long-term care before we rush to build more long-term care homes.

- **Improving care to avoid need for long-term care.** Many elderly people live with several chronic conditions. If we provided better care for chronic disease and helped people manage their conditions better, more elderly people could continue to live in their own homes. As well, if we gave better care to elderly people who end up in hospital because of their chronic conditions by bringing them back to health quickly, and if we didn't just assume they'll have to go to long-term care when they leave hospital, we might not need more long-term care beds.

2.6.4 Who is doing this better?

Long-term care homes in the US actually have vacancies despite a bed-to-population ratio similar to Ontario. Experts believe the US has controlled demand for long-

term care beds (the number per capita has been almost constant from 1990 to 2002) through the rapid rise of assisted-living communities where residents live independently but with some degree of nursing care or assistance with day-to-day activities.²⁶

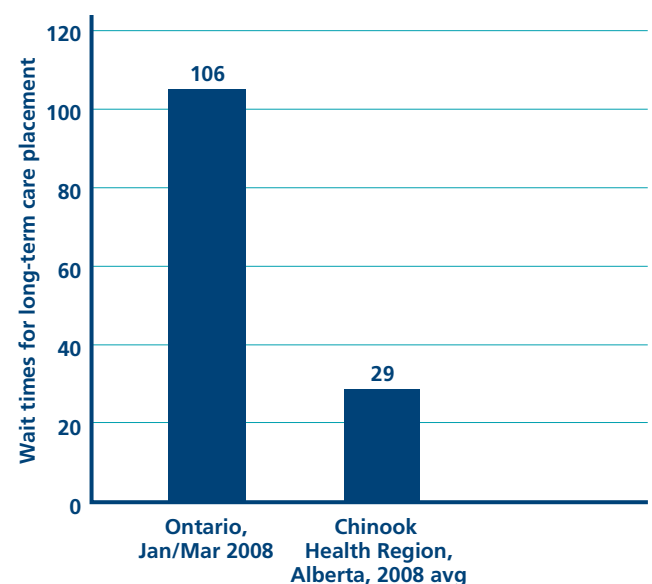
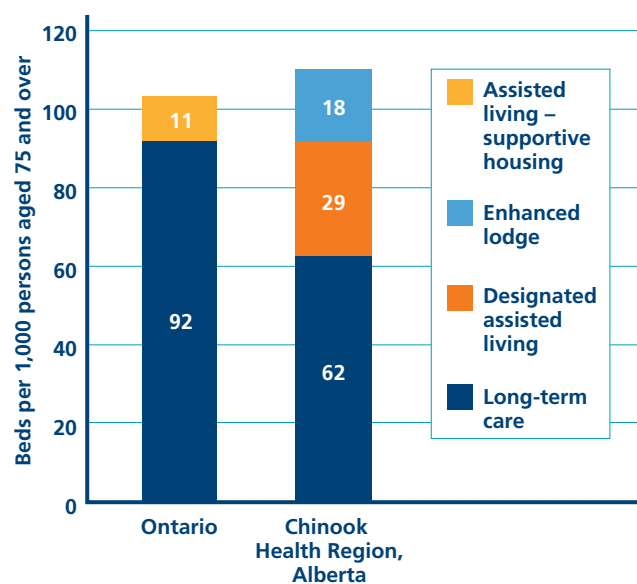
The Chinook Health Region, which is the area around Lethbridge Alberta, has vigorously promoted alternatives to long-term care for seniors for the past ten years.²⁷ Their “enhanced lodges” have personal care workers who are available 24 hours a day to help with bathing, dressing and other daily activities. Any nursing needs are provided separately, by a home care nurse, just as though the client was living independently. Rent at the lodge and the resident’s share of the cost of the services are based on income. “Designated assisted living” homes are similar but also have 24-hour on-site licensed practical nurses available. The healthcare component of these services is publicly funded.

These alternatives save the region money: \$14,500 per year for enhanced lodges and \$27,000 per year for assisted living, compared to \$44,000 per year for long-term care. Opening the facilities cut waits for long-term care from 48 to 25 days from 2002 to 2004 and waits have stayed at about that level since then. In 2002, 87% of beds for seniors were long-term care beds; in 2008, the figure was just 57%. As the graph below shows, Chinook Health



Region has been able to tame wait times for long-term care homes, even though it uses one-third fewer long-term care beds than in Ontario.

Supply of long-term care beds and wait times for long-term care placement in Ontario and Chinook Health Region in Alberta, 2008



Source: Alberta data supplied from Chinook Health Region; Ontario data from Ontario Ministry of Health and Long-Term Care²⁸

2.6.5 What are we doing in Ontario?

Ontario has some supportive housing options like the designated assisted living in Alberta but we don't have a publicly funded equivalent of enhanced lodges.²⁹

In August, 2007 the government promised \$700 million for a three-year “aging-at-home” plan.³⁰ It was to help the 14 local health integration networks develop support services — such as meals, transportation and special housing — that would help seniors live independently.

To make life easier for people getting care at home, the government has also removed maximum service limits under extraordinary circumstances for personal support and homemaking services when a person is receiving palliative care or waiting for a long-term care bed.³¹

2.6.6 Success study: Home First eases the long wait for long-term care at Halton Healthcare Services

Situation: Halton Healthcare Services is an acute care hospital with sites in Oakville, Milton and Georgetown. Its number of “alternate level of care” (ALC) patients was increasing steadily. ALC patients are seniors, in hospital for an acute illness, who are judged too frail to live independently after their treatment. They wait in the hospital for a place in long-term care — which means beds aren't available for new patients who arrive and their own health often deteriorates because they aren't getting the right kind of care.

The percent of alternate level of care days per month nearly doubled from 9.3 to 17.5% between September 2007 and September 2008. From January to September 2008, an average of 25 new patients per month were referred to long-term care. Far too many people were being judged incapable of returning home. By September 2008, 87 people were waiting for long-term care in hospital.

The Mississauga-Halton Community Care Access Centre (CCAC) gave patients at the Oakville site priority access to long-term care for four weeks and 23 patients moved on. But that was a temporary solution.

Aim: Staff gave themselves six months to reach a target of zero net monthly growth in the number of patients waiting for long-term care.

Measures: Staff looked at:

- ALC growth per month
- ALC patient days
- Number of ALC patients waiting for long-term care identified per month

- Frequency and duration of gridlock (when patients are admitted but stuck in emergency) and bed pressure (when there are almost no beds available)

Changes: Halton Healthcare launched an initiative, in partnership with the Mississauga-Halton CCAC, to change its discharge practices so more patients went back to their own homes while long-term planning about their future took place. The problem is that decisions to be moved to long-term care were likely being made in hospital prematurely. (Being unwell with an acute illness in hospital does not necessarily mean the person cannot function at home once he or she has had a chance to recover.) Also, once the decision is made that long-term care is needed, it is difficult to reverse even if the patient gets better; families may, for example start preparations such as selling the house. So, delaying the decision about long-term care until the patient has had a chance to try managing at home makes sense.

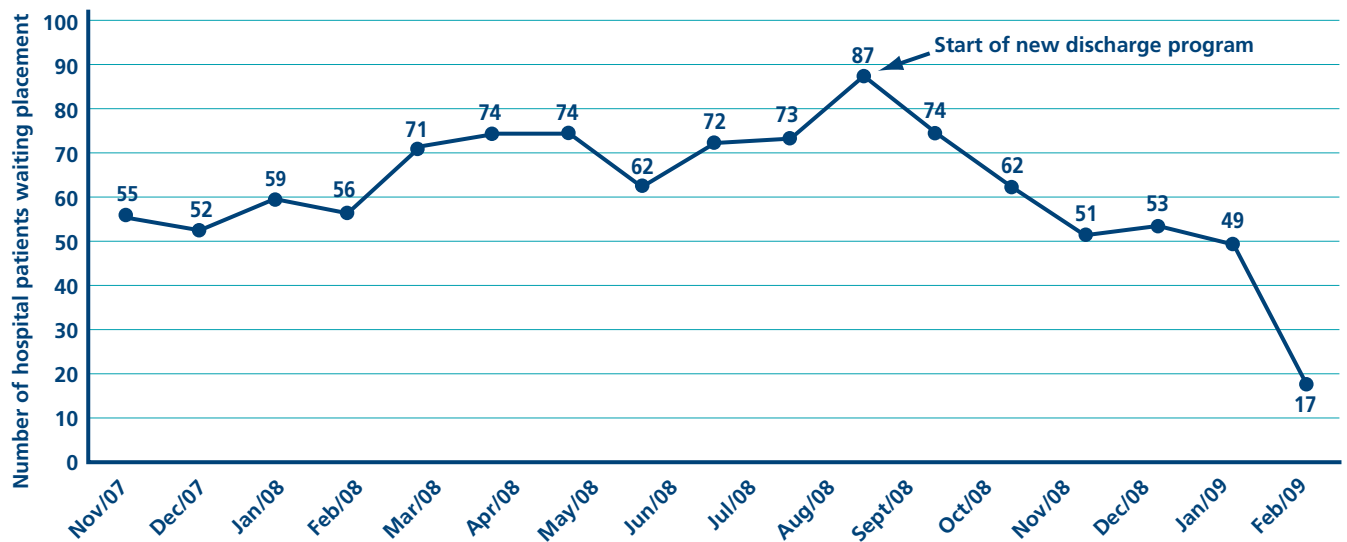
Making this happen required a conscious change in Halton Healthcare's culture. They did it by:

- Meeting with staff on the hospital wards and promoting the role of the CCAC in discharge and the new approach focusing on getting patients home with support that allows them to take their time making longer-term plans.
- Meeting with physicians to let them know about the new approach to discharge and asking them not to tell patients they need long-term care. Physicians are given a script emphasizing options after discharge from hospital and explaining the care team will help them “return home with community (and family) support where you can make longer-term decisions.”
- Establishing that case managers from the CCAC meet the patient before the discharge planners (from the hospital) do to see what it will take to help the patient go home. This shifts the focus from finding a long-term care bed to assessing what support the patient needs to return home and gets it organized quickly.

If it turns out a patient really does need long-term care, the decision is made after they go home, relieving pressure on the hospital and potentially helping seniors get their first choice of home because they have support to stay in the community while they wait.

Results: Growth in alternate-level-of-care bed days stopped then dropped from 87 people waiting for a long-term care bed to 17 people waiting in five months.

Number of hospital patients designated ALC waiting placement to long-term care from November 2007 to February 2009



Source: Mississauga-Halton Community Care Access Centre, Ontario

2.6.7 What can you do?

If you or a loved one's health is deteriorating, consider supportive housing, where people live independently with some degree of supportive care on site (see the ministry's website for more information: www.health.gov.on.ca/english/public/program/ltc/13_housing.html#5). Living a healthy lifestyle, including exercising, eating well and taking part in social and family activities can also delay the need for long-term care. Give careful thought to first, second and third choices of long-term care homes and remember you can request to be transferred to your first choice if a spot becomes available.





3

3 EFFECTIVE

People should receive care that works and is based on the best available scientific information.

3.1 Introduction

Most drugs, surgery and treatments have been tested in scientific studies, which examine their effectiveness for different patients in terms of reducing death, pain, suffering or disability and describe possible complications. These studies are essential for validating the care we provide, assessing the value of different treatments and are used to prepare practice guidelines, which set out all the care health professionals should provide for given conditions.

Many of the studies are based on either process measures — which tell us whether we provided the right care (such as giving the right drug at the right time) — or outcome measures — which tell us whether we achieved the result the best care should produce. To assess whether Ontario's healthcare system is effective, we used both process and outcome measures to judge how effectively some chronic conditions (diabetes, asthma, heart disease and stroke) and cancer were handled in different settings, including the community, hospitals and long-term care.

3.1.1 Key points about effectiveness

Chronic diseases — such as diabetes, heart disease and chronic obstructive occluded pulmonary disease — are on the increase, especially as the population ages. They and their complications put heavy demands on the health system. In last year's report, we estimated at least 8,000 lives per year in Ontario could be saved if we improved care just for diabetes and heart disease. Measuring how we handle chronic diseases tells us a good deal about how effectively we're managing the healthcare system as a whole.

Quality of care for chronic diseases is mixed. There have been improvements in some areas:

- More patients with diabetes and heart disease are getting statin drugs to lower their cholesterol. This is critical in saving lives and preventing strokes and heart attacks.
- Long-term complications of diabetes are dropping slightly over time.
- We are improving in our ability to keep patients with asthma from needing to go to hospital.
- We are doing a reasonably good job of drug management for stroke in designated stroke centres.



But efforts to give better care move very slowly in other areas:

- Many patients with diabetes, heart disease and stroke are still not getting the medications they need. We could still get more people using statins and heart medications such as beta blockers and ACEI/ARBs are still underused.
- Many patients with diabetes aren't getting regular eye and foot exams. Early detection and treatment can prevent blindness and amputation.
- Too many people with congestive heart failure (CHF) keep returning to hospital. We could reduce that number.

STATISTICAL NOTE

In this report (unless otherwise noted) we are using crude rates — in other words, the data are not adjusted to allow for natural differences in the population, in terms of sex, age and other factors. For example, quality may be lower for older persons — they may be less likely to get the right drug or monitoring. An age-adjusted rate may “hide” the fact that a region or hospital had low rates of quality because they had many more elderly people. We believe that that's not right — the elderly have as much a right to high quality care as anyone else and the size of the quality gap should be made as clear as possible.

3.2 Getting the right drugs to manage chronic disease

3.2.1 Why is this important?

We know the right drugs can save lives and prevent complications for patients with congestive heart failure and

diabetes, or those who have suffered a heart attack in the past. We looked at how medications are being used in heart failure and diabetes patients over 65, since it's the elderly who have the most to gain from drugs to reduce complications and death rates. This table shows why these drugs are important:

If you had/have:	You should probably be taking the following medications:*	To prevent:
Diabetes	Angiotensin-converting enzyme inhibitors (ACEI) or angiotension receptor blockers (ARB) and statins	Strokes, heart attacks, deaths and kidney failure ^{32, 33}
A past heart attack (AMI)	Beta blockers, ACEI/ARB and a statin	Strokes, repeat heart attacks and death ^{34, 35,36}
A past stroke	Acetylsalicylic acid (also known as ASA or Aspirin)	Another stroke ³⁷
A past stroke and atrial fibrillation	Warfarin (a blood thinner)	Another stroke ³⁸
Congestive heart failure	ACEI/ARB	Death (reduced by 20 to 25%), ³⁹ hospitalizations (reduced by 35 to 40%), and worsening of quality of life



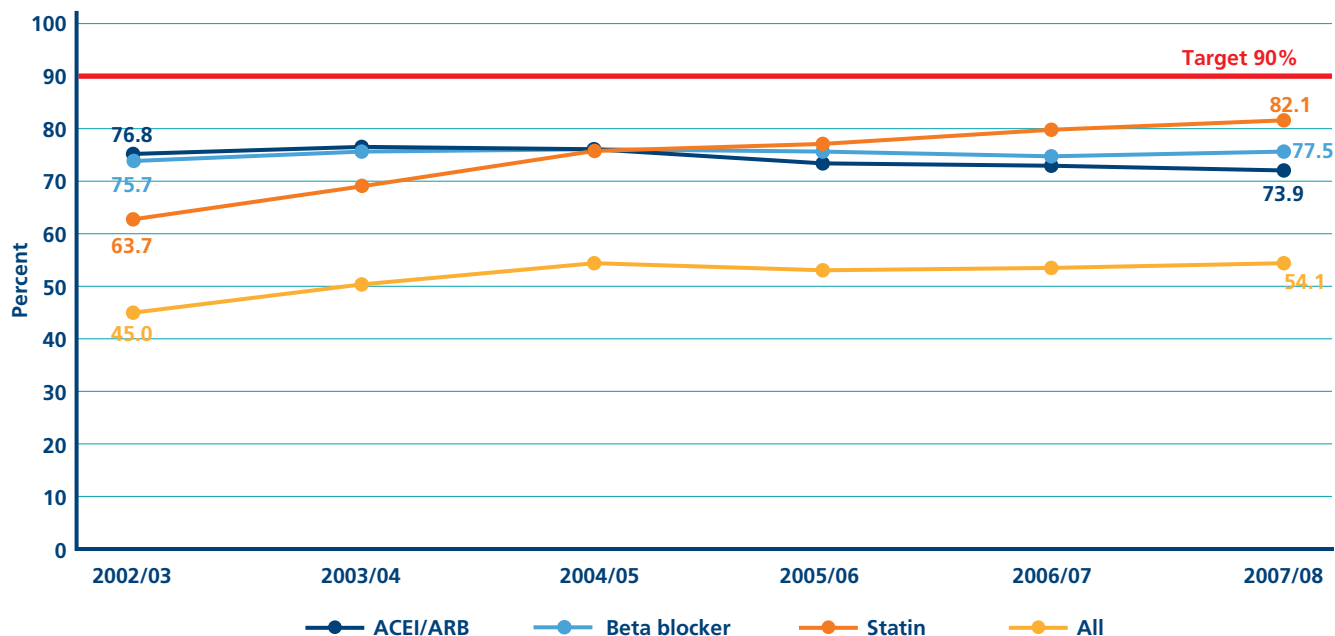
* Some patients can't take these drugs, due to allergies or other contraindications. The decision to take the medication should always be jointly made by the physician and patient.

3.2.2 What did we find?

The good news is that the use of statins for patients with diabetes and heart disease has increased in the last few years. Stroke patients

treated in regional stroke centres also seem to be getting the right drugs. But there are many patients who are not getting the drugs they need, as Ontario falls short of national targets or best practices in the US in prescribing them.

Percentage of elderly patients (aged 66+) who filled a beta blocker, ACEI/ARB, statin or all three prescriptions within 90 days post-discharge for an AMI in Ontario, 2007/2008

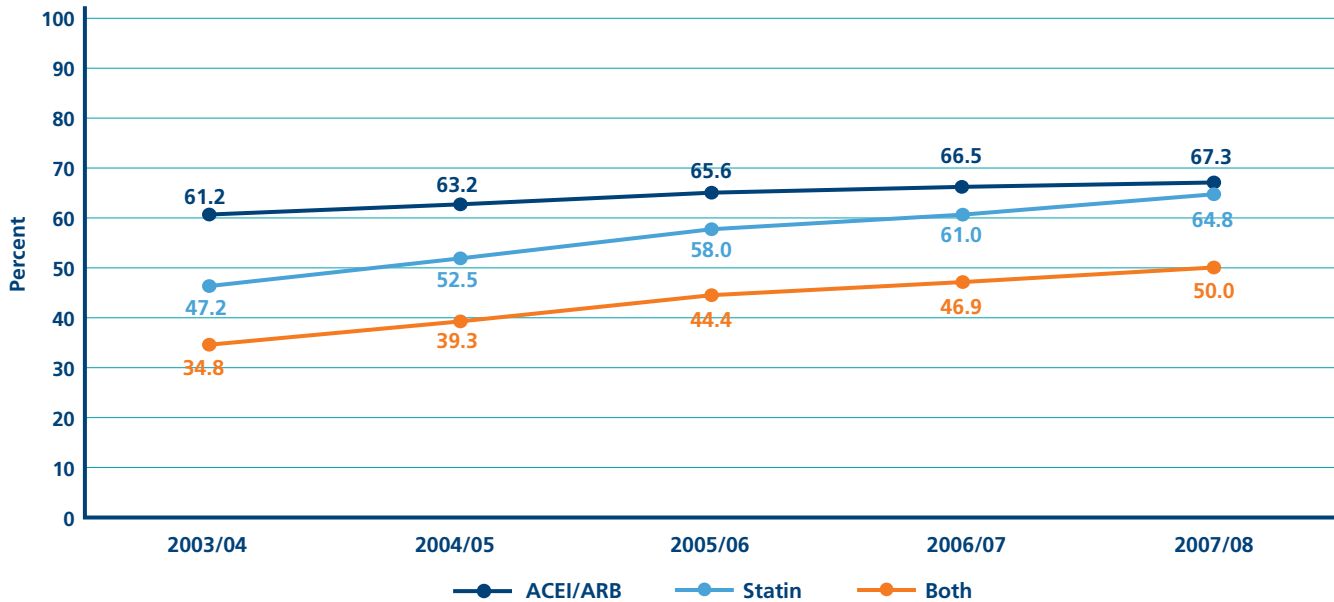


Source: Institute for Clinical Evaluative Sciences — Health system data

Use of statins has increased over the past six years for elderly patients who have had a recent heart attack. However, the current rate of 82% is still too low. Similarly, only 78% these patients were on beta blockers and only 74% were on ACEI/ARBs. According to a recent Canadian expert panel these rates should be at least 90%.⁴⁰



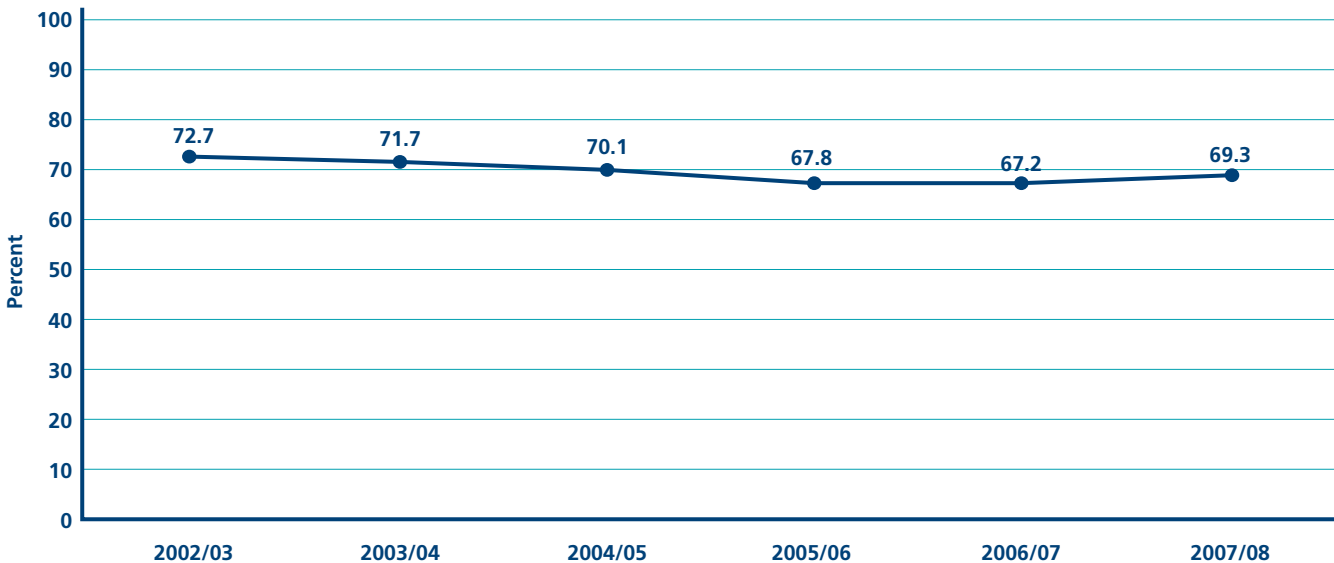
Percent of elderly patients (aged 66+) with diabetes who filled a ACEI/ARB, statin or both prescriptions in the past year in Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences — Health system data

Use of statins and ACEI/ARBs has also increased for elderly patients with diabetes, but again, the rates of use could be higher. Studies suggest nearly all patients with diabetes should be on these drugs,^{41, 42, 43} but the rate of use of each drug is only 67 and 65% respectively.

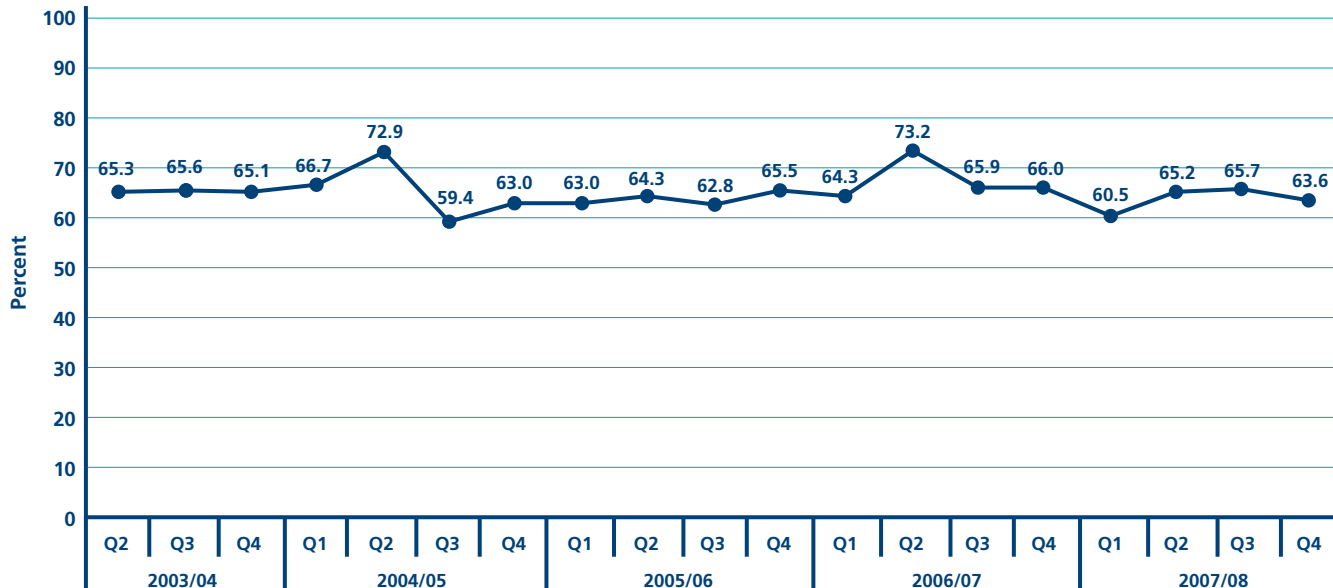
Percentage of elderly patients (aged 66+) who filled an ACEI/ARB prescription within 90 days post-discharge for CHF in Ontario, 2002/2003 – 2007/2008



Source: Institute for Clinical Evaluative Sciences - Health system data

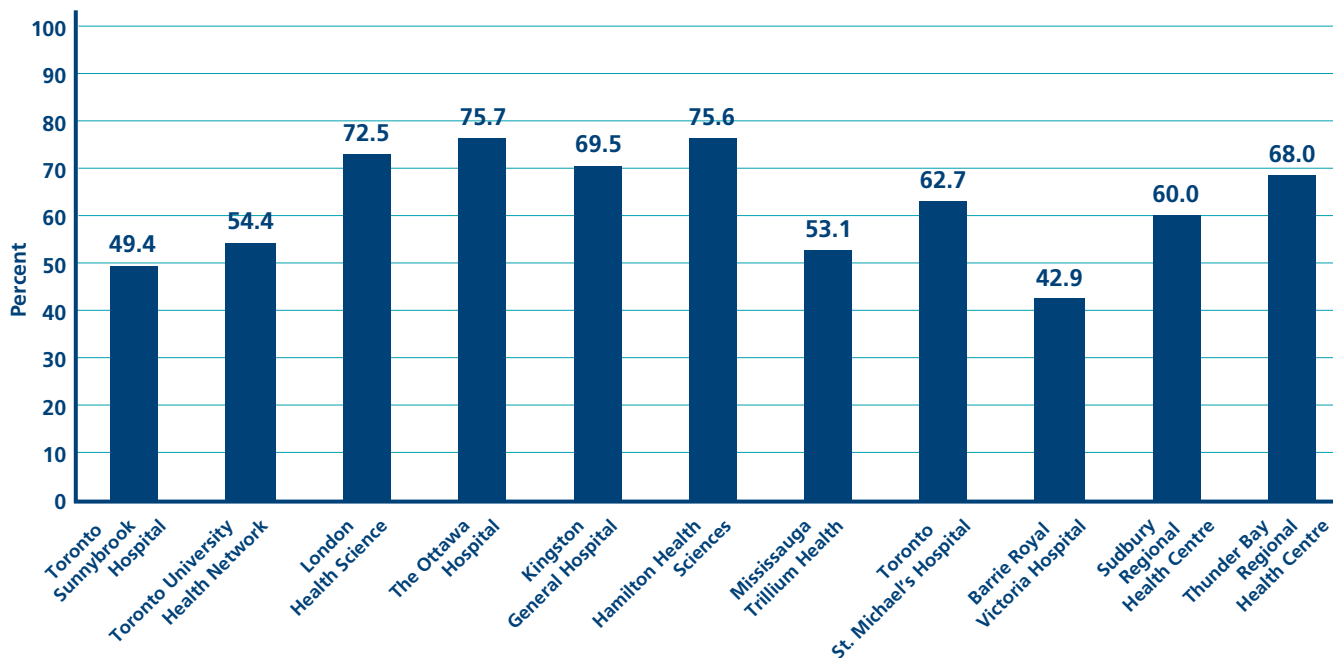
Only 70% of patients discharged from hospital with congestive heart failure are on an ACEI/ARB, which has not improved in the past six years. That rate is too low; the average in the US is 87%,⁴⁴ with best-performing hospitals attaining rates of around 95%.⁴⁵

Percent of stroke patients with atrial fibrillation discharged with warfarin in Ontario, 2002/2003 – 2007/2008 fiscal quarters



Source: Registry of the Canadian Stroke Network Phase-3
 Note: Regional and enhanced district stroke centres only.

Percent of stroke patients with atrial fibrillation discharged with warfarin by Ontario stroke centres, 2007/2008

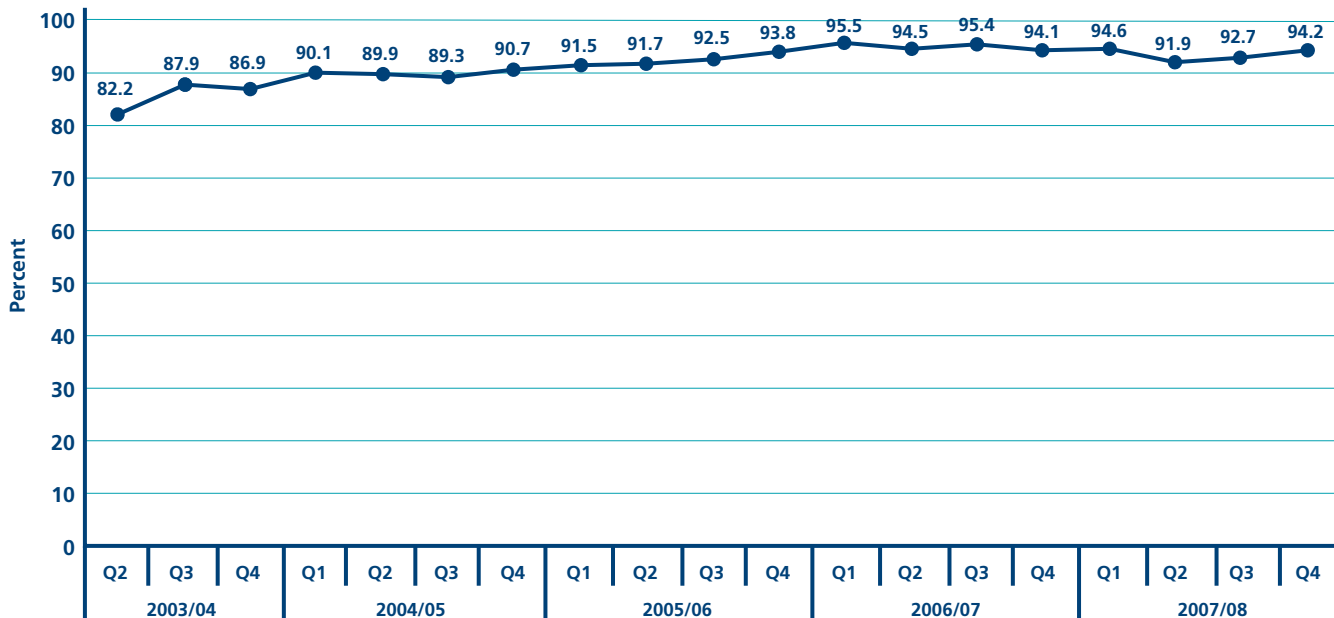


Source: Registry of the Canadian Stroke Network Phase – 3
 Note: Regional and enhanced district stroke centres only.

About two-thirds of stroke patients with atrial fibrillation (which is a rapid, irregular heart beat) are on warfarin, a blood thinner. That hasn't changed over time, but it may be a reasonable level; some studies show up to a third of patients with atrial fibrillation can't take warfarin because of a major contraindication, such as recent bleeding.^{46, 47}

However, some stroke centres have much lower warfarin use and rates of use could potentially be improved. These data are only for patients sent to regional and enhanced district stroke centres. We don't know what the rates of warfarin use are outside these centres.

Percent of acute stroke patients discharged on ASA or antithrombotic therapy in Ontario, 2003/2004 – 2007/2008 fiscal quarters



Source: Registry of the Canadian Stroke Network Phase-3
 Note: Regional and enhanced district stroke centres only.

Almost all stroke patients treated at stroke centres are now discharged on aspirin (ASA), which keeps blood from clotting. Because a small number of patients may be allergic to it, we believe these rates are as close to 100% as we can get. Again, these rates may be different for patients treated outside a stroke centre.

3.2.3 Who is doing this better?

US hospitals routinely have 95% of patients on beta blockers after a heart attack. The US actually dropped beta blockers as a quality measure because rates were so high.⁴⁸ Hospitals in the US also do better than we do at getting heart-failure patients onto ACEI/ARBs as previously noted. There are some differences in how the numbers were calculated[†] and we suggest caution in making comparisons. Still, it is worthwhile to consider what lessons could be learned from the US. Drug prescribing rates and other measures of quality are now reported for individual hospitals on a public website (www.hospitalcompare.hhs.gov). Public disclosure of this information is intended to encourage hospitals to improve quality.

[†] The US figures for beta blocker use exclude people who are allergic to them or who have conditions that prevent their use, such as a heart rate that is too low, but Ontario data sources don't let us exclude those people. The US calculation for ACEI/ARB use is based on heart-failure patients who had an echocardiogram showing left ventricular ejection fraction (LVEF) of less than 40%. Ontario calculations do not include LVEF assessments, so the proportion is based on any patient admitted for heart failure. We believe most patients with heart failure severe enough to require hospitalization probably have an ejection fraction less than 40%.

3.2.4 What is Ontario doing?

Ontario has sent out a request for proposals for a planned province-wide “academic detailing” program.⁴⁹ Detailing is the drug industry phrase for marketing and drug salespersons are called detailers. Academic detailing, in contrast, distributes evidence-based information about specific drugs or classes of drugs to doctors, based on impartial, independent reviews of their effectiveness. Its goal is to promote optimal prescribing.



3.3 Getting the right monitoring for chronic disease

3.3.1 Why is this important?

Regular monitoring is essential for patients with chronic conditions such as diabetes. Patients with diabetes are prone to several serious complications, including poor circulation, decreased sensation in their feet and eye problems. Regular foot exams spot problems early and identify when preventive measures like special-fitting shoes or nail care are needed. Regular foot exams reduce skin ulcers⁵⁰ and amputations.⁵¹

Diabetes can also cause diabetic retinopathy, where blood vessels in the retina (the back of the eye that senses light) swell and leak fluid, or abnormal blood vessels develop, then bleed. Both can cause blindness, but it can be prevented if an eye exam exposes the problem in time for laser surgery to eliminate leaky or new blood vessels early.⁵²

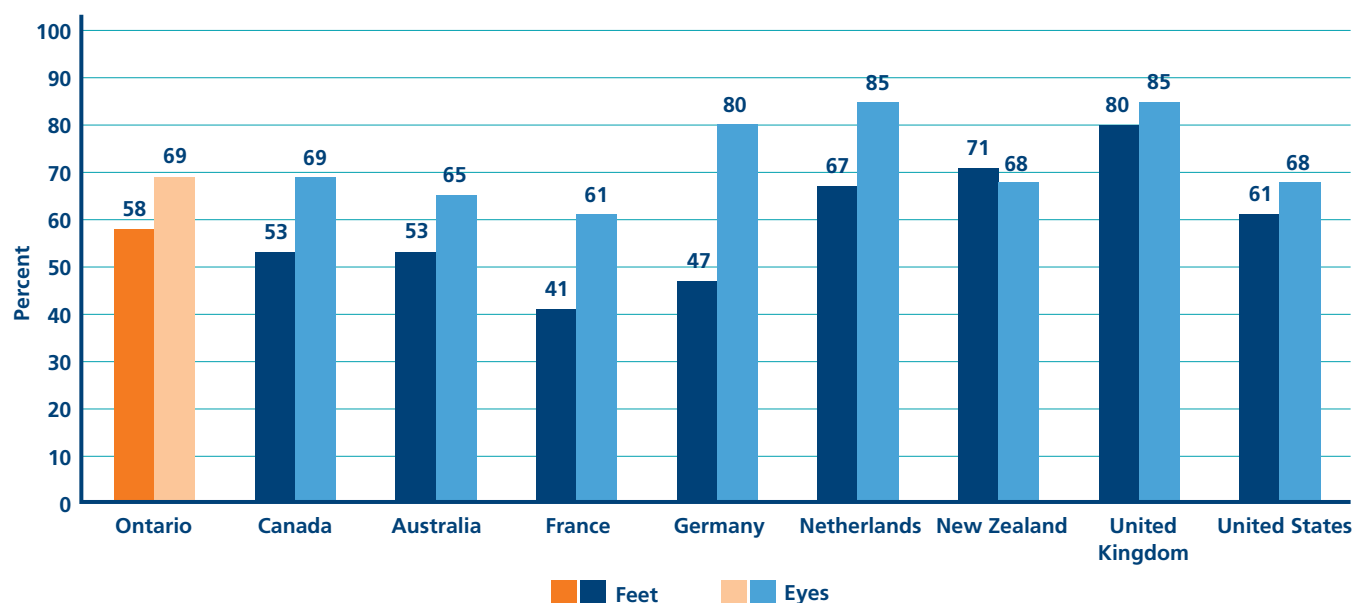
3.3.2 What did we find?

Patients with diabetes are not getting foot and eye exams consistently.

3.3.3 Who is doing this better?

The National Health Service (NHS) in the United Kingdom has set a national target that 100% of diabetes patients will be offered eye exams consistently.⁵³ The NHS also pays bonuses for providing good primary care, through its “Quality and Outcomes Framework.”⁵⁴ Each practice (where patients are cared for by teams including doctors, nurses and others) can earn up to 1,000 points, which are converted into payments, for delivering recommended care, especially for chronic diseases. After the framework’s first year, 94% of diabetic patients had been tested for HbA1c, 83% had eye tests and 97% had their blood pressure checked. An impressive 85% had been given a flu shot.⁵⁵

Percent of diabetics who had their feet and/or eyes checked by health professional in the last year in Ontario, Canada and other countries, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

In Ontario, just over half reported having a foot exam and just over two-thirds reported an eye exam. These rates are much lower than in the United Kingdom.



3.4 Reducing complications of chronic disease

3.4.1 Why is this important?

Complications of chronic diseases cause people to suffer and put great strain on healthcare. Complications are far more likely when patients don't get regular monitoring, or the right drugs, or don't feel they're engaged in making decisions about their own care.

In this section, we looked at:

- **Short-term complications of diabetes.** If a diabetes patient's blood sugar is not well-controlled in the short term (for one or two days) and goes too low or too high, he or she must go to an emergency department for treatment.⁵⁶
- **Long-term complications of diabetes.** If diabetes patients are not on the right medications and their blood sugar, blood pressure or cholesterol are not well controlled, then over time they will be more likely to suffer heart

attacks, strokes, surgery for poor circulation (including amputation), and premature death.^{57, 58, 59, 60}

- **Admissions for “ambulatory care sensitive conditions.”** Chronic diseases that can be kept under control with proper management in primary care are known as ambulatory care sensitive conditions. When they are well-managed, patients with them should not need to go to hospital, so counting hospital admissions for them is a good measure of quality. We looked at diabetes, asthma and congestive heart failure.[‡] Asthma admissions can be avoided if the patient monitors symptoms carefully at home and has careful instructions about which medications to take for flare-ups and how to manage the triggers that cause asthma to worsen.

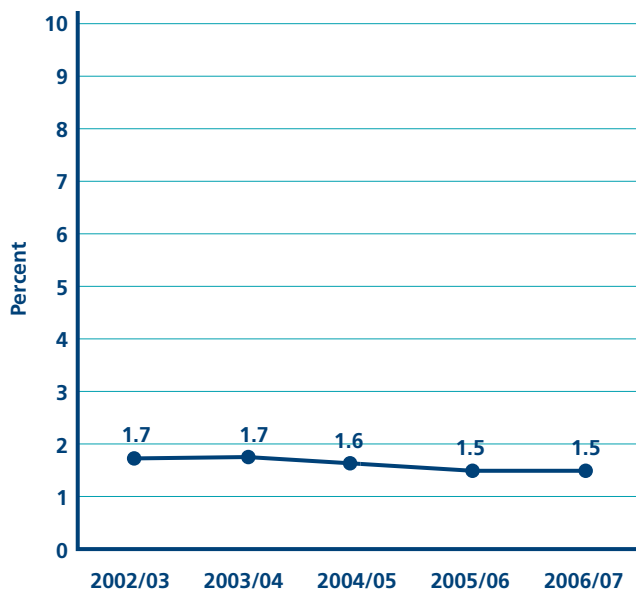
Congestive heart failure occurs when the heart is too weak to pump properly. Patients with this condition need to work closely with their doctor to control the amount of fluid in their bodies with medications and diet; if too much fluid collects in their lungs (causing shortness of breath) or elsewhere, patients must go to emergency or be admitted for treatment.

‡ This definition of ambulatory care sensitive conditions examines only these three conditions and differs slightly from the definition used by local health integration networks, which includes other conditions.

3.4.2 What did we find?

Complications of diabetes have decreased slightly over the past five years. Hospitalizations for asthma have also decreased significantly.

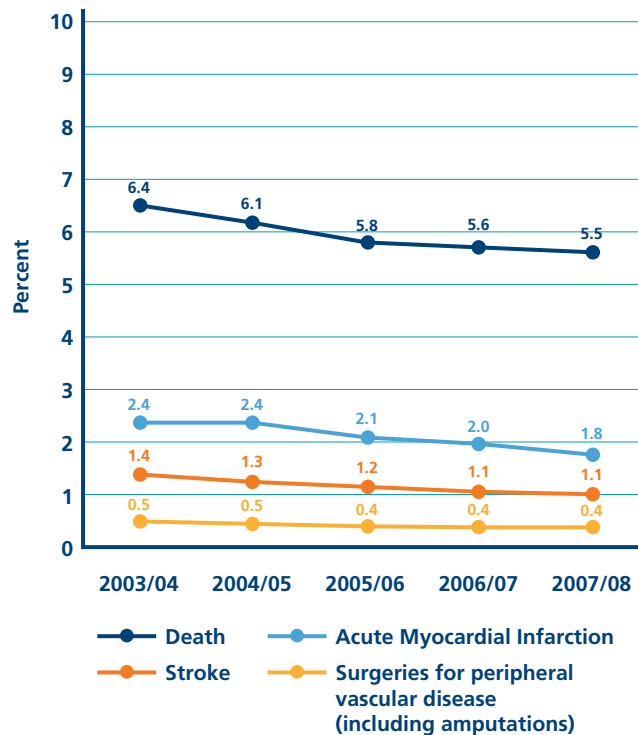
Percent of newly diagnosed diabetes patients (aged 20+) who had acute complications treated in emergency department or hospital in the year after diagnosis in Ontario, 2002/2003 – 2007/2008



Source: Institute for Clinical Evaluative Sciences — Health system data

It's good news the rate of blood-sugar complications is decreasing. Very few patients recently diagnosed with diabetes are going to emergency or being admitted for blood sugar that is too high or too low.

Adjusted percent of people (aged 66+) with diabetes for more than a year who had a serious diabetes complication treated in the hospital in Ontario, 2003/2004 – 2007/2008

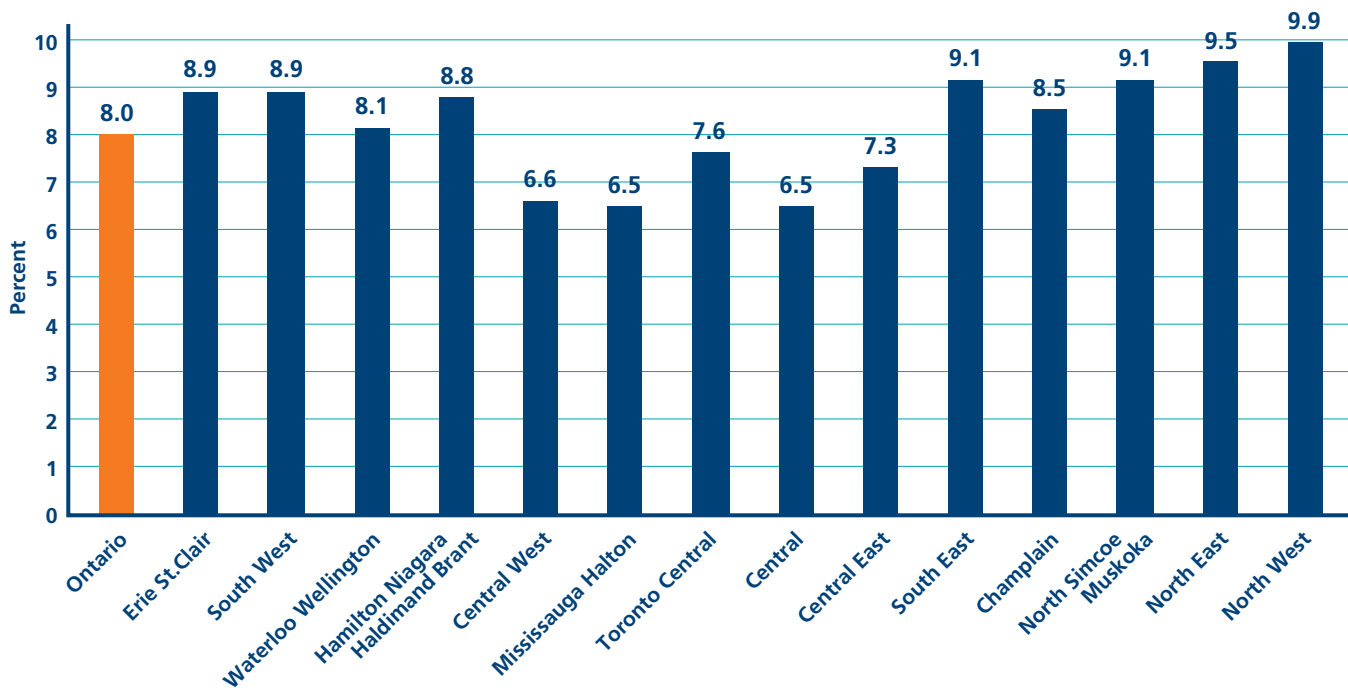


Source: Institute for Clinical Evaluative Sciences — Health system data
 Note: Data is age and sex-adjusted. Standard population is prevalent diabetes cases on April 1, 2006

Rates of serious long-term complications of diabetes have decreased slightly in the last five years.[§] However, the actual number of patients suffering diabetes complications is staggering: in 2007/08, there were almost 20,000 deaths, over 6,000 heart attacks, 3,700 strokes and 1,200 surgeries for poor circulation (including amputations) among Ontario patients with diabetes.

§ We caution that the observed reduction in long-term complications is not entirely due to a true reduction in complications. It is possible that we are diagnosing patients with diabetes at earlier stages of their disease.

Adjusted percent of people (aged 66+) with diabetes for more than a year who had a serious diabetes complication treated in the hospital across Ontario, 2007/2008



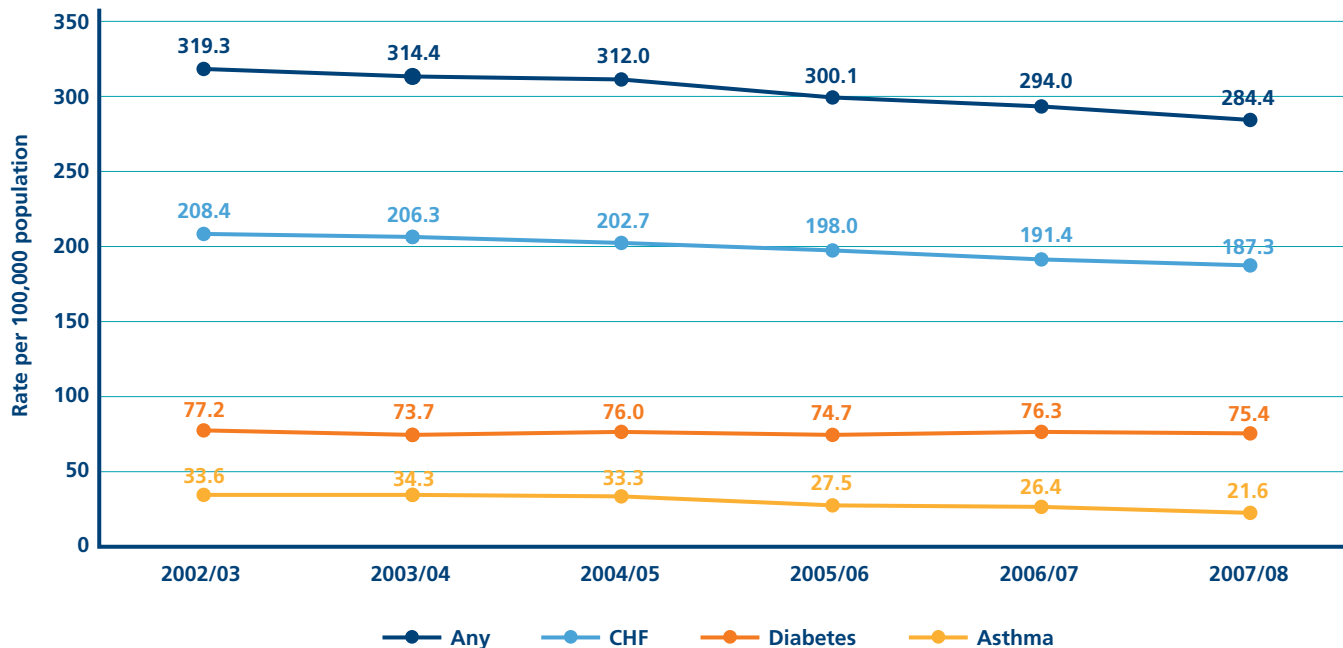
Source: Institute for Clinical Evaluative Sciences — Health system data
 Note: Data is age and sex-adjusted. Standard population is prevalent diabetes cases on April 1, 2006

Rates of complications for diabetes are highest in the North East and North West Local Health Integration Networks. The lowest rates are around Toronto, in the Toronto

Central, Central, Central West, Mississauga Halton and Central West Local Health Integration Networks.



