Ontario Cancer Plan
2008–2011

Better cancer services every step of the way
I am proud to present the 2008–2011 Ontario Cancer Plan. The pages ahead and the online version at [www.ontariocancerplan.on.ca](http://www.ontariocancerplan.on.ca) set out an action plan that will raise the bar on cancer services in Ontario. Taken together, the steps in this plan will measurably reduce the burden of cancer and improve the health and quality of life of cancer patients.

The 2008–2011 Ontario Cancer Plan encompasses the entire cancer journey, beginning with prevention and extending through to treatment, palliation and end-of-life care. Organized around six goals, the Plan is tightly focused on a set of priority initiatives that are high-impact, realistic and well aligned with the health system transformations underway in Ontario.

At the turn of the decade, cancer services in Ontario were suffering from a crisis of access and quality. Patients were being sent to the United States to receive radiation treatment, and public confidence in cancer services had eroded. Since launching the first Ontario Cancer Plan in 2004, Ontario has made substantial advances against cancer. Indeed, the last three years have been spent building a solid foundation for significant and required improvements in service capacity, performance and knowledge about cancer.

With the leadership of the Ontario government, health professionals, clinical leaders and local organizations across Ontario, we have significantly improved wait times for cancer treatment. Cancer Care Ontario is particularly proud of our partnership with the Ontario government to establish the first provincial system for measuring, managing and publicly
reporting wait times. We have established an internationally recognized approach to systematically improving the performance of cancer services. Ontario is using electronic information systems to improve the safety and accessibility of cancer services, including innovations that enable patients to manage their own care. And three breakthroughs in cancer prevention and early detection – Smoke-Free Ontario, ColonCancerCheck and the HPV vaccination program to prevent cervical cancer – are saving lives.

The foundation we have built together is a significant accomplishment. But what we have done is turn around a crisis so that together we can set our sights on making a difference for cancer patients present and future. What has been accomplished in the last three years is not enough to meet the service and prevention challenges of a rising cancer burden, or to place Ontario at the forefront of biological research. It is not enough to meet the imperative of rapidly translating new knowledge into improvements in clinical practice and health services. It is a starting point.

Driven by an aging and growing population, over the next 10 years Ontario will see an unprecedented rise in the number of people diagnosed and living with cancer. In the years ahead, with 44% of men and 39% of women expected to develop cancer, this disease will touch the lives of even more of us and of our families and friends. And we will need to adapt our services rapidly to the explosion of molecular oncology tests and treatments which are already upon us.

Given the size of the challenge, Cancer Care Ontario’s aspiration for the 2008–2011 Ontario Cancer Plan is to create the best cancer system in the world. Sitting as we are in the economic heartland of our country and in one of the richest environments in the world for health science, we in Ontario should not settle for anything less.

With well-planned and sustained investment, skillful leadership from clinicians and institutions, and a systematic focus on implementation, we will bring down rising cancer rates and provide every Ontario cancer patient with the best care every step of the way. We are certainly up to the challenge; over the past few years Ontario has demonstrated, in cancer and many other areas of healthcare, a considerable capacity to innovate and improve.

The Ontario Cancer Plan is a roadmap for the entire cancer care system; it’s for all of us involved in fighting cancer and caring for those living with this disease. It sets out the actions that Cancer Care Ontario is committed to take, and describes the partnerships that are crucial to realizing our goals.

I would like to thank the many individuals and partner organizations across all areas of the province who generously provided input into the 2008–2011 Ontario Cancer Plan. Together we can achieve the best cancer system for Ontarians.

Terrence Sullivan, PhD
President and CEO,
Cancer Care Ontario
What is cancer?

Cancer is a process – it begins with a small series of cell mutations and continues through a journey that patients and healthcare professionals must take to deal with the personal and medical ramifications of this disease.

With more than 200 types of cancer and a wide array of available treatments, defining what cancer really means to individuals and society is no simple task. Patients with some cancers – including breast, prostate, and colorectal – can have a very good prognosis and live full, long lives following cancer. Other types of cancer continue to have poor survival rates. In some cases, patients are cured of their cancer, but have to deal with lifelong and sometimes disabling health problems resulting from cancer and the after-effects of treatment. For these reasons, Ontario’s approach to cancer control needs to address the multiple dimensions and implications of this complex set of diseases.

CANCER THROUGH A MICROSCOPE

How cancer begins

Cancer starts when normal cells mutate as a result of genetic or environmental changes – or both – and these cells begin to divide uncontrollably. Eventually, these abnormal cells form tumours that can invade normal tissues. While many tumours turn out to be benign or non-cancerous, some do become malignant or cancerous. Cancerous cells can break off from the main tumour and spread to other parts of the body, resulting in what are known as secondary growths or metastases. It is important to find malignant tumours early and treat them before metastasis occurs.

What triggers cancer-causing cell abnormalities?

Damaged genes can cause cells to malfunction, which in turn can lead to cancer. Damaged genes can be inherited, which explains why some people get the same type of cancer a parent or relative also had. It is also well established that exposure to ultraviolet light and cigarette smoke can damage cells and cause cancer. And we now know that some viruses – most notably the Human Papillomavirus (HPV) – can cause changes in the cells and lead to cancer. But aging is the biggest factor, with the likelihood of genetic changes increasing as a person gets older.
THE PATIENT EXPERIENCE:
A UNIQUE PERSONAL JOURNEY

From the onset of symptoms to treatment, each person’s experience with cancer is shaped by a multitude of factors. The course of treatment, for instance, is determined not only by the type and stage of cancer, but also by what treatments and services the patient chooses. How a patient copes with the personal and psychological effects of cancer is influenced by the individual’s work and life situation, and their level of support from family and friends.

Each person’s experience with cancer is different. But it is also the same: frightening, confusing, disruptive and life-changing.

THE IMPACT OF CANCER ON ONTARIO’S HEALTHCARE SYSTEM

Like a pebble tossed into water, a diagnosis of cancer sets off a ripple effect in the healthcare system. This is because it takes more than one physician or clinic to treat and control cancer; it takes an entire healthcare team that includes family physicians, oncologists, nurses, pharmacists, therapists, spiritual care providers and community volunteers. As cancer patients go through the healthcare system, they also typically require different tests and treatments, such as surgery, radiation and chemotherapy, often at different facilities.

Cancer places a great strain on human and material resources in practically all areas of the healthcare system. In total, the province spends well over $2 billion a year on cancer care. Cancer Care Ontario directs over $600 million of this public healthcare funding for cancer prevention, detection, care and treatment.
Three years of improvements in cancer control

Facing the growing challenge of cancer

One person in Ontario gets diagnosed with cancer every eight minutes. By the time you have read this plan cover to cover, several people will have learned they have cancer and their lives will have been altered drastically in that moment of truth. In 10 years, as the province’s population grows and ages, a new diagnosis of cancer will occur every six minutes. Cancer is projected to soon surpass cardiovascular disease to become the leading cause of death in Canada.

At the same time, more and more Ontarians are surviving cancer with every passing year because of more effective treatments and early detection. As a result, many cancers are now being managed like chronic conditions. This hopeful news brings with it new challenges in terms of resources and services needed to meet the ongoing needs of people living with and beyond cancer.

A challenge we can meet together

There is a tremendous opportunity to transform Ontario’s cancer system. We first began to seize this opportunity in 2004, when Cancer Care Ontario, in consultation with the Ontario government, and healthcare professionals and organizations across the province, created the first Ontario Cancer Plan.

The first of its kind in Canada, the Ontario Cancer Plan was a detailed and practical roadmap for how the stakeholders in the province could best work together to prevent cancer and provide care for cancer patients. At the time the plan was created, Ontario’s cancer system had just been reorganized in the aftermath of a 2001 crisis that saw public confidence in the system decline because of long wait times and poor access to services, particularly to radiation therapy.

But armed with a clear strategy and a shared commitment to act, we have made important progress over the last three years.

Between 2004 and 2007, Ontario has worked hard to build up its capacity to meet the growing needs of cancer patients. During the same period, we have seen more cancer centres being built, expanded, and committed to than ever before in Ontario.

