

**Cancer Imaging Program,
Cancer Care Ontario
*Strategic Directions***

**Timely Access to
Quality Imaging**

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Ontario

Cancer Care Ontario
Action Cancer Ontario

Message from Cancer Care Ontario

Cancer Care Ontario (CCO) is working in partnership with clinical and administrative leaders from across the province, medical associations, and the Ministry of Health and Long-Term Care to create a leading edge, evidence based cancer imaging program in Ontario. Cancer Imaging plays an important role at each stage of the cancer journey. Improving the quality of that journey with clinical imaging will further the overall goals of the Ontario Cancer Plan 2011-2015 (OCP III), and result in better outcomes, and improve the patient experience.

Thus, it is appropriate that Cancer Imaging is now included as one of CCO's 10 clinical programs. This document provides the historical context, strategic goals, and priority areas of the Cancer Imaging Program.

CCO is committed to establishing a strong collaborative process among all stakeholders and working with them for transformative change in cancer care and, in particular, cancer imaging. In this vein, we have recently held two-way discussions with our stakeholders. Together, we have established some modest next steps. We will evolve and consolidate our shared goals as we continue to work together.

Collectively, we have recognized the important role cancer imaging can play in meeting the broader cancer care system objectives, particularly in wait times, early diagnosis, and improved access. The optimal and appropriate use of clinical imaging will have a positive impact on patients and Ontario's health-care system.

This document is directed at all cancer imaging stakeholders: from radiologists to referring physicians, and from front-line technical staff to hospital administrators.

Please review this document and join the conversation.



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Imaging – Emergence in Cancer Care

For years, the focus of medical imaging was to refine techniques, generate better images and develop new technologies. Medical Imaging provided valuable static two-dimensional images of the normal and abnormal human body. In the past 30 years, the continuing evolution in imaging has seen it transition from static two-dimensional imaging to functional, three- and even four-dimensional imaging, and from gross images to cellular- and molecular- level images. With the development of tissue- or disease-specific contrast agents and techniques and advanced interventional procedures, imaging continues to change.

These new techniques enhance care in new ways – improving specificity of targeting, and/or providing minimally-invasive options to diagnose, guide, and treat patients.

The progression from analog to digital acquisition and display has enabled this evolution. Digital has transformed how medical imaging is captured, delivered, accessed, stored, and transmitted while providing images and reports that are instant, can be copied and recopied with no loss of quality, and can be saved in multiple locations.

The Cancer Journey

Better cancer services every step of the way



Imaging is a critical component of cancer care for Ontario patients. It touches patients at many stages in their cancer journey and has an important role in:

- ▶▶ Cancer screening and/or detection
- ▶▶ Diagnosis
- ▶▶ Guiding treatment
- ▶▶ Monitoring recurrence

Imaging also facilitates collaboration, which occurs as patients move from one point in their care to another. Managing these patient transitions and ensuring effective communication between the patient and the experts involved is thus essential for high-quality patient care.

The increasing role and demand for high-quality imaging and Ontario's changing demographics will continue to put pressure on service providers to provide timely, appropriate, high-quality care. To ensure Ontario can meet this growing demand, cancer imaging services must be treated as a strategic resource for all Ontarians and must receive adequate provincial-level focus in:

- ▶▶ Planning
- ▶▶ Capacity development
- ▶▶ Appropriate utilization
- ▶▶ Effective monitoring

Cancer Imaging at CCO

In 2009, CCO initiated the Cancer Imaging Program, which joined nine other clinical programs within CCO. The focus of the program has been to establish a dialogue with stakeholders and to work collaboratively with them to identify areas and opportunities for quality improvement.

The establishment of cancer imaging as a clinical program at CCO was driven by:

- ▶▶ The evolution of CCO's role since 2004 as an advisor to the provincial government
- ▶▶ The establishment of standards, evidence-based practice, and support for collaboration among stakeholders
- ▶▶ CCO's mandate to enhance the quality of cancer services
- ▶▶ The government's high priority concern around wait times for cancer services in Ontario, including wait times for imaging
- ▶▶ The lack of an effective mechanism for ongoing stakeholder dialogue and collaboration within cancer imaging services in Ontario
- ▶▶ The collective stakeholder desire to champion excellence in cancer imaging in Ontario

The Cancer Imaging Program has adopted CCO's guiding principles of:

- ▶▶ Transparency
- ▶▶ Equity
- ▶▶ Evidence-based
- ▶▶ Performance-oriented
- ▶▶ Active engagement
- ▶▶ Value for money