Hospital admission rates per 100,000 population for specific ambulatory care sensitive conditions in Ontario, 2002/2003 – 2007/2008



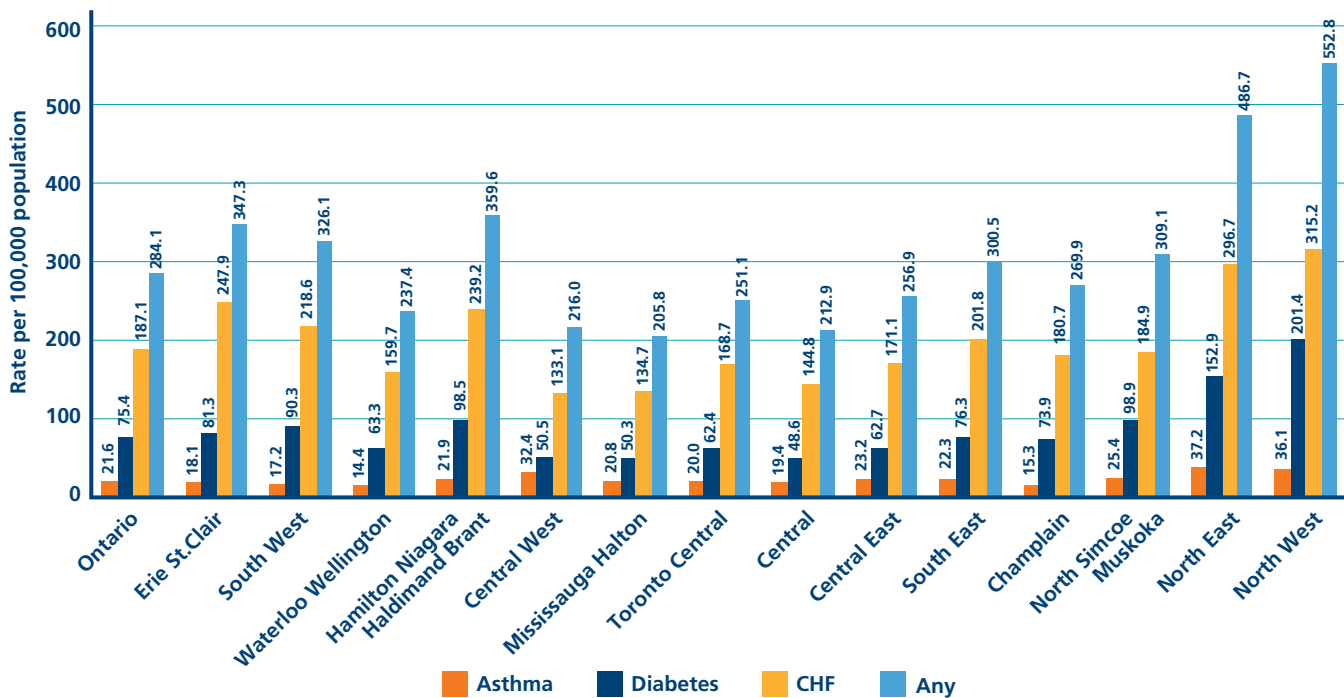
Source: Institute for Clinical Evaluative Sciences — Health system data

Note: Only select ambulatory care sensitive conditions (ACSCs) were presented: diabetes, asthma and congestive heart failure. This indicator differs from the ACSCs measured in the accountability agreement between the ministry and the local health integration networks

Hospitalizations for congestive heart failure have decreased slightly over the last six years. Asthma hospitalizations dropped, by a third, over that time, while hospitalizations for diabetes did not change.



Hospital admission rates per 100,000 population for specific ambulatory care sensitive conditions across Ontario, 2007/2008



Source: Source: Institute for Clinical Evaluative Sciences — Health system data

Note: Select ambulatory care sensitive conditions were chosen – diabetes, asthma and congestive heart failure only. This indicator is different from the LHIN accountability agreement measure

There is large variation across local health integration networks in the rate of hospital admissions for diabetes, congestive heart failure or asthma — the North East and North West networks have almost twice the rate of admissions compared to the Ontario average.

3.4.3 Why isn't chronic disease better managed?

- **Lack of information technology.** Without a computerized information system, it's difficult to monitor when patients are due for a repeat test, or track which patients are missing their targets for good disease control or not getting the right drugs.
- **Patient education.** Patients who are not well-informed about the importance of the right medications or careful monitoring, or who aren't involved in making decisions about their condition, or are in denial, are more likely to stop their medications, not get tests done or not see their doctor for regular review of their conditions.
- **Cost.** The working poor under age 65 who do not qualify for social assistance may find certain medications

— particularly statins for lowering cholesterol — are too expensive.

- **Lifestyle challenges.** Complications of chronic disease can be reduced through healthy living — including quitting smoking, eating a proper diet, getting exercise and losing weight. Barriers to following a healthy lifestyle include lack of education about the importance of lifestyle choices, availability of exercise facilities, neighbourhood designs that encourage or discourage walking and the social environment.
- **Access to primary care.** Having a regular family doctor helps ensure regular monitoring and proper drug management take place. Ontario's North West and North East Local Health Integration Networks have the highest rate of diabetes complications and residents there are more likely to report not having a regular family doctor (see section 2.3).

3.4.4 What are we doing in Ontario?

The Quality Improvement and Innovation Partnership supports 120 primary care practices (family health teams



and community health centres) to improve diabetes care. Its goal is to get 90% of diabetes patients having regular foot and eye exams and 65% meeting new, lower targets for cholesterol.

Ontario announced a four-year, \$741-million diabetes strategy in July 2008. The strategy promises that by spring 2009, there will be an online registry to track key measures of diabetes, such as blood sugar levels, for each patient. This will allow health professionals to check lab results, identify areas for improvement in their own practices and send patient alerts. The program also increases funding for insulin pumps, promotes team-based care and designed education campaigns for high-risk populations, which includes Aboriginal and south Asian people.⁶¹

The ministry funds interdisciplinary diabetes education programs through several different initiatives — the Diabetes Complications Prevention Strategy, the Ontario Aboriginal Diabetes Strategy, the Pediatric Diabetes Initiative and the Northern Diabetes Health Network.⁶² In the latter program, diabetes educators travel to 137 rural and remote communities. As well, the Canadian National Institute for the Blind's eye van visits 30 remote towns across Ontario each year to provide easy access to eye screening for diabetes patients.⁶³

Ontario introduced its stroke strategy in 2000.⁶⁴ It includes: public education on recognizing early signs of stroke; a stroke registry to monitor quality; and the creation of regional stroke centres, which have specialized services, personnel, and well-designed emergency stroke treatment. Measures to assess stroke care have been built into the accountability agreements hospitals sign with their local health integra-

tion network, promising to meet minimum standards for stroke care.

3.4.5 Success study: Primary care asthma program puts evidence into practice, reducing symptoms and visits to emergency departments

Situation: Asthma affects more than one in 10 children and one in 15 adults in Ontario. It's the leading cause of hospitalization for children and one of the main reasons people go to emergency departments and miss school or work. Following the Canadian Asthma Consensus Guidelines can reduce or avoid asthma attacks, but putting these guidelines into practice can be a challenge. Even physicians trained in them often underestimate the severity of their patients' asthma.

The Primary Care Asthma Care Pilot Project was launched in 2002 in eight primary care sites across the province as part of the implementation of Ontario's Asthma Plan of Action.

Aim: To provide more consistent, evidence-based asthma care for patients and reduce symptoms and the need for other healthcare services.

Measures: The program measured:

- Number of asthma attacks
- Number of daytime and night-time symptoms
- Number of emergency department visits by children
- Rate of school absenteeism

More than 1,400 patients aged 2 to 55 years were followed at six-month intervals.

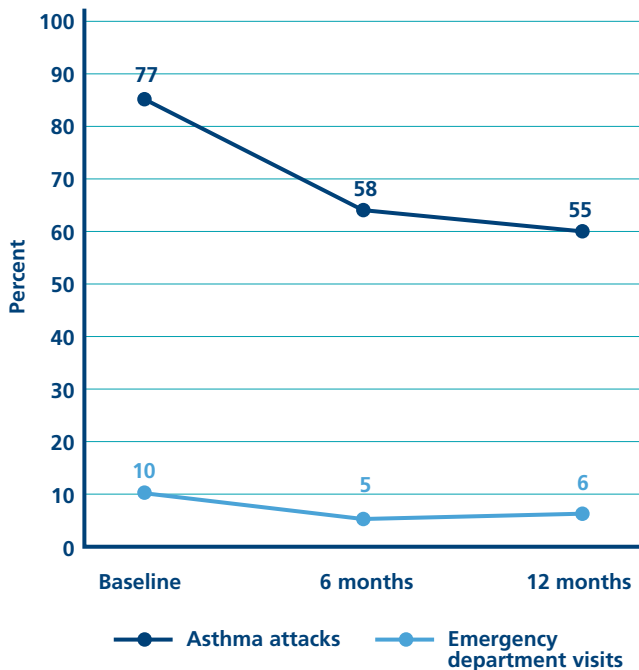
Changes: Key changes included:

- Better assessment of asthma, using spirometry — a test to measure lung function
- Use of “asthma care maps” to help assess patients' conditions, develop a treatment plan for them and educate them
- Use of treatment flow charts by physicians to help them identify the best drugs to prescribe in different situations
- Giving patients a written plan to help them monitor and improve their asthma control
- Educational materials for patients

- Introducing certified asthma educators into the primary care team, who helped implement use of spirometry in practices, provided education and co-ordination of activities

Results: Improvements were already showing at the six-month follow-up and after 12 months, they reported a 30% drop in asthma attacks, a 34% drop in daytime asthma symptoms, a 50% drop in emergency department visits for children, and a 49% drop in school absenteeism.

Percent of asthma emergency department visits and total number of asthma attacks from baseline, 6 months and 12 months of program



Source: Ministry of Health and Long-Term Care

Next steps: To monitor the ongoing effectiveness of their asthma program and treatment plans, the sites continue to measure asthma attacks, symptoms and symptom control, asthma-related use of other health services (such as visits to emergency or hospitalizations), and lost days of school or work.

This pilot project has now evolved into the Primary Care Asthma Program and is being introduced in other practices in the province. The Asthma Surveillance Initiative, which is also part of Ontario’s Asthma Plan of Action, aims to identify measurable indicators for asthma, which will be integrated into electronic medical records for ongoing monitoring of the effectiveness of treatments.

3.4.6 What can you do?

If you have a chronic disease, be engaged in managing your care. Whether you have diabetes, asthma, heart failure or a past heart attack, here are some principles to follow:

- Know the warning signs of when your condition is getting worse and develop an action plan with your doctor that tells you what you should do if that happens.
- Know the things that can make your condition suddenly worse and avoid them (for example, exposure to cigarette smoke for asthma, or a high-salt meal for heart failure).
- Know what medications you are on and why.
- Check the list of recommendations in section 3.2.1. If you are not on one of them, ask your doctor if you should be.
- Know what you should be monitoring at home to see if your disease is in control (for example, a symptom log for asthma; blood pressure and blood sugar for diabetes; or daily weight for heart failure).

You can learn more about managing other common chronic diseases on our website http://www.ohqc.ca/en/patient_resources.php. If you have asthma, visit www.on.lung.ca, or call the Ontario Lung Association’s asthma action line at 1-800-668-7682.



3.5 Getting it right the first time: Avoiding returns to hospital or emergency

3.5.1 Why is this important?

The goal of hospital stays and visits to emergency departments is to stabilize acutely ill patients, but also to get them well enough that they don't need to come back. Patients need and expect their problems to be dealt with effectively — and doing that avoids the extra cost of patients coming back to hospital, often more than once, because their care was inadequate.

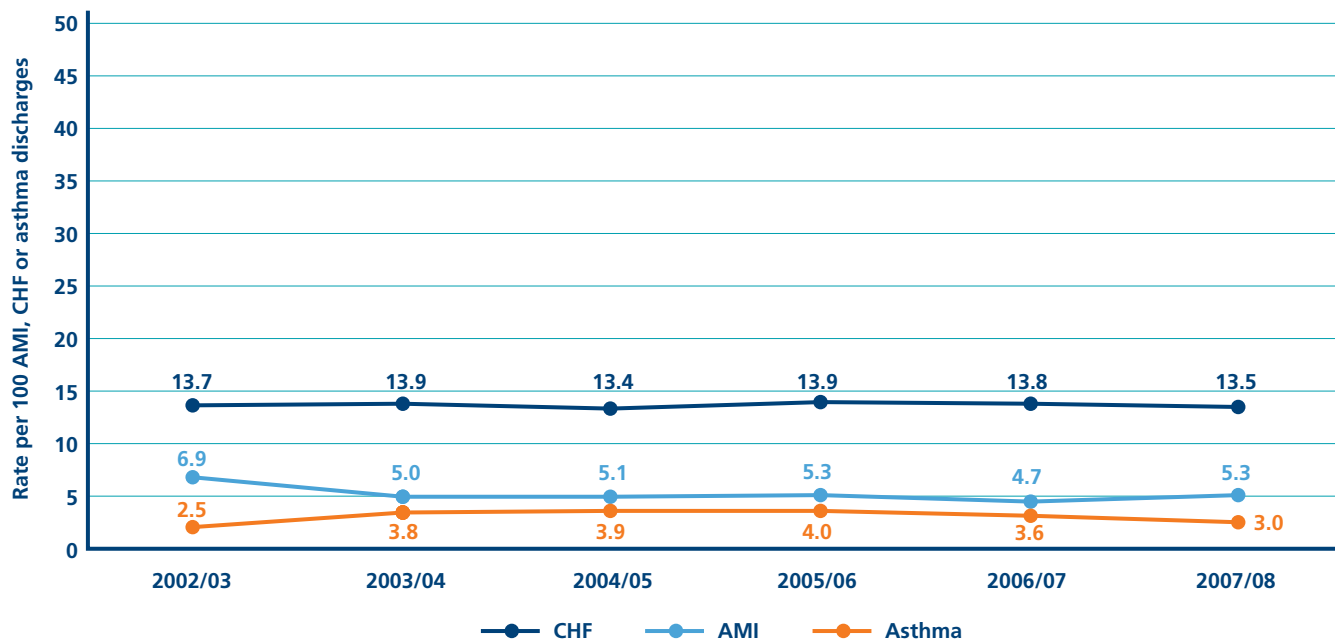
This year, we looked at returns to hospital or emergency by patients who had been treated for three conditions: asthma, congestive heart failure and heart attacks.

3.5.2 What did we find?

Returns to hospital for congestive heart failure are still common. They are less common for heart attacks and relatively uncommon for asthma. There are no significant reductions in returns to hospital or emergency over the past six years for heart failure, heart attack or asthma.



Rate of readmission to the emergency department or acute care within 30 days of being discharged for AMI, CHF or asthma in Ontario, 2002/2003 – 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

3.5.3 Why do patients have to return to hospital?

- **Incomplete treatment.** Often, patients don't receive all the medications, treatments or tests that are recommended. This can happen if the hospital does not have standardized protocols, orders or checklists, or doesn't monitor whether all necessary care is delivered. Patients who don't have all the best treatments may develop a flare-up of their condition and return to the hospital or visit another healthcare facility.
- **Poor communication with primary care providers.** Usually patients need some follow-up, such as tests or medication changes, when they leave hospital. If the main hospital physician doesn't dictate the discharge summary right away and send it, the family doctor may not know what further care is needed.
- **Poor communication with the patient.** Patients need to know why they are on certain medications, what side effects or complications to look for, which activities they should do or avoid and who to call with problems or questions. When they haven't been told — or haven't understood — these things, they're more likely to be readmitted.
- **Lack of supports in the community.** If patients don't have sufficient home care or other services or tools to help them manage their condition at home, they may wind up back in hospital.

3.5.4 What can be done to avoid returns to hospital?

If people return to hospital after they've been treated, it's an indication the care they got was not effective enough — but researchers have found many ways to decrease repeat hospitalizations. Researchers in Spain found offering heart-failure patients education about their disease, medication and diet reduced the chance they would come back to hospital for the same problem within a year,⁶⁵ and an Ontario scientist who compared eight studies from all over the world came to the same conclusion.⁶⁶ A cardiac rehabilitation organization in Wales combines walks in the country with other exercise and education sessions. No one who completed the program was readmitted to hospital within a year.⁶⁷

3.5.5 What are we doing in Ontario?

Local health integration networks monitor readmission rates for heart attack patients and set targets to try to reduce these rates.

One step in avoiding readmissions is making sure patients are discharged on the right medications, that they stay on them once they're home and their family doctor knows about changes in dose or type of medication. Ontario's MedsCheck program offers reviews of medications for people two weeks after discharge from hospital, to ensure there are no conflicts in what hospital doctors recommended and community caregivers are doing. MedsCheck reviews can also be done when there are other changes in the patient's health and/or medications. In its first year, over 195,000 Ontarians had a personal medication review with their community pharmacist.

3.5.6 What can you do?

Before leaving the hospital, make sure you've discussed all your symptoms and treatments with staff and are satisfied with the care you got. Also:

- Get a written list of instructions for what you need to do when you go home, a contact number of who you should call for questions and a written description of your diagnosis while in hospital and any changes to your medications.
- Contact your family doctor's office to say you've been in hospital and they should expect the discharge note. Tell them what you know about medications, follow-up and care.
- Tell your pharmacist if you have new medications and ask for a MedsCheck post-hospital review.

One research study found giving patients a one-hour, one-on-one teaching session with a nurse educator on heart failure and its treatment halved readmissions. Ask if there are educational programs on your condition available at the hospital before you go home.⁶⁸

3.6 Keeping people healthy in long-term care

3.6.1 Why is this important?

Long-term care homes in Ontario take care of frail, usually elderly, people who have difficulty looking after themselves. Although people's ability to live independently tends to decrease as they get older, there are ways for long-term care homes to slow this process down for some of their residents. Physiotherapists can offer exercises, stretches and other treatments to keep people walking or moving about. Occupational therapists can recommend devices to help people with everyday activities, such as dressing and eating. A choice of recreational and social activities and pleasant surroundings can help prevent depression.

In this section, we've used a standard international tool for collecting data on seniors' health called interRAI, to assess how well residents of long-term care do at keeping depression from getting worse and at preserving their ability to perform everyday activities. These assessments are done at least every three months. Ontario started phasing in the use of this tool in 2006. So far we only have results from a small number of homes and more complete data will be available in the future.

We also look at emergency department visits by long-term care residents for conditions such as congestive heart failure, dehydration or diabetes. Research shows proper care can minimize (though not eliminate) the need to send residents to emergency.

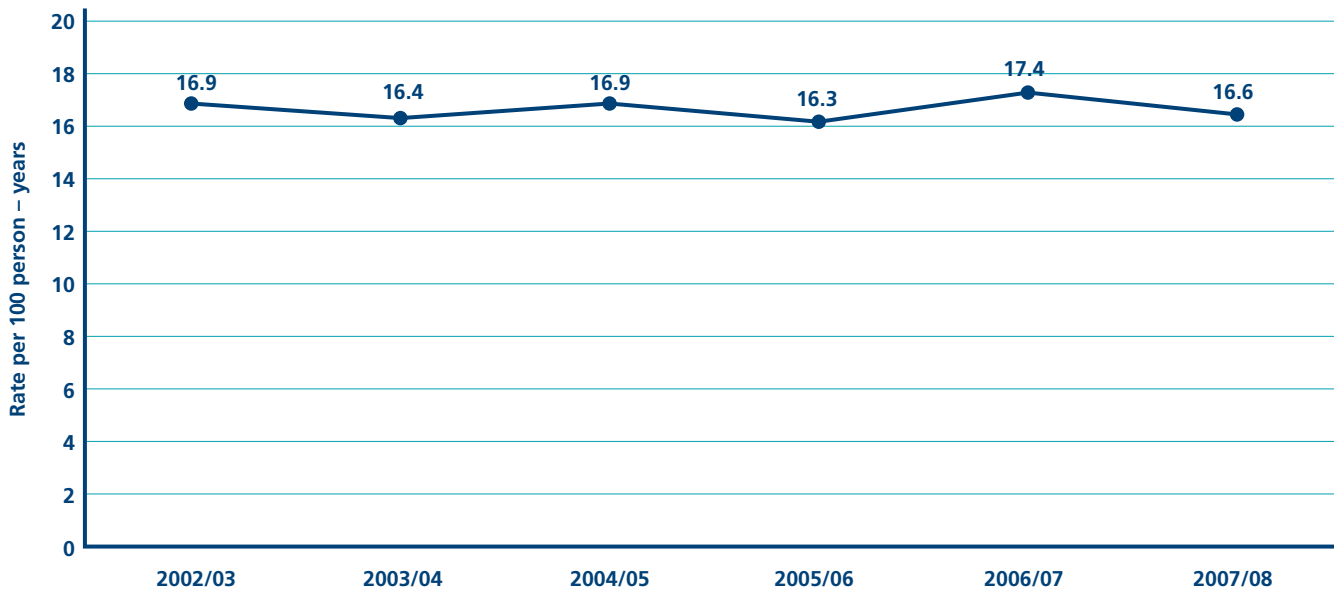


3.6.2 What did we find?

Typically, one in four residents appeared more depressed than they were during their previous assessment. About one in five residents showed

signs of decreased ability to function independently (although some of that is part of aging).

Rate per 100 person-years of emergency department visits for potentially preventable conditions by long-term care residents in Ontario, 2002/2003 – 2007/2008

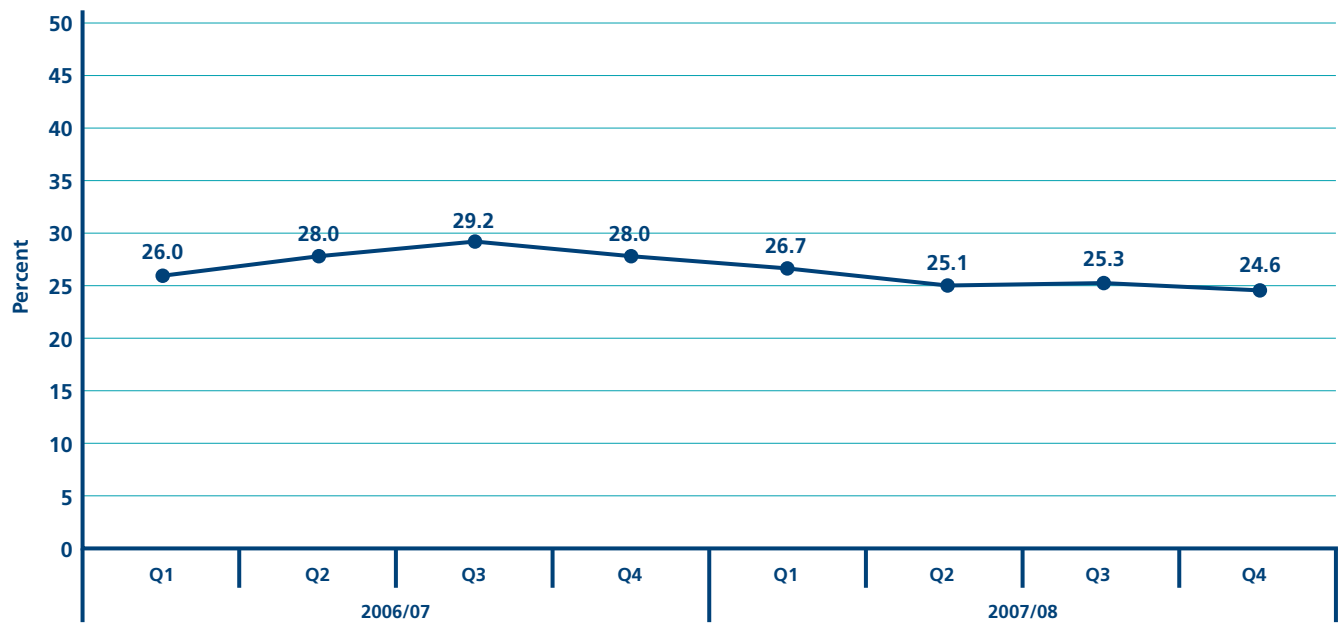


Source: Institute for Clinical Evaluative Sciences – Health system data



Between 2002/03 and 2007/08, there were about 16 visits to emergency for every 100 residents who were followed for one year for potentially preventable conditions like diabetes, heart disease or dehydration. This rate has remained stable for the last six years.

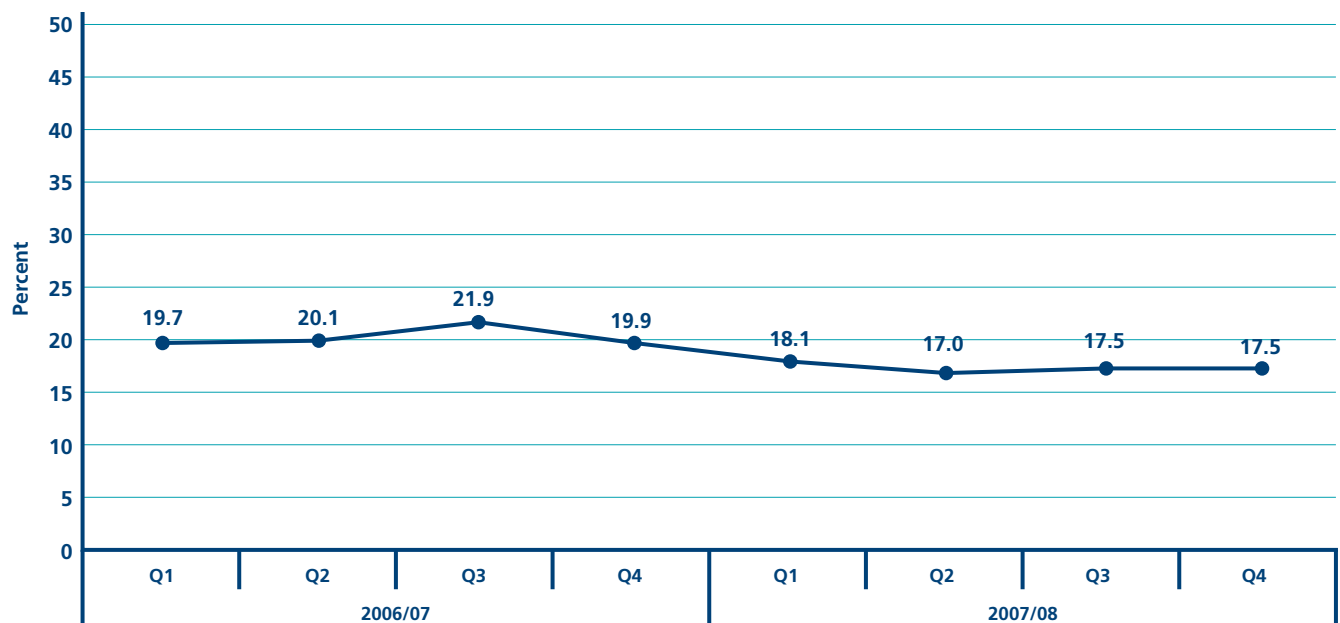
Percent of long-term care nursing home residents experiencing worsening depression in Ontario, 2006/2007 – 2007/2008 fiscal quarters



Source: Canadian Institute for Health Information, Continuing Care Reporting System (Inter-RAI MDS)

The proportion of long-term care residents whose depression was worsening has fluctuated over the past two years. On average, about one in four residents exhibited signs of worsening depression over three months.

Percent of long-term care nursing home residents experiencing deterioration in functional status in Ontario, 2006/2007 – 2007/2008 fiscal quarters



Source: Canadian Institute for Health Information, Continuing Care Reporting System (Inter-RAI MDS)

Close to one in five residents had lost some ability to function independently over the past three months.

3.6.3 Why are there challenges in keeping long-term care residents healthy?

- **Lack of protocols and training.** Chronic conditions require regular monitoring and consistent delivery of care. If a home doesn't have standard protocols for each condition, or staff don't have the skills and training to meet standards of care, frail residents can go downhill quickly.
- **Too few staff.** Many people worry staff don't have enough time to provide all the care residents need. This could be because there is not enough staff: a recent report for the Ontario government, *People Caring for People*, recommended increasing staffing⁶⁹ in long-term care homes, which would allow more care time per resident per day.
- **Inefficient use of staff time.** Last year the ministry hosted quality summits, where residents and staff were consulted about how to improve quality. Long-term care staff commented on the huge amount of mandatory paperwork and said streamlining charts and simplifying documentation could increase the quality of time spent caring for residents.⁷⁰
- **Quality of the home environment.** During the quality summits, residents expressed a strong belief that creating a “home-like environment” was critical to their quality of life. Residents may feel increased depression or not be motivated to keep themselves healthy if they are unhappy with their physical environment.

3.6.4 What are we doing in Ontario?

In May 2008, the ministry announced funding of \$4.25 million to establish fourteen nurse-led long-term care outreach teams.⁷¹ These teams of nurse practitioners and registered nurses will travel to long-term care homes to assess urgent problems, determine whether residents need hospital care and intervene to prevent unnecessary visits to hospital or emergency. Interventions that can keep people out of hospital include giving intravenous drips and caring for wounds. At a pilot site in Hamilton, visiting nurse practitioners helped avoid hospitalization in 39 to 43% of cases.⁷² See also the case study in section 7.2.4.

The ministry is co-ordinating the work of a team established to implement the findings of *People Caring for People*.⁶⁹ One of its jobs is to develop staffing plans with the right number and mix of staff for long-term care homes in Ontario.



3.6.5 What can you do?

If you or a family member live in a long-term care home or are searching for one, look for these important aspects of high quality care:

- Does it feel like home?
- Are there social and recreational programs to keep people engaged in their world and fight depression and isolation?
- What menu options are there?
- Are residents who can't get around on their own regularly moved by staff and supported by cushions and other equipment to prevent pressure ulcers?
- Does the home offer physiotherapy and occupational therapy to keep residents as active as possible?

Each home has a residents' council and a family council. You can ask to speak to someone from these groups, either to find out more about the home or to suggest improvements.

3.7 Cancer care

3.7.1 Why is this important?

Cancer is a common illness in Canada. Based on current trends, almost 40% of Canadian women and almost 45% of men will develop cancer.⁷³ Fortunately, getting cancer is no longer the death sentence it was once considered to be. There have been important improvements in all aspects of cancer treatment — surgery, chemotherapy and radiation therapy — in the past two decades. Over half of patients diagnosed with cancer are alive five years after diagnosis (which is how we measure cancer survival) and several types of cancer have survival rates of over 80% or 90%. Surviving cancer depends most of all on the type of cancer a person has and at what stage it is found. We need to ensure cancer treatments and the whole cancer care system are as effective as possible, to reduce pain and suffering and make the best use of healthcare spending.

To do that, we looked at two of the most common types of cancer — colon and breast — to see whether cancer survival has improved over time. We used the “relative survival ratio,” which shows the impact cancer has on normal life expectancy. It is the ratio of survival of a group of cancer patients to the expected survival of a group from the general population with the same broad characteristics (such as their age and where they live).

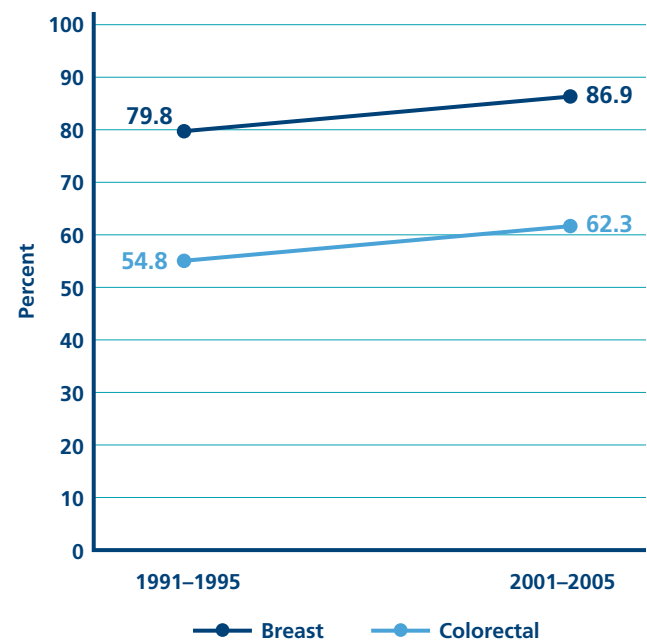
We also looked at whether an important life-saving practice — giving women radiation therapy after a lumpectomy for breast cancer — has been adopted, as a way of measuring whether we are good at integrating new knowledge into cancer treatment.

3.7.2 What did we find?

Cancer survival has improved substantially for breast and colon cancer. However, some women with breast cancer are not getting radiation therapy when it could potentially benefit them. We need to know why.

Relative survival for breast and colorectal cancer has improved substantially. Five-year survival after a diagnosis of breast cancer is good at 87%, although five-year survival for colorectal cancer is still just fair, at 62% — in other words, people with colorectal cancer are only 62% as likely to be alive after five years as comparable members of the general population.

Adjusted five-year survival ratio for patients with breast or colorectal cancers in Ontario, 1991-1995 – 2001-2005



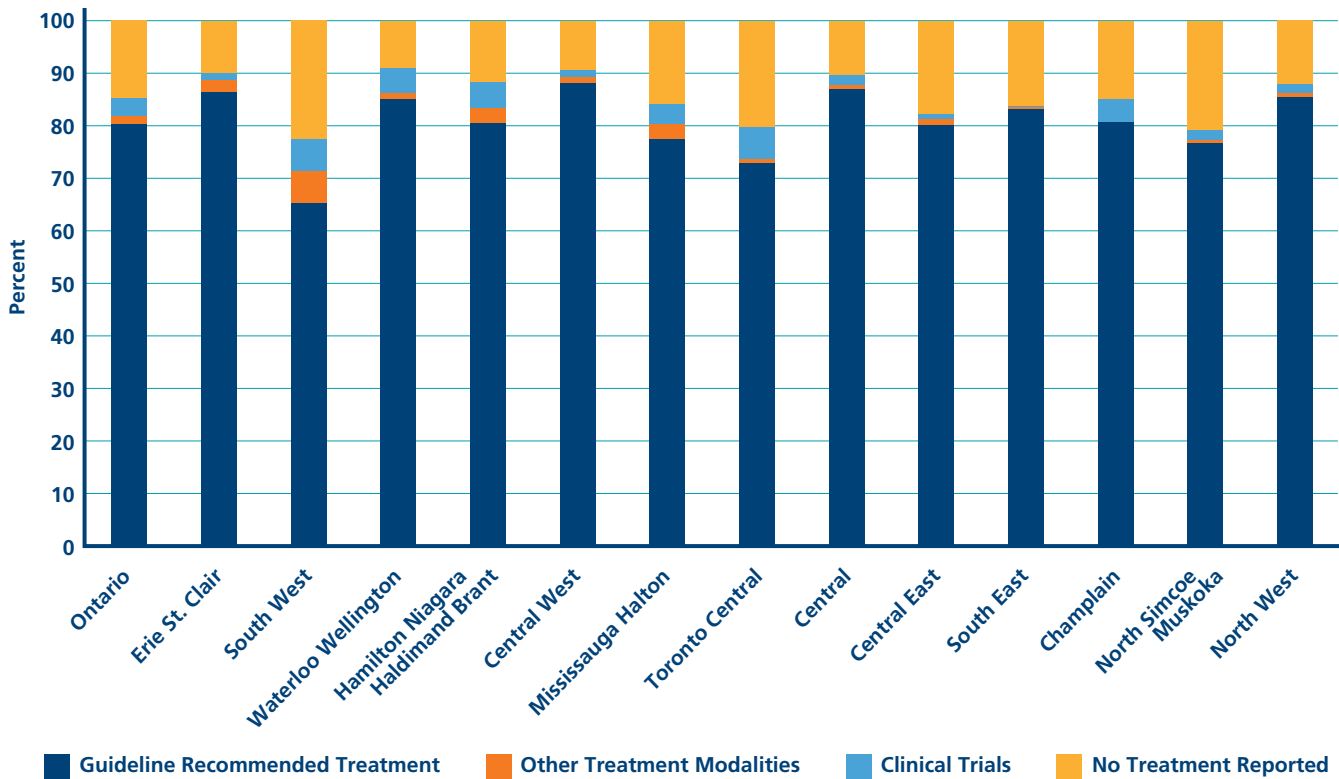
Source: Cancer Care Ontario, Ontario Cancer Registry

Note: Data is age-adjusted. Standard population are breast and colorectal cancer cases diagnosed between 1992-2001

More effective treatments are one reason for these improved chances of surviving cancer. But the most important factor contributing to survival is catching cancer early, which is done through screening and regular check-ups. Improved survival may also be related to more and better cancer screening services in the province, which detect small or slow-growing cancers that would otherwise not have been diagnosed.

Across Ontario, 80% of early-stage patients who have a lumpectomy receive radiation treatment according to recommended guidelines. A small number of women instead participated in clinical trials, which is a good thing, or had a different type of treatment to suit their particular circumstances. However, there are still 15% of women for whom no treatment was reported. It's possible some refused radiation therapy, either because of concern about side effects or inconvenience. Still, we're concerned there may be some women who are not getting an important treatment that could benefit them. At a minimum, we should know why this is happening. Auditing the charts of a sample of women who had lumpectomies but not radiation could help us find out.

Percent treated with guideline recommended radiation following breast conserving surgery in Ontario, all patients having surgery between April 2005 and March 2008



Source: Cancer Care Ontario, Activity Level Reporting and Ontario Cancer Registry



3.7.3 Why aren't all women having radiation after a lumpectomy?

Earlier studies of early-stage breast cancer found radiation therapy decreased the risk of local recurrence but not of death.⁷⁴ One study suggests women aged 70 or over with small tumors and positive estrogen receptors can avoid radiation as long as they take the drug tamoxifen.⁷⁵ However, more recent research from 2005 pooled data from 78 different studies and found radiation therapy does improve survival.⁷⁶ It may be some physicians are unaware of this evidence, or skeptical of it and not promoting radiation, or some patients are avoiding radiation out of concern about side effects.

3.7.4 Who is doing this better?

There are standard protocols for giving radiation, which means use of it should be similar everywhere, but in practice it differs across the province. The Central West Local Health Integration Network has the highest rate of patients getting recommended therapy, followed by the Central and Erie-St. Clair LHINs. The lowest rates of patients getting recommended care are in the Toronto Central and Southwest LHINs.

3.7.5 What are we doing in Ontario?

Cancer Care Ontario, the agency that co-ordinates cancer care, is working with its regional vice-presidents and hospital administrators to understand why treatment practices vary and to improve patients' chances of receiving up-to-date, evidence-based care.

Cancer Care Ontario is taking several steps to improve care. One is to promote multidisciplinary case conferences that bring together all of a patient's care professionals to review his or her progress and quickly assess all the testing and treatment options so the patient gets timely referrals, scheduling and decisions. Another is that patients' surgery records from local hospitals can now be linked with radiation treatment records in the cancer centre, which should smooth transitions in care. Cancer Care Ontario also works with physicians to review the latest research and keep guidelines for care up to date.

3.7.6 What can you do?

The Canadian Cancer Society, its Ontario branch, your local cancer centre, organizations and support groups all have extensive information available on all types of cancers. But being well-informed and taking an active part in decisions about your care are very important in the fight against cancer. For those cancer patients comfortable with the internet, Caring Voices, <http://www.caringvoices.ca/en/>, a web-based cancer community operating out of the Princess Margaret Hospital, offers all sorts of online information, tools, support groups and access to chat rooms where clinicians answer patients' questions to help them navigate the cancer system and make sense of everything they need to know.



4



4 SAFE

People should not be harmed by an accident or mistakes when they receive care.

4.1 Introduction

In recent years, patient safety has become a national and provincial priority. A safe healthcare system has procedures to detect, reduce and ultimately eliminate errors and accidents that can harm patients. The landmark Canadian Adverse Events Study by Baker and Norton in 2004 found there were 2.8 potentially avoidable events that caused harm for every 100 hospital admissions.⁷⁷ In raw numbers, there are about 70,000 hospitalizations in Canada each year where someone is needlessly harmed.

The Canadian Patient Safety Institute works closely with organizations across Canada to make patients safer. Since April 2005, it has supported and helped fund the work of the Quality Healthcare Network on the Safer Healthcare Now! campaign in Ontario. This campaign engages teams in hospitals and other settings around the province to achieve the following aims:

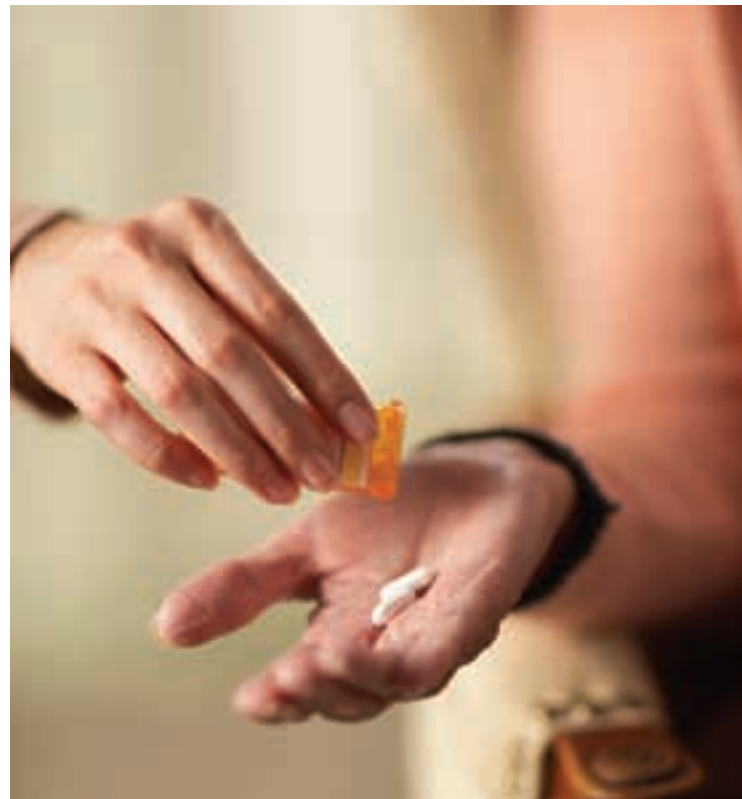
- Reduce hospital infections (ventilator-associated pneumonia, central line, surgical site and superbugs)
- Avoid cardiac arrests (through rapid response teams)
- Improve care for heart attacks
- Reconcile medications to avoid drug problems caused by miscommunication
- Prevent falls in long-term care
- Prevent blood clots in hospital

This year the Ontario government started requiring hospitals to report publicly on eight indicators of how safely they are delivering care — including how many hospital patients are contracting the dangerous bacteria *Clostridium difficile* (C.difficile). It's part of a plan to make hospitals safer by making their operations more transparent. Research shows when there's more openness about problems in healthcare, improvements are more likely.

Although most of the attention on safety to date has focused on hospital in-patient wards, there are safety issues in emergency departments, long-term care homes and the community as well. We're looking at all those sectors in this year's report.

4.1.1 Key points about safety

- Despite the highly trained and well-intentioned professionals working in Ontario's healthcare system, many patients are injured by the care they receive. These injuries are often the result of flaws in the system's design.
- Over 66,000 seniors are getting drugs for which there are safer alternatives. Seniors in long-term care often fall and get pressure ulcers, both of which are avoidable.
- Drug errors occur in hospitals when someone forgets to give a drug, gives the wrong drug or dose, or gives the drug the wrong way. There are misdiagnoses as well — sometimes heart attacks or brain bleeds (otherwise known as subarachnoid hemorrhage – SAH) are missed when patients go to emergency.
- On the positive side, Ontario has taken the lead in public reporting of superbug infections in hospitals. The Council applauds this effort towards greater transparency to the public.





Seniors tend to have more medical problems and therefore take more medicines, but they are also more likely to react badly to side effects. Expert panels of doctors and pharmacists have identified a list of drugs that should not be used by the elderly because they have potentially serious side effects such as dizziness and falls.⁷⁸ Often there are safer alternatives. We need to reduce use of these risky medications.

Another important aspect of drug safety is ensuring people get the right medication, at the right dose and right time, in the right way. Accidentally giving too high a dose can lead to serious side effects or death. Too low a dose, or forgetting a dose, can make a medical condition get worse. And giving the wrong drug can lead to a combination of the two — side effects from the wrong drug and a failure to treat the medical problem.

4.2 Drug Safety

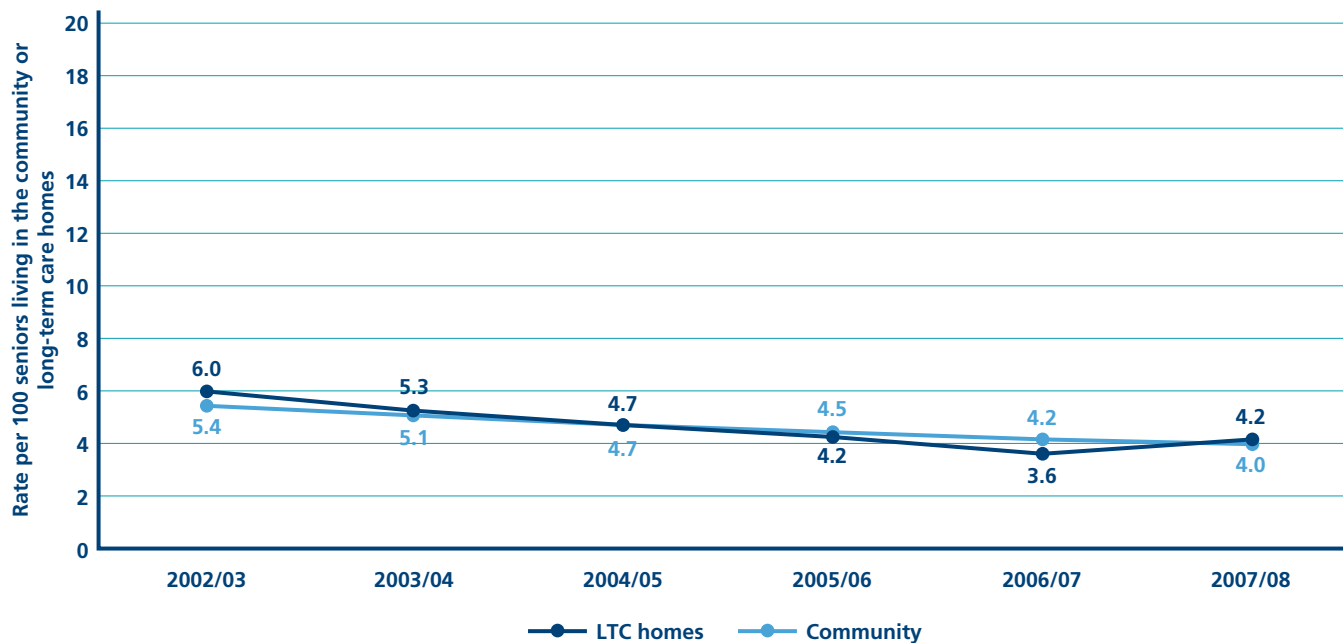
4.2.1 Why is this important?

Medications are an important part of comprehensive health-care. Used properly, they save lives and improve the quality of life, although it's important to note almost all drugs have some side effects and some cause more problems than others. Working to improve the ways we use drugs will make patients safer.

4.2.2 What did we find?

The list of drugs elderly people should not take is called the Beers list, after Dr. Mark Beers, who drew up the original version. In this year's report we look at a shortened version of the Beers list, including only drugs where the evidence is strongest they should be avoided in elderly people.

Rate of being prescribed at least one potentially inappropriate prescription per 100 seniors (aged 65+) living in the community or long-term care homes in Ontario, 2002/2003 – 2007/2008



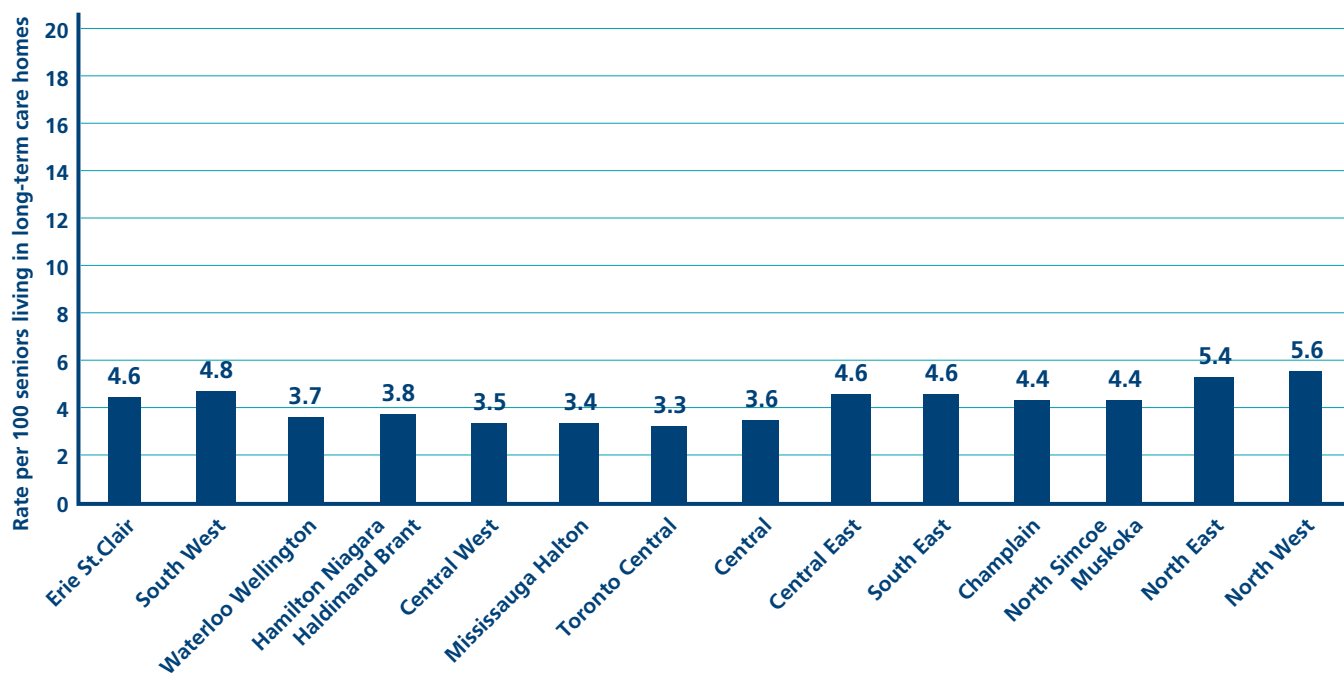
Source: Institute for Clinical Evaluative Sciences – Health system data

The use of potentially inappropriate drugs in the elderly is declining, but there is still room for improvement. There are many different types of drug errors in hospital, such as omitting a dose, giving the incorrect drug or dose, or administering it the wrong way.