We have witnessed a number of firsts in cancer prevention and detection, namely the Smoke-Free Ontario Act and the province-wide colorectal cancer screening program, ColonCancerCheck. And after many years of operating in a state of statistical and quantitative ambiguity, Ontario now has a system for measuring, managing and reporting on the performance of our cancer system. This knowledge is transforming our ability to plan and manage patients’ treatment, and to keep the public informed about the quality of cancer services they rely on.

An ambitious but practical strategy

The 2008–2011 Ontario Cancer Plan is designed to transform Ontario’s good cancer system into a great system that will give all Ontarians – no matter where they live, what language they speak, and what income they make – access to high-quality, timely, and patient-focused cancer care. While this new plan is ambitious, it is also practical, focused and entirely possible.

To view a more detailed version of this plan, visit www.ontariocancerplan.on.ca
The plan is organized around six goals that span the continuum for cancer care:

1. Reduce the incidence of cancer
2. Reduce the impact of cancer through effective screening and earlier detection
3. Ensure timely access to effective diagnosis and high-quality cancer care
4. Improve the patient experience along every step of the cancer journey
5. Improve the performance of Ontario's cancer system
6. Strengthen Ontario's ability to translate cancer research into improvements in cancer services and control

Each goal is supported by initiatives that need to come to fruition if the province is to meet Cancer Care Ontario's ambition of creating the best cancer system in the world. And, of these, four key initiatives are central to achieving the plan:

1. Transform how we screen for cancer
2. Streamline and speed up cancer diagnosis
3. Continue to develop Regional Cancer Programs to deliver consistently high-quality services across the province
4. Prepare our services to respond to and make best use of the discoveries in molecular oncology

You will find a high-level view of the 2008–2011 Ontario Cancer Plan on the following pages. An expanded version of the plan is available at www.ontariocancerplan.on.ca.

Are we moving in the right direction?
We have made visible progress over the past three years and will accelerate our efforts to improve on these results in the three years ahead of us. Here is an at-a-glance report on our performance in cancer prevention and screening, and in improving access to and quality of services.

**Progress on key indicators**

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Our vision

Working together to create the best cancer system in the world

The ultimate goal of the Ontario Cancer Plan is to offer Ontarians the very best in cancer prevention, screening and care. To achieve this, we will continue to benchmark ourselves against the highest-performing cancer systems in the world.

So what would the best cancer system mean for Ontarians?

Effective prevention, early detection and diagnosis

Cancer Care Ontario looks to the future and sees a province where the rate of new cases of cancer is declining, due to greater awareness and better prevention, detection and treatment efforts. All Ontarians will participate in screening as a regular part of their healthcare regimen. Highly organized and sophisticated screening programs, supported by e-tools or information management technology, will detect the signs and symptoms of cancer at a very early stage, followed by a coordinated diagnostic plan that will quickly result in a definitive diagnosis.

Seamless treatment plans based on each person’s genetic make-up

In a high-performing cancer system, oncologists, primary care practitioners, nurses, pharmacists, social workers and administrators will work together – virtually or otherwise – as a cohesive team. Supported by technology, they will collaborate in the care of their patients and be able to more quickly adapt their patient care to emerging research and developments in cancer. Innovations in science will also allow physicians to personalize diagnostic and treatment procedures based on each patient’s biological make-up and other individual factors such as lifestyle, gender and age.

Patients who are engaged, active members of the cancer care team

Ontarians of the future will take more active roles in their cancer care. Through e-tools, patients will have easy access to personalized disease and treatment information, and support from a community of cancer patients, health professionals, caregivers and research scientists. Ontarians and their caregivers will become partners in the cancer journey – a joint venture where supported self-care is the norm.

“We need a specific target for the time between the detection of the abnormality and the definitive diagnosis. This way, patients are not left waiting and anxiously wondering if they have cancer.”

— Terrence Sullivan, PhD
President and CEO,
Cancer Care Ontario
Support and respect for those dying of cancer

The best cancer system for Ontarians will ensure that those in the late stages of cancer are given the support and resources that will allow them to plan the remainder of their lives and, just as importantly, their deaths. Supported by the appropriate tools and technology, health professionals will do all they can to make patients as comfortable as possible while honouring their wishes and preserving their sense of dignity.

Can Ontario realize this vision within the next decade?

A high performing cancer system is within our reach. Continuing innovations in science and technology will help us achieve our aspiration. With a clear strategy, a strong foundation, and a relentless commitment to patient-focused care, this vision can become a reality.

“From the patient’s perspective, the most important thing to make the system work has to do ultimately with the language healthcare providers use. The language they use now is the language of hierarchy, it’s not the language of participation and being part of a team.”

– Peter Sadlier-Brown, cancer survivor

$632

The average out-of-pocket costs per month for cancer patients in Ontario, according to a study by researchers at the University of Toronto, McMaster University, Sunnybrook Health Sciences Centre and London Health Sciences Centre. Out-of-pocket expenditures covered items such as prescription drugs, vitamins, child care, travel and parking.
For Lindsay Kronenberg, life is a journey measured by six-month milestones, which is when she visits her oncologist. So far, each visit has yielded the result Kronenberg always hopes for: a clean bill of health, with no recurrence of the cancer that was surgically removed from her right breast in December 2003.

“I just take life six months at a time,” says Kronenberg, who now works as a peer support volunteer and program coordinator at Wellspring, a non-profit network of centres across Canada that provides emotional and social support to cancer patients and their families. “I feel grateful to be alive and I try not to worry about whether or not the cancer will come back.”

More Ontarians are surviving cancer

Kronenberg is among the growing number of Ontarians who are surviving cancer. Thanks to ongoing advances in screening and treatment, a diagnosis of cancer is no longer the death sentence it so often used to be. In fact, the survival rate for the most common cancers has improved in the last two decades, with almost all prostate cancer patients and about 90% of breast cancer patients living more than five years after diagnosis. These cancers are increasingly being managed over longer periods of time like chronic diseases, with new complexities for the patient and the system. Overall, cancer mortality rates in the province are expected to decline in the next 10 years by 11% for men and 6% for women.

The number of new cases is expected to grow

But while more people are surviving cancer, the number of Ontarians who will be diagnosed with cancer is also expected to continue to climb as the province’s population grows and ages in coming years.
More Ontarians living with cancer means greater demand for cancer services and treatments. The province also expects to provide more treatments at a greater cost to each cancer patient. The average cost for new cancer drugs for each new cancer patient has more than tripled since 1997. More patients also receive combination treatments for a first cancer, with many likely to return for additional treatments to deal with recurrent cancers.

The good news and the bad news

While more Ontarians will survive cancer, more Ontarians than ever will be diagnosed with cancer. By 2017, the number of Ontarians expected to be diagnosed with cancer will jump to 228 per day – a total of 83,220 per year – compared with 172 per day in 2007.

Who is affected by cancer?

Of all new cancer cases in 2007, 87% were in people over the age of 50, 12% in people between the age of 25 to 49 and 1% in people under the age of 25.

Did you know?

In 2007, the province provided funding for more than 27,000 intravenous chemotherapy treatments at a cost of $176 million. The New Drug Funding Program is expected to reimburse more than 49,000 treatments in 2010–2011 at an estimated cost of about $446 million. These numbers do not include supportive drugs that help patients manage their cancer symptoms, oral drugs, or cancer drugs covered by private insurance.
Improving on all aspects of cancer control

The 2008–2011 Ontario Cancer Plan

Through this plan, Cancer Care Ontario has set six goals for reducing the rate of cancer and continually improving care for patients. Each goal is supported by initiatives that need to come to fruition if the province is to meet Cancer Care Ontario’s aspiration of creating the best cancer system in the world, four of which form the centrepiece of the plan:

- Transform how we screen for cancer
- Streamline and speed up cancer diagnosis
- Continue to develop Regional Cancer Programs to deliver consistently high-quality services across the province
- Prepare our services to respond to and make best use of the discoveries in molecular oncology

This document is a high-level view of the plan for Ontario’s cancer system for the next three years. Many other initiatives are in place, or will be put in place, to support the six goals. An expanded version of the plan is available online at www.ontariocancerplan.on.ca.