In 2007/08, one out of 25 seniors received medications for which there were safer alternatives. The rate of use of these medications is about the same in long-term care homes and the community. Fortunately, use of these medications has been declining over the past six years. The most common potentially inappropriate drugs in long-term care and the community are diazepam (Valium), fluoxetine (Prozac), indomethacin, doxepin and high doses (that is, more than 25 mg) of amitriptyline.**

Rate of being prescribed at least one potentially inappropriate prescription per 100 seniors (aged 65+) living in long-term care homes across Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

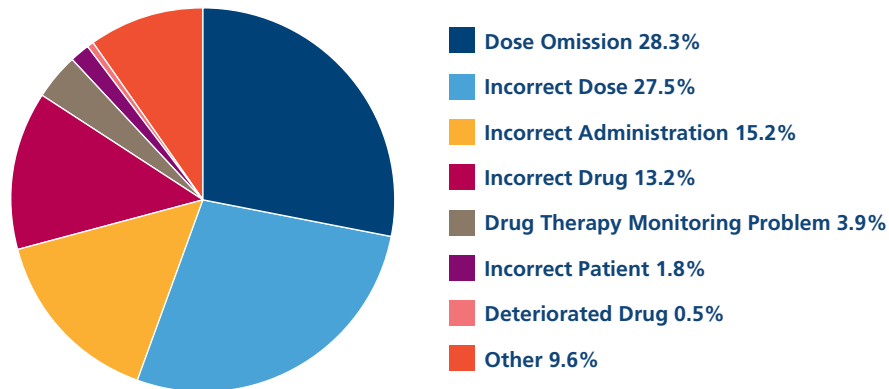
Note: Excludes hormone replacement therapy and low dose amitriptyline (less than or equal to 25mg)

The rates of prescribing potentially inappropriate drugs to seniors vary by area. The North West and North East Local Health Integration Networks have higher rates than

Toronto Central and Mississauga. In the future we'll be reporting on the rate of use of inappropriate drugs by long-term care home.

** The complete list of potentially inappropriate drugs used to calculate this graph can be found in our 2009 Technical Report, www.ohqc.ca.

Percent of reported medication incidents resulting in harm or death by type of medication incident in Ontario, 2000-2008



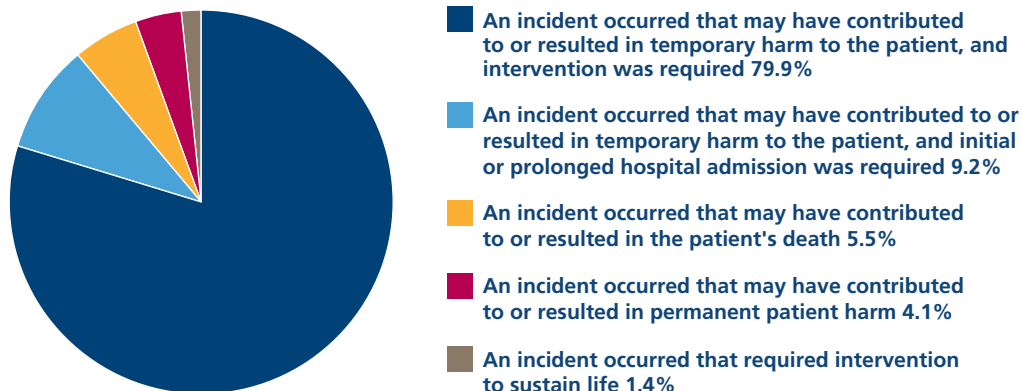
Source: Institute for Safe Medication Practices Canada

Note: Results based on voluntary reporting; reporting institutions are anonymous to ISMP Canada; majority of reports are from acute-care settings

To look at preventable medication errors causing harm in hospitals, we used data submitted from 47 Ontario hospitals on a voluntary, anonymous basis to the Institute for Safe Medication Practices Canada (ISMP Canada). The data can't say how common errors are, but they can show types of errors and the harm they cause.

The data show the four most common types of medication errors causing harm or death are forgetting to give the drug, giving the wrong dose, administering the drug incorrectly or giving the wrong drug altogether.

Percent of reported medication incidents resulting in harm and death outcomes by National Coordinating Council for Medication Error Reporting and Prevention category in Ontario, 2000-2008



Source: Institute for Safe Medication Practices Canada

Note: Results based on voluntary reporting; reporting institutions are anonymous to ISMP Canada; majority of reports are from acute-care settings

Where a preventable medication incident causes harm, the effect is usually temporary but in 5.5% of cases, healthcare providers believed the incident might have contributed to or resulted in the patient's death.

The data show the types of medications most commonly involved in errors causing harm are insulin, opioids (painkillers), blood thinners and blood-pressure drugs. All are often necessary and beneficial, but we need to find safer methods of using them.



4.2.3 Why do we have problems with medication safety?

The elderly may be on potentially inappropriate drugs for any of the following reasons:

- **Habit.** Patients may be reluctant to stop taking a medication they have been taking for years.
- **Ignorance.** Patients, physicians or long-term care homes may not know a drug is dangerous, or that there is a safer alternative.
- **No choice.** There may be rare exceptions where a drug on the list is the only viable option, such as if the patient is allergic to the safer alternative.
- **Difficulty in stopping drugs.** Drugs like diazepam (Valium) are sedatives and taking patients off them could lead to patients being up and restless at night, at least at first. Residents may need more attention while they are being weaned from the drug, which increases demands on staff.

There are dozens of reasons why medication errors occur in hospitals. Here are just a few:

- The doctor's handwriting was illegible
- A drug had a name that looked or sounded like another drug and the two got mixed up

- Staff confuse two patients with similar names
- A verbal order for a drug is not heard correctly
- The wrong label is put on a drug
- Decimal points get lost — for example 0.5 mg is read as 5 mg
- Doses are miscalculated — the wrong digits are punched into a calculator, or the weight in pounds is used instead of kilograms
- Design and layout of drug storage varies. For example, if medication carts are arranged differently in different parts of a hospital, then someone used to reaching for a drug in the top right part of the cart might pick the wrong drug while working on a different floor
- All the information was correct but the person administering the drug made a mistake, because he or she was feeling rushed or distracted

4.2.4 What has been done to reduce medication errors?

In one Quebec study, a computerized decision support system that alerts doctors when they're ordering a potentially inappropriate drug reduced new prescriptions by 18%.⁷⁹

Computerized systems allow doctors to enter drug orders straight into a computer, often using a menu of standard choices, reducing problems from illegible writing and transcription errors. Studies estimate they reduce serious drug errors from 30 to 84%.^{80,81} The University Health Network in Toronto first used computerized drug orders in 2004.⁸²

Other ways to avoid medication errors include:

- Automated medication dispensing devices⁸³ which have pre-stocked drawers for each patient's medication that automatically unlock exactly when the medication is due to be given
- "Unit-dose dispensing,"⁸⁴ where medications for a patient are prepared by the pharmacy and packaged ready to administer at the right moment, which helps eliminate nurses giving the wrong dose
- Standardizing the layout of medication carts across an institution
- Keeping the stock of the most dangerous medications separate

4.2.5 What is Ontario doing?

Doctors rarely prescribe drugs to seniors that aren't covered by the provincial insurance. A University of Toronto study⁸⁵ found almost half the Beers list drugs available in the US are not covered in Ontario, so they're less likely to be prescribed.

Ontario's eHealth Strategy says electronic prescribing and drug information systems are an immediate priority. There are plans for two pilot projects on electronic prescribing involving nearly 100,000 Ontario residents.

The Health Network System links all Ontario pharmacies to the ministry of health's computer systems.⁸⁶ It's designed to handle Ontario Drug Benefit claims but can also alert a pharmacist of potentially dangerous combinations of drugs and people who may be getting duplicate prescriptions.

Ontario also has a Task Force on Medication Management⁸⁷ in long-term care homes. It began its work in July 2008 with a survey of medication operations in all long-term care homes, looking for common problems and good ideas for improvement. Formal audits are also being done in some homes. A report is due in 2009.

The Institute for Safe Medication Practices Canada offers a medication safety self-assessment program which lets hospitals and long-term care homes identify flaws in the way they manage drugs. ISMP Canada is also expanding its voluntary database for reporting medication incidents into long-term care and community pharmacies.

Automated drug prescribing is particularly important for cancer because of the complex drug regimens prepared specifically for each patient and computerized prescribing systems help to ensure orders are conveyed accurately and clearly to the pharmacist. Cancer Care Ontario has set a provincial goal for 90% of all systemic or chemotherapy orders to be done by computer. In 2006, only 62% were.⁸⁸



4.2.6 What can you do?

You can check our version of the Beers list (see the Technical Report found on our website) or look at the complete list in the Archives of Internal Medicine, Volume 163, No. 22, December 8, 2003, in an article called *Updating the Beers Criteria for Potentially Inappropriate Medication Use in Older Adults* (it's on page 2716). The article is available online at: <http://archinte.ama-assn.org/cgi/content/full/163/22/2716> or the list alone at <http://www.dcri.duke.edu/ccge/curtis/beers.html>.

If one of the drugs you're taking is on the list, ask your doctor if there's a safer alternative for you. Don't stop taking it before you've discussed it with your doctor.

Check to see if your drug is on the list of 'look-alike, sound-alike' drugs and remind healthcare providers not to confuse your drug with the other. The list of look-alike, sound-alike drugs is at: <http://www.ismp.org/tools/confuseddrugnames.pdf>.

Ontarians should also take advantage of MedsCheck to consult their pharmacist for information on all their medications. See sections 3.5.5 and 9.4.4 of this document for more details.

4.3 Avoiding harm – Reducing falls, ulcers and infections in hospitals and long-term care

4.3.1 Why is this important?

Ontarians should not be harmed by accidents or mistakes when they are in hospital or a long-term care home, but it happens — and often, could have been prevented with proper care. Recently, infections patients get in hospital have attracted media attention. Other common dangers for patients are falls and pressure ulcers.

The Ontario government made it mandatory to report hospital-acquired infections in September 2008, starting with *C. difficile*; we present the first few months' results here.

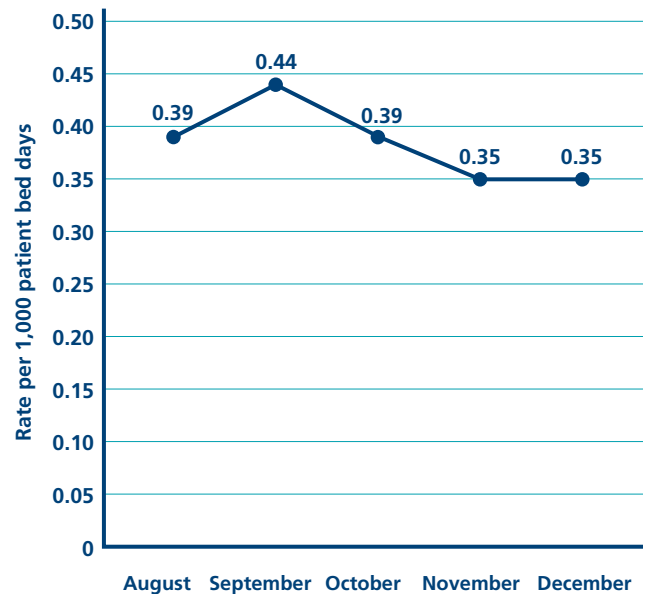
C. difficile is a bacterium that lives in 3 to 5% of adults without causing symptoms but for people on high doses of antibiotics, those who have had bowel surgery or chemotherapy, or who have been in hospital a long time, it can cause severe, even life-threatening, diarrhea. *C. difficile* spreads in institutions if proper hygiene is not in place, including correct hand washing.

Falls are the leading injury that leads to admission to hospital in Ontario — nearly 60% of injury admissions every year are for falls. About 40% of older adults who are hospitalized after a fall have a broken hip and approximately 7% die because of it.⁸⁹ Being in a home doesn't reduce the risk; falls are a major safety issue in long-term care. As well, some 40% of seniors who fall move into long-term care.⁹⁰

Pressure ulcers, also known as bed sores, are triggered by lack of blood flow to areas of skin that are under constant pressure because a patient can't move. They start as red patches but can proceed quickly to blisters, open sores and then holes where the tissue has died. They are painful, difficult and expensive to treat once they open and largely avoidable.

4.3.2 What did we find?

Rate of hospital acquired *C. Difficile* disease per 1,000 patient bed days in acute care hospitals in Ontario, August to December 2008

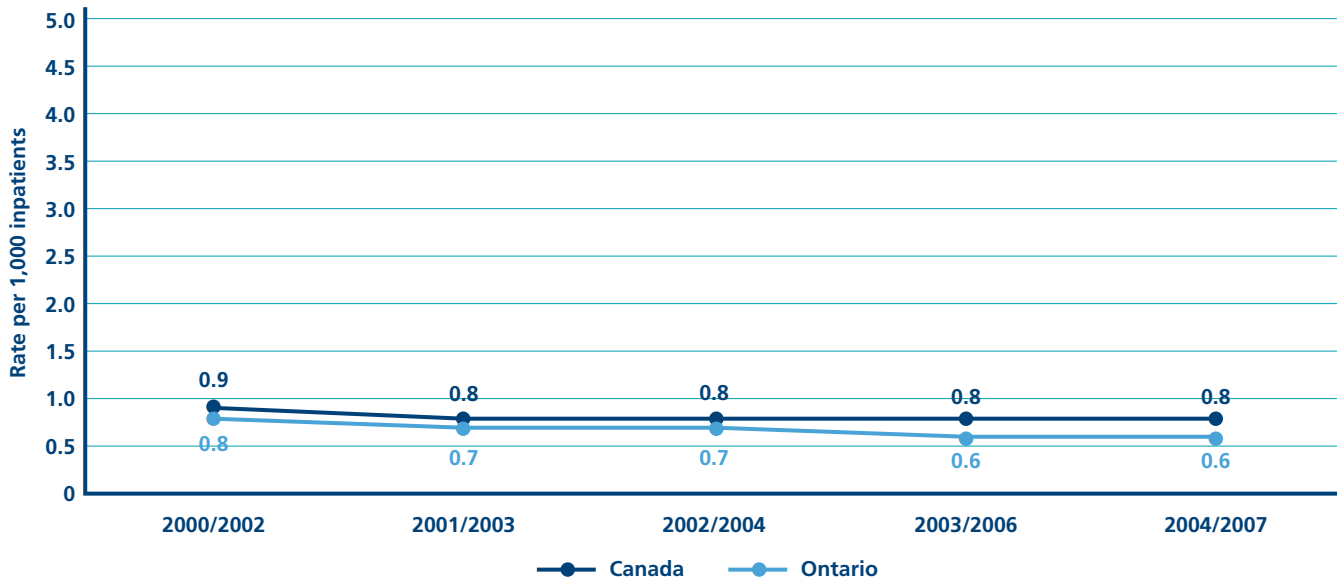


Source: Ministry of Health and Long-Term Care⁹¹

Hospitals in Ontario began reporting *C. difficile* infections in August 2008.⁹² The infection rate in December 2008 was 0.35 per 1,000 patient, which translated to 295 cases that month.



Risk-adjusted rate of in-hospital hip fracture per 1,000 inpatients in Ontario and Canada, 2000/2002 – 2004/2007

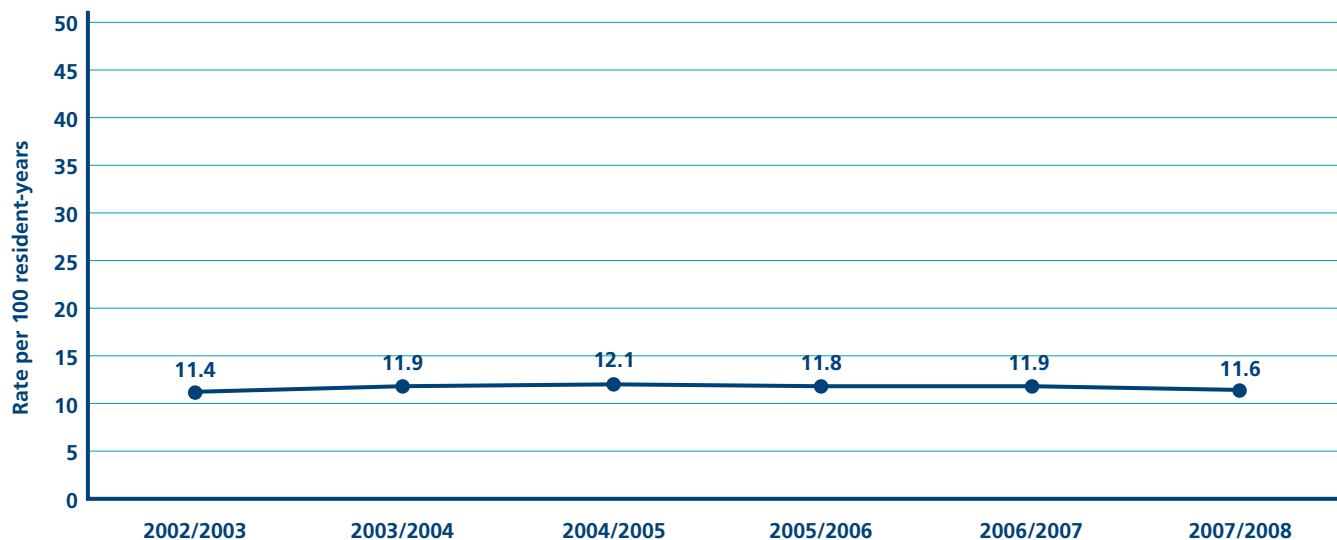


Source: Canadian Institute for Health Information

Note: Data represents three-year fiscal averages. Data are risk-adjusted for age, sex, whether a surgical procedure was provided, and the presence of medical conditions that increase the chance of a fall

It's rare for a patient to break a hip in the hospital — only one in 2,000 does so. This rate has decreased in Ontario over the past five years and it's lower than the rest of Canada.

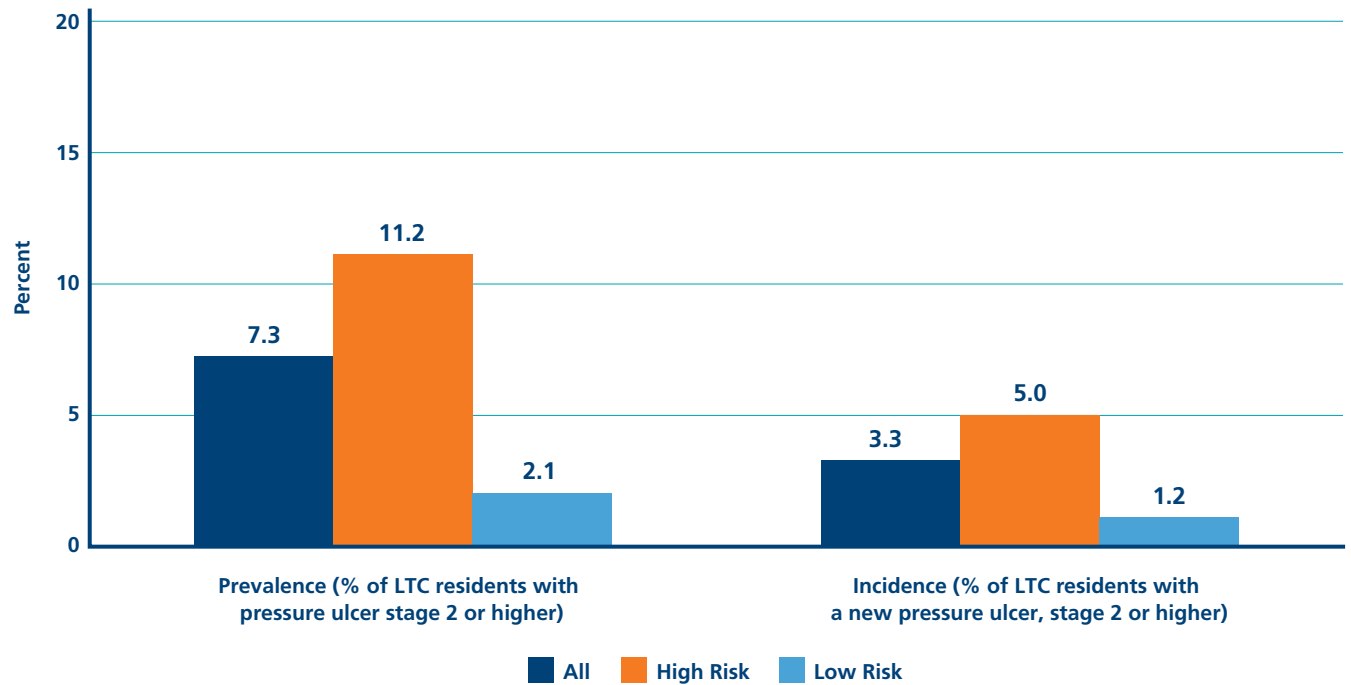
Rate of falls among seniors (aged 65+) resulting in an emergency department visit or inpatient hospitalization per 100 resident-years in long-term care homes in Ontario, 2002/2003 – 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

The picture in long-term care is not as good; there are about 11 falls serious enough to result in a visit to an emergency department for every 100 nursing-home residents in Ontario, among residents followed for one year. These rates also have not changed in the past five years.

Pressure ulcer incidence and prevalence of long-term care home residents in Ontario, January to March 2008



Source: Institute for Clinical Evaluative Sciences – Continuing Care Reporting System (InterRAI MDS)

Ontario has just started collecting data on pressure ulcers in a limited number of long-term care homes, as part of its interRAI assessments. In 2007/08, 7.3% of long-term care residents surveyed had a stage 2 or higher pressure ulcer (the higher the number, the worse the ulcer, up to stage 4). Pressure ulcers are more prevalent in patients deemed at high risk — 11.2% of patients at high risk have them, while 2.1% of those at low risk do.

We also looked at the frequency of new ulcers and found 3.3% of long-term care residents who don't have an ulcer in their previous assessment develop one. For those at high risk, the rate is 5.0%. It's 1.2% for low-risk patients.

4.3.3 Why are patients being harmed?

- Poor hygiene.** The main reason patients get infections in hospital is poor hand hygiene by healthcare providers and visitors. People forget, or hand washing isn't part of the hospital's culture, or isn't convenient, or staff worry about chapped or broken down skin from excessive washing.
- Breakdowns in care.** Sometimes, infections spread when hospital rooms or equipment aren't disinfected thoroughly enough and sometimes because staff don't recognize the infection quickly enough.
- Medication.** Falls are frequently a result of inappropriate prescribing.⁹³ Some medications make elderly people dizzy, particularly when they get out of bed.
- Environment.** All kinds of factors, indoors as well as out, such as poor lighting, clutter and slippery floors or stairs can be a hazard for a sick or frail senior.
- Equipment.** Bed rails, designed to keep patients from falling out of bed, may increase falls if they're poorly designed or assembled, because some elderly patients try get around them.⁹⁴
- Physical problems.** Even healthy elderly people may have poor vision and others don't get much exercise, which can make them weak and leave them with poor balance.
- Skin care doesn't go far enough.** The elderly are more prone to pressure ulcers because their skin is thin and less resilient, but ulcers can be prevented with rigorous skin care,⁹⁵ including:
 - Good diet and hydration
 - Keeping skin dry (which means avoiding wet diapers in the incontinent)



- Regularly checking for early signs of ulcers
- Regularly turning immobile patients
- Extra care by staff to avoid pulling the skin during any patient movement
- Special mattresses that spread pressure more evenly

Preventing pressure ulcers takes training and enough staff to do all the steps involved. It can be more difficult if patients are unhappy and not eating well or getting enough to drink. Reluctance to pay for equipment, like special mattresses, is also a problem, although evidence shows it saves money in the long run,⁹⁶ because a serious pressure ulcer is so difficult and expensive to treat.

4.3.4 Who is doing this better?

Ontario's *C. difficile* rate, which is about 0.39 per 1,000 bed days appears to be better than Quebec's rate of 0.6.⁹⁷ Rates also seem lower than in the United Kingdom (1.18),⁹⁸ but we may be calculating them differently.

British Columbia is doing a good job preventing seniors' falls since it launched a number of initiatives in 2001 to prevent them (www.injuryresearch.bc.ca). It's estimated the cost of treating fall-related injuries in B.C. hospitals was \$24 million lower in 2004/05 than the estimated cost of \$175 million in 2000/01.⁹⁹ There was also a decrease

of 15.3% in fall-related hospitalization rates (age standardized) among those 65 and over between 1996/97 and 2004/05.¹⁰⁰ B.C. is a world leader in preventing falls.

In the US, 12% of long-term care residents at high risk for pressure ulcers have one, which is not significantly different from Ontario's rate. Rates of pressure ulcers are one of the quality measures for Medicare-funded long-term care in the US, where they are reported by individual home. The best performers have rates around 8%.¹⁰¹

4.3.5 What is Ontario doing?

Ontario's strategy for controlling *C. difficile*¹⁰² includes mandatory hospital reporting of infection rates; a "Just Clean Your Hands" program to educate health professionals about the difference properly washed hands make; funding for 166 infection control professionals with specialized training and expertise in infection prevention and control to work in Ontario hospitals; and Infection Control Resource Teams, where any hospital with a new infection outbreak can get on-site assistance from a team of experts on how to track and contain it.

The Safer Healthcare Now! national collaborative on falls in long-term care runs from May 2008 to May 2009.¹⁰³ Twelve Ontario long-term care homes are participating. The goal is to reduce falls by 40% by assessing people better for their risk of falls and communicating that risk, and by doing more to prevent falls and reduce injuries from falls when they happen.

The Fall Injury Prevention Program for Seniors in Northwestern Ontario is part of the North West Local Health Integration Network's Aging at Home Strategy¹⁰⁴ which was launched this year and includes education for seniors and caregivers on preventing falls. They're starting in communities where pressures on the emergency department are greatest.

Ontario started the Pressure Ulcer Awareness and Prevention Collaborative in January 2009, involving 30 long-term care homes and aiming to reduce incidence and prevalence by 50%. Participating teams learn quality improvement skills and meet periodically to share their experiences in improving care.

4.3.6 Success story — Catching up with falls: A program for prevention at Kensington Gardens

Situation: Kensington Gardens is a 350-bed long-term care home in Toronto. Its first building opened in 2002, with 200 beds, the second in 2004 with 150 beds. Because

Kensington is new and independent, it works with an alliance of 22 not-for-profit homes in the greater Toronto area checking shared data to measure quality of care. Comparisons showed Kensington residents had an above-average number of falls.

Aim: To decrease falls.

Measures: Kensington kept track of:

- The number of falls
- How many result in broken bones (and transfer to emergency)
- How many other types of injuries there are
- Falls with no injury
- How many residents fall
- How many residents had only one fall
- How many residents fell more than once

Changes: Kensington Gardens adopted the Registered Nurses’ Association of Ontario’s guidelines for fall prevention. They call for educating all employees on the risk of falls, give tools to assess the risk and interventions to prevent falls. They also introduced a document for comparing three falls at a time to see if there are patterns or common contributing factors.

To improve the quality of care when someone does fall, the home added monthly fall drills, with a staff playing a resident. That gave staff the chance to practice assessing and treating some who had fallen and what information to record.

Results: The table below summarizes the homes findings.



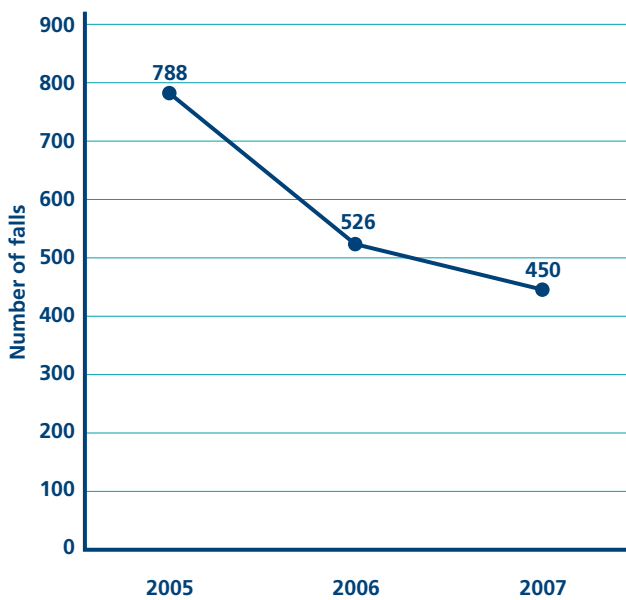
Fall prevention program indicators — Kensington Gardens

Indicator	2005	2006	2007
Number of falls	788	526	450
Number of falls resulting in fractures (resulting in transfer to the emergency department)	19	21	18
Number of falls resulting in other injuries	233	134	141
Number of falls with no injury	526	372	300
Number of residents incurring falls	547	423	366
Number of residents who had only one fall	391	349	310
Number of residents who had more than one fall	167	75	63

Source: Kensington Gardens, Toronto, Ontario

There was a significant decrease in falls over three years and fewer residents fell more than once.

Total number of falls at Kensington Gardens long-term care home, between 2005 and 2007



Source: Kensington Gardens, Toronto, Ontario

Next steps: Kensington regularly reviews its data and discusses trends at departmental meetings. If there's a spike in month-to-month rates, or higher rates compared to the other homes Greater Toronto, staff look for the cause and make changes to stop the increase. Annual education on falls and the drills keep the program alive.

4.3.7 Success study — Getting the red out: Eliminating pressure ulcers at Wellesley Central Place

Situation: Wellesley Central Place opened in the summer of 2005 on the site of the old Wellesley Hospital in Toronto. The 150-bed long-term care home is managed by the Drs. Paul and John Reka Centre, which has provided long-term care in the neighbourhood since 1988. Wellesley Central and the Reka Centre were among 20 long-term care homes that joined the pilot Pressure Ulcer Awareness Program, developed by the Canadian Association of Wound Care.

Aim: One of Wellesley Central's corporate values is to be a leader in clinical practice in long-term care and increase quality of life for residents, specifically:

- To increase clinical skills
- To decrease or minimize the number of stage 1 and 2 ulcers

- To make sure pressure ulcers are more quickly recognized
- To prevent existing ulcers from getting worse

Now they have increased their goal to zero stage 1 ulcers that were acquired in-house (the goal doesn't include ulcers "inherited" when residents come in from home or a hospital).

Measures: Prevalence and incidence of pressure ulcers.

Changes: Most care in Wellesley is provided by personal support workers, who report to their resident home area charge nurse. When the program began, many were not aware the red areas on a resident's skin were stage 1 ulcers. That meant the prevalence of ulcers was much worse than most people thought, but laid the groundwork for education, prevention programs and improvement.

Every patient is assessed according to the Braden Scale for Predicting Pressure Ulcer Risk, within 24 hours of arrival. The family is told of the risk and a care plan is written, including what equipment is needed, such as cushions, air mattresses or foam-filled booties. Training ensured everyone knows how to reposition a resident and to do it on schedule, as indicated by the level of risk.

If an ulcer appears, it's immediately reported to the nurse, an alert sticker goes on the chart and bright green turning schedules, with precise times and moves, are posted over the resident's bed. Whichever Resident Care Unit does the best job each month of "getting the red out" gets a certificate of recognition.

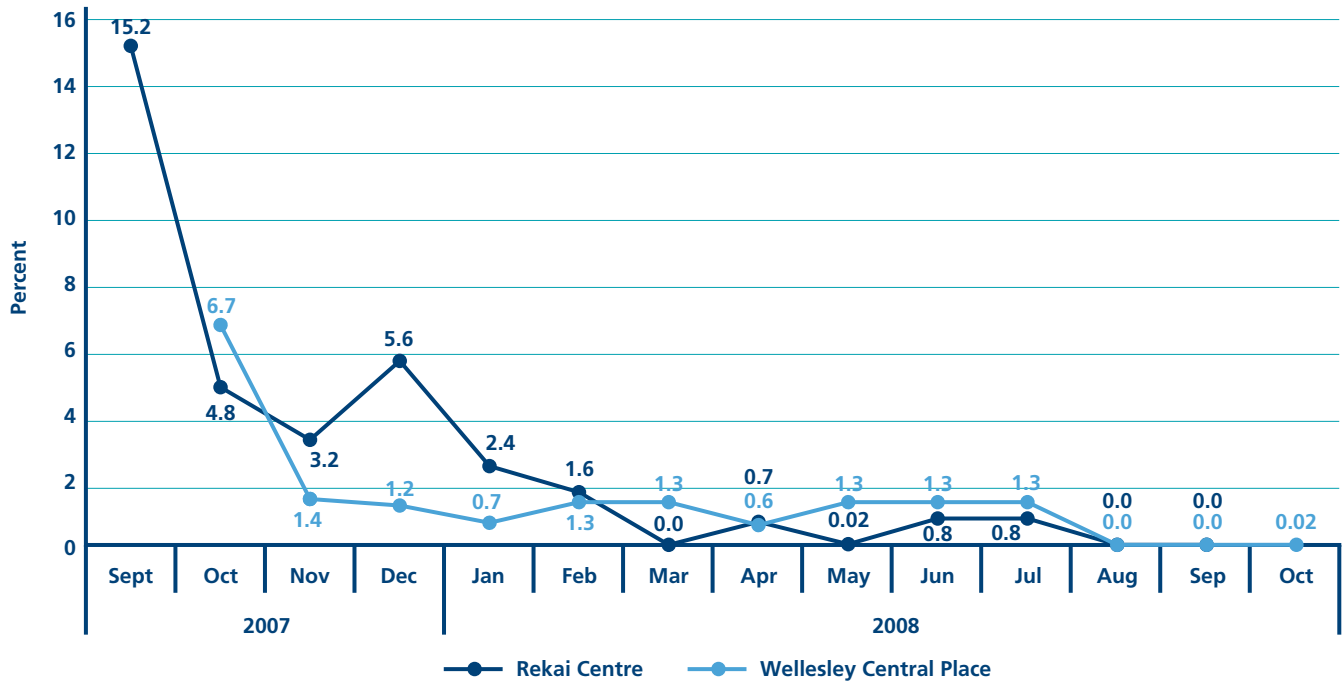
Meanwhile, the pressure ulcer team, led by the nurse consultant running the program, meets to review how people with ulcers are recovering and, if there are new ulcers, figure out why. The team includes the physiotherapist, the dietician, the activity director, the nurse in charge of skin and wound care, and representatives of nursing and support workers.

When the first signs of an ulcer appear, team members determine the cause. If it's because of poor nutrition or immobility, it's possible to reverse a stage 1 in a week by introducing protein and vitamins, or a rigorous turning schedule.

Results: Both sites dramatically reduced pressure ulcer prevalence in a very short time.

Next steps: It's common for residents to develop ulcers when they go to hospital: just a couple of hours on a hard

**Rekai Centre and Wellesley Central Place long-term care homes
percent prevalence of facility acquired pressure ulcer,
September 2007 to October 2008**



Source: Wellesley Central Place and Rekai Centre, Toronto, Ontario

emergency bed can reopen a healed ulcer or start a new one. Wellesley Central dealt with that by meeting with the staff at nearby St. Michael’s Hospital and arranging for pressure ulcer care to be available with a phone call when a resident is sent there, but the agreement sometimes breaks down if the right people aren’t around at either end, so that system needs reinforcing.

Agency nurses and workers, and new staff, are not always aware of the protocols. Better, faster education for new people and temporary staff is planned.

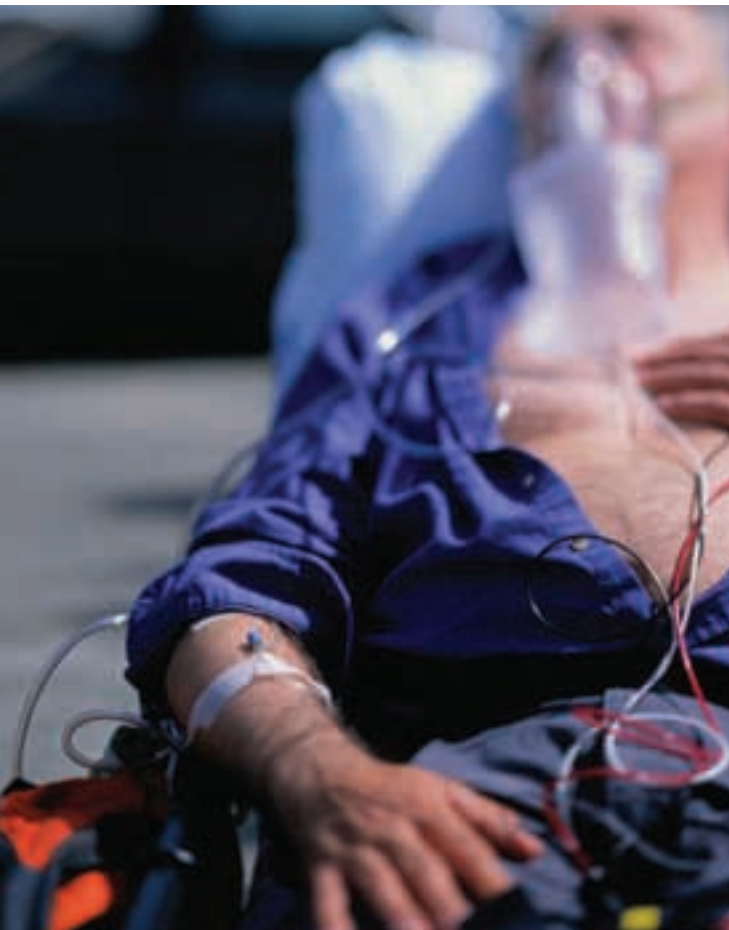
The pressure ulcer program will continue as Wellesley Central moves on to a program for preventing falls.

4.3.8 What can you do?

Go to: http://www.justcleanyourhands.ca/pdf/10_11_Hand_wash_7Feb08.pdf, for instructions on how to wash your hands well enough to control infections. In many cases, using an alcohol-based hand rub is even more effective than washing your hands. Carry some with you at all times and use it frequently.

Preventing falls by seniors is a special focus for the Community Health Research Unit at the University of Ottawa. They’ve prepared a booklet that includes a checklist for assessing whether stairs in your community — indoors and out, public and private — are safe. Find it at: <http://aix1.uottawa.ca/~nedwards/chru/english/pdf/SafeStairsOct5.pdf>. If you’re worried about a fall yourself or by a family member in hospital or long-term care, make sure the lighting is good, don’t leave clutter on the floor and use proper no-slip footwear. Ask staff for help to get around if you need to.

If you think you are at risk for a pressure ulcer, make sure you’re being turned regularly when you’re in bed, eat well and ask about getting a pressure-relieving mattress.



4.4 Missed diagnosis

4.4.1 Why is this important?

Heart attacks and subarachnoid hemorrhages — or brain bleeds — are life-threatening conditions. Heart attacks occur when an artery to the heart gets blocked, which cuts off blood flow and oxygen to the heart muscle. Subarachnoid hemorrhages are usually the result of an aneurysm — part of the wall of a blood vessel in the brain balloons out and bursts — causing a rush of blood into the brain. In both cases, prompt diagnosis and treatment can avoid death and reduce disability.¹⁰⁵

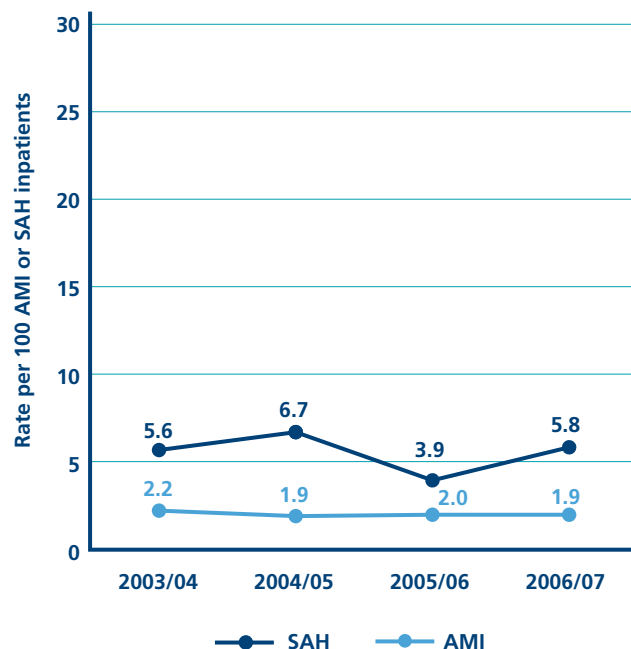
We looked at whether patients who were ultimately found to have a heart attack or subarachnoid hemorrhage had shown up at an emergency department previously with similar symptoms, but were sent home.

This analysis looks at only two examples of missed diagnoses. There are many other possible conditions that are often missed that are worth studying in the future, including ectopic pregnancy, aortic dissection, bowel infarction and meningitis.

4.4.2 What did we find?

In a small but serious percentage of cases, heart attacks and brain bleeds are initially misdiagnosed when patients arrive at an emergency department.

Rate of missed diagnosis of AMI and subarachnoid hemorrhage in the emergency department in Ontario, 2003/2004 – 2006/2007



Source: Institute for Clinical Evaluative Sciences – Health system data

For every 100 patients who have been admitted to hospital for a heart attack, two had come to emergency within the previous seven days but there was no diagnosis of heart attack. For every 100 patients admitted to hospital for subarachnoid hemorrhage, six had been to emergency within the previous 14 days but the diagnosis wasn't made. These rates of missed diagnosis haven't changed over the past four years.

4.4.3 Why are we missing heart attacks and brain hemorrhages?

- **Lack of experience.** Diagnoses are sometimes missed when hospital staff lack experience with certain conditions, or don't have easy access to diagnostic tests that would help pinpoint the problem. Studies show missed diagnoses are less common in teaching hospitals and high-volume emergency departments.^{106, 107}
- **Unusual symptoms.** People suffering a heart attack usually complain of pressure-like pain in the centre of their chest, but some people — especially women — may have discomfort that doesn't fit the usual pattern, or no pain at all.¹⁰⁸ In the case of subarachnoid hemorrhage,

the headache may be mistaken for a migraine.¹⁰⁵ It's important for doctors to remain suspicious even when only part of the information points to the actual diagnosis.

4.4.4 Who is doing this better?

Ontario's rate of misdiagnosis of heart attacks is similar to rates reported in some American hospitals.¹⁰⁹ Teaching hospitals and busy emergency departments have lower rates of misdiagnosing heart attacks and brain bleeds, perhaps because they are more experienced and have better diagnostic equipment. It's important for smaller hospitals to be vigilant in looking for these conditions.

4.4.5 What can you do?

The classic symptom of a subarachnoid hemorrhage is a sudden headache that's the worst you've ever had. Seek care promptly if that happens and ask if the doctor has considered the possibility of a hemorrhage.

Check out the Heart and Stroke Foundation's website: www.heartandstroke.on.ca and click on "heart disease," then "warning signals," to learn more about symptoms of heart attacks. Go to the emergency department immediately if you have any of the symptoms. Don't be shy to ask your doctor what he or she has done to keep you from having a heart attack.



5



5 PATIENT-CENTRED

Healthcare providers should offer services in a way that is sensitive to an individual's needs and preferences.

5.1 Introduction

In the past, our healthcare system was often structured more for the benefit and convenience of the people who work in it rather than the patients. Today, however, the public is more knowledgeable about healthcare and the system now must strive to be more service oriented and responsive to the individual's needs and preferences. This is what patient-centred care is all about. The delivery of healthcare should be a partnership between people who use it and care providers, based on consideration, communication, responsiveness and respect. Patients are actively involved in decisions around their care. Patient-centred care isn't done to you, it's done with you.

In Ontario, many healthcare settings now use different survey methods to assess the experience of patients and long-term care residents and their families. This year's report examines patient experiences in primary care, long-term care, hospitals and emergency departments. We looked at overall satisfaction with care as well as factors such as communication, participation in decisions and the extent to which patients are encouraged to manage their own conditions.

5.1.1 Key findings about patient-centred care

- Ontarians rate care from their regular doctors as very good or excellent, as is true for all the countries surveyed. However, sicker Ontario adults rate their care quality much lower than the general population.
- People are not engaged in planning their care, whether they are health-system patients or residents of long-term care.
- Only one in three people with a chronic illness are asked about health goals for themselves.
- Only two-thirds of residents of long-term care homes feel encouraged to participate in decisions about their care and one out of nine residents feel they are not free to speak to staff when they are unhappy with care.
- Language barriers are more of an issue in Ontario healthcare than in the rest of Canada. One in seven people in Ontario reported this as a problem.
- Most patients are satisfied with their hospital experience, giving it an average overall rating of over 80%, which has not changed since 2003.



5.2 Patient experience with primary care

5.2.1 Why is this important?

Primary care is the main point of contact with the health-care system for most people and having a good experience in primary care is important to maintaining overall public confidence in the healthcare system. A good experience in primary care can also improve other aspects of quality. Research, for example, shows patients who report a more positive experience with their family doctor also have better control of their diabetes and get more recommended care.¹¹⁰ Patients might not get the care they need, if they leave a doctor's office feeling angry, confused or not listened to.

Good primary care is essential for people with chronic illness, because it provides the monitoring and expertise needed to support them in managing their disease. Self-management of chronic disease improves healthy behaviour and leads to better health^{111, 112} but it requires training

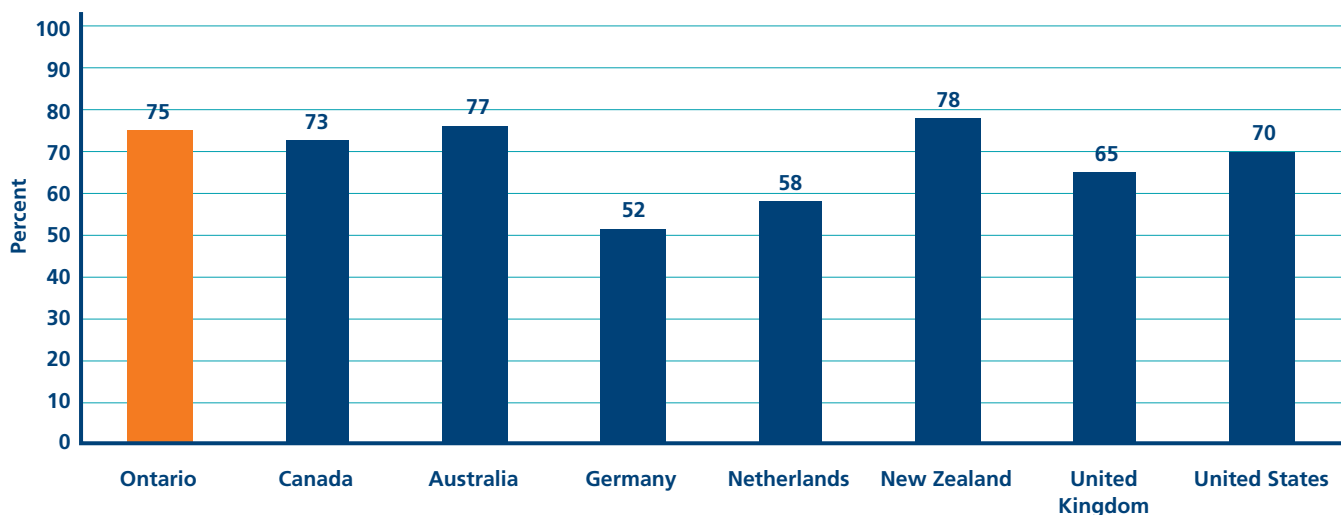
and preparing patients to manage their own care.¹¹³ Patients need help to set goals, understand their medications, support to follow through on medical treatments and knowledge of how to prevent complications. This can only happen if primary care providers communicate information well, address the patient's anxiety and fears, and truly engage patients in decision-making.

5.2.2 What did we find?

Most Ontarians rate the care they received from their regular doctors as very good or excellent, as do patients in most countries surveyed. However, sicker adults in Ontario rate the quality of care much lower than do the general population. Many Ontarians say they face language barriers when they need healthcare and patients with chronic diseases lack information and don't have health goals.



Percentage of adults who have a regular doctor or place of care who rate the overall quality of medical care they received in the past 12 months as excellent or very good in Ontario and by country, 2007

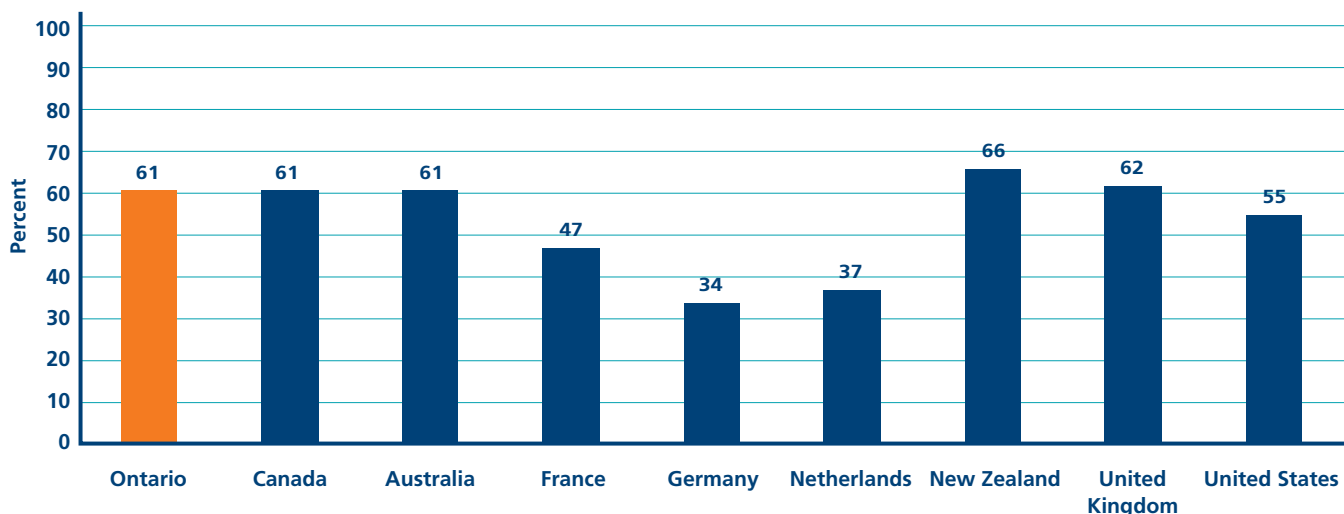


Source: Health Council of Canada, 2007; Commonwealth Fund 2007 International Health Policy Survey of the General Public's Views of their Health Care System's Performance in Seven Countries

Note: Country-level data is weighted to reflect demographic composition of the country from the latest census; Ontario-level data is not weighted

In a recent international study, three out of four Ontarians surveyed ranked the care received from their regular doctor over the year prior to the survey as very good or excellent. People surveyed in Australia and New Zealand ranked their care about the same as Ontarians. Doctors in other countries, including the Netherlands and Germany, did not get such high ratings.

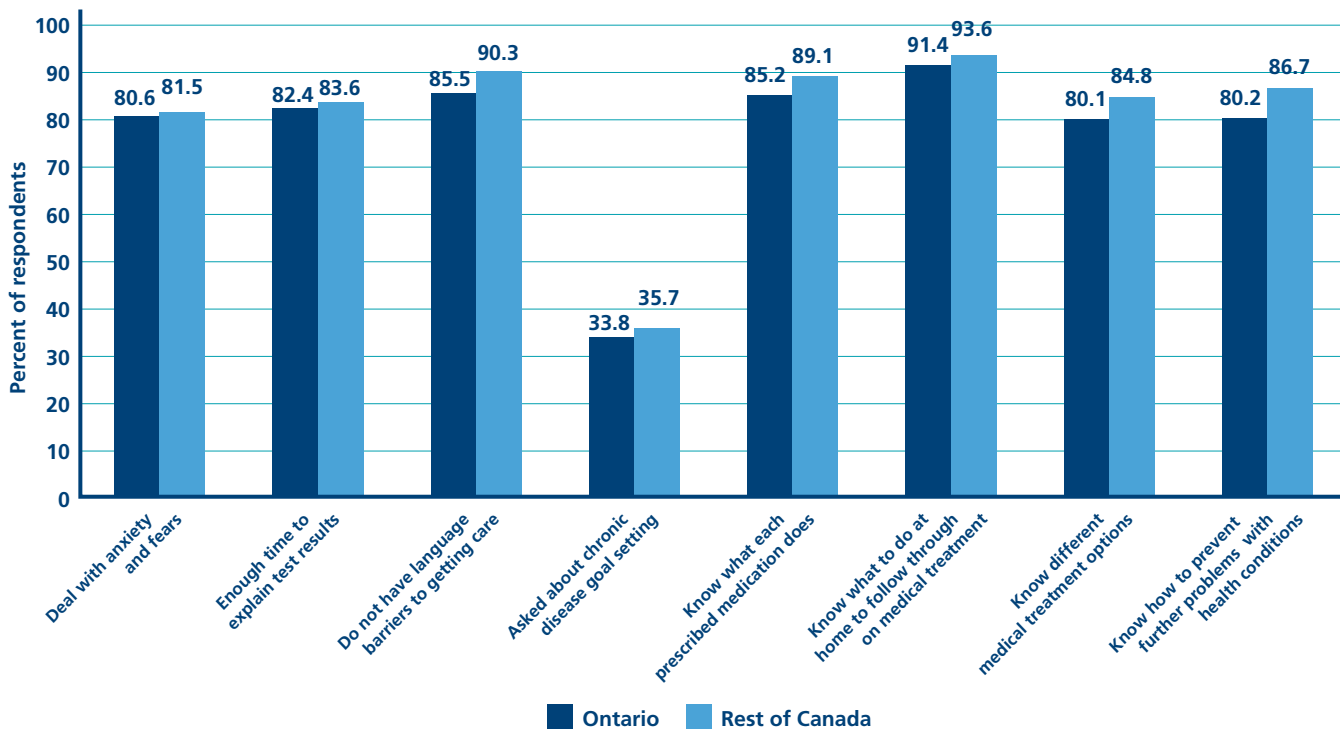
Percentage of sicker adults who have a regular doctor or place of care who rate the overall quality of medical care they received in the past 12 months as excellent or very good in Ontario and by country, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

Compared to the general population, sicker adults gave a lower rating for the overall quality of their care — a concern for sicker adults in all the countries surveyed. Ontarians' feelings about their care were at par with all Canadians; lower than those in New Zealand, but better than the Germans and the Dutch.

Percent of respondents who felt their care from their primary care provider was patient centred in Ontario and rest of Canada, 2007



Source: Statistics Canada, 2008; Canadian Survey of Experiences with Primary Health Care
 Note: Graph shows percentage of respondents who “agreed” or “strongly agreed” with each statement

The large majority of Ontarians report a fairly strong degree of involvement in their primary care, which is encouraging. Four out of five Ontarians feel their family doctor spends enough time dealing with anxieties and fears and enough time explaining test results and the same proportion know their treatment options and how to prevent complications of their health conditions. However,

as mentioned earlier, about one in seven Ontarians experience language barriers to getting care, which is higher than in the rest of Canada. This is not surprising given the strong ethnic diversity in Toronto and other urban areas.

Only about one-third of people with chronic diseases say their healthcare providers ask them about their goals for managing their conditions, which is an important step in patients taking control of their condition.

5.2.3 Why aren't patients connecting better with primary care providers?

- **Ethnic diversity.** Language barriers are a problem because Toronto and other cities are magnets for immigrants. Some immigrants may not be able to find primary care providers who speak their language and/or may have difficulty understanding instructions they are given.
- **Time pressure.** Helping people with chronic diseases understand their illness, all the treatments for it and how to manage their own symptoms can be time consuming.



- **Habit.** Self-management is a relatively new approach to care and quite a change from the old model where doctors just told patients what to do. Physicians and other providers may not have training in techniques for engaging patients in making decisions and patients aren't used to the idea, either.

5.2.4 What has been done elsewhere?

Massachusetts now measures patient experience in primary care across the state and publishes ratings of individual clinics on a public website.¹¹⁴ (Clinics must have at least three doctors to be included and individual physician ratings are not published.) Clinics are rated from one to four stars on communication, co-

ordination, how well they know their patients and preventive care and advice. The information is intended to help patients choose a new doctor and encourage them to talk to their doctor about their experience with care. Doctors can use the site to identify where they need to improve.

5.2.5 What are we doing in Ontario?

Ontario is taking a number of steps to improve chronic disease management, which we outlined in section 3.3.5. One key feature of Ontario's proposed diabetes strategy is an online, computerized registry that will enable better self-care by giving patients access to information and educational tools that empower them to manage their disease.¹¹⁵

5.2.6 What can you do?

The Health Quality Council of Alberta recently published *It's OK to Ask*, a brochure which gives patients tips on how to get the information they need to play an active part in their care before, during and after the visit, and in particular, what to ask about medications. For example, it lists the top five questions to ask your healthcare provider at each opportunity: What is my health problem, what do I need to do, why do I need to do this, what can I expect, and who do I call if I need help? For more information, visit www.hqca.ca.

The Ontario Patient Self-Management Network lists different resources and programs available across the province to help you become more engaged in your own care. Visit www.ontpsm.net/index.php.



5.3 Client and family satisfaction in long-term care

5.3.1 Why is this important?

The people who live in long-term care are among society's most vulnerable people — they are usually elderly, often frail and they may have cognitive problems as well. They are largely dependent on others to get through their day-to-day lives and, as some of society's most vulnerable members, they depend on all of us to ensure they get high quality care.

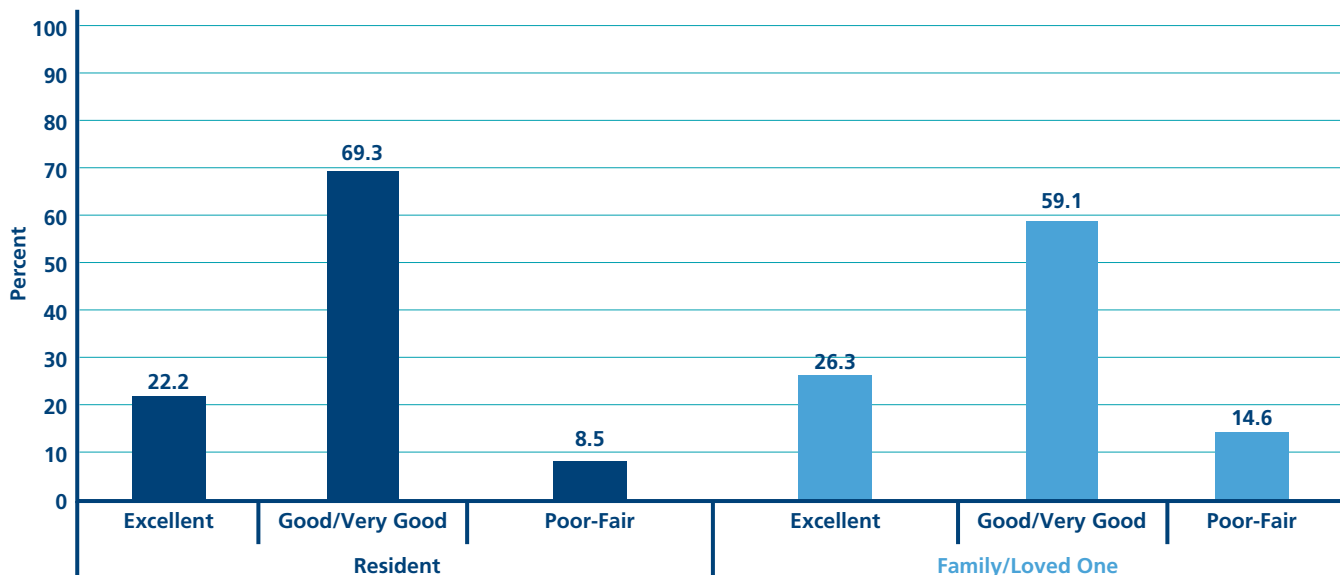
We have some objective measures of good long-term care — the proportion of residents who develop pressure ulcers or fall and how many wind up in hospital emergency departments all tell us something about whether residents are effectively cared for. However, a recent ministry-led consultation with long-term care residents found they are more concerned about their quality of life,¹¹⁶ and issues such as maintaining their autonomy, having meaningful activities and living in an environment that feels like home and not an institution. To capture these perspectives on quality, we did one-on-one interviews with more than 1,000 residents and gathered survey responses from more than 1,100 of their family members.



5.3.2 What did we find?

Nine out of ten residents of long-term care homes rate the overall quality of care they receive as good to excellent, but only two-thirds of them feel encouraged to participate in decisions about their care, get prompt responses from staff when they call and feel at home in their care setting. Unfortunately, one out of nine residents does not feel free to speak up to staff when they are unhappy with their care.

Rate quality of care/services in this home



Source: University of Toronto, Pilot long-term care home residents and family satisfaction survey 2008/2009

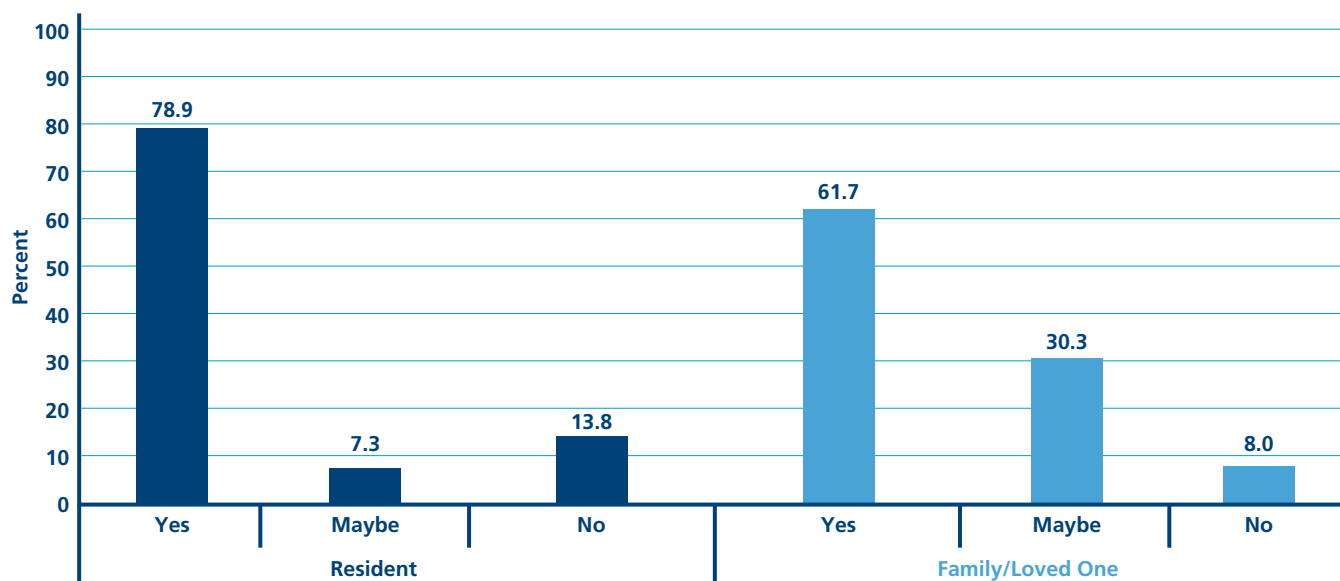
Note: Questions asked:

Resident: Overall, how would you rate the quality of care and services in this home?

Family/loved one: Overall, how would you rate the quality of care and services provided?

When it comes to the overall quality of care, nine out of ten residents rate it as good to excellent. But only 20% actually rate it as excellent, so if that's our goal, there is room for improvement.

Would you recommend this long-term care home to others



Source: University of Toronto, Pilot long-term care home residents and family satisfaction survey 2008/2009

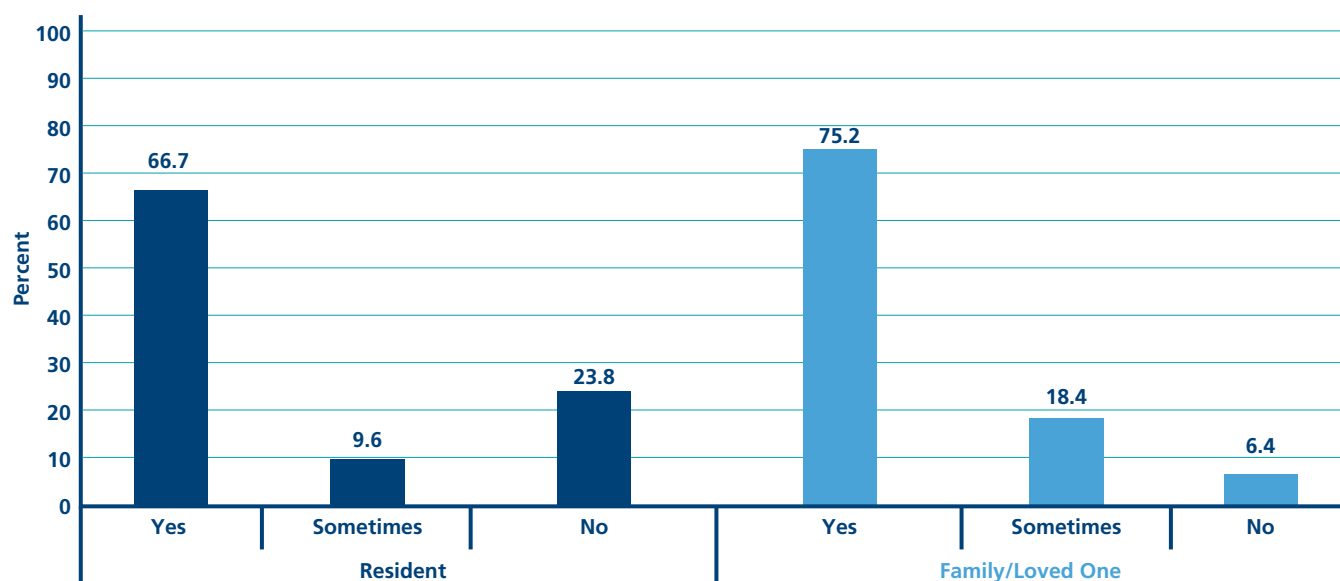
Note: Questions asked:

Resident: Would you recommend this long-term care home to others?

Family: If someone needed care in a long-term care home, would you recommend this home to them?

Twenty percent of residents and more than 30% of their family or loved ones said “maybe” or “no” to whether they would recommend the home to others.

Encouraged to participate in decisions/Involved in care as much as wanted



Source: University of Toronto, Pilot long-term care home residents and family satisfaction survey 2008/2009

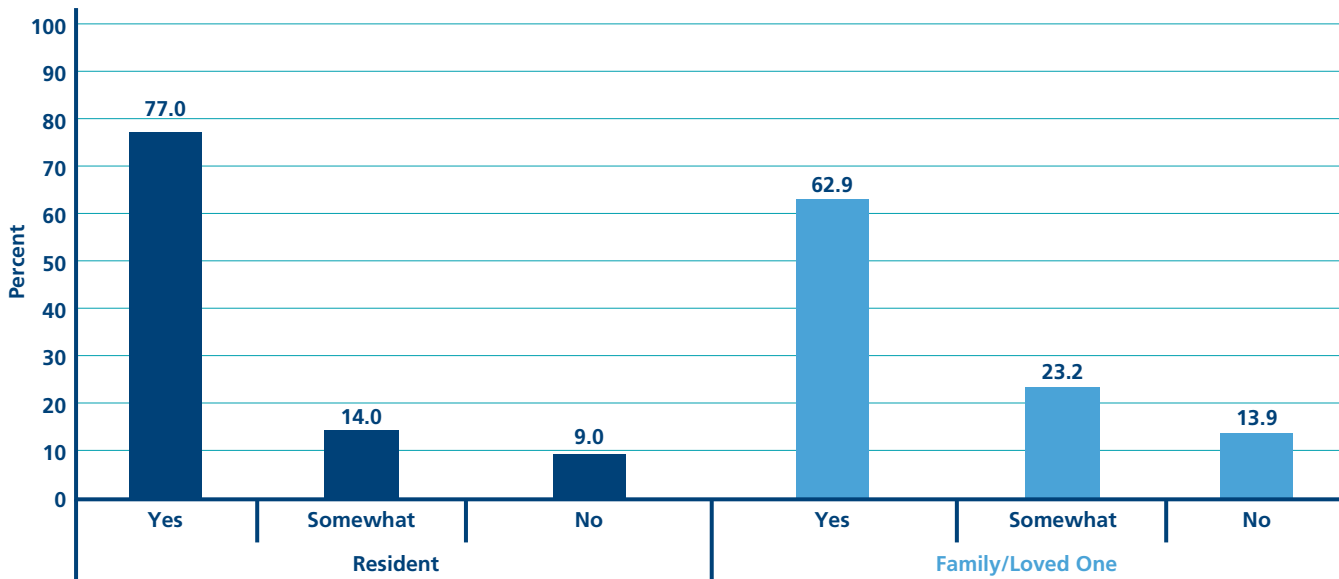
Note: Questions asked:

Resident: Are you encouraged to participate in decisions about your care?

Family: Are you involved in your family member’s care as much as you want to be?

Roughly 70% of the residents and their family or loved ones said they were encouraged to participate in decisions and to be involved in care as much as possible, which means about 30% of respondents either aren’t encouraged to get involved, or are only occasionally. This is a major area for improvement, although it’s not unique to long-term care residents and their families; people in hospital and their families feel the same way.

Enough activities at home



Source: University of Toronto, Pilot long-term care home residents and family satisfaction survey 2008/2009

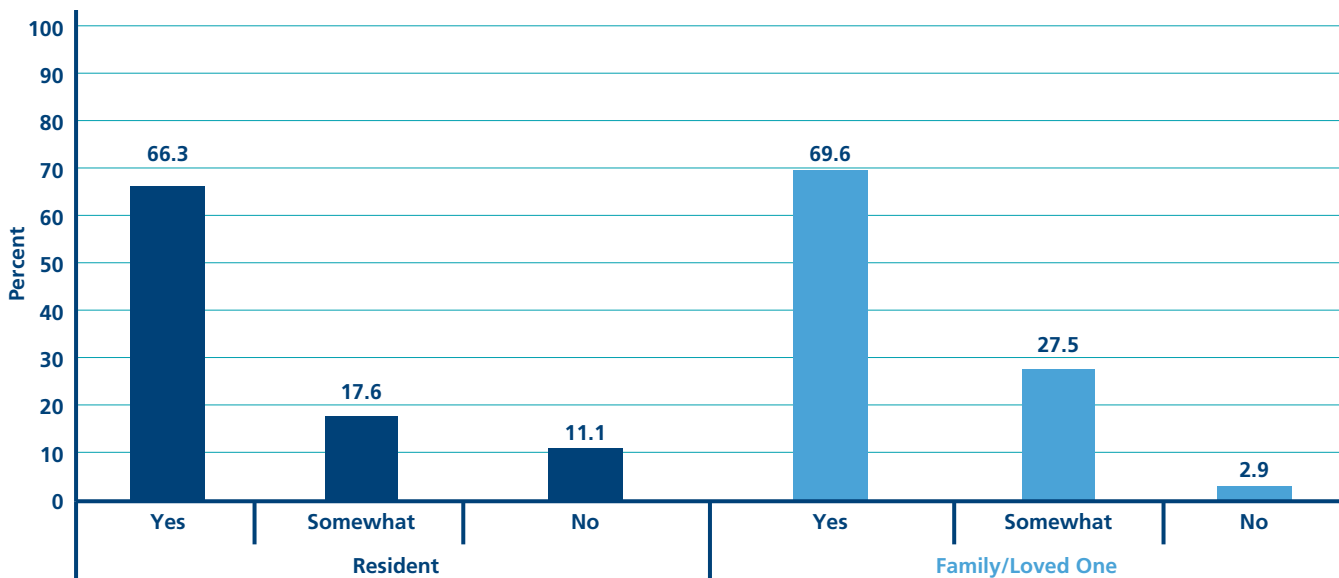
Note: Questions asked:

Resident: Are there enough organized activities for you to do during the week and on weekends?

Family: Do you feel there are enough activities for your family member?

Long-term care home residents need activities to engage them with others and keep them from being bored and depressed. Having enough activities at long-term care homes for the residents, particularly on the weekend, is an important factor in maintaining quality of life. Residents were slightly more positive about this than their family members but both groups indicated there is room for improvement.

Staff promptly answer call/Staff follow up with results



Source: University of Toronto, Pilot long-term care home residents and family satisfaction survey 2008/2009

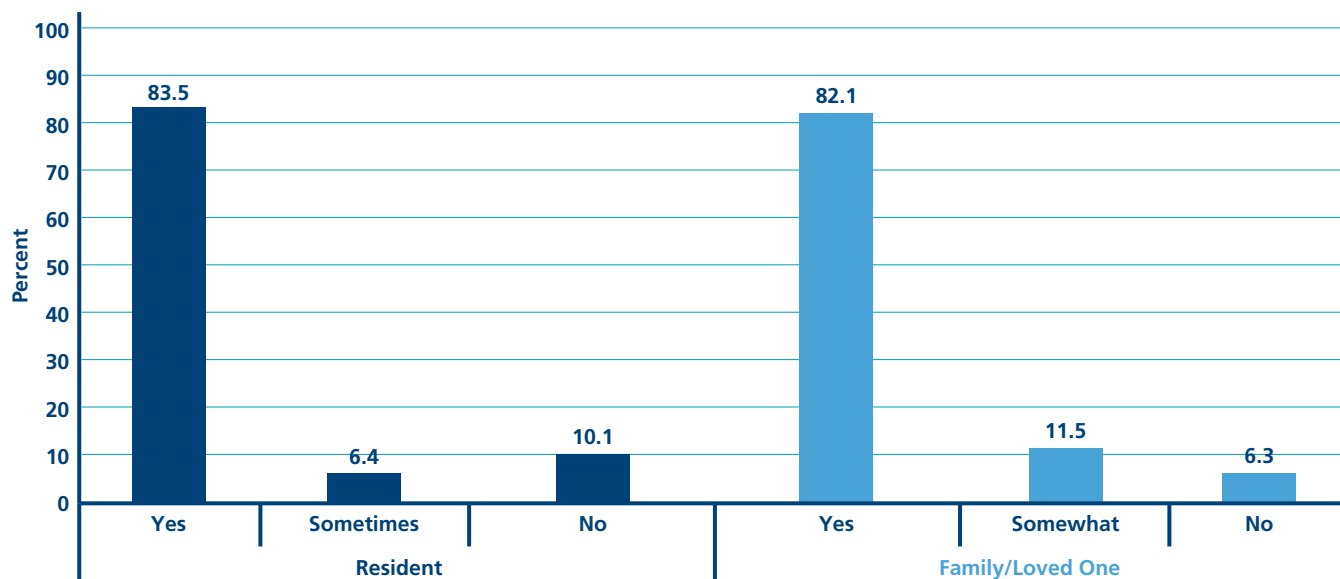
Note: Questions asked:

Resident: Do the staff answer you promptly when you call for help?

Family: Do the staff follow-up with your requests?

About two out of three residents and family members felt staff responded to promptly calls from residents. There is room for improvement in this area.

Feel free to speak up



Source: University of Toronto, Pilot long-term care home residents and family satisfaction survey 2008/2009

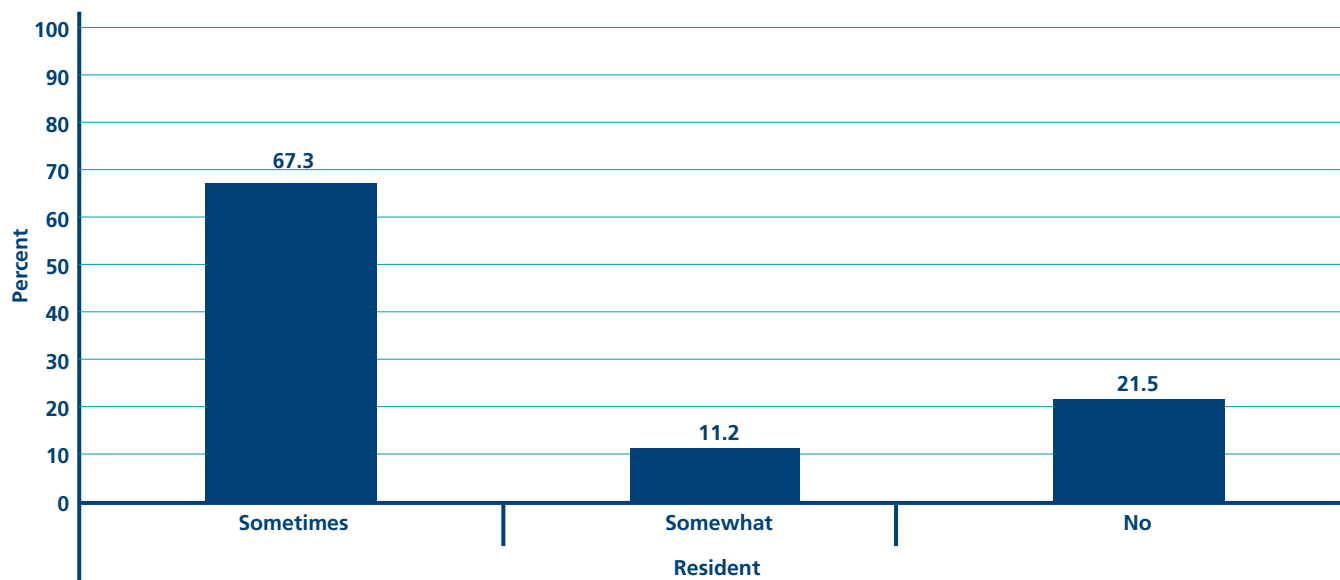
Note: Questions asked:

Resident: Do you feel free to speak up to staff when you are unhappy with your care?

Family: Do you fear that staff might punish your family member because of something you say or do?

Over 80% of residents and family members say they feel free to speak up to staff when they are unhappy with their care. Unfortunately, 10% of residents and about 6% of families are afraid to speak. This is a very important area for improvement.

Percentage of residents who feel at home, 2008/2009



Source: University of Toronto, Pilot long-term care home residents and family satisfaction survey 2008/2009

Sadly, over 20% of residents said the facility doesn't feel like home to them.

5.3.3 Why are some people unhappy with long-term care?

- **Staff availability.** Resident satisfaction may be related to how much time staff has to provide personal attention. Research tells us many staff feel they don't have enough time to do their jobs, which could keep them from meeting residents' expectations. There may not be enough staff available, or staff time may be used inefficiently.
- **Staff morale.** Good staff satisfaction can have a direct impact on resident satisfaction, but staff in long-term care homes tend to feel they have little control at work and they also have higher injury rates than other healthcare settings.
- **Activities.** Providing enough activities for residents is difficult because of their different interests and abilities. They can also take a lot of staff time to organize and run.

- **Environment.** Physical design — such as plenty of space, light, private areas and pleasant décor — contributes to a home-like environment. Newer facilities tend to have more amenities than older ones.

5.3.4 What are we doing in Ontario?

In June 2008 the government of Ontario released a report from an independent review of staffing and care standards for long-term care homes in Ontario.¹¹⁷ The report recommended an increase in staffing levels and the development of annual staffing plans at each long-term care home. A team was set up to ensure its recommendations were acted on. Another recommendation was to develop standard quality measures for all long-term care homes and report on them publicly; these will appear on our website, www.ohqc.ca, beginning in November 2009.

5.3.5 What can you do?

Be involved in your care, or the care of your loved one.

Inspection reports on every long-term care home in Ontario are available at http://www.health.gov.on.ca/english/public/program/ltc/26_reporting.html.

Beginning in November 2009, visit our website, www.ohqc.ca, to see how homes perform on a set of standardized quality measures.



5.4 Patient experience with acute-care hospital and emergency department care

5.4.1 Why is this important?

Each year there are more than 5.3 million visits to emergency departments in Ontario and close to 1.1 million Ontarians have at least one hospital stay.¹¹⁸ How those people feel about their experiences helps us identify strengths and things that need improving.

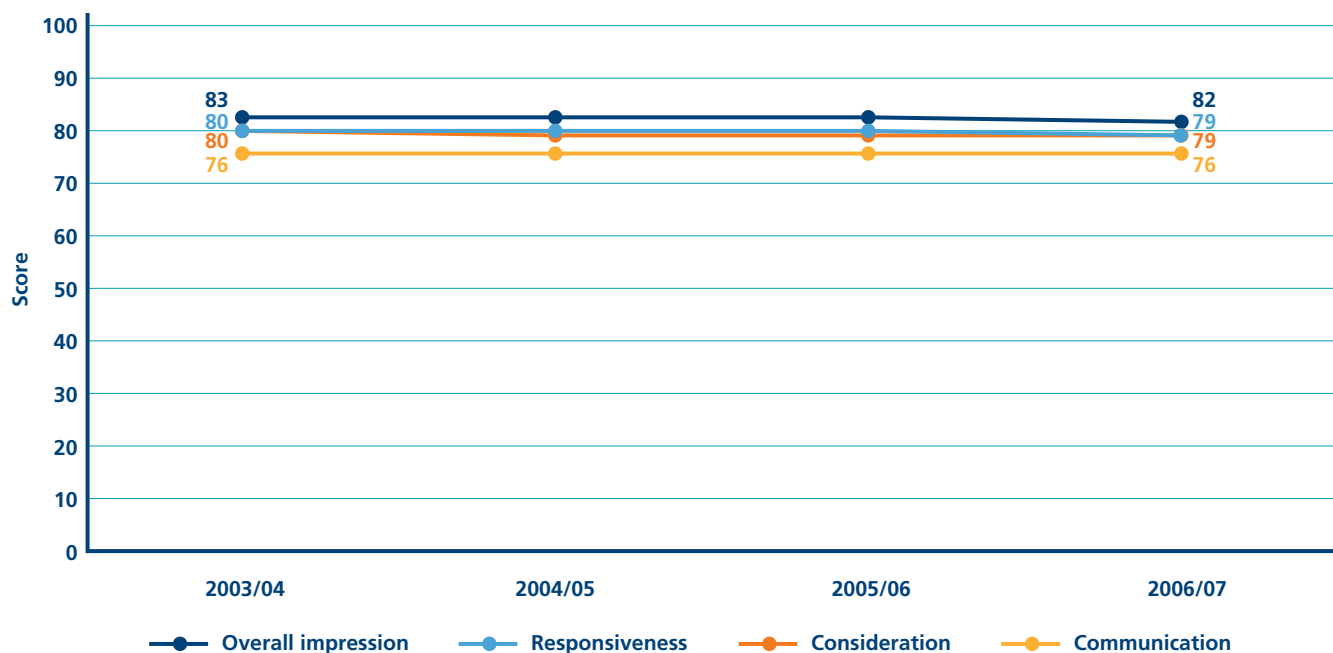
The data in this section is from patient surveys that hospitals distribute that ask about overall satisfaction with care and whether patients were satisfied with consideration, responsiveness and communication. Our graphs show an index based on a composite of survey answers.



5.4.2 What did we find?

Patients' satisfaction with their experience in a hospital setting has not changed at all since 2003. Communication and responsiveness need to improve.

Patient satisfaction and experience score for hospitals in Ontario, 2003/2004 to 2006/2007

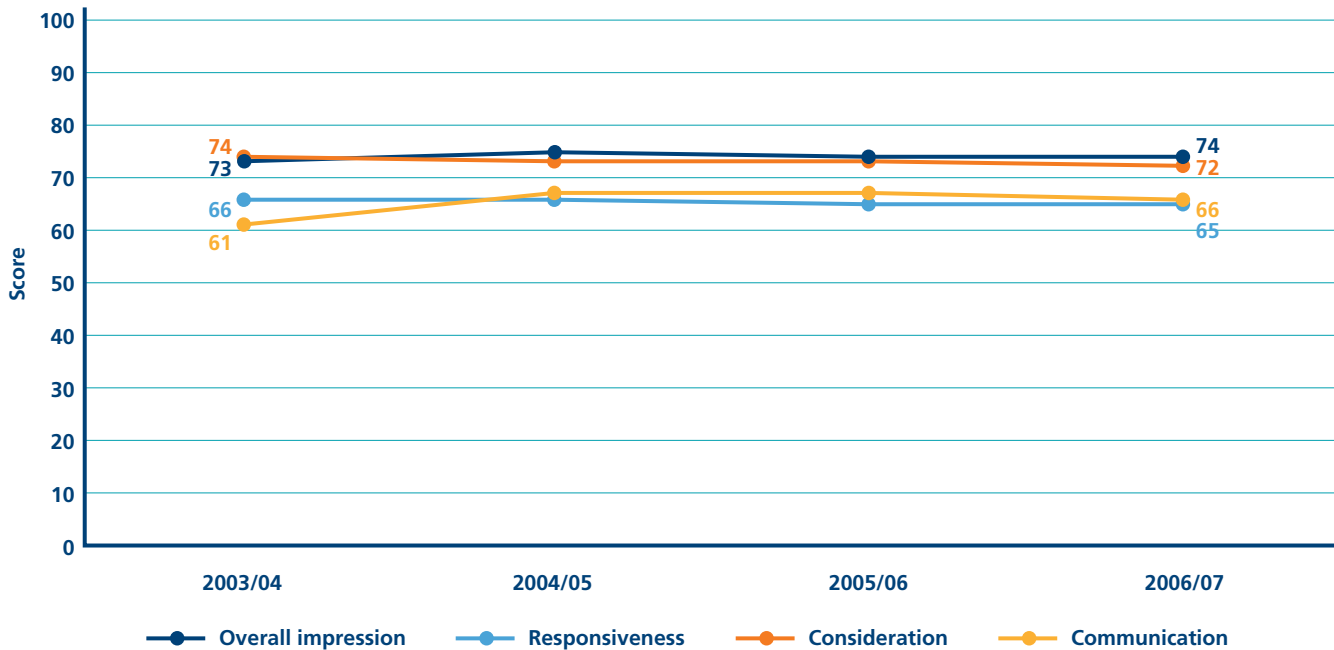


Source: Hospital Reports Research Collaborative. Hospital Reports 2005, 2006, 2007: Acute Care – Patient Satisfaction; Hospital e-Scorecard Report 2008: Acute Care

Ontarians who have been hospitalized report an overall good impression of hospital experience. However, they rated communication and responsiveness lower. There has

been no improvement in these measures from 2003/04 to 2006/07.

Patient satisfaction and experience score for emergency departments in Ontario, 2003/2004 to 2006/2007



Source: Hospital Reports Research Collaborative. Hospital Reports 2005, 2006, 2007: Emergency Department – Patient Satisfaction; Hospital e-Scorecard Report 2008: Emergency Department

Ontarians who visited an emergency department between 2003/04 and 2006/07 period rated their overall impressions of care fairly positively (three out of four), but the scores were lower than for in-patient care. Communication and responsiveness are clearly problems — nearly one in three Ontarians said they need improvement. These rates have not changed since 2004/05.

5.4.3 Why are people unhappy with hospital care?

- **Unnecessary waits.** Studies show making people wait unnecessarily in emergency leaves them dissatisfied with their overall experience.¹¹⁹
- **Lack of information.** People want information about what tests or procedures are being done, why and when they will be scheduled. But they may not get it if staff aren't trained to communicate plainly, or if information handouts aren't readily available or standardized, or if staff have problems communicating plans for care among themselves.
- **Staff issues.** As in long-term care, if there isn't enough staff, their time is used inefficiently or they feel rushed,

they're less likely to take the time communicate or respond to patients. That leaves patients less satisfied.

5.4.4 What's being done elsewhere?

Patient satisfaction with care in Ontario's emergency departments is similar to patients in the rest of Canada. Provinces that used the same questionnaire, including New Brunswick, Nova Scotia, Manitoba, British Columbia and the Yukon got almost identical results when they asked people to "rate the care you received in the emergency department overall." Everyone needs to improve communication and responsiveness.

The Trillium Health Centre in Mississauga designed an Ideal Patient Experience program to improve patient satisfaction. Changes included:

- Everyone committing to patient-centred care. All the staff were involved in defining what that new philosophy meant
- Redesigning how care was delivered, to reflect the new philosophy by centring on what worked best for patients

- Redefining the hospital as a service organization and developing the kinds of standards service organizations have for meeting clients' needs¹²⁰

In one year the number of patients who rated their overall care as excellent increased five percentage points. The Ideal Patient Experience program is a good example of taking information from patient surveys and turning it into a quality improvement initiative.

5.4.5 What are we doing in Ontario?

The Ontario Hospital Association has a patient education program called “Your Health Care — Be Involved” which is designed to tell patients about the role they can play in improving the safety and quality of their care. It has posters and brochures (available in 14 languages) that give these tips on how to be an informed patient:

1. Be involved in your healthcare. Speak up if you have questions or concerns about your care.
2. Tell a member of your healthcare team about your past illnesses and your current health condition.
3. Bring all of your medicines with you when you go to the hospital or to a medical appointment.

4. Tell a member of your healthcare team if you have ever had an allergic or bad reaction to any medicine or food.
5. Make sure you know what to do when you go home from the hospital or from your medical appointment.

The posters just display the tips but the brochure gives details for each, including suggested questions for patients to ask such as “What is the purpose of this test or treatment?” and “What should I do when I go home?” It also lists some of the things patients should tell their healthcare team, including whether they have a chronic disease or allergies and any herbal remedies and food supplements they are taking.

5.4.6 What can you do?

Follow the five tips from “Your Health Care _ Be Involved” campaign (www.oha.com/patientsafetytips). For more detailed tips on how to get the information you need to play an active part in your care, check *It's OK to Ask* by the Health Quality Council of Alberta, www.hqca.ca.





6

6 EQUITABLE

People should get the same quality of care regardless of who they are and where they live.

6.1 Introduction

A high-performing healthcare system should provide care based on what the person needs, not on the basis of how rich or how educated they are, or how long they have lived in Canada or where they were born. However, we know that often this is not the case.¹²¹ In this year's equitable section, we look at how equity may be affecting several measures of quality in healthcare: access to family doctors; admissions or emergency department visits for asthma, congestive heart failure and diabetes (which reflect effective care) and also for population health — who gets screening and who lives healthy lifestyles.

To find out whether quality differs because of people's education or income level, we used a set of evidence-based indicators developed for the POWER Study (Project for an Evidence-based Women's Health Report, www.powerstudy.ca).¹²² The POWER study reports on gender, socioeconomic and ethnic differences in health and healthcare in Ontario, as a tool to improve health and reduce inequities among men and women.

Since the 1990s, income inequality has increased in Canada — people with high incomes have been getting richer and people with low incomes have been getting poorer.¹²³ That's important because hundreds of studies from around the world tell us the lower your income is, the worse health you have.¹²⁴ Studies show poverty leads to poor health, rather than poor health leading to poverty,¹²⁴ and people with low incomes have much worse health than average, whereas people with high incomes are only slightly more healthy than average. The difference could be because poor people can only afford low cost, high-fat diets, often live in polluted or unsafe neighbourhoods and may be stressed by coping with very little money.

How much education you have is also tied to how healthy you are.¹²⁵ Lack of education can lead to lower income, which in turn leads to poor health. Less education may also make it more difficult for patients to learn how to improve their health or get involved in complex decisions about medical treatment.

To complete our review of equity, we also looked at whether access to a family doctor differs with gender, age or immigration status.

6.1.1 Key points about equity

- People with low incomes are slightly less likely to have a family doctor.
- Women who have low incomes or little education are less likely to be screened for cancer with Pap smears and mammograms.
- People who have low incomes or less education are more likely to smoke and less likely to exercise.
- Low income people are more likely to go to hospital for asthma, diabetes and heart disease.
- Recent immigrants are less likely to have a family doctor.



6.2 Equity in access

6.2.1 Why is this important?

Having a regular doctor is important for everyone, but it may be especially so for older Ontarians, who tend to have more serious medical conditions. People with low incomes also tend to be less healthy and have greater need of a regular doctor.

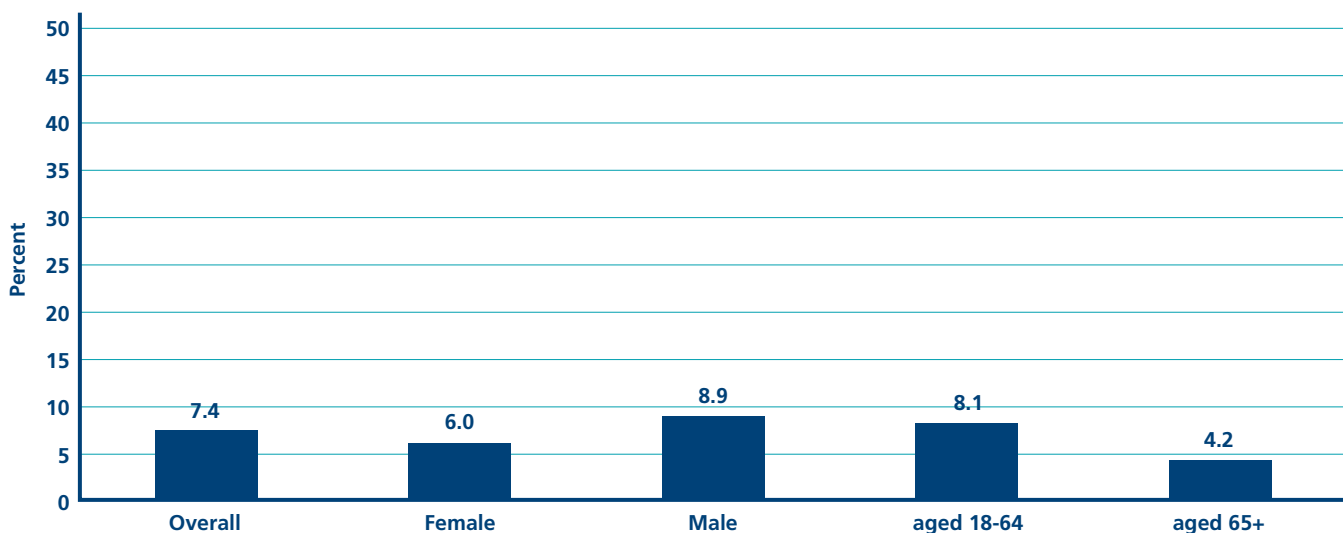
While a recent immigrant tends to be healthier than a Canadian-born individual the same age,¹²⁶ it's still important to ensure immigrants have access to a family doctor to stay healthy. Studies show recent immigrants are less likely to receive Pap smears,¹²⁷ are less physically active¹²⁸ and that, over time, immigrants' health declines more rapidly so in older age, there is no difference in health between immigrants and people born in Canada.¹²⁹ Research also shows immigrants face a variety of cultural and economic barriers in accessing health professionals.¹³⁰



6.2.2 What did we find?

People with low incomes and recent immigrants are less likely to have family doctors.

Percent of adults who do not have a regular medical doctor by gender and age in Ontario, 2007/2008

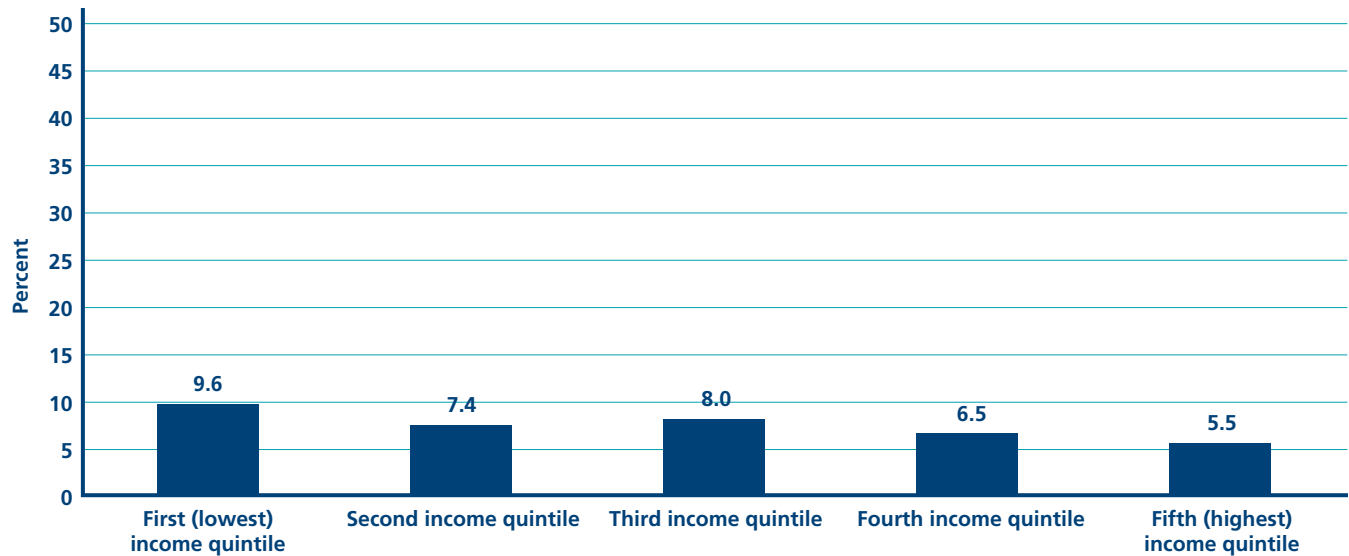


Source: Institute for Clinical Evaluative Sciences – Primary Care Access Survey

Overall, 7.4% of Ontario's adults didn't have a regular doctor in 2007/08. Older people appear to have fewer problems finding a regular doctor than young people,

which is reassuring, given their greater need. Women are less likely to say they don't have a family doctor.