Goal n°1

Reduce the incidence of cancer

Fewer people developing cancer

With a rapidly growing and aging population, Ontario faces an unprecedented increase in the number of people living with and dying of cancer – unless we gain the upper hand on this disease by preventing cancer in the first place. To achieve this goal, we need to better understand the risks and causes of cancer, in particular environmental and occupational exposures to carcinogens, which we know too little about.

In turn will allow us to develop more effective strategies and policies for preventing cancer. At the same time, we need to tackle the biggest risk factors we already know plenty about – smoking, obesity and inactivity. With these in mind, we intend to undertake the following initiatives:

1. Intensify efforts to support healthy eating and active living in Ontario
2. Gain a better understanding of the role that occupational and environmental carcinogens play in causing cancer

Healthy eating and active living

The goal of promoting wellness does not belong solely to Cancer Care Ontario. We are one player in a powerful partnership that includes the provincial government and groups from various sectors such as primary care, public health, non-governmental organizations and schools. Cancer Care Ontario will do its part to intensify efforts to support healthy eating and active, tobacco-free living in Ontario. Our aims need to be aggressive. By mounting a broad-based, sustained and focused campaign to promote healthy diets and physical activity, we expect to see the following results by the year 2020:

- Flatlining and, eventually, declining obesity rates in Ontario, with a target of 10% based on a definition of obesity as body mass index of over 30
- Significantly improved diets, with 90% of Ontarians consuming five or more servings per day of fruits and vegetables

"People everywhere are going over the cliffs, developing cancers that could be prevented, dying of cancers that could be cured. Some 700,000 Canadians have cancer today, me included. Your job is to stop that happening. Don’t leave here until you have a blueprint and a flow chart. And your luggage bulging with determination.”

— June Callwood (1924–2007), journalist, author and activist speaking at the 2002 National Cancer Leadership Forum
Increased activity amongst Ontarians, with 90% participating in moderate to vigorous activity most days of the week.

Reduction in many health conditions including diabetes, cardiovascular disease and, eventually, cancer.

We know today that more than one-third of all cancers can be attributed to poor diet, obesity and inactivity and that healthy eating and active living reduce the risk of cancer. Progress has already been made in reducing the most recognized cancer risk: smoking. Through Smoke-Free Ontario, a provincial strategy strongly supported by Cancer Care Ontario, tobacco consumption in the province was dramatically reduced by 18.7% between 2003 and 2005. We believe this strategy will have a greater impact on reducing cancer rates in the province than any policy in Ontario’s history.

We will continue to focus on the most serious and preventable cancer risks: smoking and healthy weights. This includes remaining a strong ally in the Smoke-Free Ontario strategy and supporting government efforts to improve access to smoking cessation services. Similarly, we will use our infrastructure, data and knowledge to support initiatives that address unhealthy weights and inactivity in the province.

To put this plan into action, Cancer Care Ontario will:

- Contribute to provincial efforts such as the Ontario government’s Healthy Eating and Active Living Strategy and develop effective intervention strategies for reducing cancer risks through healthy living.

- Conduct active surveillance by monitoring the status of the overall population, with special attention directed to high-risk populations such as aboriginal communities. As part of this plan, Cancer Care Ontario is working with the Ontario Institute for Cancer Research and other partners to launch the Ontario Cancer Cohort, a long-term study of tens of thousands of Ontarians to better understand risk factors for cancer and other diseases. There is more on the Ontario Cancer Cohort on page 31.

- Contribute to better disease management by informing and engaging Ontarians and primary care practitioners through Ontario Cancer Facts, Cancer Care Ontario’s new multi-format cancer prevention information service. Ontario Cancer Facts will deliver customized web-based and print information to help ensure healthy living strategies are based on reliable, up-to-date evidence.
Occupational and environmental carcinogens

Cancer Care Ontario will lead the way in gaining a better understanding of the role that occupational and environmental carcinogens play in causing cancer, with a view to reducing Ontarians’ exposure to cancer-causing substances in the workplace and in their general surroundings.

Where are we now?

There is convincing evidence that a number of products used in the workplace or in the environment are carcinogenic. And some specific carcinogens, including asbestos and radon, are present in certain occupational settings at levels that cause cancer. However, the relationship between cancer and many carcinogens at low levels of exposure is much less clear.

What is our plan moving forward?

More action needs to be taken to reduce exposure to known carcinogens. However, to fully understand the risks of environmental and occupational exposures, Ontario needs to develop a comprehensive surveillance strategy and undertake greater research in this area. Cancer Care Ontario will work with the Ontario government and other stakeholders to better understand carcinogens and reduce harmful exposures. As steps in this direction, Cancer Care Ontario will:

- Work with partners to develop an Occupational Cancer Research Centre to bolster our knowledge base about cancer and the environment.
- Develop an environmental and occupational monitoring and surveillance program, of which the Ontario Cancer Cohort will be an instrumental part. Learn more about the Ontario Cancer Cohort on page 31.

"We have put significant resources into that elusive cure, and now it’s time to redirect more efforts into prevention such as tobacco control and colorectal screening. Cancer prevention must always be considered the priority."

— Dr. Robert Cushman, CEO, Champlain Local Health Integration Network

Goal n°2

Reduce the impact of cancer through effective screening and earlier detection

We know that screening for breast, cervical and colorectal cancer is saving lives in Ontario. However, screening rates have flatlined in recent years and a new approach is needed to increase the number of Ontarians participating in regular screening. Cancer Care Ontario will work with the Ontario government and other partners to transform cancer screening in Ontario by creating one high-quality and organized program for breast, cervical and colorectal cancers, resulting in earlier detection and prevention of these cancers.

We expect to see the following outcomes by 2010:

- Mammography screening of 70% of Ontario women aged 50 to 69 years old – up from today’s participation rate of 60%
- Cervical screening of 85% of eligible Ontarians, representing a 15% increase in three years
- Colorectal screening of 40% of eligible Ontarians, representing a 23% increase in three years

Ontario has had breast and cervical screening programs in place for a number of years. While these screening efforts have contributed to earlier detection of cancer and improved outcomes, participation rates have stalled at levels below provincial targets and well below countries with high screening rates. This is due in large measure to the fact that these current models have had limited success in reaching vulnerable and under-screened
populations, including aboriginal communities, people living in poverty and new Canadians.

ColonCancerCheck, a province-wide, population-based colorectal screening program, was launched in January 2007 and is the first cancer screening program of its kind in Canada. It promises to change cancer screening and prevention in Ontario. This new screening program is efficient, accessible and more responsive to the needs of individuals and health professionals. It will give primary care physicians and other practitioners the support they need to screen their patients. It will reach out to all individuals in the target populations, particularly vulnerable groups with low screening rates. And it will use information technology to support self-care and improve clinical management at every step.

We will use this program as the foundation on which to build an integrated screening program for all three cancers, making screening that much more efficient and effective. The data systems, primary care resources and patient outreach strategies used in screening can then be leveraged to support efforts in other areas of healthcare such as chronic disease management.

**What is our plan moving forward?**

Cancer Care Ontario, in partnership with the provincial government and the active support of provider, public health and patient organizations, will achieve an integrated, organized screening program by bringing together the best aspects of current screening efforts, applying proven strategies used to improve cancer treatment wait times and quality in Ontario, and adopting practices from jurisdictions with high cancer screening rates. Cancer Care Ontario will:

- Establish regional primary care leadership for screening in each Local Health Integration Network (LHIN)
- Support family physicians and other primary care providers with the tools needed to meet screening targets

**Aiming high with breast screening**

100 is the magic number within the Waterloo Wellington Local Health Integration Network (LHIN), where the cancer care community is working towards a breast screening target of 100%. To achieve this goal, the Grand River Regional Cancer Centre has made enhancements to the Ontario Breast Screening Program, including employing a coordinator to improve access to breast cancer screening and assessment in Waterloo Wellington. The Waterloo Wellington Regional Cancer Program in the LHIN also established a Regional Breast Assessment Program to provide same-day diagnosis and alleviate patient anxiety. All women with a screen-detected abnormality are sent to the assessment centre for a comprehensive evaluation by an on-site team that includes a surgeon, radiologist, mammography and breast ultrasound technologists, and a patient support companion. The results so far? The time to diagnosis for a breast cancer in this LHIN is consistently better than provincial targets.

Dr. Lisa Del Giudice, a family physician at Sunnybrook Health Sciences Centre, shows a patient how to use a fecal occult blood test kit, a critical tool in screening for colon cancer.
Use information technology to support patient self-care and strengthen the connection between primary care providers and patients – for example, generating invitations to patients for regular screening, and recalling and following-up with patients.

Support continuing innovation in health human resources, including the creation of advance practice roles – such as registered nurses who perform flexible sigmoidoscopy – to expand cancer screening services and provide greater options for patients.

Partner in high-impact education and social marketing initiatives to promote awareness among the public and healthcare professionals, particularly primary care providers, and motivate them to make screening a part of their healthcare routine.

Cancer Care Ontario is forging partnerships with the Ontario government, associations, non-governmental organizations and local health system partners to undertake innovative approaches for reaching under-screened populations.

Spotlight:

Dr. Linda Rabeneck and ColonCancerCheck

Her father and uncle both died of colorectal cancer. Today, Dr. Linda Rabeneck, Chief of the Odette Cancer Centre at Toronto's Sunnybrook Health Sciences Centre and a Regional Vice President with Cancer Care Ontario, focuses her advocacy work, clinical practice and research on colorectal cancer screening. “This has been especially meaningful for me because of my family history,” she says.

Dr. Rabeneck's commitment to colorectal cancer screening should also prove to be meaningful to many Ontarians; she is one of the designing minds and driving forces behind Ontario's ColonCancerCheck – the first province-wide colorectal cancer screening program in Canada. Backed by provincial funding of $193 million over five years, ColonCancerCheck will be supported by an aggressive marketing campaign aimed at providers, physicians, pharmacists and the general public.

“Until now, we did not have an organized screening program for colorectal cancer with the infrastructure, funding and support needed to run a province-wide program,” says Dr. Rabeneck. “Finally, we have a huge, unparalleled and historic opportunity to get ahead of this disease.”
Goal n°3

Ensure timely access to effective diagnosis and high-quality cancer care

Cancer Care Ontario believes timely access to effective diagnosis and high-quality cancer care will lead to improved outcomes and a much better patient experience. We have already laid down a strong foundation and achieved significant improvements, including reduced wait times, enhanced local access to services, and e-health innovations that have led to better patient and healthcare provider experiences. Now we must make further progress to ensure we have the people, facilities, technologies and treatments in each Local Health Integration Network to meet the needs of Ontarians.

While we continue to ensure that needed services are in place across the province, Cancer Care Ontario will intensify efforts to raise the quality and safety of those services. We will work to continually make services more efficient, better organized and available as close to home as possible.

Four major initiatives will help us reach this goal:

1. Ensure that we have the services available to meet the needs of cancer patients. Cancer Care Ontario's capacity plan addresses requirements for treatment services in every LHIN and for low-volume and highly complex services that should be available only in specialized facilities.

2. Build a high-quality Regional Cancer Program in every LHIN to ensure the system has the capacity to provide access to timely, high-quality care as close to home as possible. As part of this initiative, Cancer Care Ontario will take the following action on four quality standards:
   - Make Intensity Modulated Radiation Therapy (IMRT) – the new gold standard radiation treatment – available to all who will benefit.
   - Establish regional systemic (chemotherapy) treatment programs to improve the safety of chemotherapy and bring services as close to home as possible.
   - Expand the use of multidisciplinary case conferences that bring together a patient’s entire healthcare team to review their care plan.
   - Implement province-wide standards for thoracic (lung, chest and esophagus) surgery.

3. Streamline and accelerate diagnostic assessment processes resulting in better and faster diagnosis for patients.

4. Capitalize on the new knowledge emerging from new bio-predictive testing (molecular oncology) to transform cancer services.

What is a Regional Cancer Program?

Regional Cancer Programs are the networks of cancer prevention, service providers and stakeholders within each of the province’s 14 Local Health Integration Networks. Each is led by a Cancer Care Ontario Regional Vice President. The Regional Cancer Programs were established in 2005 to respond to local cancer issues and needs, to act on provincial standards and programs locally, and to improve access, wait times and quality by managing and coordinating care across local and regional healthcare providers.
Ensure the availability of cancer services

Over the past three years, Cancer Care Ontario, with the support of the Ontario government, has focused its efforts on ensuring cancer treatment services are in place throughout the province. While we have made substantial gains in improving access to radiation treatment and cancer surgery, much still needs to be done to meet the needs of patients in the upcoming years. Meeting the needs of the growing number of people with new and recurrent cancers remains a challenge for cancer surgery, radiation treatment and systemic treatment. Access to systemic treatment has not improved much in recent years and must be the focus of a concerted and comprehensive effort in the years ahead. We will also increase efforts to improve access to a number of provincial-level services provided by sub-specialists, such as bone marrow transplantation.

Over the next three years Cancer Care Ontario will accelerate efforts to achieve a system that provides timely and high-quality cancer care equitably across the province. This requires coordinating the efforts of various partners and stakeholders – including the Ministry of Health and Long-Term Care, hospitals and other Regional Cancer Program partners – to build a system resilient to changes in demand and sustainable well into the future. Cancer Care Ontario will:

- Use sophisticated planning approaches to improve the accuracy of projections for surgery, chemotherapy and radiation treatment needs, and work with the Ministry of Health and Long-Term Care to ensure the system is funded appropriately. For example, the forecasts of radiation therapy machine needs contained in this plan are based on international benchmarks and planned productivity improvements.
- Plan treatment services across Ontario for patients with rare cancers – such as sarcoma, peritoneal, thoracic and some gynecological cancers – so that the province can effectively coordinate and deliver these highly complex treatments across regional cancer centre hospitals. These treatments include:
  - Bone marrow (stem cell transplant)
  - Radiopharmaceutical therapy
  - Immunomodulated therapy
- Ensure that the necessary infrastructure is in place to deliver needed care. Cancer Care Ontario is working with the Ontario government on an ambitious program to construct and expand regional cancer centers over the next four years.
- Support investment in new and replacement radiation machines to meet the growing demand for radiation treatment.
- Develop innovative ways to deliver care through new roles for health professionals and enhancing collaboration between disciplines.
Building to meet patient needs

Cancer Care Ontario is supporting the development of the province’s most ambitious capital development program. Over the next four years, Ontario will fund the construction of four new regional cancer centres and the expansion of two existing centres.

Existing Regional Cancer Centres

<table>
<thead>
<tr>
<th>Number</th>
<th>Centre Name and Location</th>
<th>Radiation Machines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Odette Cancer Centre, Toronto</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>R.S. McLaughlin Durham Regional Cancer Centre, Oshawa</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Princess Margaret Hospital, Toronto</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Juravinski Cancer Centre, Hamilton</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>Carlo Fidani Peel Regional Cancer Centre, Mississauga</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>The Ottawa Hospital Regional Cancer Centre</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Hôpital régional de Sudbury Regional Hospital Regional Cancer Program</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Thunder Bay Regional Health Sciences Centre – Regional Cancer Care</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Windsor Regional Cancer Centre</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Cancer Centre of Southeastern Ontario, Kingston</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>London Regional Cancer Program</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td>Grand River Regional Cancer Centre, Kitchener</td>
<td>4</td>
</tr>
</tbody>
</table>

Planned Regional Cancer Centres

<table>
<thead>
<tr>
<th>Number</th>
<th>Centre Name and Location</th>
<th>Radiation Machines</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>The Regional Cancer Centre at Southlake, Newmarket (Summer 2009)</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>The Ottawa Hospital Regional Cancer Centre (Fall 2010)</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>Cancer Centre of Southeastern Ontario, Kingston (Winter 2010)</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Algoma Regional Cancer Centre, Sault Ste. Marie (Fall 2010)</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>Simcoe Muskoka Regional Cancer Centre, Barrie (Spring 2011)</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>Niagara Regional Cancer Centre, St. Catharines (Spring 2012)</td>
<td>3</td>
</tr>
</tbody>
</table>

Mobile Radiation Units

<table>
<thead>
<tr>
<th>Number</th>
<th>Centre Name and Location</th>
<th>Radiation Machines</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>The Ottawa Hospital Regional Cancer Centre</td>
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</tr>
<tr>
<td>20</td>
<td>Simcoe Muskoka Regional Cancer Centre, Barrie</td>
<td>1</td>
</tr>
</tbody>
</table>
“Implementing Intensity Modulated Radiation Therapy will enable us to focus the radiation on the tumour with more precision, avoiding the surrounding healthy tissues. That means fewer side effects from treatment, improved quality of life, and potentially more cures for our cancer patients – clearly very good news.”