Percent of adults who do not have a regular medical doctor by income quintiles in Ontario, 2007/2008

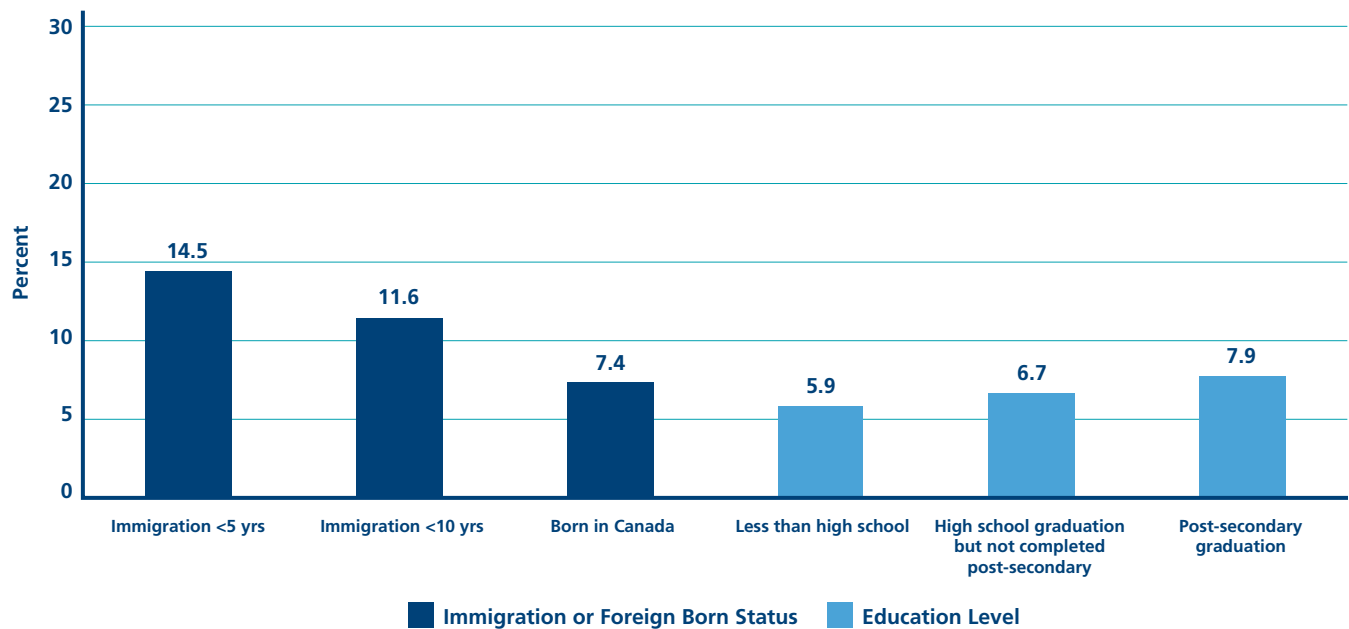


Source: Institute for Clinical Evaluative Sciences – Primary Care Access Survey.

Note: The first quintile is the 20% of the population with the lowest incomes; the fifth quintile has the 20% with the highest incomes

The 20% of people with the lowest incomes are less likely to have a regular family doctor, even though they have the worst health.

Percent of adults who do not have a regular medical doctor by education level and by time since immigration or foreign born status in Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Primary Care Access Survey

There was no statistically significant difference in access to a family doctor by education level. However, people who immigrated in the last five years were nearly twice as likely as those born in Canada to say they didn't have a regular doctor.

6.2.3 Why is access inequitable?

- **Cultural barriers.** Recent immigrants are less likely to have a family doctor, which might be because new immigrants know less about how to find healthcare than people born here and they may also have language difficulties that keep them from asking for help to find one. Immigrants in general tend to be healthier than native-born Canadians and may think they don't need a doctor, but it could also be because newcomers don't want to see a physician who doesn't speak their language or understand their culture.
- **Poverty.** Ontarians who don't have much money may not be able to get to the doctor's office when they need to — even bus fare can be a hardship for some and in remote areas travel can be prohibitive. There is some concern physicians may selectively reject patients whom they think may have complex medical or social issues to deal with. We can't find any research evidence on this, but the issue is serious enough that the organizations that regulate doctors are considering human rights guidelines in Ontario to prohibit such practices.^{131,132}

6.2.4 What is being done elsewhere?

One study suggests Prince Edward Island has the most equitable use of healthcare among different income groups in all of Canada, for visits to general practitioners, specialists, dentists and hospitals (as inpatients).¹³³ This greater equity is apparent in the Atlantic provinces in general.

6.2.5 What are we doing in Ontario?

Community health centres provide primary care services for specific populations such as people with low incomes or recent immigrants. The centres use teams — which include family doctors, nurses, nurse practitioners, social

workers, health educators and others — to work with people who have complex medical and social issues. In November 2005, the Ontario government announced it would increase the number of community health centres from 54 to 76 with 17 additional satellite clinics.¹³⁴

Low-income people and some ethnic groups are more prone to diabetes and one of the goals of Ontario's Diabetes Strategy is to address the needs of these high risk groups by raising awareness, increasing access to services and providing care and self-management tools that are sensitive to cultural differences.



6.2.6 What can you do?

You can register with the ministry's Health Care Connect program, which helps you find primary care, by calling 1-800-445-1822. You'll be able to register online soon through the ministry's "Your Healthcare Options" website, www.ontario.ca/healthcareoptions. The site will offer information on local healthcare resources, such as family physicians, urgent care centres and walk-in clinics.

6.3 Equitable effective care

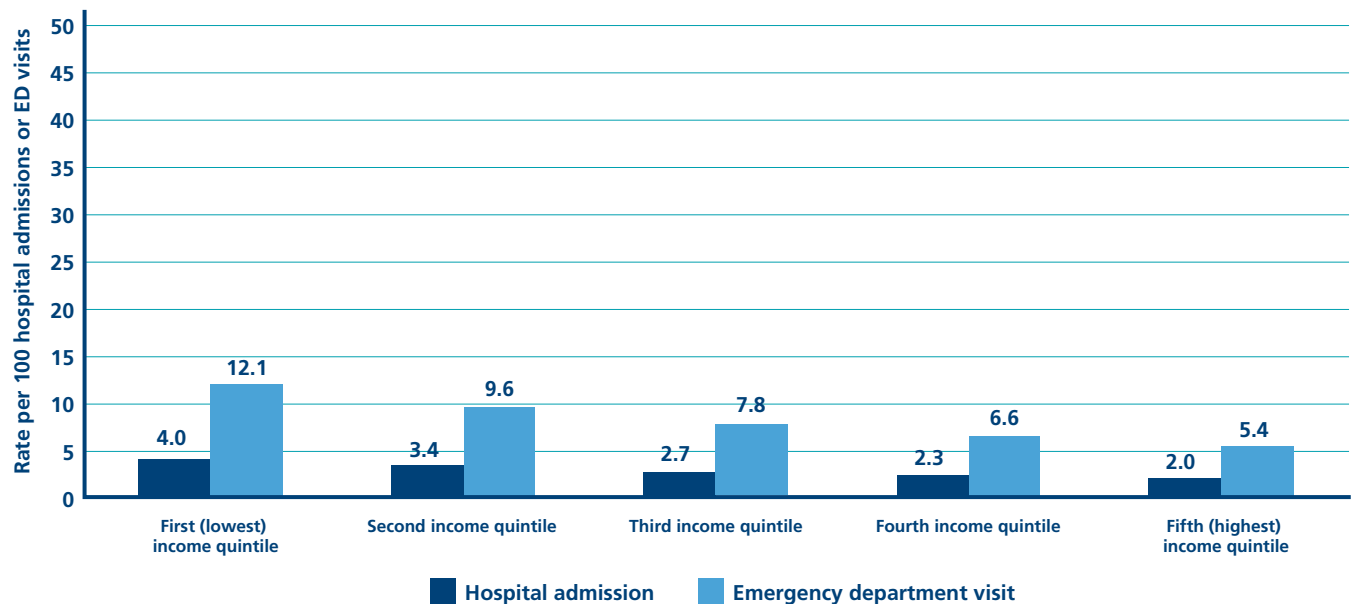
6.3.1 Why is this important?

People with low incomes and those who are less educated are less healthy overall and many have chronic diseases like diabetes or heart disease, so it's a particular concern to us if they're not getting equitable access to care. We also looked at whether there are gender differences in "potential years of life lost." This measures the impact of premature death from those "primary care sensitive conditions" — heart disease, stroke, influenza and respiratory diseases like asthma and emphysema — where good primary care can save lives.



6.3.2 What did we find?

Hospital admission rate and rate of emergency department visits per 100 people for reasons related to asthma, congestive heart failure or diabetes by income quintiles in Ontario, 2007/2008

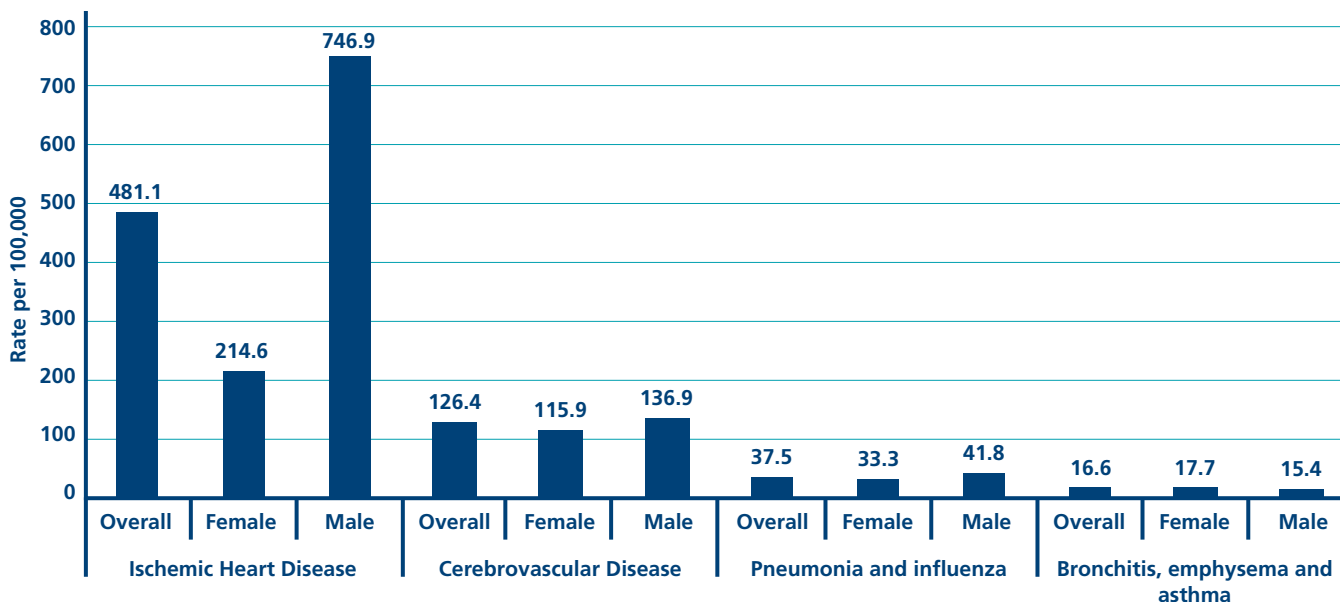


Source: Institute for Clinical Evaluative Sciences – Health system data.

Note: The first quintile is the 20% of the population with the lowest incomes; the fifth quintile has the 20% with the highest incomes

People with lower incomes are much more likely to be hospitalized for diabetes, asthma or congestive heart failure.

Rate of potential years of life lost due to primary care sensitive conditions per 100,000 by gender in Ontario, 2001-2003



Source: Ministry of Health and Long-Term Care, Primary Care Scorecard

Note: Data represents three-year average of 2001 to 2003

Men have a much higher rate than women of potential years of life lost due to ischemic heart disease.

6.3.3 Why do people with low incomes suffer more from chronic disease?

- **Lack of primary care.** People with low incomes are slightly less likely to have a family doctor.
- **Lifestyle.** People with low incomes are more likely to smoke and less likely to be physically active.
- **The cost of care.** Seniors and people with very low incomes, who are on social assistance, usually have their drugs paid for by the Ontario Drug Benefit Program. But people with low-paid jobs often don't have employee benefits and may not be able to afford some expensive drugs, especially those for lowering cholesterol.

6.3.4 Who is doing this better?

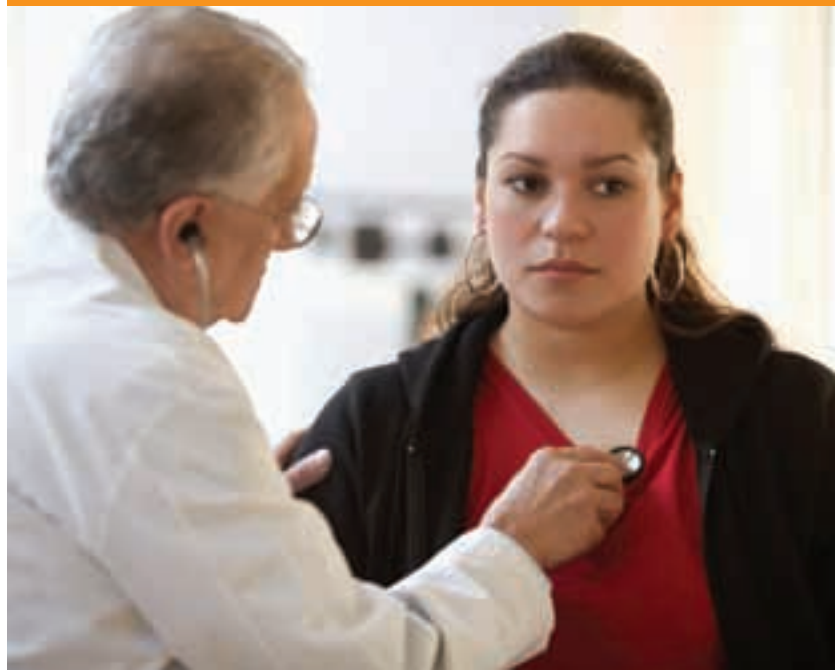
Last year, we reported community health centres did the best job of providing evidence-based chronic disease management in the province, despite working with the most disadvantaged people.¹³⁵ The kind of careful management community health centres routinely give for diabetes and heart disease can keep people out of hospital and help them live longer.

6.3.5 What are we doing in Ontario?

Ontario is increasing the number of community health centres.

6.3.6 What can you do?

Go to www.aohc.org to find the community health centre closest to you. Contact the centre to see if it offers programs that will benefit your health, or can help you build a place in the community by linking you to groups and activities.



6.4 Equity in preventive health services

6.4.1 Why is this important?

Many diseases can be prevented, or treated more effectively, if they're detected early with screening tests. Screening for breast, cervical and colorectal cancer regularly saves lives in Ontario by alerting us when apparently healthy people may have a disease and should be sent for further diagnosis and treatment if necessary.¹³⁶

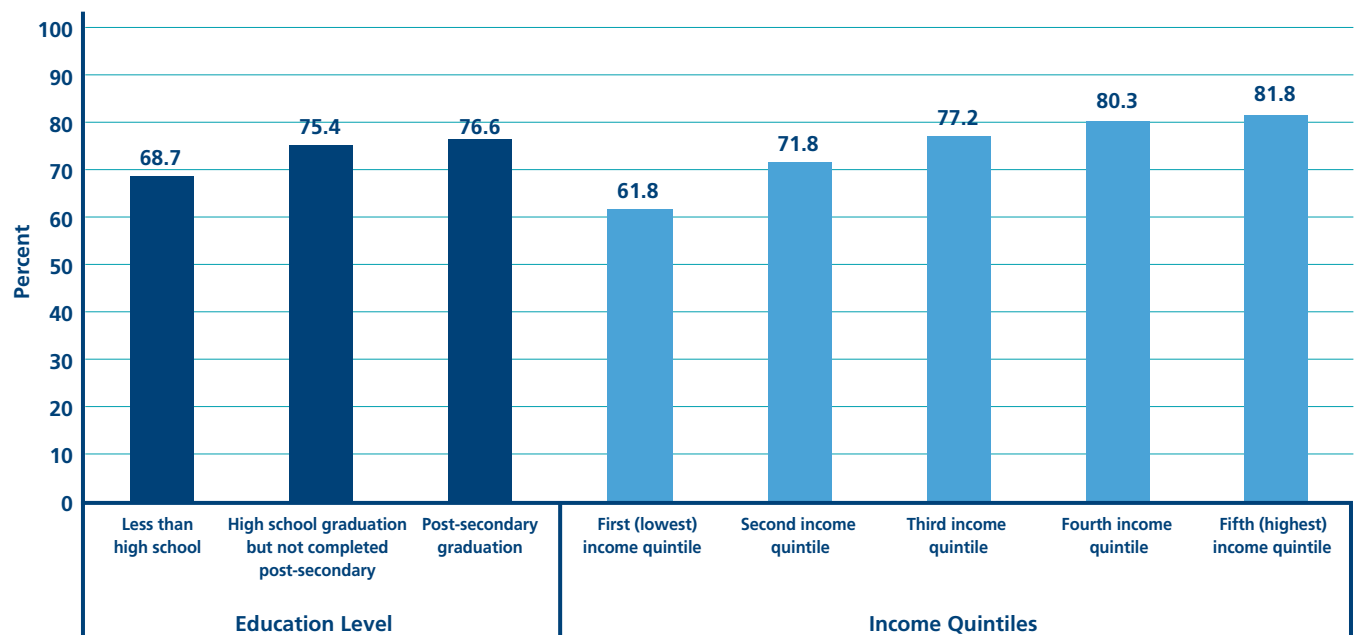
We talk more about screening in chapter 10 on population health, but we're looking at it here as well because there are some inequities in who gets screened. We looked at the use of preventive services according to income and education levels. Unfortunately, we did not have enough data to examine use of screening by immigrants.

The information here is based on population surveys which ask people whether or not they got screened. This provides excellent information on differences by income or education, but we caution that in such surveys, people generally overestimate how many tests they actually get done, which means the actual number of tests done (as tracked by Cancer Care Ontario's Cancer System Quality Index)¹³⁷ tends to be lower.

6.4.2 What did we find?

Women with lower incomes or less education were less likely to have Pap tests for cervical cancer and mammograms for breast cancer. We found no difference by income or gender in who has a fecal occult blood test for colorectal cancer. Overall, Ontario does poorly on screening for colorectal cancer.

Percent of women (aged 50-69) who reported having a mammogram in the two years prior to the survey by education level and income quintiles in Ontario, 2007

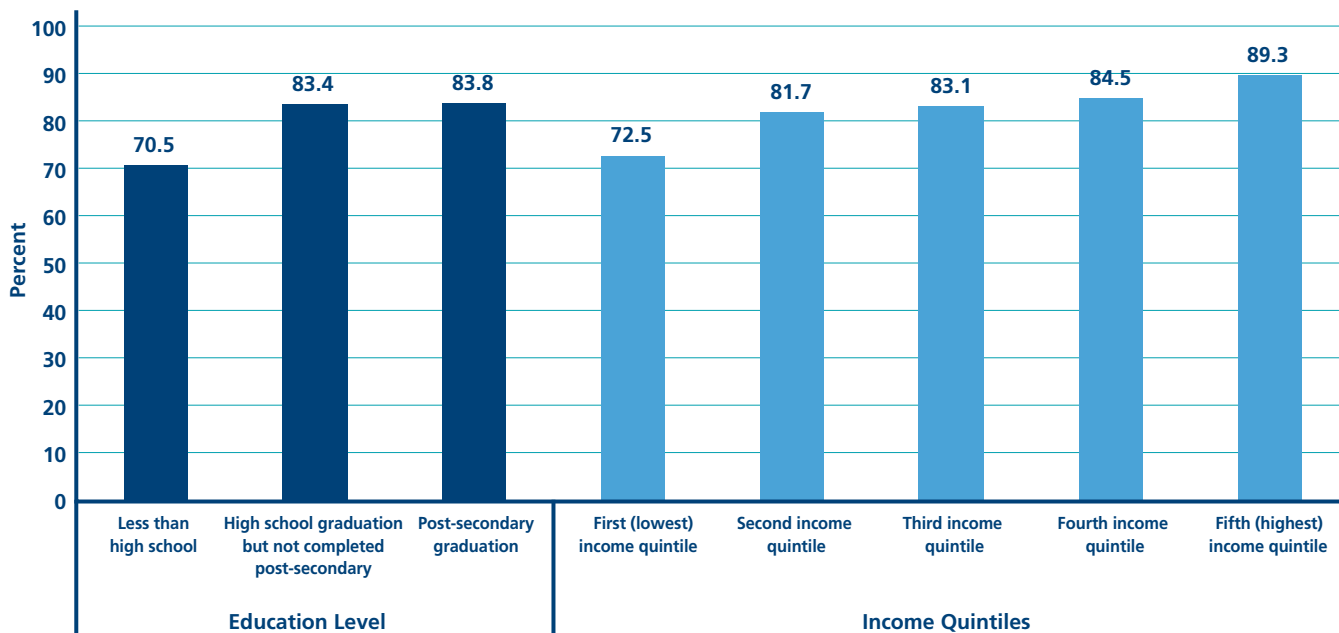


Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey.

Note: The first quintile is the 20% of the population with the lowest incomes; the fifth quintile has the 20% with the highest incomes

Women with lower income and lower education are less likely to receive a mammogram.

Percent of woman (aged 25-69) who reported having a Pap test in the three years prior to the survey by education level and income quintiles in Ontario, 2007



Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey.

Note: The first quintile is the 20% of the population with the lowest incomes; the fifth quintile has the 20% with the highest incomes

Similarly, women with lower income and lower education are less likely to receive a Pap test.

In 2007, only one in four Ontarians reported having a fecal occult blood testing for colon cancer in the preceding years. There was no significant difference in use of this test between males and females, nor by education or income level. The rates are too low for everybody.

6.4.3 Why do people use preventive services differently?

- **Access.** People with low income are less likely to have a family doctor, so they may not be urged to get screening tests.
- **Survival.** People living in poverty may be so stressed or preoccupied with immediate survival that they cannot attend to long-term preventive health issues.
- **Knowledge.** People with lower education may not be as knowledgeable about the importance of screening, or may not understand public health advertising.

6.4.4 What is being done elsewhere?

The Health Research and Services Administration, an agency funded by the US Department of Health, developed the Health Disparities Collaboratives to improve all primary care and eliminate health disparities. The collaboratives have greatly improved care for highly disadvantaged people. In cancer care, for example, groups involved in the collaborative created a registry to help them manage the care of people eligible for cancer screening and by August 2005, most had improved their rates of screening for colon, breast and cervical cancer.¹³⁸

The US Centers for Disease Control and Prevention has a Racial and Ethnic Approaches to Community Health (REACH) program which funds community activities to reduce disparities in health. One example is the REACH rural Alabama project, which aimed to improve cancer screening among African American women. It mobilized volunteers, sent out targeted information materials, and helped women get to their screening appointments by visiting, calling and sending reminders. Over a two-year time span, mammography rates increased from 48% to

62%, Pap screening increased from 55% to 66% and disparities between white and black women decreased from 17% to 11%.¹³⁹

6.4.5 What are we doing in Ontario?

Research released in 2007 shows a woman's cultural origin has a significant impact on whether she's ever had a Pap test: they're much less common among women who have immigrated recently.¹⁴⁰ Ontario's screening programs for breast and cervical cancer are both trying to reach more women from different cultures.

Researchers have found women are more likely to get cancer screening tests when:

- They are recommended by their doctors

- They get letters of invitation
- There's community involvement and participation
- They are promoted by health educators
- There are initiatives aimed at getting specific groups involved
- Organizers discuss access, language barriers and fear

To improve screening rates for colorectal cancer, across the province, Cancer Care Ontario is planning a pilot project inviting screen-eligible Ontarians (50 years or over, or with a first-degree relative with colorectal cancer) to visit their primary care provider to discuss colorectal cancer screening, to see if it gets more people tested.

6.4.6 What can you do?

Women between 50 and 69 should have a mammogram every two years. You can arrange your own screening by contacting the Ontario Breast Screening Program at breastscreen@cancercare.on.ca or 1-800-668-9304. More information on the Ontario Breast Screening Program is available at www.cancercare.on.ca.

The ColonCancerCheck program recommends men and women 50 years of age or older, who do not have a family history of colorectal cancer, be screened every two years using a home test (fecal occult blood test). Individuals who are at increased risk of getting colorectal cancer may need to begin screening for the disease at a younger age and a colonoscopy is the more appropriate screening tool. Talk to your healthcare provider about your family history and the screening method that is right for you. You'll find more information at <http://coloncancercheck.ca/>.

Ontario guidelines recommend women have a Pap test every year once they start having any sexual activity. If your tests are normal for three years in a row, you only need a Pap test every two to three years and if you're over 70 and have had normal Pap tests for 10 years, you can stop. Ask your doctor or nurse about how often you should have a Pap test.



6.5 Disparities in risk factors and healthy behaviours

6.5.1 Why is this important?

Unhealthy behaviour, including not exercising, smoking, eating badly, being obese and drinking too much all contribute to the chances of getting cancer and some chronic diseases. In fact, cigarette smoking is a factor in approximately 30% of cancer deaths in Ontario men and 17% of cancer deaths in Ontario women. Tobacco use also increases the risk of stroke and fatal heart attacks.

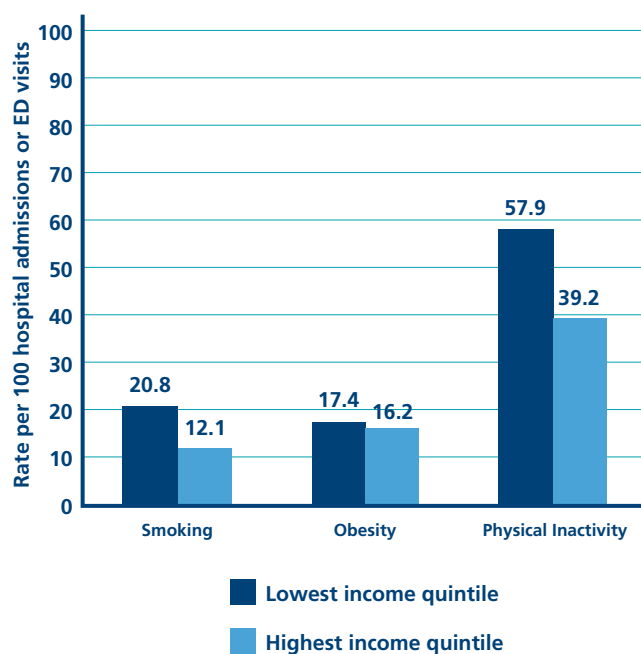
We talk more about risk factors and lifestyle in chapter 10 on population health. Lifestyles are influenced by your social and economic environment. In this section we look at the impact of income and education on smoking, obesity and physical inactivity.



6.5.2 What did we find?

People with low incomes are much more likely to smoke and much less likely to be active. Less educated people are more likely to be obese than people with more education.

Percent of the population who lead unhealthy lifestyles in the lowest income quintile compared to the highest income quintile in Ontario, 2007

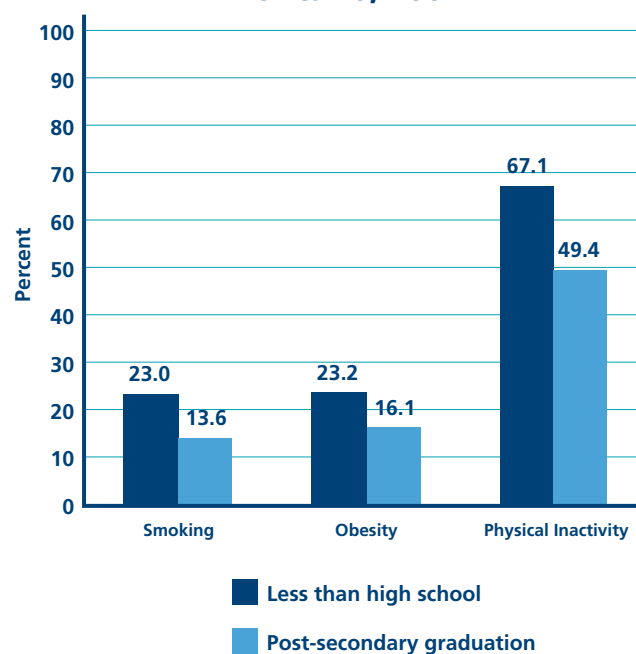


Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey

Note: Age range for smoking and physical inactivity is aged 12+ and obesity is aged 20+

People with the lowest income in Ontario are about 50% more likely to smoke or be inactive than those with the highest income, but there is little difference in obesity based on income.

Percent of the population who lead unhealthy lifestyles in the lowest education category compared to the highest education category in Ontario, 2007



Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey

Note: Age range for smoking and physical inactivity is aged 12+ and obesity is aged 20+

Education makes a big difference in how likely you are to smoke, be inactive or be obese, with the largest difference for smoking.

6.5.3 Why does income affect healthy behaviour?

- **Stress.** People with low incomes may try to cope with being poor through unhealthy but often pleasurable behaviour such as smoking.¹⁴¹ Stress can also make it difficult to quit smoking.¹⁴² Studies have demonstrated significant increases in rates of chronic stress in low-income groups.¹⁴³
- **It's the norm.** Many low-income neighbourhoods have high smoking rates.¹⁴⁴ Children growing up in a neighbourhood with a lot of smokers are more likely to smoke themselves just because so many other people do.¹⁴⁵ In the same way, children in neighbourhoods where no one gets much exercise are likely to be inactive.
- **It's too much of a challenge.** Low income people may be less physically active because they're too concerned about day-to-day survival to exercise regularly, or they may not have access to leisure and sports activities

6.5.4 What's being done elsewhere?

The Healthy People 2010 initiative in the US has two major goals: to help all Americans increase quality and years of healthy life and to eliminate health disparities among different segments of the population. The initiative is trying to increase physical activity, reduce the number of overweight and obese people, reduce smoking, substance abuse, injury and violence and promote responsible sexual behaviour, mental health, environmental quality, immunization and access to healthcare.¹⁴⁶

The Racial and Ethnic Approaches to Community Health (REACH) program in Fulton County around, Atlanta, Georgia aimed to decrease health disparities among minorities, particularly African Americans and the poor. Its programs offer free, community-based services such as nutrition education classes, physical activity programs, empowerment groups for men and women, cardiovascular wellness centers in churches, and cardiovascular resource centres in barbershops and beauty salons. Thanks to its work, the percentage of African American adults who smoke decreased from 25.8% in 2002 to 20.8% in 2004 and the percentage of adults who did vigorous weekly physical activity increased from 25.4% in 2002 to 28.7% in 2004.¹⁴⁷

6.5.5 What are we doing in Ontario?

In December 2008 the government of Ontario announced "Breaking the Cycle — the Poverty Reduction Strategy." Its target is to reduce the number of children living in

poverty by 25% over the next five years, based on the idea that ensuring children have what they need to succeed, especially at school, will break the cycle of poverty. The strategy proposes extra money from the Ontario Child Benefit program to support education and early learning, employment, housing and community development. The government will assess its effectiveness through eight indicators, including:

- Birth weight
- Tests of their readiness for school
- Progress in school
- High school graduation rates
- Economic measures such as depth of poverty and the deprivation index

The Smoke-Free Ontario Strategy was launched in 2005. It focuses on:

- Encouraging young people not to smoke
- Protecting people from exposure to second-hand smoke
- Helping smokers quit

Smoke-Free Ontario funds programs provided by agencies including the Canadian Cancer Society's Ontario Division and the Heart and Stroke Foundation of Ontario.

6.5.6 What can you do?

Changing unhealthy drinking, smoking and eating habits can be done, but it works best when multi-faceted interventions are designed specifically for groups known to be at risk. The Community Health Research Unit at the University of Ottawa has a website designed to help people plan and deliver "multiple intervention programs" — programs that use a variety of approaches to influence health-related behaviour in the community. Find out more about them at www.miptoolkit.com

For a list of programs and services to support families and individuals break the poverty cycle, visit www.growingstronger.ca.



7

7 EFFICIENT

The healthcare system should continually look for ways to reduce waste, including waste of supplies, equipment, time, ideas and information.

7.1 Introduction

Ontario spends far more on healthcare than on any other public service — as much, in fact, as it spends on all other services combined. The provincial government estimates it will spend \$42.4 billion on healthcare in 2009/10, almost half of all provincial spending.¹⁴⁸ It is an enormous enterprise. Whether it is sustainable is not a debate for the Ontario Health Quality Council, but we do know planners and policy makers need every possible opportunity to make the system more efficient so money isn't wasted.

The Council's job in that process is to assess how efficient the system is. Again this year we can't emphasize enough that Ontario's failure to use information technology effectively is an enormous barrier to efficiency. Healthcare demands the same kind of linked electronic information systems that are the backbone of every complex enterprise. Known collectively as "e-health," those systems would include integrated electronic patient records, management systems for prescribing medication and monitoring chronic diseases, information on illnesses and treatment guidelines for patients and physicians, billing, waits for care, hospital use — every aspect, in short, of the publicly funded healthcare system.

Meantime, we have several measures for looking at efficiency right now — how many visits to emergency departments there were that might have been avoided, how often patients are given low-cost drugs that work as well as more costly ones and how many unnecessary tests are given before cataract surgery. We also looked at what patients have said about waste in the system.

7.1.1 Key points about efficiency

- There are many ways we could save money but still provide high quality care such as using equally effective but lower-cost medications and reducing tests before surgery that don't benefit health.
- Many visits to emergency departments are for relatively minor problems that could be handled faster elsewhere at less cost.
- Ontarians are more likely than citizens of other countries to report inefficiency and waste due to poorly organized care and unnecessary duplication of tests.
- Tracking medical records with computers would improve care and make the system more efficient, but Ontario lags behind on building the infrastructure for an e-health system.





7.2 Emergency department visits that might have been avoided

7.2.1 Why is this important?

Emergency departments are meant to provide care for serious illnesses and injuries that need fast, highly-skilled care. Often however, people go to them for minor problems that can be treated in a doctor's office or after-hours

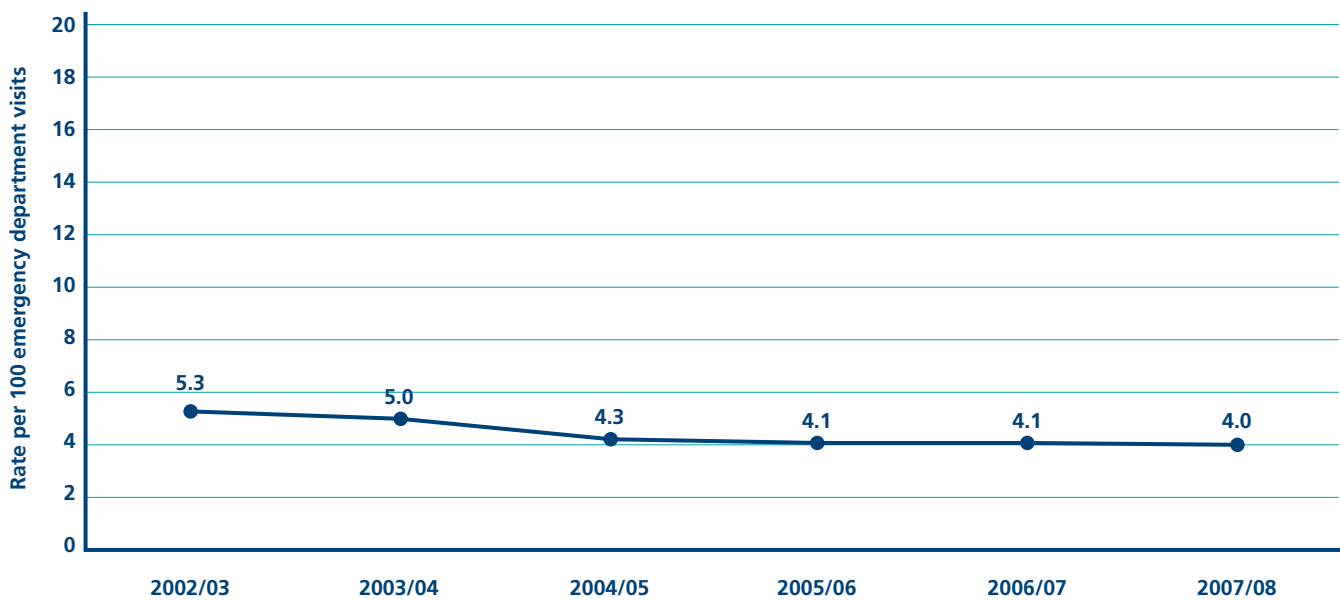
clinic. Keeping non-urgent cases out of emergency takes pressure off hospitals and frees up resources to treat those who need the services. (Rural communities may be an exception, because small towns often can't support an after hours clinic, so it makes sense to use emergency for less urgent care).

People who live in long-term care facilities often end up in emergency for medical conditions — like dehydration, gastroenteritis (stomach flu), diabetes and bladder infections — which could be prevented with basic monitoring and care. Even when they do get worse, these conditions could be managed in their long-term care home. That too would save money and reduce stress for elderly patients who are often very frail. A long wait in emergency is not only tiring but potentially dangerous, if they get disoriented, catch an infection, or miss taking their medicine.

7.2.2 What did we find?

Over the five years we looked at, we found an overall decline in avoidable visits to urban emergency departments. Some areas in the province are doing a better job keeping the number of avoidable visits down.

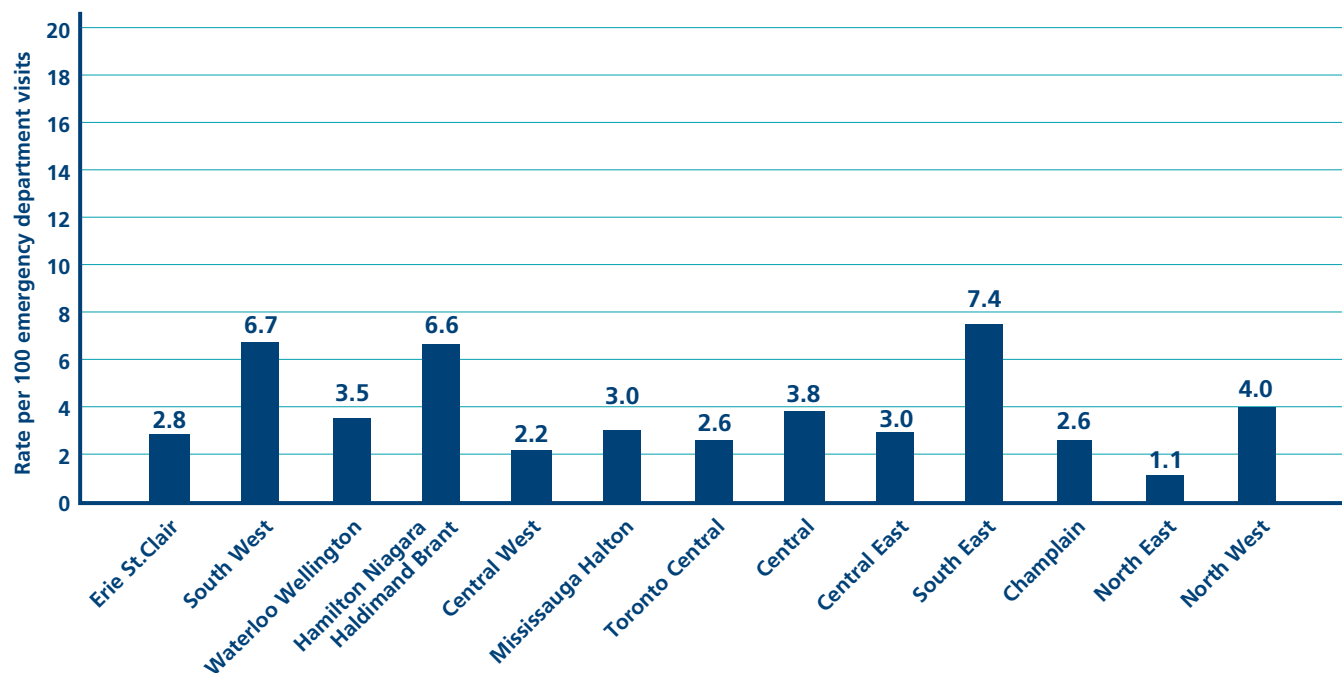
Rate of emergency department visits that could be treated elsewhere in major Ontario cities, 2002/2003 to 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

In major Ontario cities, about four out of every 100 visits to emergency are for minor health conditions that could have been taken care of elsewhere. That number has shown a slow decline over the past years but there is still room for improvement.

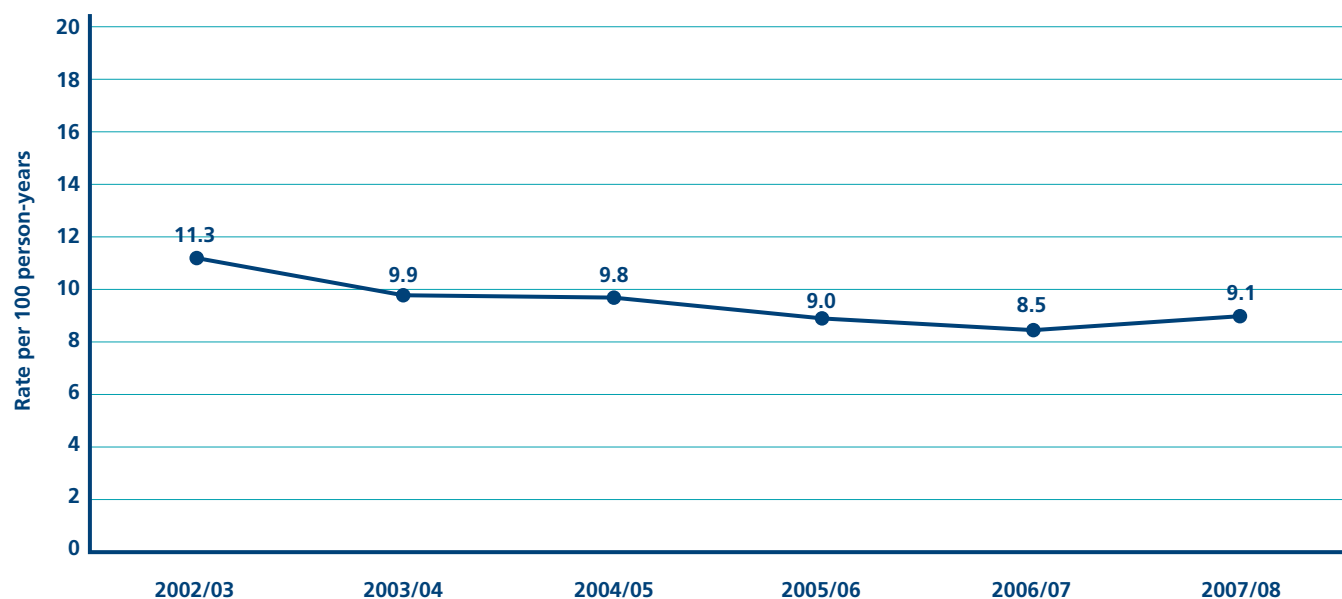
Rate of emergency department visits that could be treated elsewhere in major Ontario cities by LHIN, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

How many avoidable visits there are varies by local health integration network. South West, South East and Hamilton-Niagara had the highest rates in 2007/08.

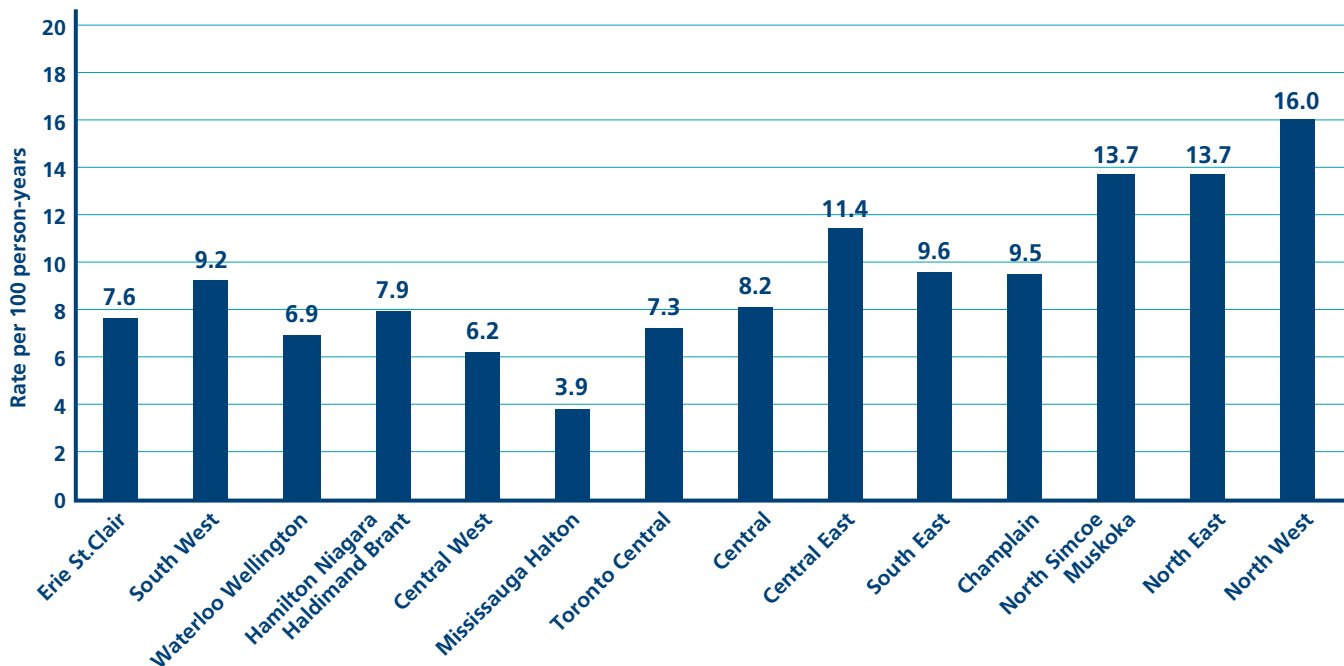
Rate per 100 person-years of low acuity emergency department visits by long-term care residents in Ontario, 2002/2003 to 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

Long-term care residents are less likely to go to emergency for something minor than they were six years ago, but there is still opportunity to reduce this number further.

Rate per 100 person-years of low acuity emergency department visits by long-term care residents across Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

How residents of long-term care homes use emergency varies widely across the province. Residents in some regions are three times more likely than in other regions to go to emergency for something minor.

7.2.3 Why are there so many unnecessary visits to emergency?

- **Lack of options.** Some people may visit emergency for a minor problem because they don't have a family doctor, or do but can't get an appointment and there are no after-hours clinics in the area. Some patients may not think of going to a walk-in clinic.
- **Lack of training.** Residents from long-term care facilities may be sent to emergency for something minor because their home doesn't have enough staff trained to handle the problem or there's no physician available to assess how sick the resident is.

7.2.4 Success study: Nurse practitioner outreach avoids ambulance transfers and emergency department visits

Situation: The Sault Area Hospital had an overflowing emergency department where people waited hours for care. When they analyzed the situation, they found 35%

of patients who arrived by ambulance from long-term care homes in 2006/07 did not have an urgent need for care and could have been looked after at the home by a primary care provider.

Aim: To reduce unnecessary visits from long-term care homes to emergency (which would also keep ambulances from being tied up by those trips).

Measures: Number of ambulance transfers to the Sault Area Hospital emergency department from two long-term care homes.

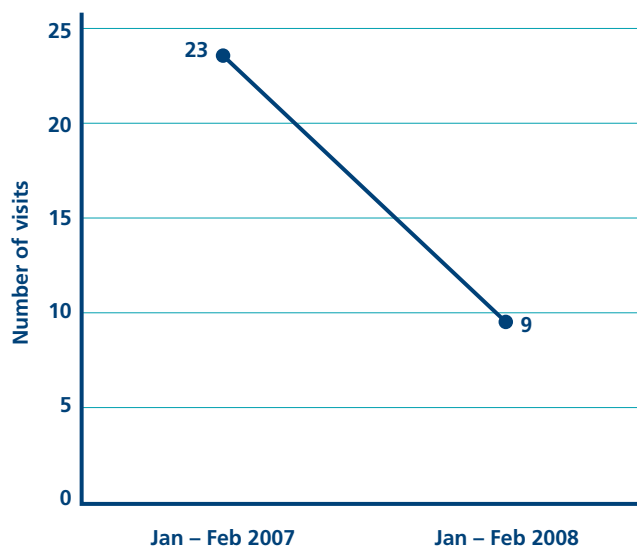
Changes: A system was piloted where a nurse practitioner worked in two long-term care homes and provided assistance in managing residents' problems. The nurse practitioner either provided advice over the phone or made a visit to the home to assess the resident and suggest treatments or further tests. Examples of common problems which could be dealt with in the home instead of at the emergency department include managing skin wounds, bladder infections, suturing, catheter changes or assessment of the resident after a fall.

The nurse practitioners also provided mentorship and in-service training sessions to long-term care staff to teach them how to manage better these situations on their own.

Implementation of this system required a lot of communication and coordination with physicians and staff to clarify the role of the nurse practitioner.

Results: Ambulance transfers decreased from 23 in January/February 2007 (baseline) to nine in January/February 2008.

Number of visits to the emergency department at Sault Area Hospital, January-February 2007 and January-February 2008



Source: Sault Area Hospital, Sault Ste-Marie, Ontario



7.2.5 What can you do?

If you are thinking of going to a hospital emergency but aren't certain you need to, call the 24-hour, seven-day-a-week Telehealth Ontario service (1-866-797-0000; TTY: 1-866-797-0007). Telehealth gives you free, confidential access to a registered nurse, who can provide advice about health-related concerns and help you decide whether you can look after yourself, should make an appointment with your doctor, go to a clinic, contact a community service or go to emergency.

7.3 Use of low-cost drugs that work as well as more expensive ones

7.3.1 Why is this important?

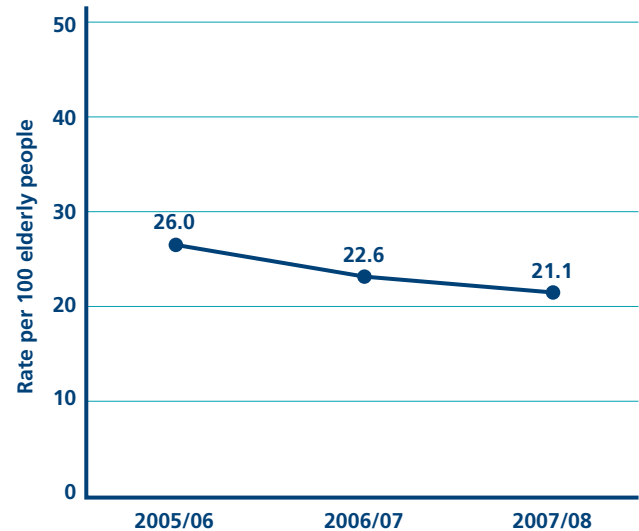
Drugs have an essential role in the treatment of illness and disease and every year we spend more money on them. Often, however, a newer, more expensive drug is prescribed instead of an older, cheaper one that works just as well. This wastes money that could be used elsewhere in the health system.