— Dr. Anthony Whitton
Radiation Oncologist, Juravinski Cancer Centre, Hamilton
Provincial Head, Radiation Treatment Program, Cancer Care Ontario

Innovations in health human resources result in advanced practice roles

The growing number of cancer patients in Ontario means an even greater demand for health professionals. Cancer Care Ontario is continuing to work with partners in the province’s cancer system to introduce new roles and collaborative multidisciplinary teams, improving access to needed services. We are already making headway:

• In 2007, Cancer Care Ontario and the Ministry of Health and Long-Term Care launched Nurse-Performed Flexible Sigmoidoscopy, a pilot project – and a first in Canada – where nurses perform flexible sigmoidoscopy for colorectal cancer screening.
• A project is now underway to implement oncology advanced practice nursing roles as a means of increasing access to quality cancer care.
• The Ministry of Health and Long-Term Care is continuing to evaluate advanced practice roles in radiation therapy.

High-performing Regional Cancer Programs in every LHIN

In order to provide Ontarians with timely access to effective diagnosis and high-quality cancer care, we need to continue to develop Regional Cancer Programs in every LHIN.

Cancer Care Ontario has completed and published four service standards which every Regional Cancer Program will implement to raise the quality of care in each LHIN. Over the next three years, the following work will be completed:

1. Intensity Modulated Radiation Therapy

Cancer Care Ontario is working towards implementing Intensity Modulated Radiation Therapy (IMRT) in each LHIN for all patients who will benefit. IMRT allows oncologists to deliver radiation to irregularly shaped treatment fields, sparing healthy tissue and minimizing side effects. Compared with traditional radiation techniques, IMRT reduces irradiation of surrounding tissues, such as the heart and lungs, by up to 50%. (Irradiation of heart and lung tissues has been linked to cardiovascular and pulmonary

Mobile radiation unit brings care close to home for Barrie area patients

Cancer patients in the Barrie area can now get radiation therapy closer to home, thanks to a new, leading-edge portable radiation unit at Royal Victoria Hospital. The mobile facility – the first of its kind in Canada – has a modular design that allows it to be built in less than a week. It will be in use at Royal Victoria until the Simcoe Muskoka Regional Cancer Centre opens, about three years from now, and is expected to treat close to 400 cancer patients each year. Before the unit arrived in Barrie, many patients from the region had to travel to cancer centres in Toronto for radiation therapy.
diseases and deaths resulting from these diseases.) Cancer Care Ontario aims to have made significant progress in IMRT implementation by the end of 2009 in Regional Cancer Programs across the province, with a utilization target of 50% of IMRT-appropriate cases.

**Where are we now?**

IMRT has been the standard of care in other Canadian provinces and in the United States for more than a decade. To date, only eight out of 12 radiation programs in the province deliver some level of IMRT.

**What is our plan moving forward?**

To move the province towards full IMRT implementation, Cancer Care Ontario will work to ensure that all Regional Cancer Programs have the technology and know-how to safety and efficiently deliver IMRT where there are sufficient patients. We will develop a clear plan and schedule for implementation as well as standards clearly defining patient eligibility for IMRT.

**Growth in radiation treatment and demand for machines**

![Growth in radiation treatment and demand for machines](chart.png)

*Source: Cancer Care Ontario, Data Book Activity Level Reporting*

IMRT allows oncologists to deliver radiation to irregularly shaped treatment fields, sparing healthy tissue and minimizing side effects.
“Regional systemic treatment programs are an important initiative that will result in the best and safest evidence-based care for all Ontarians requiring chemotherapy. That means treatment as close to home as possible for common tumours and specialized multidisciplinary care in large cancer centres for less common cancers.”

— Dr. Maureen Trudeau
Head of the Systemic Therapy Program, Odette Cancer Centre;
Head of Medical Oncology/Hematology, Sunnybrook Health Sciences Centre;
Provincial Head, Systemic Therapy, Cancer Care Ontario

2. Regional systemic (intravenous chemotherapy) treatment programs
Access to chemotherapy must be improved across the province. Cancer Care Ontario is leading an initiative to achieve two key objectives: improve patient safety in the delivery of systemic treatment throughout the province, and improve timely access to high-quality systemic treatment as close to home as possible.

Hospitals are holding chemotherapy wait times steady but have been unable to reduce wait times in the face of rapidly growing demand for care and limited treatment resources. Depending on the type of cancer and where the treatment is delivered, median wait times (the point at which half the patients have completed treatment) for chemotherapy have ranged from less than a half-week to more than 12 weeks. Access to high-quality chemotherapy also continues to be uneven across Ontario.

Cancer Care Ontario is developing a regional systemic treatment program in every LHIN that will focus on planning, implementing evidence-based standards to ensure the safe delivery of chemotherapy and improving access by increasing the availability of less complex chemotherapy in community hospitals. This program will also identify ways to use resources more efficiently, share knowledge more effectively, and increase collaboration among healthcare providers.

Alongside the development of a regional systemic treatment program, Cancer Care Ontario will provide advice to the Ministry of Health and Long-Term Care about a funding model to support implementation.

3. Multidisciplinary case conference
All cancer patients benefit from the team approach to care
A multidisciplinary case conference brings together the entire team of cancer care professionals to review the progress of the cancer patient under their joint care.
This improves a patient’s chances of receiving up-to-date, evidence-based care by allowing health professionals to quickly assess all suitable testing and treatment options together and ensure timely referrals, scheduling and decisions. Cancer Care Ontario intends to facilitate the creation of multidisciplinary case conferences in each LHIN, as well as provincial conferences for rare cancers. Our ultimate goal for this initiative: to ensure that all cancer patients benefit from a multidisciplinary review of their care plan.

Less than 64% of Ontario hospitals today use a multidisciplinary case conference approach based on a standard published by Cancer Care Ontario. By comparison, many countries – such as the United States, United Kingdom and Australia – consider multidisciplinary review as a standard component of cancer care.

Cancer Care Ontario will work with stakeholders to implement multidisciplinary case conferencing in all LHINs and develop strategies for addressing variability between LHINs. We will determine and deliver the technology needed for effective multidisciplinary case conferencing. We will also build community leadership.

4. Thoracic surgery standards

Thoracic cancer surgery is a complex, high-risk procedure performed in the lungs, chest wall, esophagus or diaphragm. Today, most hospitals in the province perform thoracic surgery with varying outcomes from one facility to the next. Cancer Care Ontario believes establishing provincial standards in thoracic cancer surgery and building expertise in designated hospitals within each Regional Cancer Program will improve patient safety and ultimately result in better outcomes and lower death rates.

Cancer Care Ontario has been working with the Regional Cancer Programs, hospitals, and surgeons to develop evidence-based standards for thoracic cancer surgery and to identify the best model for delivering this service. The standards set out the requirements for designating hospitals as providers of thoracic surgery, including surgeon training, multidisciplinary teams and the number of thoracic surgeries provided (surgery volumes). For instance, for a hospital to be designated as a Level 1 provider of thoracic cancer surgery, it must have at least three surgeons handling at least 150 major lung cases and 20 major esophagus cases a year. A Level 2 designation would require at least one surgeon performing a minimum of 50 major lung and seven major esophagus surgeries a year.

Virtual speaking

Videoconferencing technology has made it possible for cancer care practitioners from different locations to gather virtually for a multidisciplinary care conference. North Simcoe Muskoka’s Local Health Integration Network has certainly experienced the benefits of virtual conferences. In 2005, the Regional Cancer Program within this LHIN launched videoconference case reviews for breast and gastrointestinal cancer cases. Dr. Duncan Paterson, regional surgical oncology lead for the Simcoe Muskoka Regional Cancer Centre and one of the driving forces behind this project, says multidisciplinary case conferences “can only lead to better patient care, are very attractive to smaller centres, and provide a sense of peer group to the solo practising surgeon.”
Roaming scopes present unique solution at Grey Bruce

With only two or three scopes at each of its rural hospitals, Grey Bruce Health Services was looking for ways to reduce waiting lists for colonoscopies and other scope procedures. But the obvious solution – to purchase more scopes for each hospital – would be too costly.

“We came up with this idea that we could just roam the scopes to our four rural hospitals with operating room capability, meaning Southampton, Wiarton, Markdale and Meaford,” recalls Gary Tutin, corporate manager of material management at Grey Bruce.

Grey Bruce purchased 13 scopes, seven colonoscopes and three gastroscopes, as well as special stainless steel cases and plastic boxes to store and transport the new equipment. Then it assigned a dedicated team to travel between the four hospitals selected for the roaming scopes program and to maintain the scopes.

The result: instead of the three to six scopes each rural hospital used to perform, the four hospitals can now do 12 scopes each in a four-hour block, resulting in better use of operating room time and the general surgeon’s time. But the biggest beneficiaries are the patients who now have faster access to scope procedures.

What is our plan moving forward?

With the standards for thoracic cancer surgery now defined, Cancer Care Ontario will take a leading role in implementing them across the province. We will work with the Ministry of Health and Long-Term Care, LHINs and Regional Cancer Program leaders to assess the challenges and opportunities they face in designating hospitals for thoracic surgery.

Ontario has had some successes in streamlining diagnostic assessment. Toronto East General Hospital shortened wait times for lung cancer assessment from 17 weeks to 3.5 weeks in six months during the April 2005–March 2006 fiscal year. At the Lung Diagnostic Assessment Unit at St. Joseph’s Healthcare in Hamilton, clinicians are now able to obtain needle and tissue biopsies within 48 hours, and so far 99% of patients have completed assessments within the hospital’s target of 10 days. For many years we have had a clearer picture of wait times for breast assessment in the province, largely an outcome of Ontario’s organized breast screening program. Similarly, we are starting to gain better insight into wait times for colonoscopy through ColonCancerCheck.

Remote sites, for instance, may be best served by virtual diagnostic assessment tools, such as videoconferencing, while other centres may find the use of nurse navigators – who guide patients through the entire diagnostic and treatment process – to be the most effective approach.

Diagnostic assessment processes

Patients consider the diagnostic phase of cancer to be the most anxiety-ridden and disorganized part of the cancer journey. A streamlined diagnostic assessment process can reduce the time from symptom to diagnosis, reduce the need for repeated tests, and improve the patient experience and treatment outcomes. While all cancer services must be based on consistent quality standards, the actual model for a streamlined diagnostic assessment process will depend on each jurisdiction’s regional and local realities, including existing resources such as information systems and technology, and the number and complexity of cancer cases treated.
Building on the province’s successes in streamlining diagnostic assessment, Cancer Care Ontario will launch an Ontario-wide effort to accelerate and sustain innovations in diagnostic processes. Our goal is to enable these improvements in all areas of the province within the next three years with a view to ensuring every Ontarian has access to timely and accurate diagnosis. To achieve this objective, Cancer Care Ontario will take the following steps:

- Improve access to colonoscopy services through ColonCancerCheck
- Encourage local innovation to improve the diagnostic assessment process
- Establish an expert panel on ‘Wait One’ – the waiting time between the date of referral from a family physician to the date of consultation with the appropriate specialist
- Establish targets for Wait One for a limited number of cancers starting with colorectal cancer, and develop a strategy to measure progress
- Implement an electronic referral solution to measure Wait One times regionally
- Develop a step-by-step implementation plan, starting with the expansion of existing pilot programs

**Molecular oncology**

Cancer Care Ontario will capitalize on rapid advances in molecular oncology – the study of the molecular mechanisms of cancer – and human genetics research. This is an area of exciting growth and opportunity. Molecular oncology promises to revolutionize how we diagnose, predict a patient’s response to treatment and treat cancer.

Cancer Care Ontario recognizes the groundbreaking opportunities presented by molecular oncology; the challenge is how to shift rapidly, but carefully, what we learn into practice and patient benefit. Adverse events such as the hundreds of flawed estrogen/progestin receptor tests in Newfoundland – now the target of a lawsuit – have made us keenly aware of the need to ensure we have the appropriate standards, training and quality control in place to implement molecular oncology-based predictive tests and treatments. Through this initiative, Cancer Care Ontario will:

- Gain a better understanding of how to best deliver new programs based on advances in molecular oncology, such as cancer risk testing and response prediction
- Work closely with the Ministry of Health and Long-Term Care, the laboratory community and others to realize opportunities in Ontario
- Advise on appropriate funding models for these new and expensive tests and targeted treatments

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“Advances in our understanding of the links between specific genetic changes and responses to treatment are revolutionizing medicine and improving patient care. We are truly in the era of individualized molecular medicine.”

— Suzanne Kamel-Reid
Director, Molecular Diagnostics and Head, Laboratory Genetics, University Health Network and Toronto Medical Laboratories

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The science and technology to enable biological testing for cancer risks and to predict certain cancers’ response to treatment already exist today, and are influencing some patients’ treatment.
For example, women with early stage breast cancer are tested for the Her2/neu protein to see if they will benefit from the drug Herceptin. What is lacking, however, is an organized and standardized system for introducing these tests and treatments, many of which are complex and costly.

Cancer Care Ontario will establish a task force composed of leading clinicians from different oncology disciplines, the laboratory medical community and others to understand and make recommendations concerning the challenges and opportunities this new frontier in cancer care represents. The goals are to ensure consistent evidence-based standards and quality assurance for molecular oncology testing, an orderly process for introducing these new technologies and equitable access to services across the province.

**Goal n°4**

**Improve the patient experience along every step of the cancer journey**

Even when their treatment outcomes have been positive, many patients have expressed strong feelings of dissatisfaction about their journey through the cancer system. That is why it is critical that everyone in the cancer system must work to improve the patient experience at every step of the journey and lessen the impact of the disease. Here are the key initiatives that will take us there:

1. Move towards a truly patient-centric system through measuring, understanding and developing targeted strategies to improve the patient’s experience at every phase of cancer
2. Improve psychosocial care for cancer patients
3. Improve palliative and end-of-life care

**A patient-centric system**

Building on our work from the first Ontario Cancer Plan, Cancer Care Ontario will continue to move the province towards a truly patient-centric cancer system – one where services are organized according to the needs, wishes and location of the patient, and where the patient is engaged as an active partner and decision-maker in his or her own care.

**What is our plan moving forward?**

While recent improvements to the cancer system have made it more reliable, accountable and high-performing for patients, there continue to be significant gaps in the continuum of cancer care as well as in our understanding of what it truly means to be a cancer patient. Patients and their families also continue to struggle to find adequate information about their disease and the system.

Cancer Care Ontario will develop a strategy to measure the patient experience across the continuum of care. As part of this strategy, we will develop more precise measuring tools, expand our understanding of what it means to live with cancer, and develop long-range targets for improvements in the patient experience and treatment outcomes. We will also advance the application of
web-based technologies that make it easier for patients and their families to obtain information and share experiences.

Psychosocial care:  
*Taking care of all of the patient’s needs*

From symptom management and help coping with depression, to nutritional advice and post-treatment sex counseling, psychosocial care is a critical part of the patient experience and yields benefits to the cancer system by reducing strain on resources. Cancer Care Ontario plans to raise the level and quality of psychosocial care for cancer patients as a key step towards improving the overall patient experience.

**Where are we now?**

About 35% of people diagnosed with cancer experience high levels of distress. Yet respondents in the Ontario Ambulatory Oncology Patient Satisfaction Survey gave emotional support the lowest rating compared with other aspects of the patient experience.