Drugs for high blood pressure are a good example of this problem. High blood pressure is a common condition that can lead to heart disease, stroke and death if untreated. Thiazides (a type of diuretic or “water pill”) work well for most people and Ontario’s practice guidelines list thiazides as the first drug to try in most cases.^{††149} They cost only a few cents a day, while newer blood pressure medications cost four or five dollars a day. This is an issue for the province, because senior citizens and people on social assistance have most of their medication paid for by the government.

7.3.2 What did we find?

There is room to reduce waste in our health system. Many patients take more expensive drugs when equally effective, cheaper drugs exist.

Rate of prescribing a thiazide as their first antihypertensive medication per 100 elderly people, 2005/2006 to 2007/2008

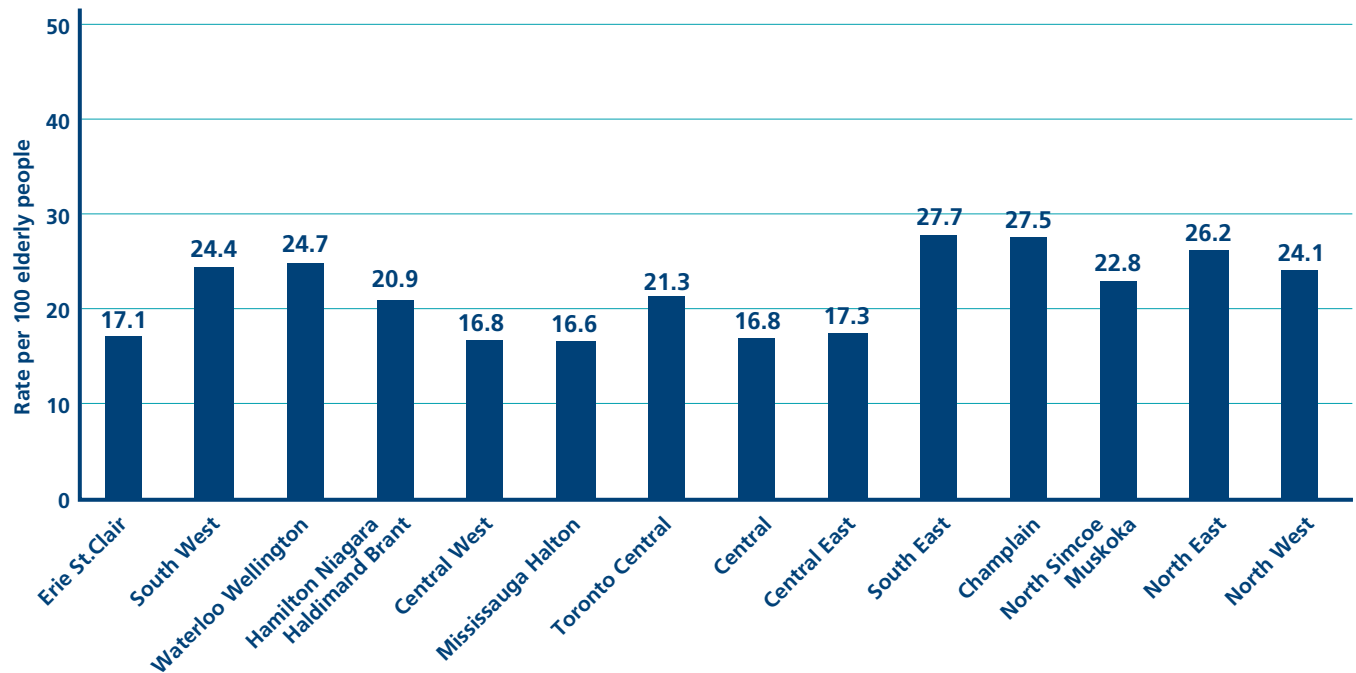


Source: Institute for Clinical Evaluative Sciences – Health system data



†† Patients with heart failure, ischemic heart disease, stroke, diabetes or chronic kidney disease should try other drugs for high blood pressure first. When calculating the rate of use of thiazides, we excluded people with these conditions.

Rate of prescribing a thiazide as their first antihypertensive medication per 100 elderly people across Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

Only about one in five elderly Ontarians are given thiazides when they start blood pressure treatment and that rate is going down. However, some regions make much better use of thiazides, which tells us more doctors could be prescribing them first to save money without affecting quality of care.

7.3.3 Why are doctors prescribing more expensive drugs?

One reason for the use of expensive drugs is that drug manufacturers aggressively market newer products to physicians, not older drugs with expired patents that make less money.

7.3.4 What has been done elsewhere?

Saskatchewan has a province-wide program called RxFiles¹⁵⁰ which sends trained pharmacists to visit doctors in their offices and promote the best, most cost-effective and evidence-based drugs to use in different situations. The idea copies how drug companies sell by sending marketing staff to doctors' offices to promote products — but the advice from the province isn't influenced by the need to make a sale.

7.3.5 What can you do?

Whether you have just been diagnosed with hypertension or are already being treated for it but haven't been prescribed a thiazide, ask your doctor about them. Unless there are other medical issues to prevent you taking a thiazide, they are as safe as newer (and far less costly) medications.



7.4 Reduce unnecessary tests

7.4.1 Why is this important?

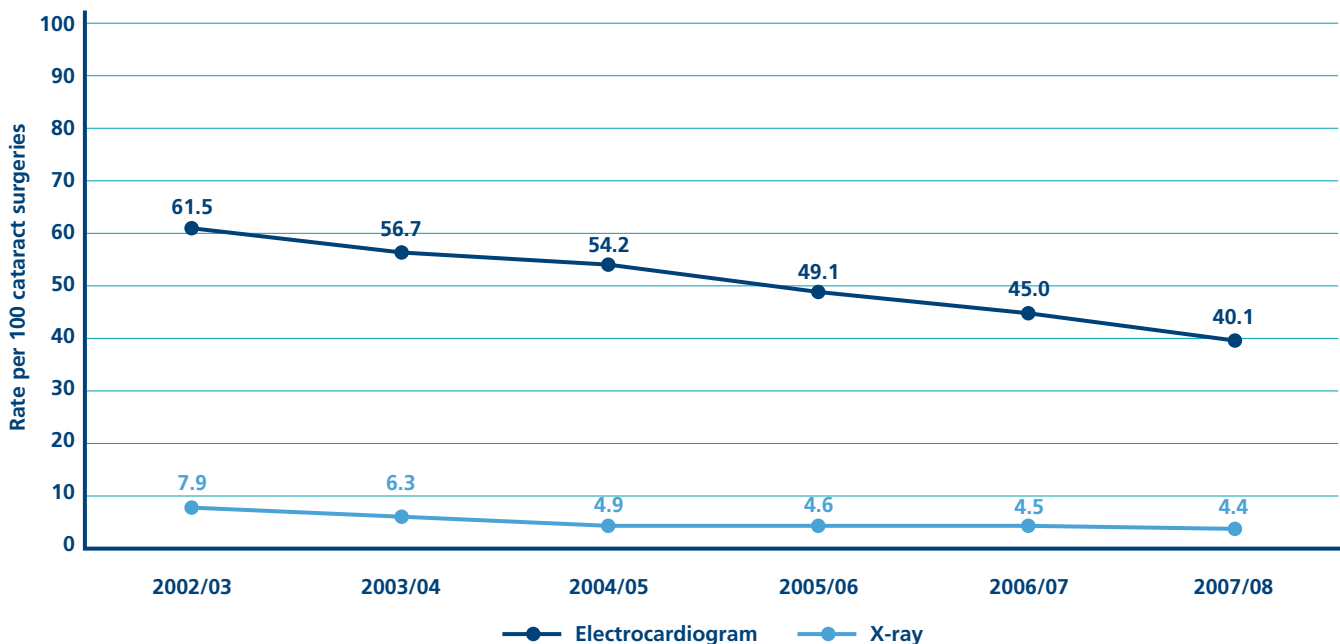
Pre-operative tests are common, especially for older patients, but many of them may not be necessary. Preliminary results from a recent Toronto-based study show there is no benefit from pre-operative testing in many types of out-patient surgery.¹⁵¹ Another Canadian study found pre-operative testing could be reduced for a wide variety of hospital-based procedures if standardized protocols were used.¹⁵² Again this year, we've looked at electrocardiograms (ECGs) and chest X-rays before cataract surgery to see if Ontario is wasting money and time this way. Several studies show neither improves patient safety¹⁵³ and eliminating them could save money.¹⁵⁴ Moreover, unnecessary X-rays expose people to unnecessary radiation and tests that patients don't need can be inconvenient and a waste of people's time.

7.4.2 What did we find?

Unnecessary tests are still being done before surgery and there is too much variation in rates of them among local health integration networks. If our goal is to eliminate all unnecessary pre-operative tests for cataract surgery, we have a long way to go.

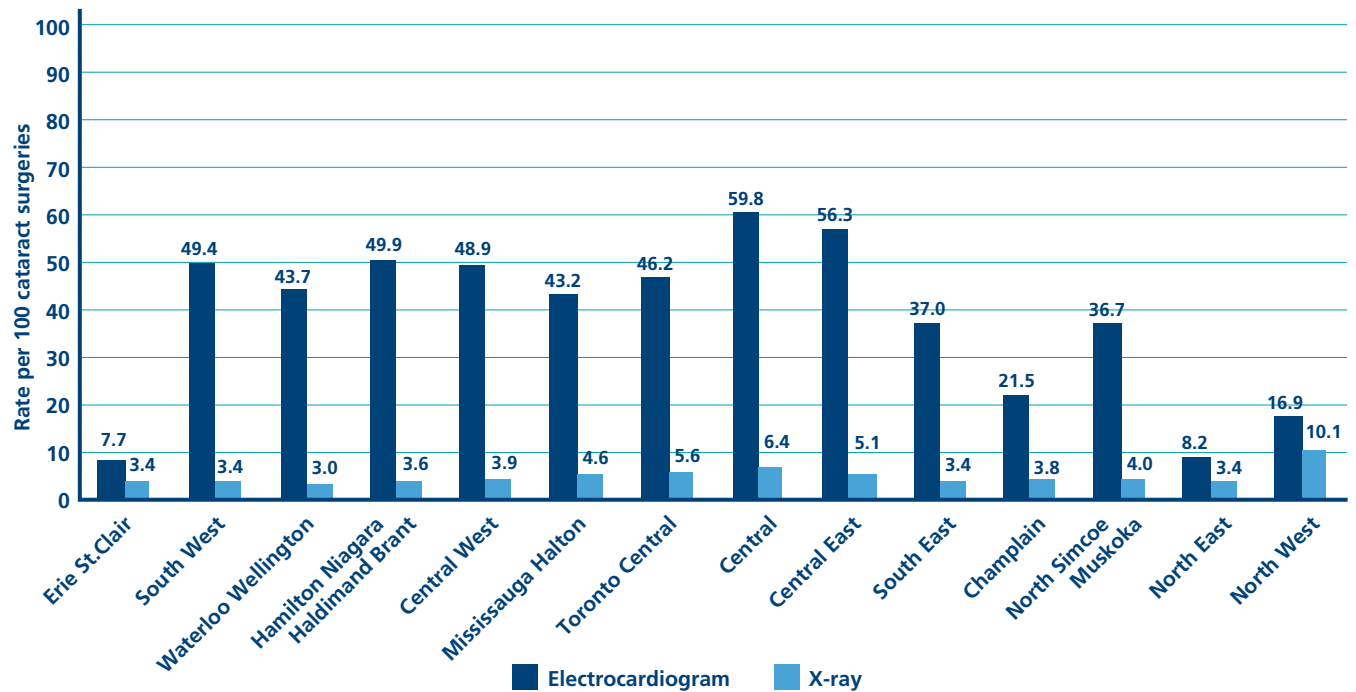


Rate of pre-operative testing per 100 cataract surgeries in Ontario, 2002/2003 to 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

Rate of pre-operative testing per 100 cataract surgeries across Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

Both the use of cardiograms and chest X-rays before cataract surgery are decreasing, but in 2007/08, four out of 10 cataract surgery patients had a cardiogram. The rates of cardiograms before cataract surgery vary enormously across LHINs, from a low of 8% to a high of 60%. Cutting them would be an easy way to save patients time and the healthcare system's money.

7.4.3 Why are we testing eye patients' hearts and lungs?

Most cataract patients are older and may be at risk of heart attack or lung disease. In the past, cataract surgery was a more complex procedure done in hospitals and these tests were done to ensure the patient was fit for surgery.

Nowadays, cataract surgery is a minor procedure that can be done as day surgery and requires only a local anesthetic, but the belief these tests are needed persists.

7.4.4 What has been done elsewhere?

We could not find examples of places that have eliminated unnecessary tests before cataract surgery. However, there are general strategies for reducing unnecessary tests, including standardizing orders and protocols^{155, 156} so the default is not ordering them. Tracking individual physicians' use of unnecessary tests and regularly giving them feedback about it, with comparisons to how other physicians are doing can also be effective.¹⁵⁷

7.4.5 What can you do?

If you are scheduled for cataract surgery, ask whether any pre-operative tests have been ordered and if so, why. You might also ask whether information on your pre-admission forms showed you needed the tests.





7.5 Patients' perceptions of waste

7.5.1 Why is this important?

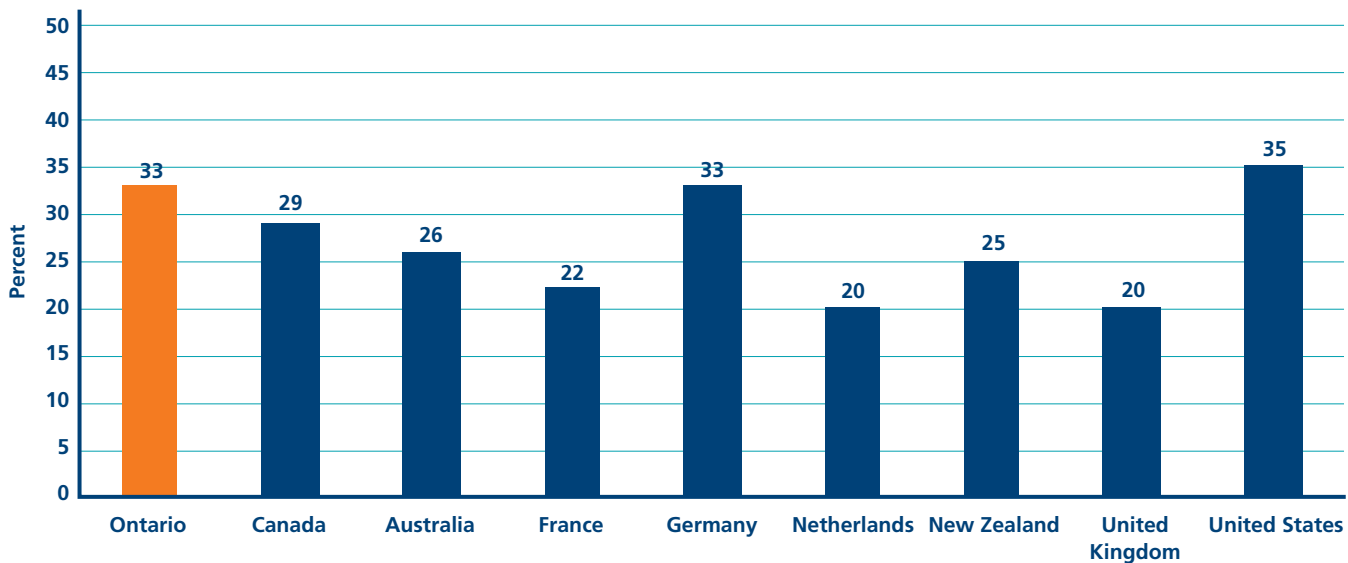
Patients' time is valuable and they don't want it wasted. It's fair, for example, that patients expect test results to be available when they're needed, so an appointment or procedure can go ahead without the test having to be redone. Disorganization is the root cause of wasted time in the healthcare system and if time is wasted because of it, both patient satisfaction with care and their confidence in the system are undermined.

This year we have new data from the Commonwealth Fund Survey of Sicker Adults (see sidebar in section 2.1). The survey involved 7,500 patients in eight countries, including an extra-large sample for Ontario, to make the data for this report.

7.5.2 What did we find?

One out of three sicker adults surveyed in Ontario felt their time was wasted because of poorly organized care, which is more than citizens of other countries.

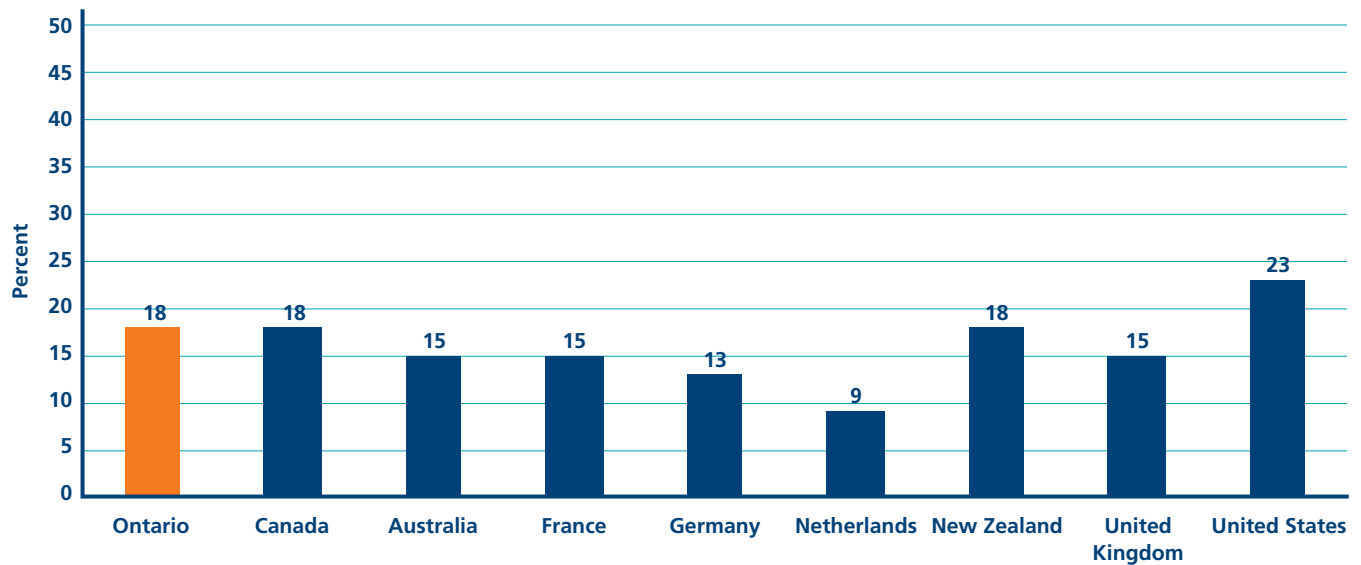
Percent of sicker adults who in the last two years often or sometimes felt their time was wasted because their medical care was poorly organized, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

Ontario is tied with Germany and the United States for the worst patient rating for wasted time. The Netherlands and the UK were tied for the lowest rate of patients likely to feel their time was wasted.

Percent of sicker adults who reported that in the last two years their test results, medical records or reasons for referrals were not available at the time of their scheduled doctor's appointment, 2008

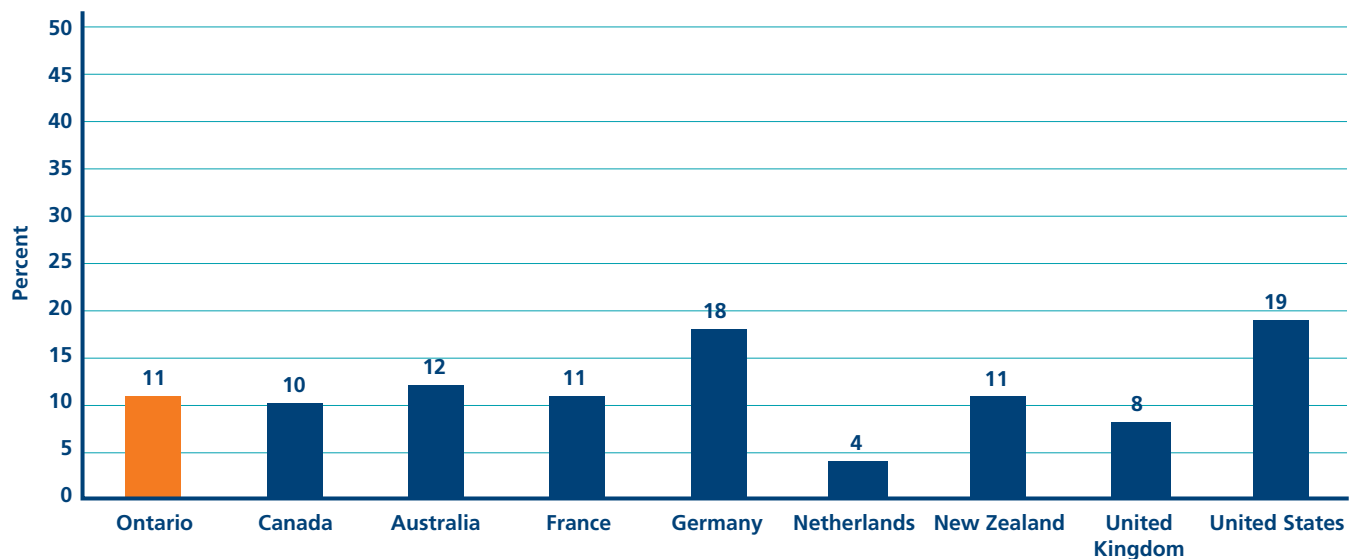


Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

Almost one in five sicker adults in Ontario felt their time had been wasted because their test results, medical records or referrals were not available at their scheduled appointment. On this, Ontario is about the same as Canada as a

whole, slightly better than the US and slightly worse than most other countries. The Netherlands stands out as having a very low rate of people who feel their care was disorganized — half Ontario's rate.

Percent of sicker adults who in the last two years felt tests were unnecessary because the test had already been done, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

About one in 10 sicker adults in Ontario felt they had been given an unnecessary test because it had already been done. This rate is about the same as the rest of Canada

and many other countries. Fortunately, it is much lower than the United States. The Netherlands had far lower rates of tests felt to be redundant.

7.5.3 Why are we wasting people's time and repeating tests needlessly?

- **Lack of co-ordination.** When healthcare is delivered by many organizations, co-ordination and communication is important. When it doesn't happen, the patient will sense the system is disorganized. If a hospital doesn't communicate with the family doctor when a patient is admitted, the hospital may order a test that has already been done.
- **Lack of information technology.** The lack of investment and planning in e-health contributes to problems with information flow. In the scenario above, if the patient had an electronic health record that stored and shared test results among the patient's healthcare providers, the unnecessary test could have been avoided.
- **Bad habits.** One study in the UK found the vast majority of repeated tests were done by relatively few physicians. Some ordered far more repeat tests for the same patients than other physicians.¹⁵⁸ The study recommended informing doctors how their test-ordering patterns compared to their peers.

7.5.4 Who's doing better?

In the three areas we looked at, the Netherlands stands out for being far less disorganized and wasting less time than healthcare in Canada and Ontario. In 2006, the Netherlands had one of the highest rates in the world of adoption of electronic medical records in primary care — 98% — compared to a paltry 23% in Canada.¹⁵⁹ Dutch doctors were also far more likely than Canadians to have electronic records that let them share information with doctors outside their practice (45% vs. 22%).



The US Veterans Administration is widely thought to have one of the most efficient healthcare systems, with the best results when it comes to quality.¹⁶⁰ It has a universal health record system called VistA, which lets clinicians view and edit electronic health records throughout its 400-site system.¹⁶¹ When a veteran from California goes to emergency in New York, any healthcare provider can instantly see the full medical history, including all past lab tests, x-rays, medications and allergies. There's never a need to repeat a test because the results aren't available. Some researchers estimate the VA has improved productivity (services per dollar spent) by 6% per year since VistA was launched in 1999.¹⁶²

7.5.5 What are we doing in Ontario?

Ontario, like most of Canada is sadly behind on using information technology in healthcare — commonly called e-health. We can't make real progress in improving the quality of care and the efficiency of the health system until we greatly improve our use of information technology. Our failure to computerize means physicians' offices and hospitals don't have the systems they need to store patient information and manage and improve care, and the health system as a whole can't easily send information from one healthcare setting to another.

However, in the fall of 2008, the province combined all its e-health activities into one agency, eHealth Ontario. Its mandate is to lead the way in harnessing technology and innovation to improve patient care, safety and access. One of its goals is to create an electronic health record for every resident of Ontario by 2015. Electronic health records store and share health information through secure, digital networks. They help end duplication, delays and loss of information and waste much less time for patients and healthcare providers.

7.5.6 Success study: Linking information systems in hospitals and primary care

Situation: In 2004, Trillium Health Centre in Mississauga launched a project to capture, integrate and share information from all over the hospital and even outside it. The system^{‡‡} picks up data from many different systems, integrates them in a central hub and delivers information to users. Because family doctors are central in co-ordinating care, Trillium wanted to include them in its project and set out to build an electronic link with the Summerville Family Health Team, which already had electronic medical records.

^{‡‡} Transforming Healthcare into Integrated Networks of Knowledge (THINK)



7.5.7 What can you do?

When your doctor refers you to a specialist or for a test, ask what background information will be sent along beforehand. You can also ask for copies of any critical documents, both for your own information and just in case information doesn't get to the specialist in time. If you're having a test repeated, feel free to ask why.

Summerville serves over 31,000 patients with 25 physicians and six nurse practitioners as well as nurses, social workers, psychologists, a dietician and a clinical pharmacist, spread over a number of sites. It was an ideal candidate for the project, because the Ministry of Health funds family health teams to keep their records electronically.

Aim: To eliminate delays in delivering medical reports, test results and notifications about admissions or emergency department visits by Summerville's patients.

Measures: The project kept track of the time required to deliver reports and test results from the hospital to the family doctor, and the reduction in lost reports and test results.

Changes: Trillium established the electronic link and moved all the data on eHealth Ontario's private network, to minimize the cost of ensuring privacy and security. It tested implementation of the system, first with a single volunteer family doctor and then the whole group, and first with fake data, then a small amount of real data, then all data.

Results: Summerville staff estimate the time to receive test results and hospital reports dropped from more than a week to about five minutes between November 2007 and April 2008. There have been no incidents of lost reports or test results.

Next steps: Trillium is exploring expansion to other family health teams in the area.



8

8 APPROPRIATE RESOURCES

The health system should have enough qualified providers, funding, information, equipment, supplies and facilities to look after people's health needs.

8.1 Introduction

The healthcare system is large and complex and, like any large system, can only perform at a high level if it has the right people, the right processes and the right equipment in place. Traditionally we have considered resources in the healthcare system to be how much we spend and how many people we're training or have working in the system, which are still important ways to look at investment. Increasingly, however, large businesses assess resources by including measures of whether conditions are right for people and equipment to be used productively, so the system works well. We believe this approach is needed in healthcare too.

To do that, we examined:

- Total expenditures on healthcare
- Changes in the supply, distribution and mix of healthcare providers
- Healthcare as a work environment, including whether healthcare workers are being injured, and their satisfaction with their jobs and working conditions

8.1.1 Key points about appropriate resources

- Information technology spending and use has increased in institutions in Ontario, which is encouraging. However, most hospitals still cannot communicate electronically with doctors and healthcare organizations in the community.
- Use of electronic medical records by Ontario's family doctors lags far behind Alberta and even further behind many European countries.
- Very few of the practices that have electronic records use them properly to help doctors monitor care and improve quality.
- Ontario's health spending is in the middle of the pack of provinces and territories as a percentage of provincial wealth.
- The province has expanded its training spots for health professionals and the impact of that will be felt in the next five to 10 years.
- Over the last five years, the overall supply of family doctors per capita has increased by 5%. The supply of nurse practitioners has grown at a much faster rate.
- We need to improve the mix and number of primary care providers and try to get them distributed more equitably in relation to the distribution of the population and health needs. We also need better organization of providers to improve access and the quality of care.
- Healthcare workers report higher rates of injury at work than people who work in construction or mining. Injury rates are highest in long-term care and for home-care workers.
- Doctors and nurses are more dissatisfied with their jobs than other people.



8.2 Overall spending

8.2.1 Why is this important?

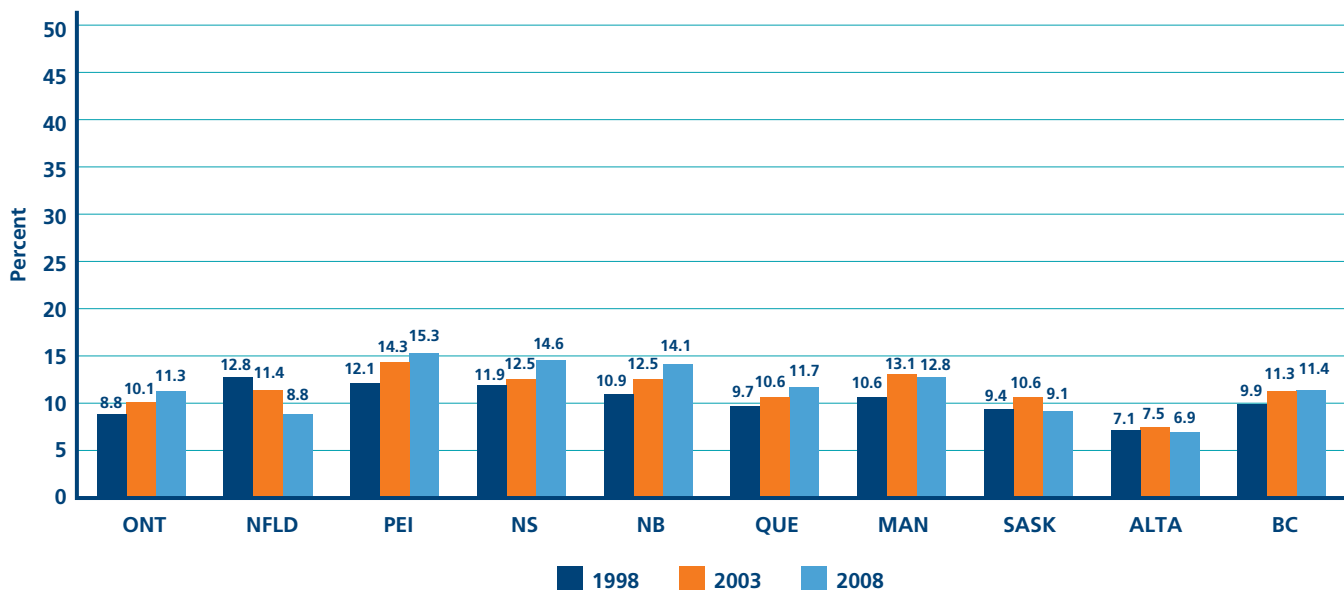
Adequate financial resources are essential for running a large, complex system like healthcare. One way to measure investment in healthcare is to see what percentage health takes of the total wealth of the province. This is measured as a percentage of the “gross provincial product,” the total of all the goods and services Ontario produces.

8.2.2 What did we find?

Ontario’s health spending is growing and is comparable to that of other provinces.



Total health expenditure as a percent of gross domestic product, by province, 1998, 2003, 2008* — current dollars



* Forecasted

Source: Canadian Institute for Health Information, *National Health Expenditure Trends*

The graph above compares total health spending as a percentage of gross domestic product. In Ontario in 2008, about 60% of total health spending was by the provincial government; the rest came from individuals or insurers.¹⁶³ The graph shows Ontario spent just over 11% of its total wealth on healthcare in 2008, up from just below 9% in 1998. (Total health spending as a percentage of gross domestic product can shift because of spending changes but also because the provincial economy has grown or shrunk. That’s why, for instance, Newfoundland appears to be spending less — its gross provincial product has grown, making the proportion spent on health smaller. Spending can also differ from province to province or over

time because of different age distributions, population density and geography). Ontario’s per capita health spending in 2008 was \$5,229 per person, which put us right in the middle of Canada’s provinces and territories.¹⁶⁴

The most recent international comparisons are from 2006. That year, among the 30 member countries of the Organization for Economic Co-operation and Development, Canada ranked eighth in total healthcare spending, at 10.0% of gross domestic product, compared to 15.3% in the US, 11% in France, 10.6% in Germany, 8.4% in the UK and 8.1% in Japan.¹⁶⁵

8.3 Health human resources

8.3.1 Why are they important?

“Health human resources” refers to the number and mix of people who work in healthcare. Without adequate staffing, care may be delayed or unsafe. A recent review of research showed cities or states in the US that had a higher proportion of primary care doctors had better outcomes for cancer, heart disease, stroke, infant mortality, low birth weight, life expectancy and self-rated health.¹⁶⁶ Another review of studies of nurse staffing in hospitals found hospitals with higher levels of nurse staffing had lower death rates and fewer cardiac arrests and illnesses caused by healthcare, including hospital-acquired pneumonia.¹⁶⁷

It’s not just about numbers. What types of health professionals there are on staff and what their duties are is another important resource question. Too often, professionals do work that could be done at lower cost, or more consistently,

by others. Numerous studies show nurse practitioners who work with family physicians can relieve them of tasks such as treating minor ailments, giving preventive care and health counselling, which frees the physicians to take on more patients or focus more intensely on difficult cases.^{168, 169, 170} But we have to be careful not to shift too many responsibilities to less-trained staff; studies show that when that was tried with nursing care in Ontario hospitals, patients didn’t do as well.^{171, 172} Getting the right mix of staff is a tricky balancing act for health system planners.

Geographic distribution of healthcare workers is also an issue. Providing access to people in small or remote communities is a particular challenge and requires special planning and programs.

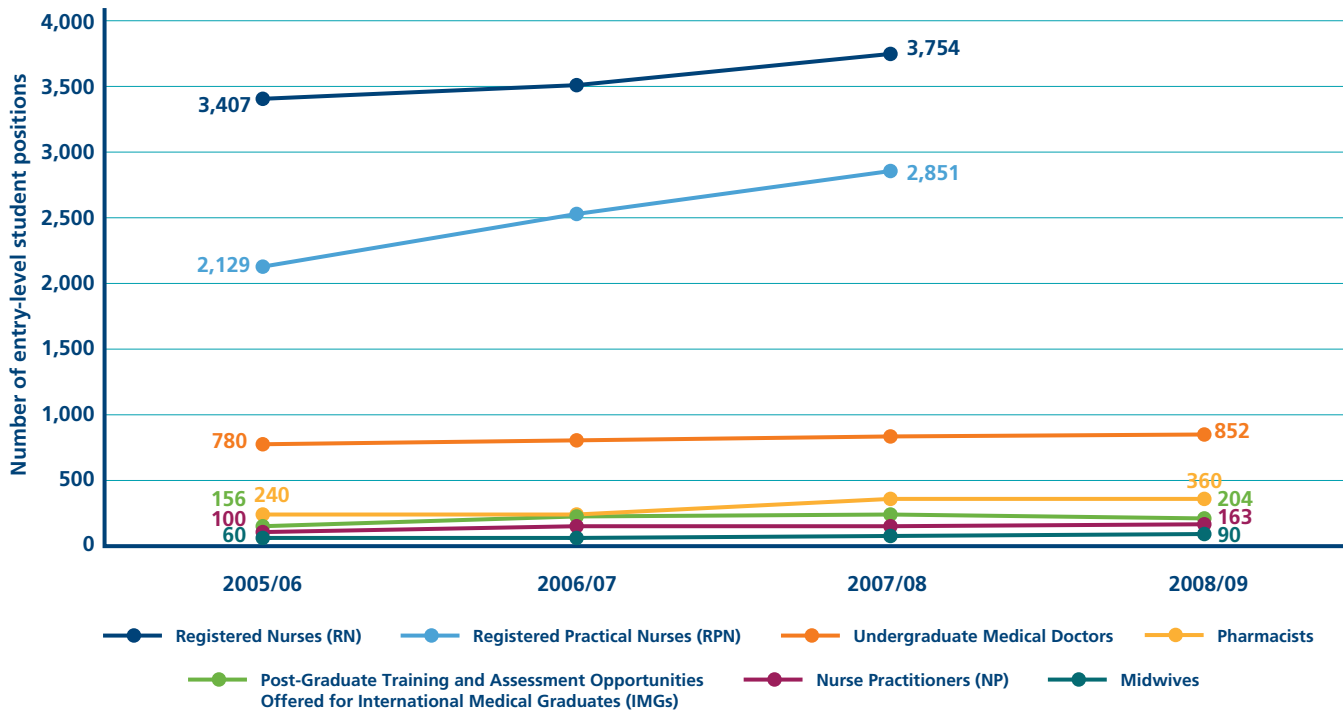
This section examines the overall supply of healthcare providers in Ontario, their distribution across the province and the number of trainees produced by Ontario’s education programs for health professionals.



8.3.2 What did we find?

Ontario continues to expand training opportunities for health professionals and increase the supply of these individuals.

Number of entry-level student positions for select health professional programs in Ontario, 2005/2006 – 2008/2009 academic year

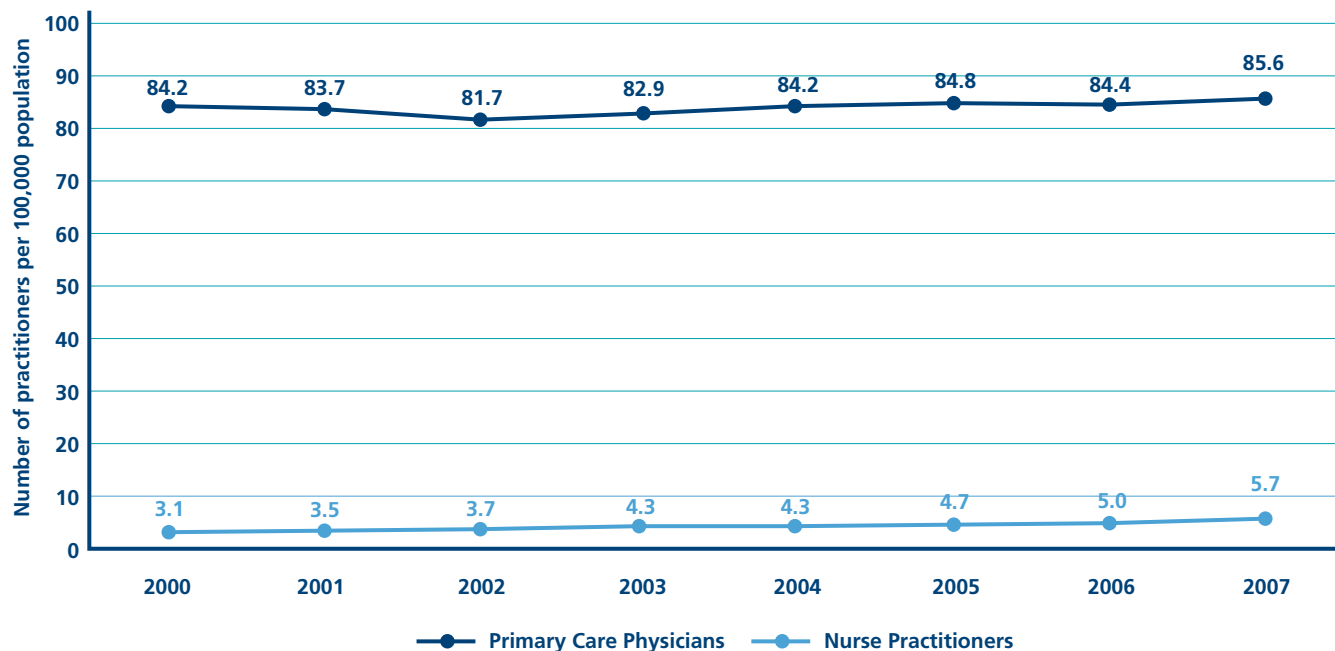


Source: All data provided by the Ministry of Training, Colleges and Universities, except for undergraduate medical doctors and IMGs, which was provide by the Ministry of Health and Long-Term Care
 Note: RN and RPN data for 2008/09 is not yet available.



The number of training spots for physicians, nurses, nurse practitioners, pharmacists and midwives has increased in recent years. The jump in first-year pharmacy students in 2007/08 followed the opening of the University of Waterloo’s new School of Pharmacy.

Supply of primary care practitioners and nurse practitioners per 100,000 population in Ontario, 2000 – 2007



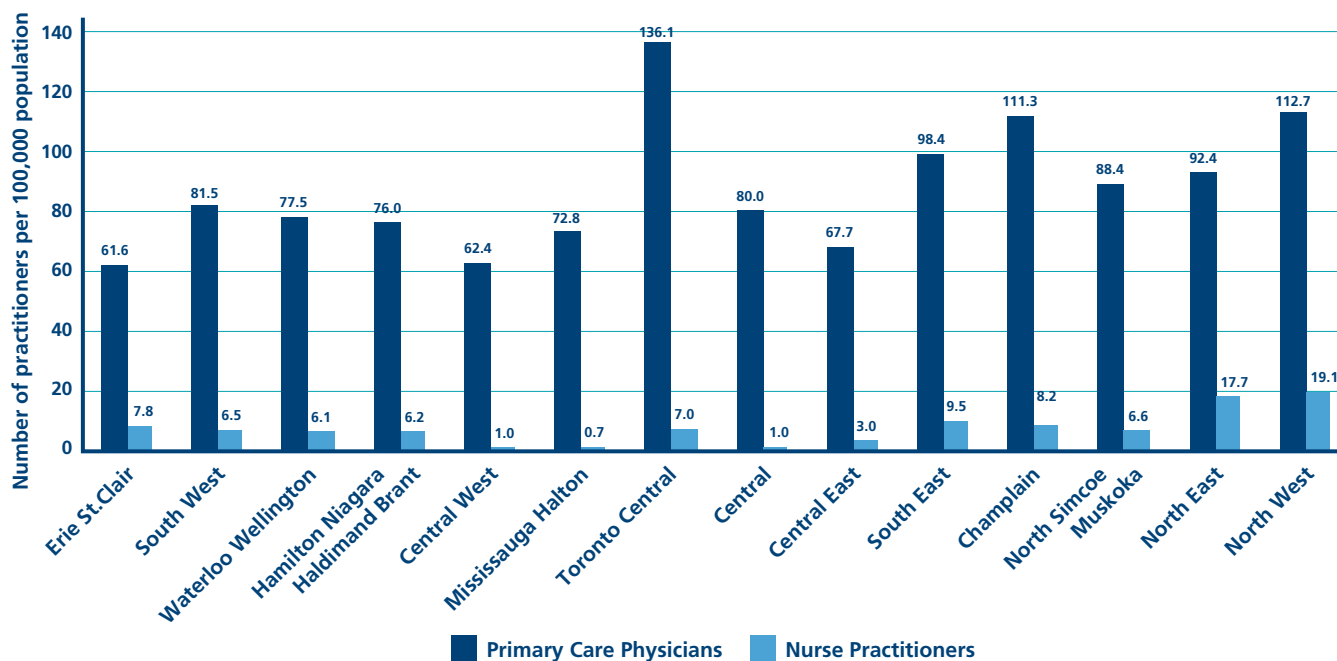
Source: Ontario Physician Human Resources Data Centre; The College of Nurses of Ontario; Calculated at the Institute for Clinical Evaluative Sciences using Statistics Canada population estimates

Ontario's supply of primary care doctors per capita hit a low point in 2002, but from 2002 to 2007, has increased by 5%. The supply of nurse practitioners has almost dou-

bled in the last seven years, which is very encouraging. However, nurse practitioners remain a relatively small part of the overall healthcare workforce.



Supply of primary care practitioners and nurse practitioners per 100,000 population across Ontario, 2007



Source: Ontario Physician Human Resources Data Centre; The College of Nurses of Ontario; Calculated at the Institute for Clinical Evaluative Sciences using Statistics Canada population estimates

The supply of primary care physicians and nurse practitioners varies widely across Ontario. It's encouraging the North East and North West health integration networks have an above-average supply of family physicians/general practitioners. This could be the result of aggressive efforts to recruit doctors for the north,¹⁷³ and programs that train them locally and pay them more to work in remote areas.¹⁷⁴

However, doctors in rural and remote communities handle many tasks, such as emergency and hospital care, which are done by specialists in urban areas, so patients may still have trouble seeing their physicians.¹⁷⁵ The vast size of northern Ontario may also mean that even with an above-average number of physicians, many areas still lack access.

The north has the highest use of nurse practitioners, who often work in small or remote communities with backup from visiting family physicians. In the south, however, there is still significant variation in the supply of physicians and nurse practitioners.

8.3.3 What is Ontario doing?

The province is tackling health human resources issues with a number of initiatives under its HealthForceOntario strategy:¹⁷⁶

- The Nursing Graduate Guarantee promises a full-time job to every new Ontario nursing graduate who wants one.

- The Ontario Physician Assistants Initiative trains people to help doctors with tasks like taking a patient history, ordering tests or counselling. They work in a range of healthcare settings.
- The HealthForceOntario Marketing and Recruitment Agency advertises job opportunities, helps internationally trained health professionals qualify to work, helps Canadian physicians move home from abroad and helps find physicians for communities who need a doctor for short-term relief.
- The Underserved Area Program provides financial incentives, free tuition and other incentives to encourage health providers to work in rural or remote areas.

HealthForceOntario has doubled places in residency training for international medical graduates, from 90 to over 200. The government has also invested \$2.3 million to expand enrollment in midwifery education to 90 places in fall 2009.

More established initiatives include the Northern Ontario School of Medicine (whose first class started in 2005), rural family practice residency programs,¹⁷⁷ a medical training program in Windsor affiliated with the University of Western Ontario, and the University of Waterloo's pharmacy school.

8.4 Healthy Workplace

8.4.1 Why is this important?

Where we work has a significant impact on our health and well-being. Safe, well-run workplaces tend to have fewer work-related injuries and workers who are more satisfied with their jobs and feel greater general well-being — which is important for a number of reasons.

There are about 6,000,000 people in Ontario's labour force. Healthcare workers are 5.6% of the total.¹⁷⁸ As employees and citizens they have a rightful expectation the healthcare system will help keep them healthy.

A healthy workplace leads to better quality care for patients. Research shows when nurses feel they have enough staff and administrative support, patients are more satisfied with their care.¹⁷⁹

Having a stable workforce is also good for healthcare. Workplaces where job satisfaction is low have more turn-

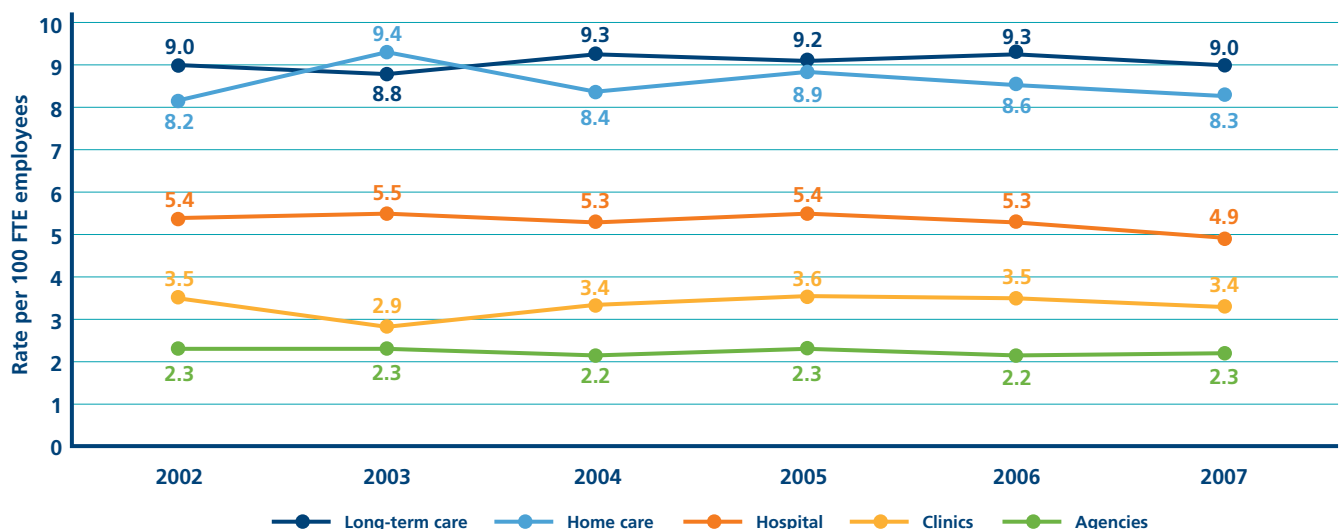
over¹⁸⁰ and losing healthcare workers — either because of injury or dissatisfaction with the job — disrupts things. Vacant positions create extra work for people who remain, while filling positions with temporary workers undermines continuity of care and service.

So making work safe and rewarding can reduce costs and make healthcare more sustainable. Injuries are expensive for employers and if workers quit healthcare altogether, society's investment in their training is lost.

8.4.2 What did we find?

Injuries are common among healthcare workers, especially those who work in long-term care and home care. About one in four nurses feel they don't have enough time to carry out their duties and that they have low control over their work environment.

Reported injuries across the largest health care employers per 100 FTE employees in Ontario, 2002-2007



Source: Ontario Workplace Safety and Insurance Board, 2008

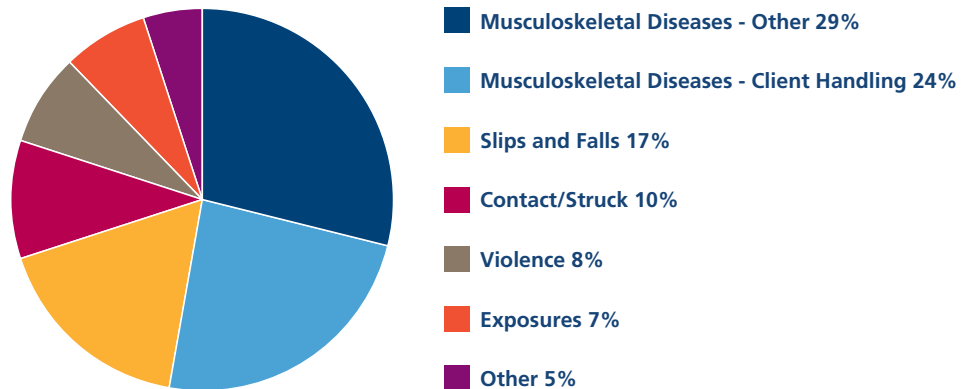
Note: Injuries include both lost-time and non-lost-time injuries. With the former, an employee who is off work because of injury receives wage replacement benefits from the Workplace Safety and Insurance Board (WSIB). With the latter, an injury is reported to WSIB, but there is no claim for benefits either because the worker did not need time off, or the cost of the time off was picked up by the employer. An example of a clinic is a community health centre and for an agency is a nursing agency.

The highest injury rates are found in long-term care (one injury is reported for every 11 full-time workers per year) and home care (where there's one injury per 12 workers per year). Injury rates in long-term care and home care are almost double that of hospital workers. Hospitals are the only healthcare sector that has managed to decrease injury

rates among their workers — a relative drop of 10% over the past two years. In all other health sectors, injury rates have stayed the same.

In 2008, the rate of injuries that required workers to take time off was higher among healthcare workers than in construction (2.03% vs. 1.95%) and mining (1.31%).

Causes of lost-time injuries among Ontario healthcare workers, 2008

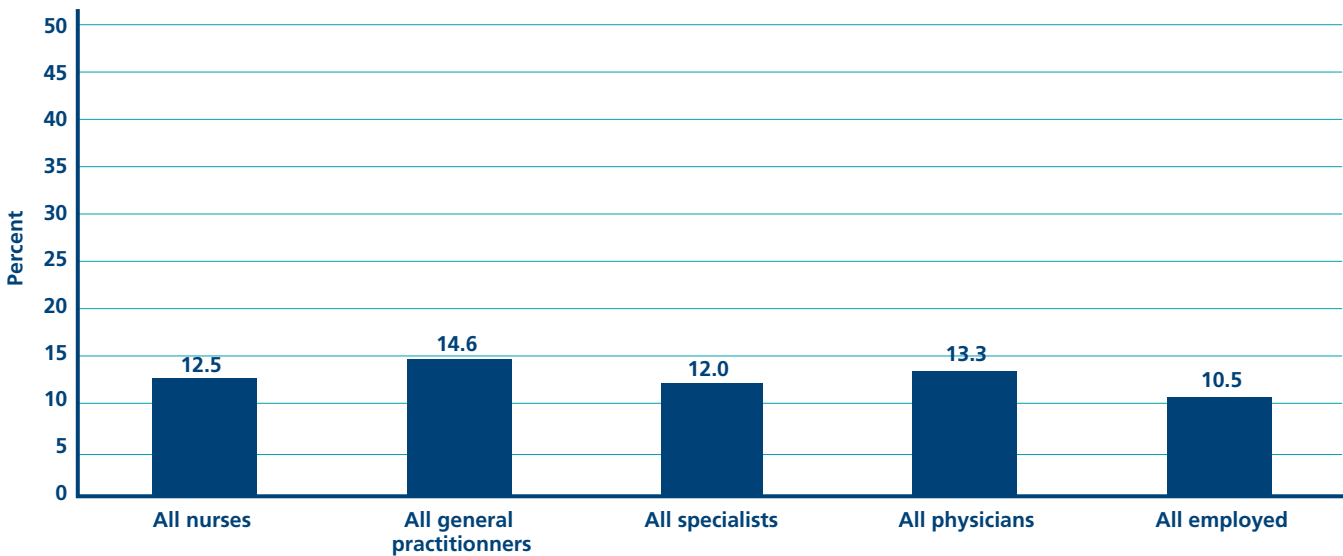


Source: Ontario Workplace Safety and Insurance Board 2008.

This pie chart shows injuries that resulted in a claim for lost time to the Workplace Safety and Insurance Board. In healthcare, most of these injuries are due to musculoskeletal injuries such as back sprains, many of which are due

to handling patients, such as lifting or moving a patient. We're concerned, however, that one in 12 injury claims is due to violence against healthcare workers.

Percent of nurses, doctors (general practitioners/specialists) and all employed people reporting job dissatisfaction in Ontario, 2003 (all), 2005 (nurses), 2007 (physicians)



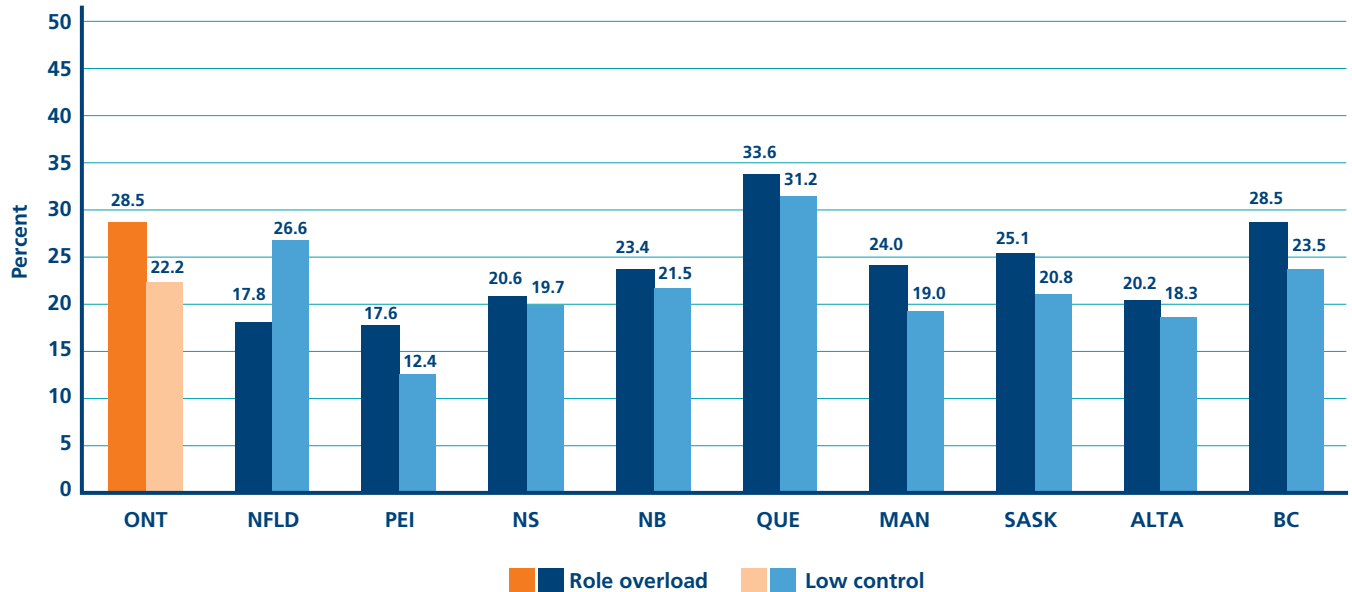
Source: Statistics Canada, National Survey of the Work and Health of Nurses, 2005; National Physician Survey, 2007; Institute for Clinical Evaluative Sciences – Canadian Community Health Survey, 2003

Note: Survey question posed to the nurses and all employed people were asked on a four-point scale, while the survey question posed to the physicians were asked on a five-point scale. The results represent people who are very or somewhat dissatisfied with their job.

Doctors and nurses are more dissatisfied with their work than other people who have a job. Family doctors are

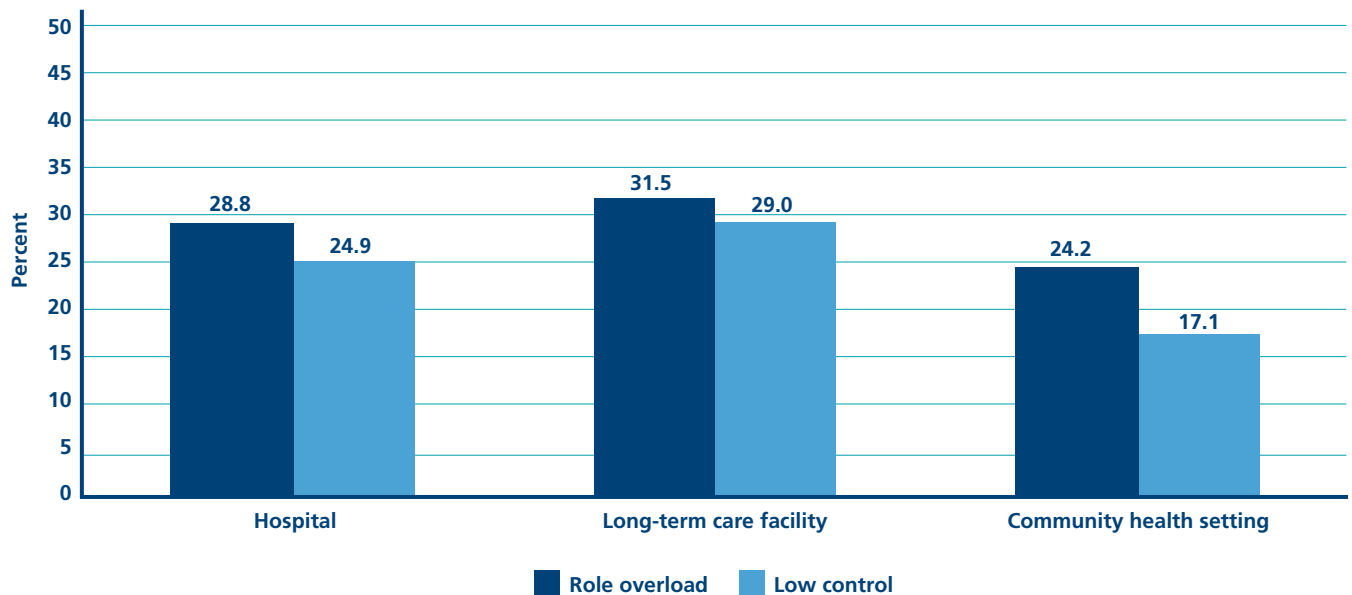
more dissatisfied than specialists.

Percent of nurses reporting not having enough time to do what is expected in their job and having low control over their job by province, 2005



Source: Statistics Canada, National Survey of the Work and Health of Nurses, 2005

Percent of nurses reporting not having enough time to do what is expected in their job and having low control over their job by work setting in Ontario, 2005



Source: Statistics Canada, National Survey of the Work and Health of Nurses, 2005

Some Ontario nurses expressed concerns about the level of control they have while doing their jobs and whether they have enough time to carry out their duties. Nurses in Ontario are happier than those in Quebec on these points, but worse than nurses in most other provinces.

Nurses who work in long-term care are more likely than others to feel they don't have enough time for their job and feel little control over their environment. Notably, long-term care also has the highest rate of work-related injuries.

8.4.3 Why are there safety problems in healthcare workplaces?

- **Lack of training or equipment.** Executing tasks safely (such as turning patients, or handling contaminated material) takes training (especially for new or temporary workers); equipment such as devices to help lift heavy patients or prevent needle-stick injuries is also important.
- **Lack of leadership.** Employers who don't take worker safety seriously, or who allow others to neglect it, may not pay attention to flaws in the work environment, such as a lack of security measures or security personnel to protect staff against violent individuals, or poorly designed work stations.
- **Staff overload.** When employees feel overworked, they may rush through tasks and ignore safety precautions.



Why are workers dissatisfied with their jobs?

- **Too much pressure.** Healthcare professionals often feel overworked, which may be due to inadequate staffing or inefficient use of their time.
- **Powerlessness.** Healthcare staff often complain they lack control over decisions, which could be caused by micromanagement or because they have to follow policies, procedures or regulations that don't make sense, which they can't influence.
- **Pointlessness.** Healthcare is demanding work and often seems unappreciated. Some professionals feel there aren't opportunities for career development.

8.4.4 What is Ontario doing?

The Healthy Work Environments Program has educational tools and resources to improve work environments and reduce workplace violence against healthcare staff.¹⁸¹

Ontario's Patient Lift Program gives hospitals and long-term care homes money for mechanical patient lifts¹⁷⁶ to help prevent musculoskeletal injuries among staff. In 2004/05, 593 long-term care homes and 142 hospitals got funding; in 2005/06, 364 homes and 116 hospitals did. (Some got funding both years).

The Ontario Ministry of Labour runs the Safe at Work Ontario program for all workplaces, not just healthcare.¹⁸² Workplaces where workers have a high risk of injury are inspected more often for hazards and to check compliance with the Occupational Health and Safety Act.

Twelve national healthcare organizations have joined together to form the Quality Worklife — Quality Healthcare Collaborative to improve work life and safety.¹⁸³ It has developed national, standardized indicators for measuring quality of work life, a knowledge exchange network for organizations to share ideas and a list of practices for dealing with conditions that make employees unhappy.

8.4.5 What can you do?

Employers and employees alike should know how to build safer and healthier workplaces. The Ministry of Health and Long-Term Care's Healthy Work Environment Program has tools and resources to help: <http://www.healthforceontario.ca/WhatIsHFO/HWE.aspx>.

8.5 Information Technology

8.5.1 Why is this important?

Modern healthcare, like all modern enterprises, needs information technology to do its job. Your doctor and other caregivers must have a full and accurate understanding of your health. Otherwise, you risk receiving care that is ineffective and unsafe.

Providing healthcare involves collecting large amounts of data and bringing them together to deliver timely, efficient, high quality care. This is particularly important because today's patients are constantly being sent from one setting to another and from one provider to another. It's essential that patients' information moves with them so providers have what they need to make the right decisions and don't have to ask patients the same questions over again or repeat tests.

There are hundreds of studies which show that well-designed information systems make healthcare more convenient and more efficient, and are also key tools for making patients safer and improving quality.¹⁸⁴ When doctors enter drug orders straight into a computer system instead of writing them, for example, drug errors decrease

because there's no illegible handwriting or transcription errors, dose miscalculations are caught and the computer automatically flags drug interactions or allergies.¹⁸⁵

It's important to understand the two types of electronic records. Electronic medical records are used in hospitals and physicians' offices. Essentially, they're stand-alone sources of information that aren't connected to a broader network, but they are much more efficient than paper files. They help family doctors, for example, to manage patients with chronic diseases better, by reminding them which patients need what medication or treatments, or when patients should return or get a lab test.¹⁸⁶

Electronic health records go beyond that and make it possible to share a person's medical history and information, such as test results, among providers, while keeping the information secure. A true electronic health record recognizes patients have a fundamental right to their own health information and lets them access it so they can be active participants in their own care.

This year, we're looking at the use of information technology in different settings, including primary care physicians' offices.

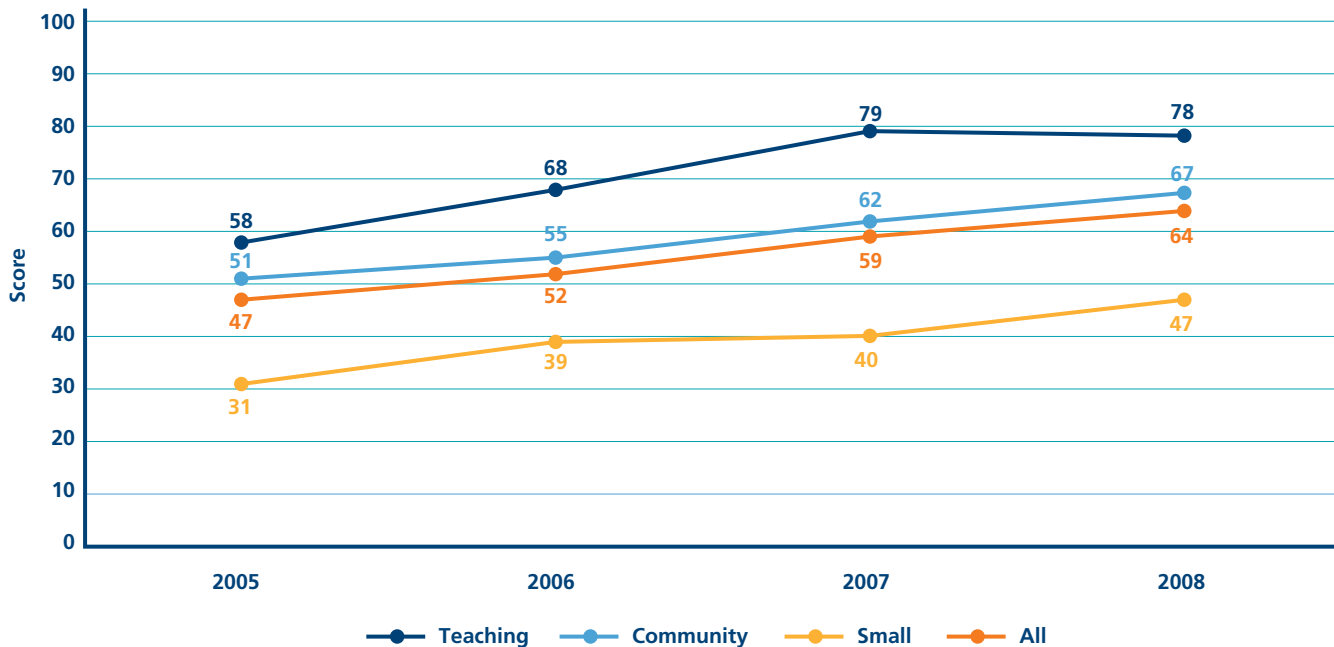


8.5.2 What did we find?

There has been some improvement in hospitals' use of information technology, but most hospitals still can't communicate electronically with doctors and healthcare organizations in the community. Ontario is far behind Alberta and other countries in the use of electronic records in primary care and most of these electronic records systems don't have all the basic functions that help improve quality. We should learn from places like the Netherlands, where new information systems have been designed to support patient safety and quality of care.



Score (out of 100) of selected Ontario acute-care hospitals on their use of clinical information technology by type of hospital, 2005 – 2008

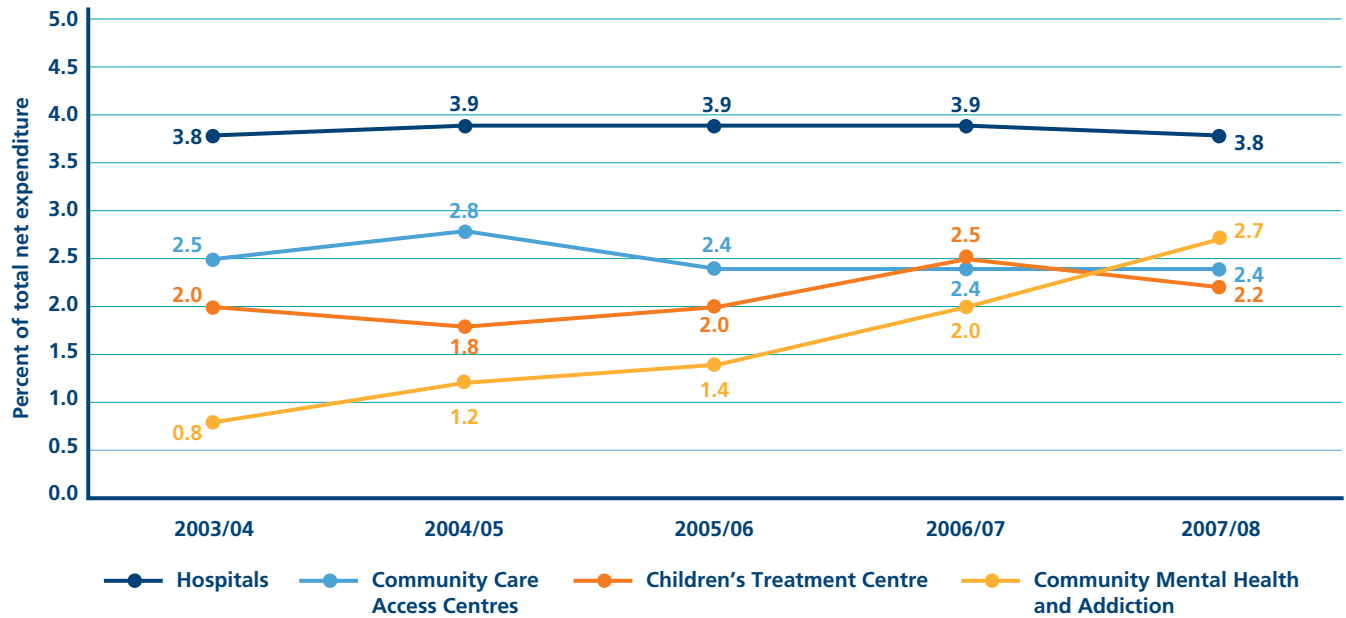


Source: Hospital Reports Research Collaborative. Hospital Reports 2005, 2006, 2007; Acute Care – Hospital e-Scorecard Report 2008: Acute Care

Ontario's Hospital Report scores hospitals' use of information technology based on how far-reaching their systems are; a perfect score of 100 would mean every aspect of care and administration is managed electronically. In 2008, the average score for clinical use of IT in hospitals was almost one-third higher than in 2005. However, small hospitals lag behind larger community hospitals in adoption of IT. Teaching hospitals do best, but even they have not achieved complete adoption of IT, and that hasn't improved in the past year.

One weakness of hospitals is their inability to share data with other healthcare providers. The Ontario Hospital Association's 2008 e-Health adoption survey¹⁸⁷ shows most hospitals can now share information such as diagnostic images and lab results within the hospital. However, fewer than 20% of hospitals have the ability to share basic information such as discharge summaries with physicians or organizations in the community, such as community care access centres which organize home care and other services for patients. This remains a major weakness in our ability to communicate information throughout the system.

Information systems and communications net expense as a percentage of total net expenditure in select health sectors in Ontario, 2003/2004 – 2007/2008

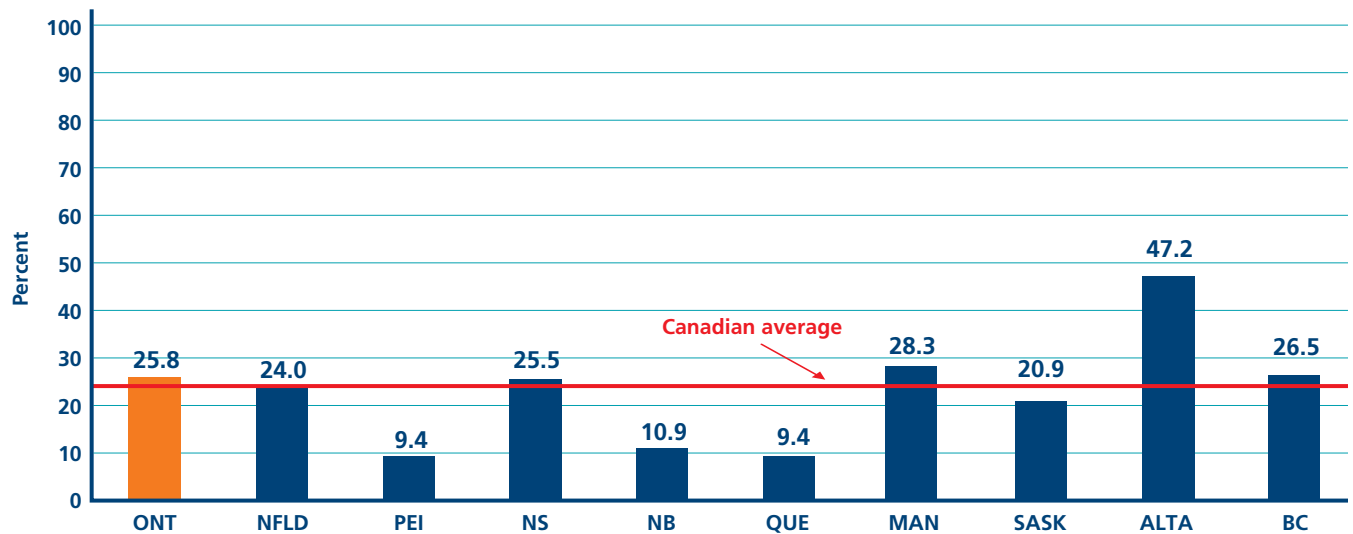


Source: Ministry of Health and Long-Term Care

Acute-care hospitals invest about 4% of their total expenditures in information technology. There has been a rapid increase in IT spending in mental health, which is very encouraging. It is difficult to define what the “right” amount of spending would be, but we note for comparison the financial industry, another intensive user of infor-

mation, spends close to 7% of total revenue on information management.^{188, 189} Bank customers can access their banking information at any branch or on the internet, but healthcare users’ records are lodged in individual institutions or clinics with few links to anywhere else.

Percent of family physicians who use electronic medical records by province, 2007

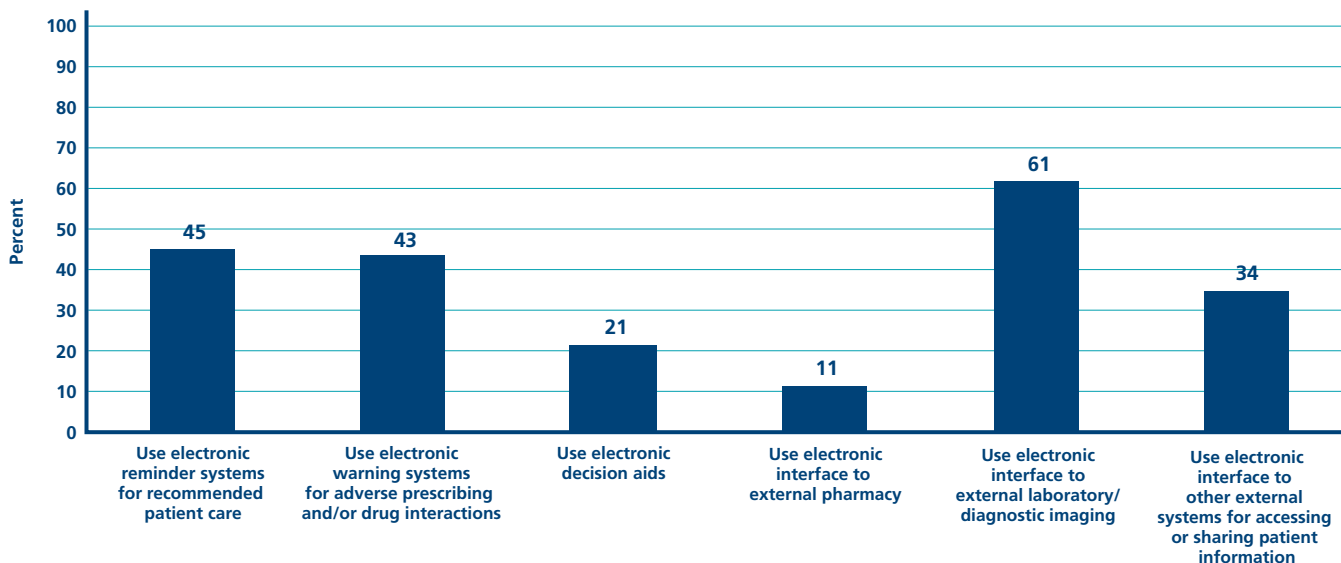


Source: 2007 National Physician Survey – The College of Family Physicians of Canada, Canadian Medical Association, The Royal College of Physicians and Surgeons of Canada

Overall, Ontario’s use of information technology in primary care is close to the national average but that’s far behind

Alberta, which has almost double the proportion of family physicians with electronic records (26% vs. 47%).

Percent of family physicians who use electronic tools (electronic medical records) to improve quality in Ontario, 2007



Source: 2007 National Physician Survey – The College of Family Physicians of Canada, Canadian Medical Association, The Royal College of Physicians and Surgeons of Canada



We're concerned so few family doctors with electronic medical records are using them to their full potential to improve quality. According to a national survey done in 2007, few doctors with electronic medical records use them to communicate with pharmacies. Just under half use warning systems to alert them to things like bad drug interactions and fewer than half use them to remind patients of repeat visits or tests. Only 21% use decision aids to remind doctors which drugs or treatments are recommended for different medical conditions. The majority of family doctors with electronic charts have external links to download information from laboratories, which is a step in the right direction, but there's still major room for improvement.

Since that survey was done, Ontario has funded electronic medical records for another 1,172 family physicians¹⁹⁰ (about 11% of all family physicians). This would narrow, though not eliminate the gap with Alberta, except Alberta has begun its next phase of electronic record expansion since then.¹⁹¹

8.5.3 Why is it so hard to get electronic health records in place?

- **Cost.** Computers and specialized software can be expensive. On top of the cost of training, maintenance and upgrades, the time it takes to switch an office over to computer-based records and the disruption it causes, doctors may just think electronic records just aren't worth it.
- **Fear of problems.** All the advantages of computers are lost when they crash and busy primary care practices may have legitimate concerns about how they'll handle technical problems.
- **Thinking it's too soon.** Information technology is not well established in the Ontario healthcare system — there are no province-wide information systems for referrals, diagnostic imaging or labs and mostly computers in hospitals and physicians' offices can't communicate with each other. Many doctors may be waiting until other parts of the IT infrastructure are built.

8.5.4 Who is doing better?

Alberta is far ahead of other provinces in the use of electronic medical records. It is also working toward giving patients access to their records online, although that will happen gradually, starting with vaccination records. Several countries are doing far better than Ontario. A 2006 survey¹⁹² found 98% of primary care doctors in the Netherlands use electronic medical records, as do 92% in New Zealand, 89% in the UK and 79% in Australia, compared to only 23% in Canada. Introducing IT works best when there are financial incentives in place as there were in the Netherlands and the UK.¹⁹³

The 2006 survey also found Canadian doctors who have electronic records are far less likely than Dutch doctors to get electronic alerts of potential medication problems (10% vs. 93%), or to use it for prescribing drugs (11% vs. 8%), or to look at test results (27% vs. 78%). Canadian doctors were much less likely than UK doctors to use their computers to send reminders to patients for follow-up care such as regular cancer screening (8% vs. 93%), or to get information about care, such as the proportion of diabetes patients with good blood sugar control (24% vs. 78%).

8.5.5 What is Ontario doing?

OntarioMD is a subsidiary of the Ontario Medical Association and receives funding from the Ontario Ministry of Health and Long-Term Care. This program

provides funding and technical support to help family practices implement electronic medical records. Funding, however, is restricted to certain types of family practices^{§§} which represent only 30% of doctors.¹⁹⁴ It also provides web-based decision support services which are available to all doctors. The program has spent \$150 million over the past four years. Alberta spends \$32 million per year on electronic health records¹⁹⁵ which is more than twice what Ontario invests on a per-physician basis.

In July 2008, the Ontario government announced its provincial diabetes strategy and promised \$150 million over four years to create a diabetes registry.¹⁹⁶ Work on the registry is set to begin in spring 2009. It will give people with diabetes access to electronic information and educational tools to help them manage their care. Physicians will use the registry to check patient records, access diagnostic information and send patient alerts.

eHealth Ontario, which we talked about in section 7.4.5, has a mandate to create electronic health records for all Ontarians by 2015.¹⁹⁷ It's good to have a clear date, but we haven't seen details of how this vision will be accomplished. To safeguard taxpayers' investment, the final product must be clearly defined, along with milestones for tracking progress and reporting on how the project is going. We also expect to see opportunities for the public to have input into its design and implementation.



§§ The types of primary care practices eligible for funding are: Family Health Networks (FHN), Health Services Organizations (HSO), Primary Care Networks (PCN), Family Health Organizations (FHO), Northern Group Funding Plans (NGFP), Community Sponsored Contracts (CSC), The Group Health Associates in Sault Ste. Marie, The Queen's Family Health Unit, Family Health Groups (FHG), and Family Health Teams (FHTs).



9

9 INTEGRATED

All parts of the system should be organized, connected and work with one another to provide high quality care

9.1 Introduction

Many patients today — especially those who are chronically ill, often with more than one problem — are taken care of by several providers, who work in different settings. Because of this, care has to be integrated — with smooth, dependable transfer of information and patients among providers and settings — to be effective. Lack of co-ordination, particularly of information, can reduce the quality of care, increase the risk of medical error and cost more.

This year we look at how care is integrated between hospital or emergency departments and the community, and between the hospital and a rehabilitation centre, home care or family physician care.

We've also looked at how well the primary healthcare system is organized to provide care by asking sicker adults about their experiences and comparing them to what happens in other countries.

9.1.1 Key points about integrated healthcare

- Ontario's healthcare system is struggling with integrating care. Patients have difficulty getting the information they need when they leave hospital and ensuring they get important follow-up services.
- Too many stroke patients don't get sent to dedicated stroke rehabilitation units which could improve their recovery.
- Some types of bone fractures are a flag for possible osteoporosis (a disease that thins bones and makes them fragile) but patients with those fractures are rarely sent for the test to diagnose osteoporosis. Increased testing could lead to earlier drug treatment and protect people from future fractures.
- The four Commonwealth Fund measures we looked at were as well integrated in Ontario as in other countries, which is to say not very well. Integrating and co-ordinating care are problems for health systems everywhere.



9.2 Smooth handoffs from hospital to other services: Preparing patients for discharge

9.2.1 Why is this important?

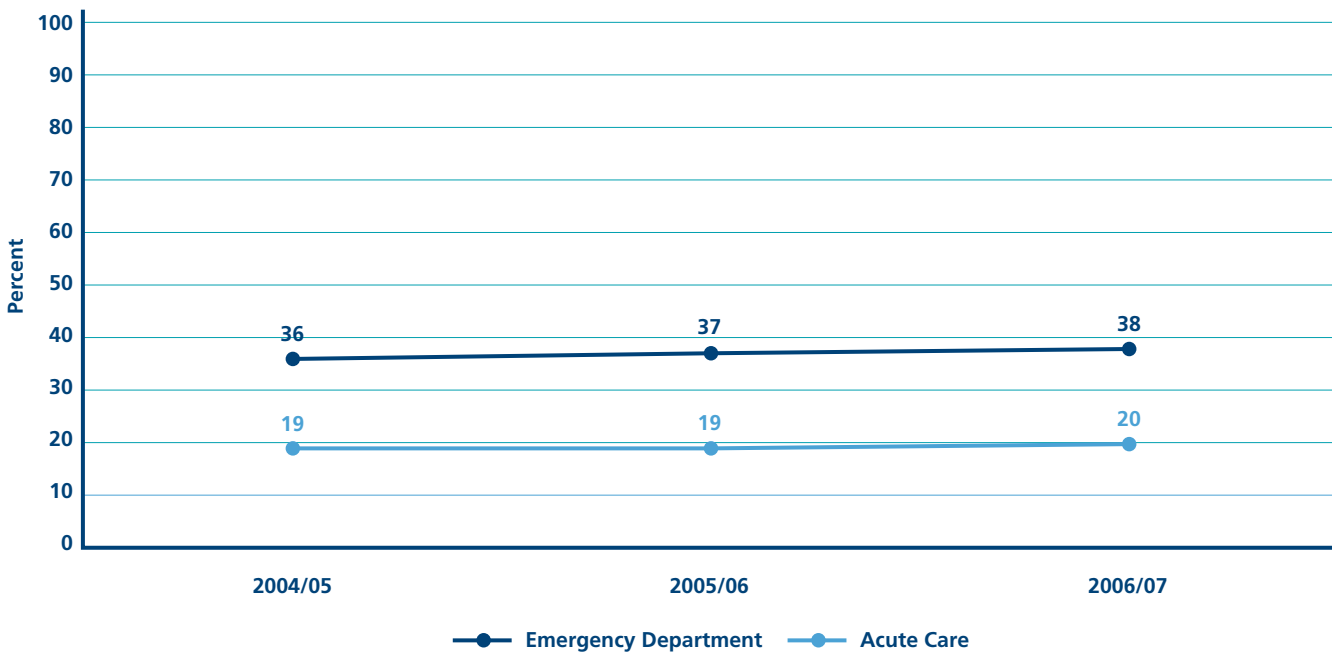
Patient safety is at extra risk when people are being moved from one type of care to another such as when they leave hospital or get out of emergency.¹⁹⁸ These transition times usually involve follow-up care to help patients maintain or improve their health. Patients need to know what to do if their condition worsens, or if they develop a complication from any treatment they may have received, such as infection, bleeding, or an allergic reaction. To check that, we asked whether patients knew who to contact if they had a problem or a question.



9.2.2 What did we find?

Everyone discharged from hospital or emergency should know who to call if they have a problem. However, one out of five patients discharged from hospital and one out of three patients leaving emergency didn't have that information. This has not improved over the last three years.

Percentage of patients leaving acute inpatient care or the emergency department who did not know whom to contact if they needed care or had questions in Ontario, 2004/2005 – 2006/2007



Source: Canadian Institute of Health Information - The Picker Acute and Emergency Department Survey, 2004/05, 2005/06, and 2006/07

9.2.3 Why don't patients know who to call for further care when they leave hospital?

- **Too much going on.** Hospital staff may have told them what they need to know, but patients may forget because they're ill and stressed.
- **Communication barriers.** Many patients may have difficulty with the language, or have reading problems, or simply find the instructions too difficult to grasp.

- **No communication guidelines.** Hospitals should have standard protocols for patients being discharged and even standard printed instructions for follow-up, but not all do.

9.2.4 What can be done to better prepare patients for discharge?

We couldn't find an example of discharged patients with a better sense of community contacts, but research shows patients are far more likely to remember discharge instructions given in writing, rather than spoken.¹⁹⁹

9.2.5 What can you do?

When you're discharged from acute care or emergency, make sure all your questions have been answered by a healthcare provider, you know whether you need follow-up care and you have contact numbers to get the care you need. It's wise to ask for the information in writing, because you may be more stressed and tired than you realize.

It's also important to follow up with your family doctor after any hospitalization, to ensure you both understand and agree to the hospital's follow-up plan. If you don't have a family doctor, ask staff at the hospital whether it will provide your follow-up care. If not, ask where they suggest you get care and how they will ensure information about follow up is available if you wind up at a walk-in clinic or other community provider.

With or without a family doctor, in case of an emergency call 9-1-1. If you're not sure if you need medical help, you can call Telehealth Ontario at 1-866-797-0000 and talk to a nurse about your symptoms and what you should do.





9.3 Smooth handoffs from hospital to other services

9.3.1 Why is this important?

Lack of integration in healthcare means co-ordination tends to break down at transition points — where patients move from one service provider to another. If information doesn't move smoothly through the transition, patients may not get the follow-up care they need.

This year we looked at several important transitions for patients. One was what proportion of stroke patients are discharged from hospital to an inpatient rehabilitation facility. Stroke is the third leading cause of death in Canada (heart problems are first, cancer is second). More than 40% of stroke survivors have moderate to severe impairment and 10% are so seriously disabled they require long-term care.²⁰⁰ Stroke costs the Canadian economy over a billion dollars annually, in addition to the toll suffered by patients, their family and friends.²⁰¹ Studies show stroke rehabilitation departments reduce the rate of serious disability and loss of independence by five percentage points²⁰² and recovery is better if rehabilitation starts within seven days of the stroke.²⁰³

Measuring how long it takes someone released from hospital to get a home-care visit is another way we measured integration and continuity of care. Delays starting home

care may force a patient to stay in hospital, or recover more slowly because there wasn't enough support at home. This is the first year we've reported on waits for home care. It's a first step to a comprehensive report on the state of home care in Ontario we are planning to release in the fall of 2009.

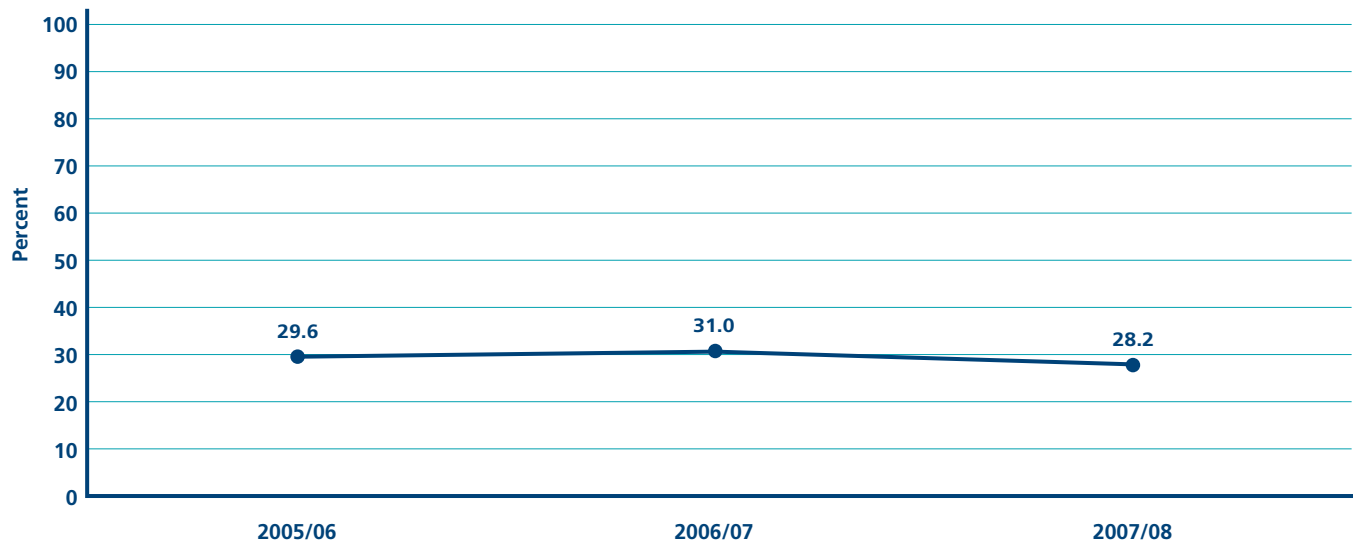
We also measured integration by looking at adults aged 50 years and older who have broken a bone because of a low-trauma incident, such as a minor fall, or where the break was in the hip, ribs, spine, arm, shoulder, pelvis or leg. Breaking any of those bones is a flag for osteoporosis. It's estimated 57,000 fractures a year in Ontario are caused by osteoporosis, costing the province approximately \$500 million in hospitalization and long-term care.²⁰⁴ We checked patients with fractures likely due to osteoporosis to see how many had the test within six months.

9.3.2 What did we find?

Despite the damage strokes cause, too few stroke patients are getting transferred to the rehabilitation care they need.

Osteoporosis affects more than half a million Ontarians and is the single greatest cause of broken bones among those 50 and over. Yet, referrals for bone mineral densitometry tests after fractures are quite rare.

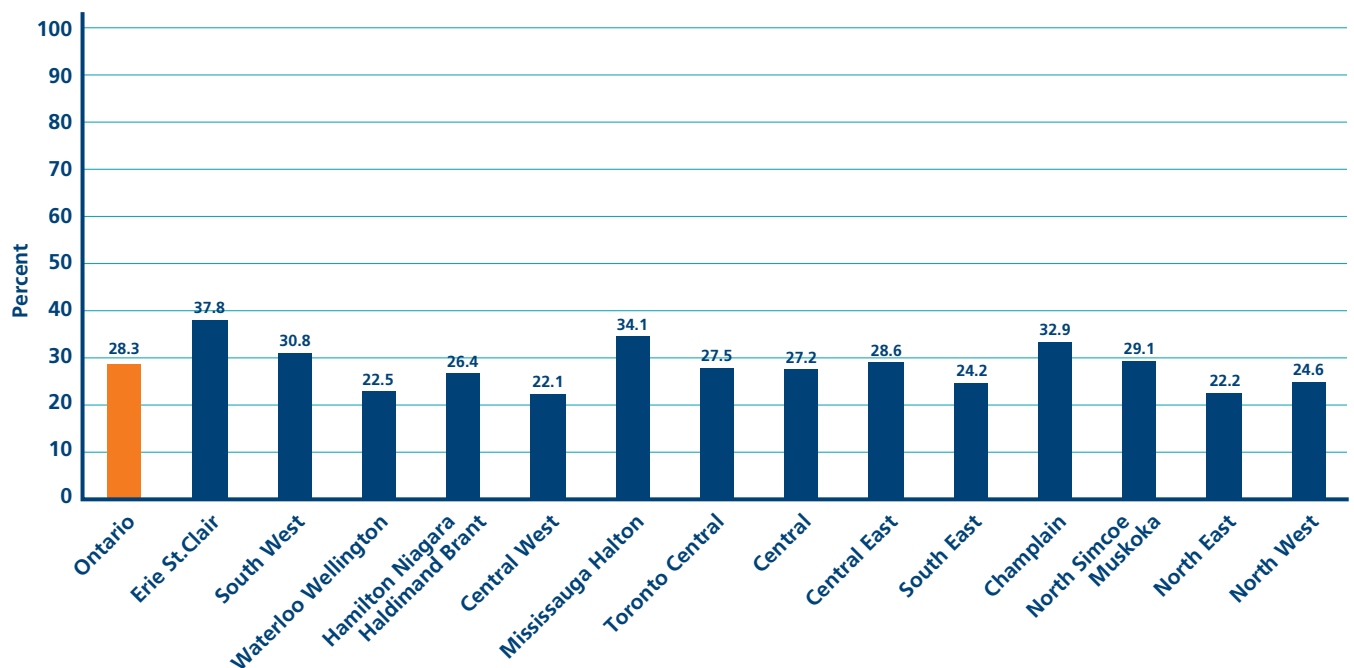
Percent of stroke patients discharged from acute care to inpatient rehabilitation in Ontario, 2005/2006 – 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

About 30% of stroke patients are discharged from acute care to inpatient rehabilitation — which hasn't changed since 2005/06. These results are too low; current guidelines suggest 60% of stroke patients should get in-patient rehabilitation.²⁰⁵

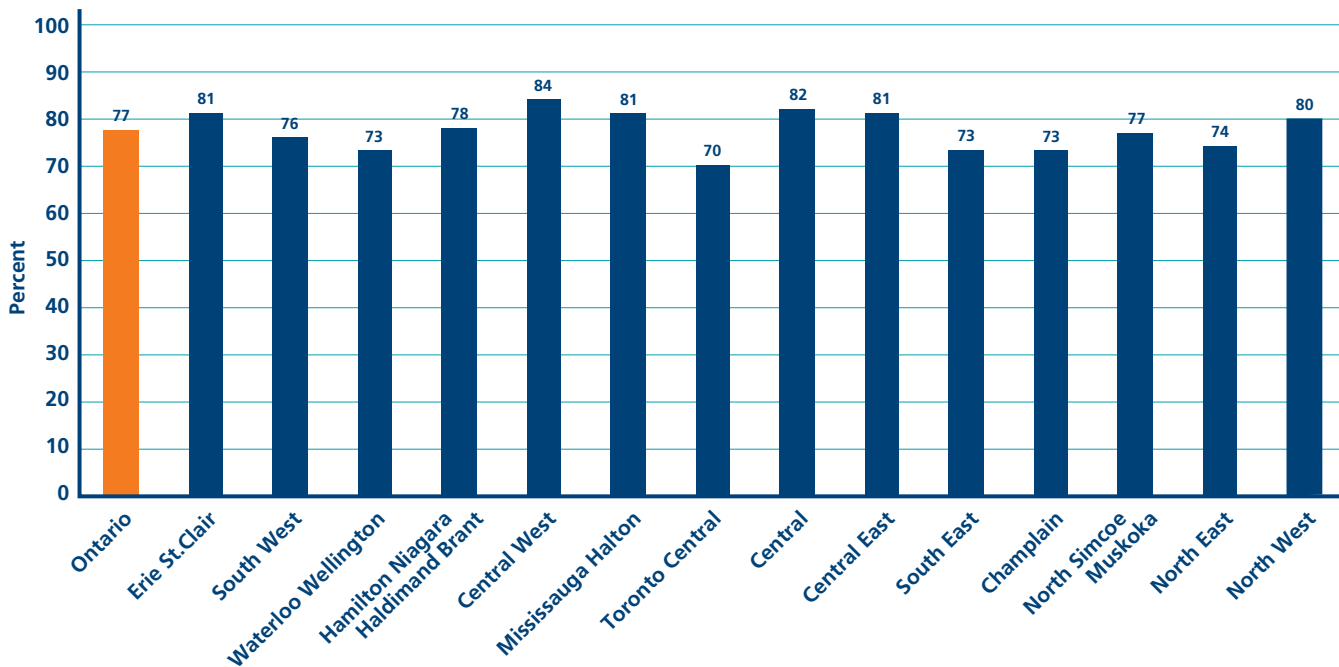
Percent of stroke patients discharged from acute care to inpatient rehabilitation across Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

The best rate of referral in the province is the Erie St. Clair LHIN, where just under 40% of stroke patients are discharged directly to inpatient rehabilitation units; most areas of the province don't do nearly that well.

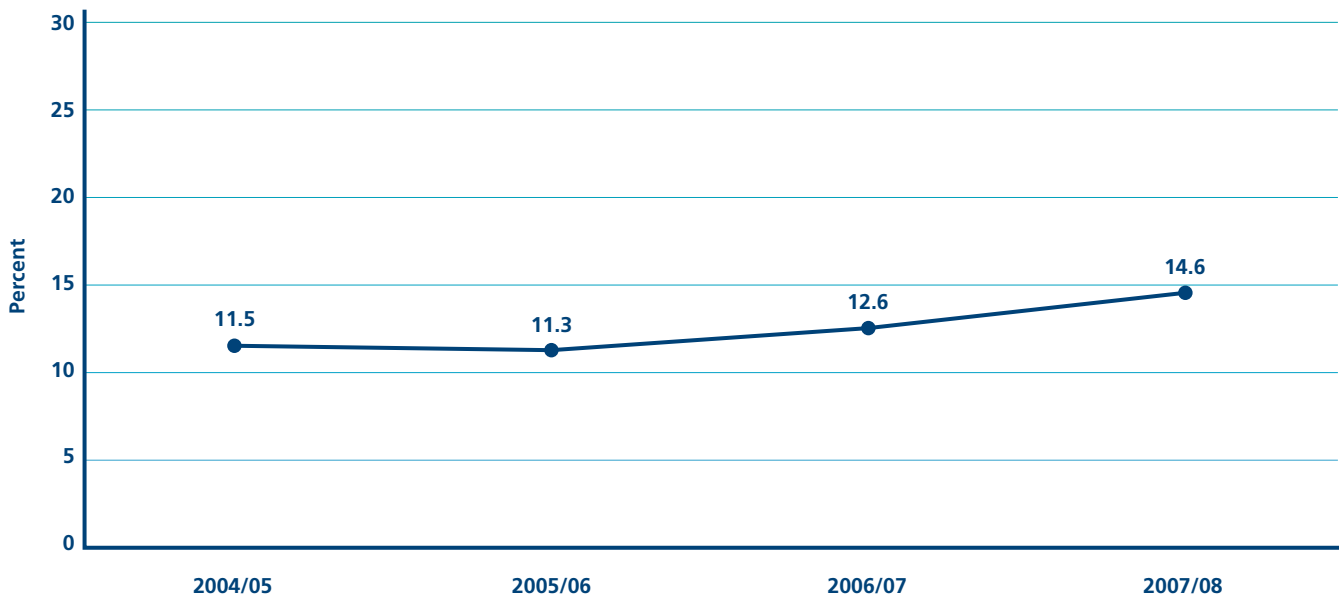
Percent of acute clients receiving first service within three days of referral to CCAC across Ontario, 2007/2008



Source: Ontario Association of Community Care Access Centres

Almost 80% of Ontarians referred to community care access centres (CCACs) get their first home care visit within three days and some regions nearly reach 85%. This is a new indicator in the CCACs’ accountability agreements for 2009/10. By next year, the home care sector will have a local targets to achieve.