**What is our plan moving forward?**

In February 2007, Cancer Care Ontario launched a Provincial Psychosocial Oncology program that includes a committee comprised of representatives from the various Regional Cancer Programs. Through the Psychosocial Oncology Program, Cancer Care Ontario will guide improvements in quality and availability of psychosocial oncology services across the province. We will look at areas of unmet need and provide recommendations for enhancing psychosocial care skills among cancer care professionals, and for increasing awareness of psychosocial oncology resources for patients and families.

Palliative and end-of-life care

Up to 85% of palliative care patients in Ontario have cancer. In light of this fact, Cancer Care Ontario has identified palliative and end-of-life cancer care as priorities in the next three years. We need to make changes to ensure patients have greater involvement and control in their care, including the option of receiving care in their homes. Building on the Provincial Palliative Care Integration Project (PPCIP) launched in April 2006 by Cancer Care Ontario and the Ministry of Health and Long-Term Care, our goal is to achieve the following improvements in palliative care over the next three years:

- Integrated Palliative Care Programs in every region, which will provide universal access to web-based patient symptom-screening tools in regional cancer centres, satellite clinics, or in patients’ homes. Cancer Care Ontario is aiming for completed symptom screening for at least 90% of all patients who visit a regional cancer centre in Ontario.
- Better symptom management, fewer emergency room visits in the last weeks of life, and a higher percentage of deaths occurring in the setting chosen by the patient.

**Where are we now?**

In 2005, the provincial government committed $115.5 million over three years to an end-of-life care strategy that includes funding for home care and community support services. This year, the government introduced an aging-at-home strategy to improve the patient experience and provide Ontarians with more options for palliative care at home or in a community setting.

“A commitment to PPCIP engages us as healthcare practitioners and providers in a critical review of the way we provide care to individuals who face life-threatening illnesses. The application of integrated assessments and coordinated approaches to care creates an environment of continuous learning and improvement. Through PPCIP initiatives, the interdisciplinary healthcare team is better equipped to anticipate the needs of patients and families and to respond quickly to their concerns. The bottom line is a system that is better able to respond in meaningful ways to alleviate suffering and provide comfort and dignity during the sunset of an individual’s life journey.”

— Betty Kuchta  
Executive Director,  
Erie St. Clair Community Care Access Centre
Ontario’s Provincial Palliative Care Integration Project has proved to be a major success. Designed to provide improved symptom screening, assessment and control, and coordinated palliative care support, the Provincial Palliative Care Integration Project was embraced by patients, families and their care team. This project uses real-time data entered by patients into an Interactive Symptom Assessment and Collection (ISAAC) system to inform treatment decisions. While Ontario has made some clear strides in palliative and end-of-life care in recent years, there is a need to do much more in this phase of care.

ISAAC puts patients in control

ISAAC stands for Interactive Symptom Assessment and Collection, an easy-to-use electronic tool that puts cancer patients in control of their own symptoms. Developed by Cancer Care Ontario, ISAAC allows patients to track their own symptoms over time and notifies the appropriate clinicians when the scores exceed certain parameters. Because ISAAC is web-based, patients can access it anywhere there is an internet connection. Right now, ISAAC is a tool primarily being used for lung cancer patients. But it has the potential to be used more broadly, for example, to communicate emotional and psychological symptoms to a patient’s care team.

ISAAC by the numbers: Last year, over a nine month period, there was a sixfold increase in the number of patients using ISAAC – from 776 to 4,529.

“On my continuous journey as a cancer patient, I have met some wonderful people along the way. All of my providers – from the radiation staff and chemotherapy nurses to the volunteers – have been there for me throughout my treatments, addressing not only the curing of the physical body, but of my mind and spirit as well.”

— Ann Francis Oakes, cancer patient
Ontario’s Cancer System Quality Index

In 2005, Cancer Care Ontario launched the Cancer System Quality Index – a publicly accessible, online report of the cancer system’s performance based on 30 indicators spanning the full spectrum of cancer control and care. Cancer Care Ontario and its partner, the Cancer Quality Council of Ontario, are committed to the ongoing development of the Cancer System Quality Index. This includes expanding public reporting of performance right down to the level of institutions and organizations.

www.cancercare.on.ca/qualityindex

Goal n°5
Improve the performance of Ontario’s cancer system

Across its programs, Cancer Care Ontario is committed to continuous quality improvement. This ongoing improvement is driven by our work in four key areas: disease and patient experience management; information management and e-health; standards and clinical guidelines; and evidence-based evaluations of new cancer drugs and technologies. At the same time, regional and clinical leadership plays a crucial role in advancing performance and innovation across cancer care providers in the Regional Cancer Programs.

Changes in healthcare funding and delivery are helping to improve system performance. These changes include better data quality and performance reporting, clear requirements for evidence-based decision-making, multidisciplinary care teams, tying payment for services to performance, and a shift to patient-centred approaches to cancer care.

But these improvements are just a starting point. In the next three years, we will pursue performance improvement through fundamental system changes that focus directly on the patient experience and on the use of new information tools to better understand and improve the quality of cancer services. We will focus on two key initiatives:

1. Implement a disease pathway management approach to cancer care
2. Leverage information management and technology to improve the performance of the cancer system

Disease pathway management:
Easier access, better informed and supported patients

The disease pathway for cancer varies from one type of cancer to another; patients with colorectal cancer, for instance, will follow a very different course of treatment than patients with breast or lung cancers. To improve the experience of patients and their care providers, it is important to understand how the system performs with respect to specific types of cancer, and how patients transition between services and providers in the patient journey. Armed with better knowledge of how the cancer system functions for particular types of cancer patients, Cancer Care Ontario will develop focused strategies to better coordinate and improve care, leading to the following outcomes:
Reducing the risk of cancer drug errors

Ontario cancer patients are safer today, thanks to an innovative cancer-specific Computerized Physician Order Entry system. Operated by Cancer Care Ontario, this system allows physicians to enter chemotherapy and related drug orders directly into a computer, reducing ordering-related errors typically caused by misinterpretation of handwritten prescriptions and dosage calculations. (It is estimated that CPOE systems help catch 48% of ordering-related errors and 23% of transcription-related errors.) The CPOE system also helps care providers and system planners monitor chemotherapy services across Ontario. Currently in place in 11 cancer centres across Ontario, 60% of all chemotherapy orders are placed using Cancer Care Ontario’s CPOE system, helping nearly 500 physicians manage chemotherapy for over 30,000 patients a year. Five more centres will adopt the system by the end of March 2008.

• A better understanding of how the care continuum differs for each type of cancer
• Empowered patients and a significantly improved patient journey
• Earlier interventions, improved processes, better coordination between stages of care, and greater collaboration between care providers

Through initiatives such as the Cancer System Quality Index, Cancer Care Ontario measures and reports in detail on the overall quality of cancer services in Ontario. However, at the level of specific cancers, it is fair to say we have only snapshots of the system’s performance. We do not have an adequate grasp of the patient journey for individual cancers, including the quality of services and of patient-provider interactions. Over the next three years, we will take a more focused look at the quality gaps for specific cancers using Cancer Care Ontario’s cancer data, analytic capabilities and clinical leadership including expert panels on the treatment of specific cancers (disease site groups) established through our Program in Evidence-Based Care.

Starting with colorectal cancer, Cancer Care Ontario will map out the patient journey for each cancer type and systematically measure the performance at every step. This knowledge will allow us to set priorities for action, develop improvement projects, and create tools to help patients, care providers and system planners. The Cancer Quality Council of Ontario will take a leadership role in bringing together healthcare providers, patient representatives, experts and decision-makers to design and execute a three-year work plan for improving the pathway for different types of cancer.

Information management and technology

To transform the cancer system and keep up with rapid changes and new demands for cancer care, Ontario needs to continue to build a robust information management infrastructure capable of supporting the entire cancer system—a system that improves quality, access and accountability while advancing innovation in patient engagement and self-care.

Cancer Care Ontario, together with provincial government, healthcare providers and planners, will enable the transformation of Ontario’s cancer system by supporting providers and patients every step of the way.