Percent of patients with fractures who received a bone mineral densitometry test in Ontario, 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

Fewer than 15% of people with fractures that suggested they had osteoporosis got a bone mineral densitometry test.

9.3.3 Why don't people get the follow-up care they need?

- **Lack of capacity.** The nearest stroke rehabilitation program may be full, or home care service providers may be fully committed when a patient is discharged.
- **Lack of co-ordination.** When sectors of healthcare aren't integrated, who has responsibility for what isn't clear and necessary care can fall through the cracks. For example, the hospital doctor could assume the family doctor will order a test and vice versa. There may be delays in taking all the steps needed to organize the right home care for a patient who is ready for discharge.
- **Poor communication.** Lack of integration among healthcare providers can mean that important information about the patient is not passed on to those who need to know.
- **Lack of knowledge.** The healthcare provider may be unaware of the most appropriate next step. For example, it's possible neither the family doctor nor the hospital doctor was aware of the need to test for osteoporosis after certain types of fractures.

9.3.4 What are we doing in Ontario?

The Home at Last! program helps seniors living alone or with an elderly caregiver to get home, settled and supported after a hospital stay. Hospitals have reorganized discharge processes so patients leave at a scheduled time, transportation home is ready and there's a worker waiting to help the patient settle in. The workers pick up prescriptions and basic groceries and stay with the patient until a family caregiver arrives or until 9 p.m. The next day, the Home at Last! co-ordinator follows up with the patient and family to arrange community services and supports.

The Ontario Stroke Strategy was launched in 2000. One of its goals is to get more people to rehabilitation and get them there faster. Research shows immediate rehabilitation is very important for recovering lost abilities for many people who've had strokes, which cause different types of brain damage. The stroke strategy has set up rehab programs in the community, in places such as special clinics in long-term care homes — letting patients get the right amount of therapy closer to home.

The goal of Ontario's Osteoporosis Strategy is to improve care for people with the disease by integrating services.²⁰⁶ In many cases, that will include getting people bone mineral densitometry testing. The Ontario Health Insurance



Plan now pays for bone densitometry for people at high risk of osteoporosis and future fractures, and for low-risk patients to have the test once in three years.

9.3.5 Success study — Easing the flow of patients from hospital to long-term care

Situation: North York General Hospital in Toronto was facing long waits in the emergency department for patients waiting to access inpatient beds. When staff analyzed the flow of patients through the hospital, they found things were bogging down at discharge, when plans for where people were to go next were not complete. On average, patients were staying in hospital 39 days before they could move on to the kind of care they needed, whether that was home with home care, rehabilitation or long-term care.

The staff used quality improvement techniques to identify several things that impeded the flow of patients, including:

- Determining where patients should go upon discharge
- Delays and duplication when planners from the hospital and the community care access centre (CCAC) worked on long-term care applications separately
- Bringing the CCAC into discharge planning too late
- Not knowing what services were available and appropriate for each patient

Aim: North York General set out to improve and speed up the long-term care application process and reduce the number of days patients wait in hospital for long-term care by 25%.

Measures: North York General measured the average number of “alternate level of care” days — those patients spend in hospital waiting for admission to a long-term care home.

Changes: North York General and the CCAC worked together to make discharge more efficient while reducing duplication. Instead of being called in after families have chosen a specific long-term care home to assess whether that’s right for the patient and assemble the paperwork for admission, CCAC staff attend rounds on all medical units every day and start organizing discharge before patients are ready to leave. If home care is needed, they set it up. If long-term care is the next step, CCAC staff and the hospital social worker meet with patients and families to start the application process.

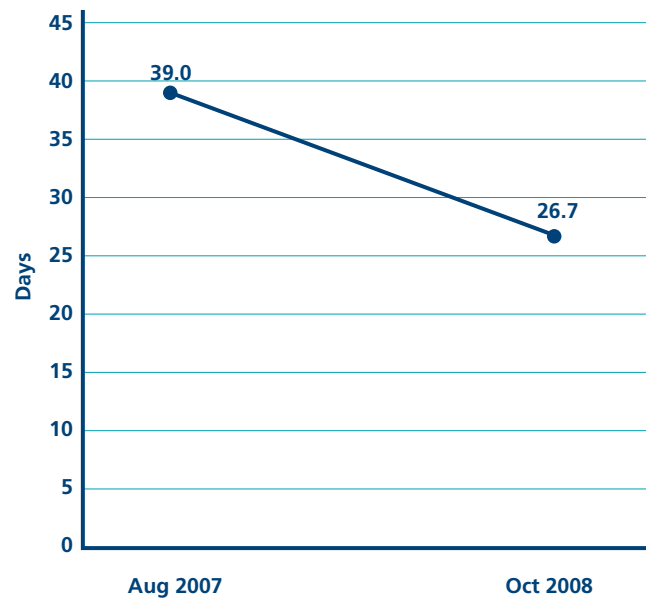
North York developed two tools, the Discharge Destination Criteria Matrix and the Flowchart to Determine Discharge Destination. The matrix takes families step-by-step through the criteria used to decide appropriate care (such as home with home care vs. rehabilitation or long-term care) in case they are having trouble understanding, for example, why rehab is not an option. The flowchart is then used to choose the appropriate destination, whether that’s home, rehab or convalescent care, palliative or long-term care. The tools allow consistent, objective decisions for each patient and are being used in hospitals across Ontario.

The hospital also set up a “walker mart,” which supplies patients with the safety equipment they need before they leave the hospital. In the past, patients sometimes had to stay until equipment could be delivered.

Results: Between August, 2007 and October, 2008, the average number of alternate level of care days dropped from 39 to 26.7 days.

The changes meant fewer handoffs from one staff person to another and improved co-ordination of the discharge planning process. Fewer long-term care applications are rejected and safety equipment is readily available for discharge home.

Average number of alternate level of care days at North York General Hospital, August 2007 – October 2008



Source: North York General Hospital, Toronto, Ontario

Next steps: The hospital plans to expand the use of the standardized discharge tools to other medical units and continue to track alternate level of care days to ensure the improvements are sustained.

9.3.6 What can you do?

If you or a family member are in hospital, ask to talk to a social worker or discharge planner early on. It’s never too soon to start organizing care for when you get out — whether that’s rehab after a stroke or heart attack, a place in long-term care, visiting nurses to change dressings or home-making support. Many people stay in hospital much longer than they need to because plans aren’t in place for community care.

Ask your primary care provider if you’re at risk for osteoporosis and should have a bone mineral densitometry test. There are drugs that can be given to make bones stronger again if you have osteoporosis, and weight-bearing exercise, adequate calcium and vitamin D all help prevent it. Too much caffeine and alcohol can weaken bones, as does smoking.²⁰⁷ For more information, visit Osteoporosis Canada website at www.osteoporosis.ca.

9.4 How well is my primary care co-ordinated?

9.4.1 Why is this important?

Primary care services are the foundation of a high-functioning health system. Patients look to their family doctor to be their quarterback, the main co-ordinator of their medical care. Family physicians, ideally working with a primary care team, co-ordinate referrals to specialists, orders tests and ensure there's an overarching treatment plan if a medical problem requires it.

To assess co-ordination in primary care, we again used the Commonwealth Fund Survey 2008, which interviewed “sicker adults” in eight countries (see the sidebar in section 2.1, for definition of “sicker adults”), for definition of “sicker adult. Because people in the survey have had some sort of serious health problem in the past two years, they are particularly likely to be getting care from several

sources and to need good co-ordination from their primary care providers.

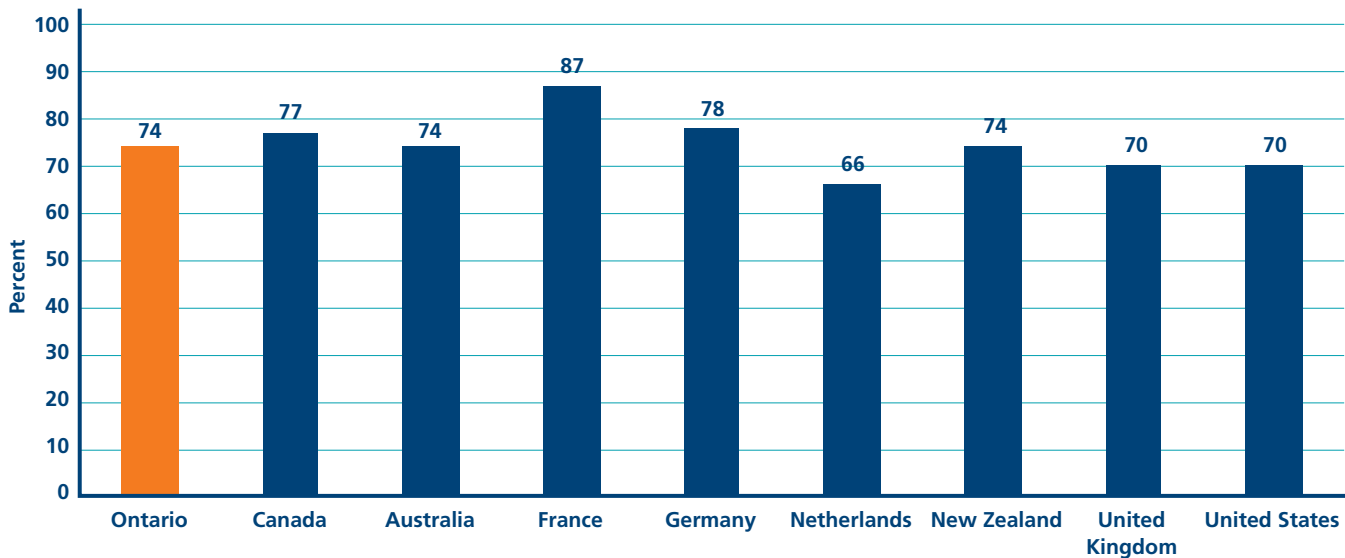
They were asked four questions. First, does their primary care provider seem informed and up-to-date about the care received from specialists? Second, does their doctor or pharmacist periodically review all their medications, regardless of who prescribed them? Third, when they see a specialist, does the specialist seem informed about their past medical history? Fourth, do they get conflicting instructions from different physicians?

9.4.2 What did we find?

Primary care is about as well co-ordinated in Ontario as in Canada and the other countries surveyed — in fact, providing co-ordinated care is a challenge for all health systems; there's room for improvement everywhere.



Percent of sicker adults whose primary care provider seemed informed and up-to-date about the care received from a specialist in Ontario, Canada and other countries, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

Note: Question was posed to respondents (with multiple conditions) who have seen a specialist in the last two years.

About 75% of sicker adults in Ontario said their family doctor was informed and up-to-date about the care they received from specialists and that's about average for the countries surveyed. Similar results were found in a recent Statistics Canada survey of Ontario patients who had a recent hospital, long-term care home or convalescent stay.²⁰⁸ However, everyone should do better — 100% of patients should say their family doctor was aware of their specialist care and plans for follow-up.

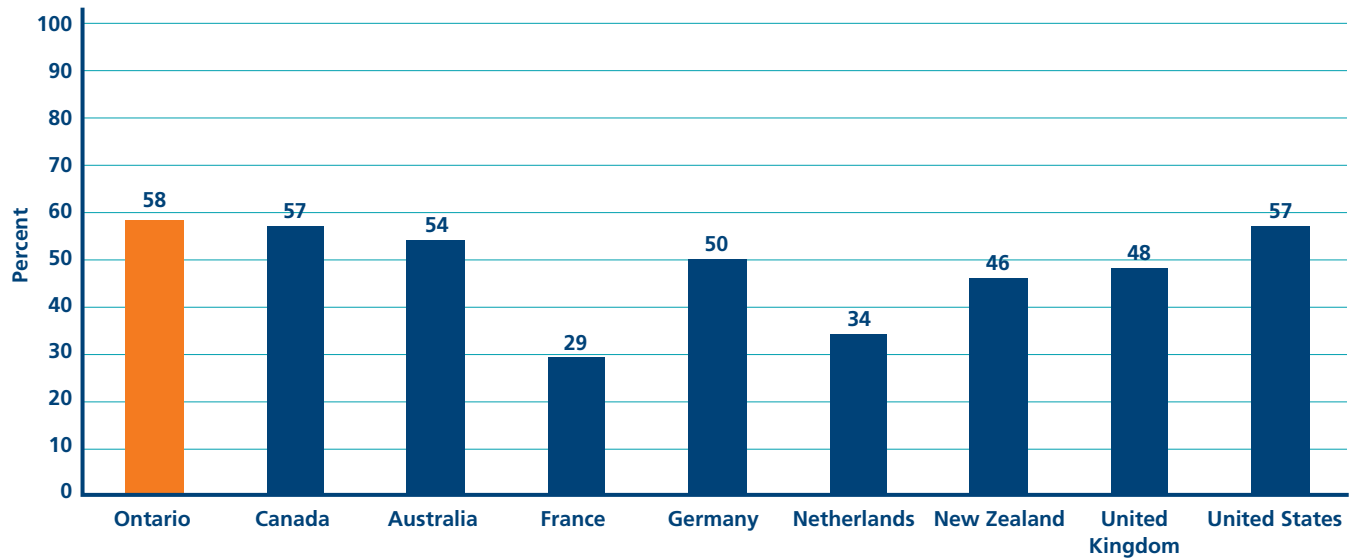
About six out of 10 sicker adults in Ontario have had a detailed review of their medications in the past two years. Ontario is doing better than most other countries at providing this service, but the numbers are far lower than they should be.

Three-quarters of sicker adults say their specialists already had information about their medical history when they saw them, which puts Ontario at about average among the countries surveyed.

About one in seven sicker adults in Ontario get conflicting instructions and information about their care from their providers. The Ontario and the US, rates for this problem are higher than in other countries surveyed.



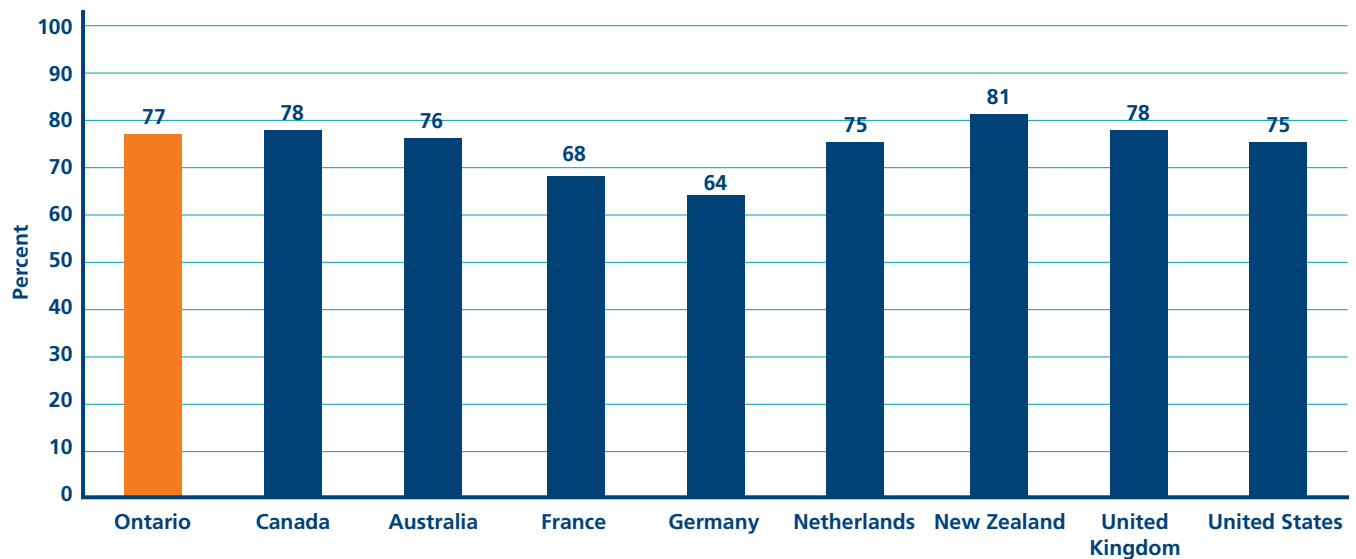
Percent of sicker adults who had their doctors or pharmacists review and discuss all the different medications they were using, including medicines prescribed by other medical doctors in Ontario, Canada and other countries, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

Note: Question was posed to respondents who are taking medications and who, in the last two years, always or often had their medications reviewed by a health professional.

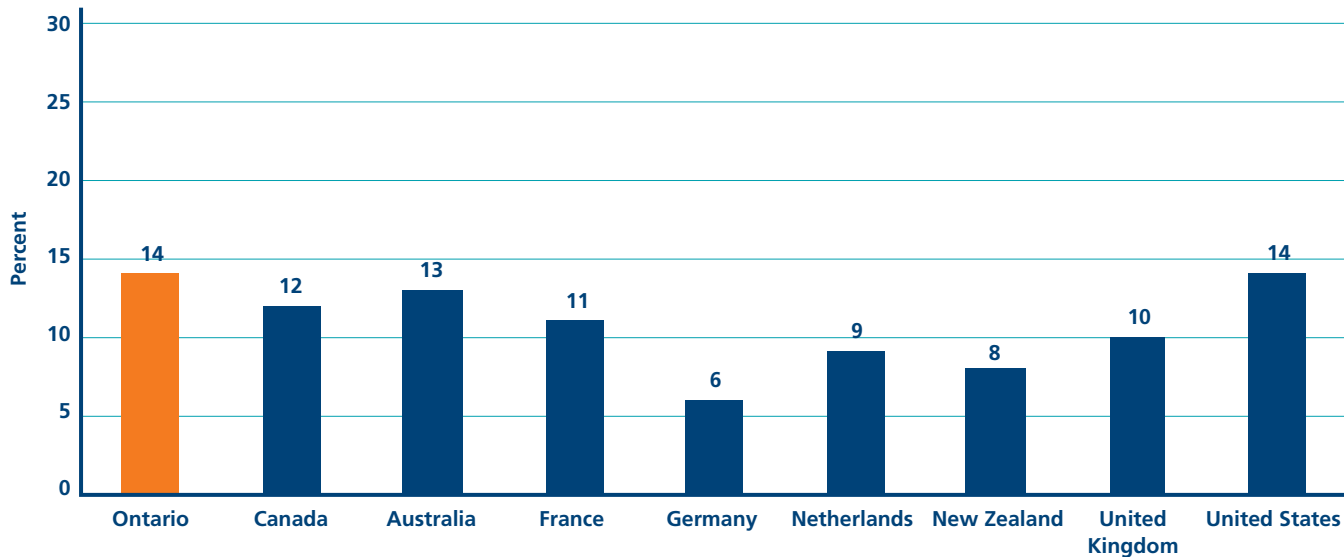
Percent of sicker adults (who saw or needed to see a specialist in the last two years) whose specialist had information on their medical history in Ontario, Canada and other countries, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

Note: Question was posed to respondents who have a doctor and have seen a specialist in the last two years

Percent of sicker adults (with multiple conditions) whose doctor ever gave instructions for one of their chronic conditions that conflicted with what they have been told to do to for another condition in Ontario, Canada and other countries, 2008



Source: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008

9.4.3 Why is care not always well co-ordinated?

- **Poor communication.** In Ontario, patients are usually referred to specialists by their family doctors, who should then get a letter with the specialist's opinion and advice on further treatment. At the same time, specialists

should be well-informed of the patient's past medical conditions when they arrive for the appointment because the family doctor should write a referral letter describing the patient's problem. If either letter is delayed, lost, or omits key information, the physicians aren't well informed and care will be less co-ordinated.

- **Long waits.** Ontario's wait times to see a specialist are higher than in most countries in the Commonwealth survey (see section 2.5.) During the wait the patient's condition, treatments, or lab results might change, leaving the referral letter out of date.
- **Unclear responsibility.** Regular medication reviews are important for patients on multiple medications, but they're time consuming and might not get done. There could also be confusion over whether the family doctor or the pharmacist should do the review. If patients use multiple pharmacies it's hard for the pharmacist to keep track of medications and it's difficult for physicians to do it without electronic records, which most don't have.
- **Different opinions and information.** Patients can get conflicting instructions from doctors because of legitimate differences in opinion about the best treatment, or because one is more informed than another, or because the patient's condition has changed since the original advice was given.



9.4.4 What are we doing in Ontario?

Providers can't co-ordinate patient care unless they can share information. As we discussed in section 7.4.5, one of eHealth Ontario's goals is to develop an electronic health record for every Ontarian by 2015.

Ontarians with a chronic condition who take at least three prescription medications per day can have their pharma-

cist do an annual review of all their medications under the MedsCheck program. The pharmacist checks all of a patient's prescriptions to see whether they're necessary, can be taken together safely and are the right dose. The standard form the pharmacist fills out can be shared with other health professionals, so everyone involved knows what medications a patient is on and what the proper dose is, limiting the chances of a medication error.

9.4.5 What can you do?

Bodies are like cars — they need regular maintenance. Keep track of the instructions you're given about managing your health as you would your car maintenance records. Get the help you need along the way to clarify your instructions and if there seems to be a conflict, point it out and ask why.

Ask your pharmacist if you're eligible for MedsCheck.





10

10 A FOCUS ON POPULATION HEALTH

The health system should work to prevent sickness and improve the health of the people of Ontario.

10.1 Introduction

When we talk about population health, we mean the overall health of everyone in a province or country. Population health is determined by factors such as social and economic well-being, the quality of housing people have and the security and support they find in their communities. Equity in education and employment opportunities, safe workplaces and a clean environment all shape it as well. Improving population health focuses on promoting good health, which we do by things like encouraging exercise and banning smoking in public places and by preventing disease, whether that's with vaccinations against infectious diseases or screening programs to check people for signs of cancer or other health problems.

All Ontarians benefit when the population is healthier overall, so we looked at various screening tests to see what the province is doing to enhance population health by early detection and treatment of illnesses. The tests we looked at are: mammograms, fecal occult blood tests (FOBT),

Pap tests and bone densitometry. We also examined rates of flu shots across the province and looked at the presence of risk factors that lead to poorer health.

10.1.1 Key points about population health

- Screening programs save lives and the ones that have been around for a long time — such as mammograms for breast cancer and Pap smears for cervical cancer — are fairly well-used, but some pockets of the population don't get them and there is room for improvement overall.
- Newer screening programs for colon cancer and osteoporosis are starting to get established, but there is a long way to go before we're even close to reaching target numbers for them.
- Ontarians still aren't leading healthy enough lives. We made progress quitting smoking between 2001 and 2005, but obesity and physical inactivity increased slightly from 2005 to 2007.



10.2 Prevention and early detection of disease

10.2.1 Why is this important?

Influenza makes thousands of Canadians sick every year. It's particularly dangerous for frail elderly people and those with chronic medical conditions. Getting vaccinated reduces the chance flu will turn into a serious illness and even lead to death. Vaccination for flu reduces pneumonia, hospitalization and death by half among people living in long-term care.²⁰⁹

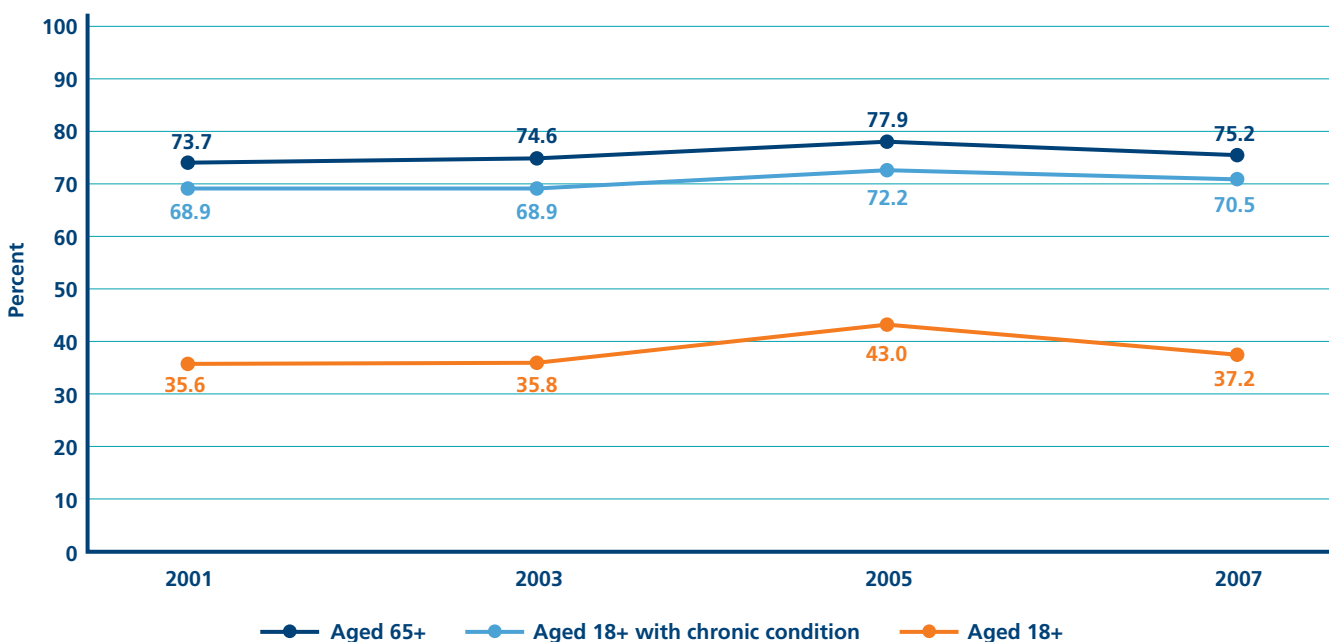
Colon, breast and cervical cancers are common, but early detection and treatment can prevent deaths. About one in 15 people develop colon cancer in their lifetime and half of them die from it.²¹⁰ One in nine women develop breast cancer in their lifetime; one in 28 dies from it.²¹¹ Screening programs for these three cancers can find disease very early and increase patients' chances of survival.^{212, 213}

Not all screening is for cancer. Bone mineral densitometry screens for osteoporosis are important for elderly people, because for them a broken bone can lead to pneumonia or force a move to long-term care. Early detection and treatment with medications, calcium and exercise can reduce the risk of future fractures. The Canadian guidelines say every aged 65 and over are high risk and should have the density of their bones tested regularly.²¹⁴

10.2.2 What did we find?

Ontario's flu vaccination, mammography and Pap screening programs are reaching many who could benefit, but there is still room to improve coverage. There is modest improvement in colon cancer screening, but we still have a long way to go. Osteoporosis screening has improved, but again, there is lots of room to do better.

Percent of the population who reported receiving a flu shot in the previous year in Ontario, 2001, 2003, 2005 and 2007

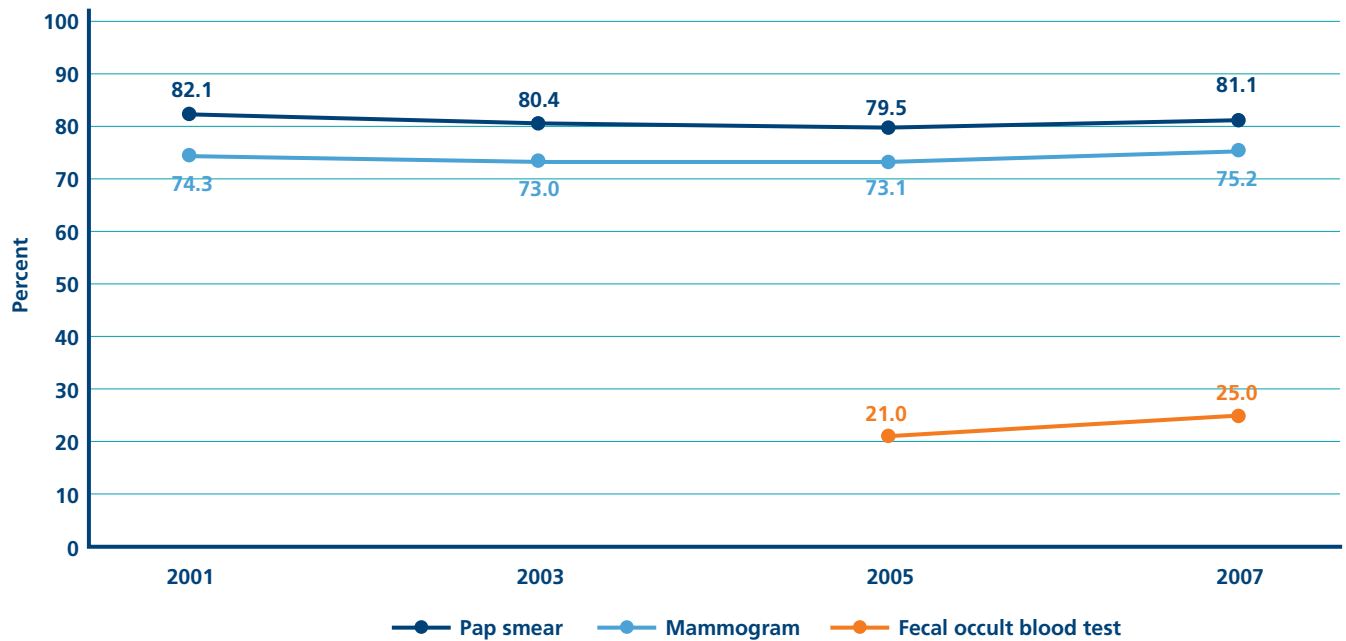


Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey

Three-quarters of seniors and 71% of adults with chronic conditions are getting flu shots, but less than half of

younger adults get them. These numbers have changed little over the past six years.

Percentage of the population who reported receiving select recommended cancer screening procedures in Ontario, 2001, 2003, 2005 and 2007



Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey

Note: Population surveyed for Pap smears in past 3 years were women aged 20-69, mammogram in past 2 years were women aged 50-69 and FOBT in past 2 years were women and men aged 50-74; In 2001 and 2003, FOBT data was not available for all regions in Ontario.

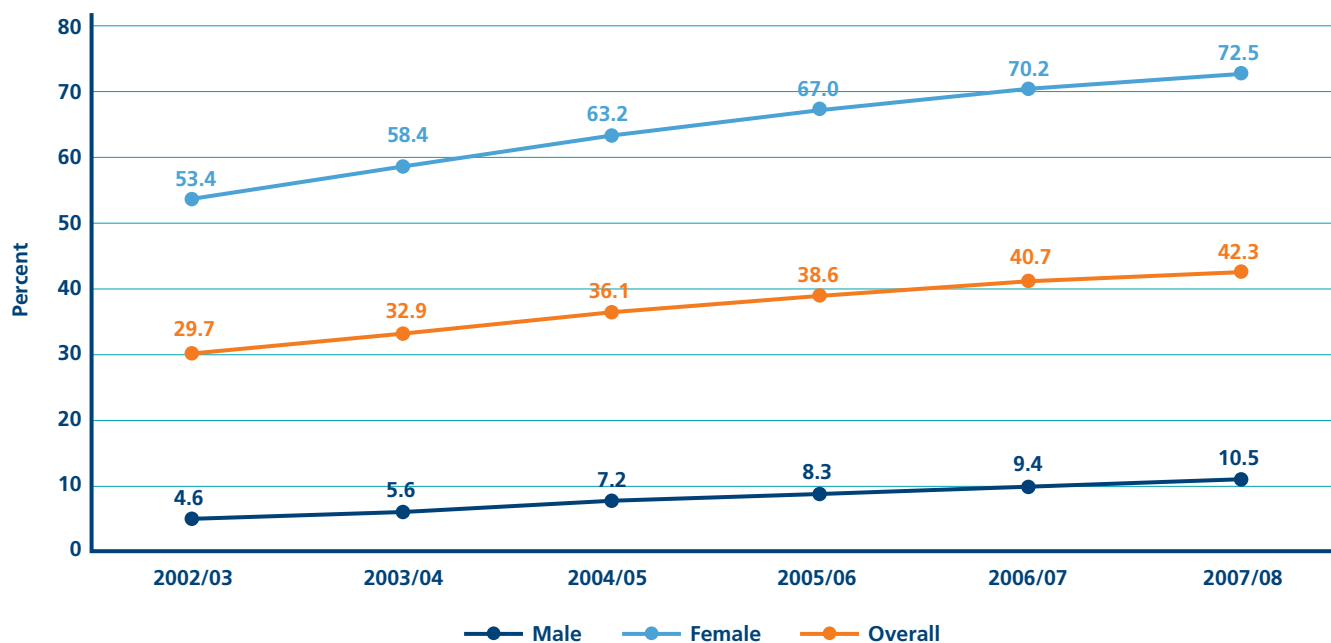
Three-quarters of women aged 50 to 69 report they have had a mammogram in the past two years and four out of five adult women report they have had a Pap smear in the prior three years. These rates have been stable for the last six years.

There was some improvement in colon cancer screening between 2005 and 2007 but there’s still a long way to go. ColorectalCancerCheck’s goal is to increase screening to 55% within five years and to 65% within 10 years.²¹⁵

These results are somewhat higher than the actual screening participation rates published in the Cancer System Quality Index by the Cancer Quality Council and Cancer Care Ontario, likely because they’re based on patient surveys and in general, people tend to over-report in surveys how much screening actually gets done.²¹⁶



Percent of men and women aged 65 who had a bone mineral densitometry assessment since turning 55 years of age, 2002/2003 – 2007/2008



Source: Institute for Clinical Evaluative Sciences – Health system data

The proportion of 65-year-old Ontarians who had a bone mineral densitometry done since they turn 55 years of age increased over the years for both males and females. The rate is much higher among females.

10.2.3 Why aren't people getting preventive screening done?

- **It takes some effort.** Busy, healthy people who think their risk of illness is low may not feel screening is worth the time and trouble it takes. If it's hard to get in to see a doctor and clinics aren't convenient, people may not bother.
- **People lose track.** We've already talked about how few doctors have automated systems to prompt them to call patients in for tests; individuals aren't likely to keep track of when they need screening if their doctor doesn't. One study found women tend to believe their last mammogram was more recent than it actually was.²¹⁷
- **They're unpleasant.** Screening tests are at best inconvenient and can be painful. Mammography flattens the breasts in a machine, Pap smears require a vaginal examination and to get a fecal occult blood test you have to collect and smear your stool on a paper slide. Better education about the importance of screening might help overcome reluctance to get it done.

- **There are social status barriers.** Lower-income people have less knowledge of healthcare, fewer resources to ensure they get the care they need and less access to a family doctor who can send them for tests (see section 6.2).
- **We don't promote screening enough.** Improving population health generally takes multi-level campaigns to educate the public and make sure health initiatives are widely available. Organized, population-based screening programs that actively recruit, remind and recall target populations greatly increase screening rates.

10.2.4 Who is doing this better?

Finland started its national screening program for fecal colon rectal cancer in 2004 and in just two years was able to get 71% of its target population to do fecal blood tests.²¹⁸ The United States does better than Ontario on Pap smears, at 85%.²¹⁹ Mammography rates in some European countries are much higher, including Netherlands and Luxembourg at 85%; Finland at 88% and Norway, where 98% of eligible women have mammograms.²²⁰

10.2.5 What are we doing in Ontario?

In January 2007, the Ontario Ministry of Health and Long-Term Care and Cancer Care Ontario announced a

\$193.5-million investment over five years to establish a colorectal cancer screening program, called ColonCancerCheck, which was mentioned earlier in this report.²²¹ The program encourages family doctors to have their patients get fecal occult blood tests by paying them a fee for each patient who does. There's also a public education campaign.

In the 2008 budget, Ontario included a plan to invest \$154 million over three years to build on the province's cancer screening program to increase early detection and treatment of breast, cervical, and colorectal cancers, and to cover the cost of the prostate specific antigen (PSA) test used to diagnose and monitor treatment of prostate cancer. In January 2009, PSA tests became eligible for funding under OHIP for those men meeting the clinical guidelines.²²² This makes it possible to get the test in a community laboratory; before, it was only publicly funded in hospital labs.

The Ontario Breast Screening Program provides regular mammography. Women who are registered with the program receive regular reminders of when they're due for their

next screen. A mobile breast-screening unit visits small communities throughout the north to improve access. The budget commits to doubling the number of screens per year by 2010/11.



10.2.6 What can you do?

Get a free flu shot from your doctor or a public health clinic (for locations, visit www.gettheflushot.ca/public/fluclinics.html.) Keep your own logbook of when you have flu shots and screening tests and check regularly with your doctor about your next scheduled test.

Women between 50 and 69 should have a mammogram every two years. You can arrange your own screening by contacting the Ontario Breast Screening Program at breastscreen@cancercare.on.ca or 1-800-668-9304. More information on the Ontario Breast Screening Program is available at www.cancercare.on.ca.

The ColonCancerCheck program recommends men and women 50 and older who do not have a family history of colorectal cancer have a fecal occult blood test every two years. Individuals at increased risk of colorectal cancer may need to start screening younger and should have colonoscopies. Talk to your healthcare provider about your family history and what screening method you should have. There's more information at www.coloncancercheck.ca You can lower your risk of colorectal cancer by quitting smoking, getting regular exercise, eating a healthy, high-fibre diet, eating less red and processed meat and maintaining a healthy weight.²²³

Ontario guidelines recommend women have a Pap test every year within three years of starting sexual activity. If your tests are normal for three years in a row, you only need a Pap test every two to three years after that and if you're over 70 and have had normal Pap tests for 10 years, you can stop. Ask your doctor or nurse about how often you should have a Pap test.

The human papilloma virus (HPV) vaccine can prevent HPV infection. With regular Pap test and HPV vaccines, it is possible to greatly reduce the incidence of cervical cancer. For more information on cervical cancer, Pap testing and HPV vaccines, please visit the cancer care Ontario website or www.hpvontario.ca.

10.3 Risk factors and healthy behaviour

10.3.1 Why is this important?

Living a healthy life — by eating a nutritious diet, being active, not smoking and limiting alcohol — can lower the risk of developing chronic diseases and help us lead longer, happier lives. We examined five health risks people can reduce by changing their behaviour: smoking, obesity, physical inactivity, regular heavy drinking and not consuming enough fruit and vegetables.

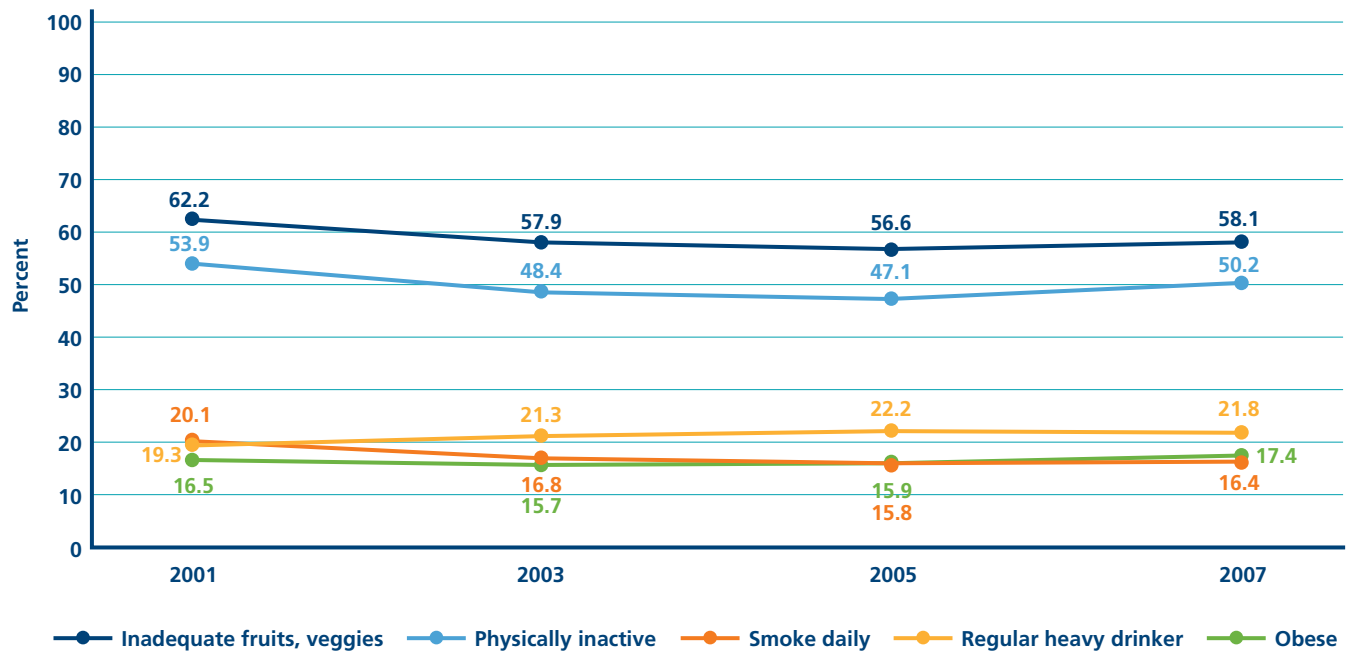
Tobacco use is the number one cause of preventable disease and death in Ontario, killing over 13,000 Ontarians every year. It also has a tremendous impact on the economy: tobacco-related diseases cost Ontario \$1.6 billion for healthcare per year, cause \$4.4 billion in lost productivity and account for at least 500,000 hospital days each year.²²⁴ We know that smoking causes many kinds of cancer, heart attacks, strokes, emphysema and other conditions.²²⁵ Quitting smoking reduces the risk of complications almost immediately.²²⁶

Obesity increases the risk of heart disease, stroke, diabetes, several kinds of cancer (including breast, colorectal, esophageal, pancreatic, endometrial and kidney),²²⁷ as well as arthritis of the knees and many other conditions.²²⁸ Physical inactivity has been shown to lead to obesity, the worsening of heart disease or diabetes and the onset of osteoporosis.²²⁹ Eating less than five servings of fruit and vegetables per day increases the risk of heart disease and stroke as well as stomach, esophageal, lung and colorectal cancer.²³⁰ Regular heavy alcohol consumption causes cirrhosis of the liver, pancreatitis and chronic gastritis (irritation and bleeding of the stomach).²³¹ Small amounts of alcohol can reduce the risk of heart attacks and strokes but regular heavy drinking increases them, and alcohol is also linked to cancer of the mouth, throat, esophagus, colorectum and breast²³² as well as to injuries and violent behaviour.^{233, 234}

Your personal health decisions are influenced by your social environment. Individuals decide what foods to eat and how active a life to lead, but government policies and programs can shape population health by creating an environment that encourages and supports healthy behaviour and makes the healthy choice the easy choice.



Percent of population who report having poor health habits in Ontario, 2001, 2003, 2005 and 2007



Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey

Note: Obesity is measured among those aged 20 and over; the other indicators – smoking daily, physical inactivity and regular heavy drinking is measured for those aged 12 and over

10.3.2 What did we find?

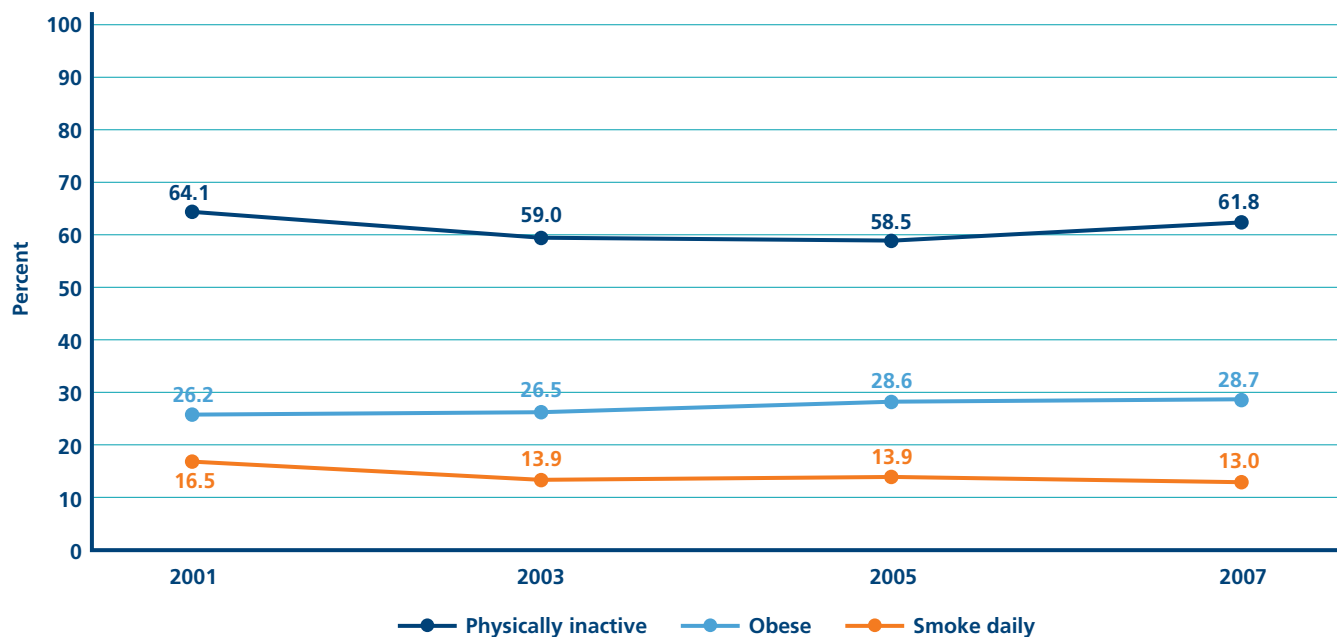
There was progress in reducing smoking from 2001 to 2005, but none since then. The problems of obesity and physical inactivity actually got worse from 2005 to 2007.

About one in six Ontarians aged 12 and above say they smoke daily and half of this age group is physically inactive. One in six Ontarians aged 20 and above is obese. Just under 20% of the population reported regular heavy drinking in the past year and 60% do not eat enough fruit and vegetables.

Ontario made important progress in reducing smoking from 2001 to 2005 but there has been no improvement from 2005 to 2007. This trend was also true for fruit and vegetable intake. After making steady progress in Ontario in reducing physical inactivity and obesity from 2001 to 2005, physical inactivity and obesity actually worsened from 2005 to 2007.



Percent of population who report having both a chronic disease and poor health habits in Ontario, 2001, 2003, 2005 and 2007



Source: Institute for Clinical Evaluative Sciences – Canadian Community Health Survey

Note: Obesity is measured among those aged 20 and over; the other indicators – smoking daily, physical inactivity and regular heavy drinking is measured for those aged 12 and over

Poor health behaviour is common in people with chronic diseases, who are more likely to be obese and inactive than the general population. Smoking is also a problem, but on the positive side, smoking rates among the chronically ill are a bit lower than the general population and they were lower in 2007 than in 2001.

10.3.3 Why don't people lead healthier lives?

Tobacco and alcohol are addictive, which makes using them more difficult to stop. Tobacco use is influenced by many factors including price and availability but also whether smoking is normal in your social environment. There are many reasons people are obese and inactive and don't eat enough vegetables and fruit. We discussed the impact of low income and education earlier and some people may lack the skills needed for cooking and physical activity. Cultural and social norms prevent some people from leading healthier lives and they may not grasp the potential benefits of changing their behaviour.

10.3.4 Who is doing better?

According to a 2005 Statistics Canada survey, only 13% of British Columbians were reported to be obese, which was lower than Ontario at that time.²³⁵ Also, 58% of British Columbians said they are active or moderately active, which was better than in Ontario.²³⁶



Ontario's smoking rate in 2007 was lower than the Canadian rate at 19%²³⁷ and the same as B.C. at 16%.²³⁸

10.3.5 What is Ontario doing?

The Smoke Free Ontario Act, passed in May 2006, bans smoking in all enclosed workplaces and public places. In June 2008, Ontario passed legislation banning smoking in moving vehicles when a person under 16 years old is present.²³⁹ Ontario also funds a toll-free smoker's help line.

Ontario released its Action Plan for Healthy Eating and Active Living in June 2006.²⁴⁰ The Ministry of Health Promotion's Eat Right Ontario website provides information on healthy eating and offers toll-free access to a registered dietitian by telephone or online. There's also a

Healthy Schools Recognition Program to encourage schools to promote healthy behaviour and to create healthy school environments.²⁴¹ This year, the Northern Fruit and Vegetable Pilot Program is providing free fruit and vegetable snacks twice a week to approximately 12,000 students in Northern Ontario schools.

ACTIVE2010 is Ontario's Sport and Physical Activity Strategy and aims to increase Ontarians' rate of physical activity to 55% by 2010.²⁴² As part of this strategy, the Communities in Action Fund has contributed over \$32 million in support to over 1,000 community organizations since 2004/05. The related Ontario Trails Strategy aims to improve availability of walking trails throughout the province.²⁴³

10.3.6 What can you do?

If you are a smoker, call the toll-free Smoker's Help Line at 1-877-513-5333 or visit www.smokershelpline.ca. Ask your family doctor or nurse practitioner about ways to quit smoking. Your local health unit can provide resources and support for quitting smoking and for adopting healthy behaviour.

For more information on healthy eating and nutrition, call EatRight Ontario at 1-877-510-5102, or visit www.eatrightontario.ca.

Contact your local Community Health Centre for information about programs in your neighbourhood that relate to exercise and nutrition, and the environment and health.



11 ENDNOTES

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12 ACKNOWLEDGEMENTS

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