Using information management and technology, we will achieve the following specific outcomes:

• Comprehensive province-wide screening information to improve planning, funding, service delivery, and accountability
Automatic invitations, reminders and recalls to enable patient self-care for colorectal cancer screening

90% of chemotherapy ordered through computerized order entry system

Ontario is leading the way in Canada and internationally in creating information management systems that improve the safety and experience of cancer patients. Through the Cancer System Quality Index, created by Cancer Care Ontario in 2005, we have the unique ability to evaluate and report on how the cancer system is performing based on 30 measures that span the cancer journey.

Other notable examples of our accomplishments include the Interactive Symptom Assessment and Collection tool (see page 26), and the Computerized Physician Order Entry system (CPOE) – Cancer Care Ontario’s electronic drug ordering system for systemic therapy, which reduces prescribing errors and improves patients safety by, among other things, eliminating hard-to-read handwriting and flagging drug interactions. And through the Wait Times Information System Cancer Care Ontario operates as part of the province’s Wait Time Strategy, patients, providers and the public are able to monitor wait times for all cancer surgeries as well as other procedures.

Cancer Care Ontario has been a leader in using information management and technology to achieve better accountability and performance. However, we need to do more to harness the full potential of information management and technology to enhance the quality of Ontario’s cancer system. We also need to take better advantage of the Internet to engage patients, care providers, and the public. Building on our previous successes, Cancer Care Ontario will now focus on:

- Building cancer screening information infrastructure and tools to support patients and primary care practitioners, increasing participation in cancer screening and improving disease management
- Making diagnostic assessment more efficient and accessible through information management and technology
- Expanding and providing more accessible web-based information for patients about wait times and other aspects of cancer services so that they can better manage their own care
- Supporting the information needs of the Regional Cancer Programs within their Local Health Integration Networks
- Increasing the use of best practices and guidelines by Regional Cancer Programs through the use of electronic tools such as CPOE and ISAAC
- Providing online, on-demand access to cancer information to health professionals, patients and planners

“CPOE has been very beneficial for the Grand River Regional Cancer Centre. It has improved patient safety around chemotherapy orders, increased efficiency in ordering treatments, and allowed standardization of protocols among physicians. CPOE has become a seamless part of chemotherapy delivery at our centre.”

– Dr. Greg Knight
Medical Director of Systemic Therapy, Grand River Regional Cancer Centre
Goal n°6

**Strengthen Ontario’s ability to translate cancer research into improvements in cancer services and control**

Scientific research continues to be the engine that drives improvements in cancer prevention, detection and care when it is rapidly translated into the delivery of care. Today, cancer patients in Ontario live longer and enjoy a better quality of life because of advancements stemming from research. Recognizing the critical importance of research, Cancer Care Ontario will take steps to ensure that new knowledge that can reduce the burden of cancer is transferred as quickly and effectively as possible from research laboratories and into the cancer system.

Where are we now?

Ontario has established a tremendously strong cancer research environment that produces findings recognized at the highest levels of research in Canada and on the global stage. But much more needs to be done to ensure this strength in research is fully utilized to achieve the most advanced and effective cancer prevention and care system for Ontarians. As a step in this direction, Cancer Care Ontario has established a scientist network program that links researchers across Ontario, and supports their efforts to translate research findings into clinical practice, including clinical trials. The research networks focus on four important areas:

- **Cancer imaging** – The use of imaging technology such as magnetic resonance imaging (MRI), positron emission tomography (PET), computed tomography (CT), and
ultrasound to pinpoint cancers in the body and to monitor and understand their establishment, growth and spread.

- **Experimental therapeutics** – The development and eventual translation into clinical practice of therapeutic technologies for cancer, including new drugs and medical device-based treatments.

- **Patterns of cancer care** – Studying the ways in which cancer prevention, screening and care services are best delivered to the population to improve outcomes.

- **Population studies** – Studying large groups of people to understand the factors that influence the risk for getting cancer, the ways that cancer can be prevented or detected early, and factors that influence how cancer progresses and responds to treatment.

Cancer Care Ontario will help create a research environment that leads to the rapid translation of cancer research findings into care. In the next three years, we will:

- Further support the work of these scientist networks by developing a growing pool of researchers through a Cancer Care Ontario Research Chairs Program. Primarily aimed at bringing new researchers to Ontario, this program will help ensure that Ontario has a critical mass of scientists focused on the translation of research for the benefit of the cancer system and patients.

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**Cohort study to be the first of its kind in Canada**

Cancer Care Ontario and the Ontario Institute for Cancer Research are poised to launch the Ontario Cancer Cohort, a research project whose objective is to improve our understanding of the risk factors that lead to cancer and other chronic diseases.

“We will be enlisting the support of thousands of people across Ontario in a venture to unlock the causes of cancer and other diseases such as cardiovascular disease and diabetes,” says Dr. John McLaughlin, Vice President of Population Studies and Surveillance at Cancer Care Ontario and the project’s leader. “With the knowledge we gain through this process, we’ll be able to develop much more effective prevention and detection strategies than we have today.”

This bold research initiative – the first of its kind in Canada – will be established in 2008 and over the next three years will involve the first 50,000 participants. All told, more than 150,000 Ontarians aged 35 to 69 will be asked to participate in the study, which will involve ongoing tests, follow-up and health examinations for as long as 20 years, yielding an unprecedented wealth of new information about the health of Ontarians.

**150,000**

The number of Ontarians who will be asked to take part in the Ontario Cancer Cohort, a research project aimed at improving our understanding of the risk factors for cancer and other chronic diseases.
• Work in close partnership with the Ontario Institute for Cancer Research, through which the Ontario government has made a very significant new investment in cancer research. The Institute’s role will entail a major focus on discovery. Cancer Care Ontario will take a leading role in supporting studies of the causes, prevention and early detection of cancer, and of the cancer care delivery system, and will accelerate the application of proven prevention, detection and treatment methods in Ontario’s healthcare system. Both organizations will support translation of research findings into clinical practice through clinical trials.

ARCTIC project aims to put colorectal cancer on ice

Two scientists from Cancer Care Ontario and the Ontario Institute for Cancer Research are driving advances in the use of genetic analysis to identify individuals’ risks of developing colorectal cancer. Dr. Brent Zanke, a research scientist with Cancer Care Ontario, and Dr. Tom Hudson, a senior researcher at the Ontario Institute for Cancer Research, are the principal investigators for the Assessment of Risk in Colorectal Tumours in Canada, or ARCTIC for short. The project is being funded by a $10 million grant given by the federal government to Cancer Care Ontario.

“What we are proposing to do is to take cancer screening one step further,” says Dr. Zanke. “What if you could identify people who are at high genetic risk of developing cancer and then monitor them more closely, perhaps starting to screen them at age 40 instead of 50, and then screening them more frequently instead of every five or 10 years?”

Working with other scientists in Toronto and Montreal, Dr. Zanke and Dr. Hudson have developed a predictive test that screens for genetic markers for colorectal cancer. The test still needs to be validated – a process that could take some time – before it can be launched commercially, says Dr. Zanke.

“The true value of the test isn’t so much that it can tell you if your risk for colorectal cancer is 6% or 20%,” he says. “It’s what you’re going to do with that information that really counts.”

To view a more detailed version of this plan, visit www.oniotori cancerplan.on.ca
A targeted investment strategy 2008–2011

New improvement and innovations investments
Incremental base operating funds ($16M) and one-time funds ($116.4 M)
- Improve the patient experience across the continuum of care
  $4.5M
- Ensure timely access to effective diagnosis & high quality care
  $22.7M
- Reduce the impact of cancer through effective screening and earlier detection
  $105.2M

Volume investments
Incremental base operating funds ($258.2M) and one-time funds ($192.1M)
- Screening Volumes
  $47.4M
- Treatment volumes
  $197.9M
- Cancer drugs
  $205M

Capital investments in equipment
Total 3-year capital request for equipment by year ($66M)
- 2008–2009
  $27.5M
- 2010–2011
  $16.5M
- 2009–2010
  $22M

Note: It is not possible to project capital costs for new cancer centre projects, as costs are embedded in Infrastructure Ontario projects.
We will improve the performance of the cancer system by driving quality, accountability and innovation in all cancer-related services.