Quality Framework and Improvement Cycle

CCO has established a Quality Framework that includes eight dimensions of quality:

- ▶▶ Safe
- ▶▶ Effective
- ▶▶ Accessible
- ▶▶ Timely
- ▶▶ Responsive
- ▶▶ Patient-centred
- ▶▶ Efficient
- ▶▶ Equitable

Each of these dimensions plays a key role in guiding the initiatives we develop to improve the cancer system. These initiatives are implemented through a quality and performance improvement cycle with four key steps:

Information: The collection of system-level performance data and the development of quality indicators

Knowledge: The synthesis of data, evidence, and expert opinion into clear clinical and organizational guidance

Transfer: Knowledge transfer through a coordinated program of clinician engagement

Performance: A comprehensive system of performance management through the use of contractual agreements, financial incentives and public reporting.

Early Program Milestones

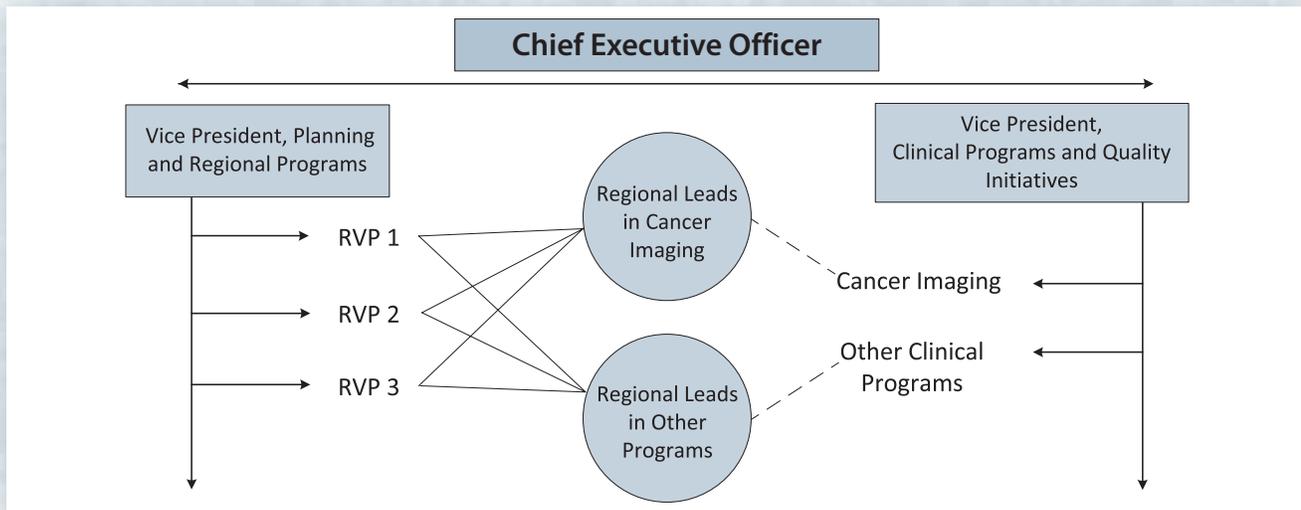
- ✓ Early-mid 2009 – CCO decides to establish Cancer Imaging Clinical Program
- ✓ August 2009 – Provincial Cancer Imaging Head selected
- ✓ March 2010 – First meeting of Regional Leads
- ✓ June 2010 – First Planning Day
- ✓ September 2010 – All Regional Leads in place

Organization of CCO's Cancer Imaging Program

The Cancer Imaging Program works collaboratively with CCO's nine other clinical programs under the leadership of the Provincial Vice Presidents. The Regional Cancer Imaging Leads are appointed by and report to the Regional Vice Presidents, Cancer Services (RVPs). The Imaging Leads ensure a broad outreach and a consistent approach to quality initiatives across Ontario. The Imaging leads also foster the development of a regional community to allow local issues to be identified and raised at the provincial level.

The following physicians are the Regional Cancer Imaging Leads for their respective LHIN:

- Dr. Brigitte Ala, Erie St. Clair • Dr. Donald Taves, South West • Dr. Eda Wallace, Waterloo Wellington
- Dr. Alan Bau, Central West/Mississauga Halton • Dr. Ronjon Raha (interim), Central West/Mississauga Halton
- Dr. Martin O'Malley, Toronto Central • Dr. Elaine Martinovic, Toronto Central • Dr. Lisa Thain, Central
- Dr. Gus Dotsikas, Central East • Dr. Annette McCallum, South East • Dr. Blair MacDonald, Champlain
- Dr. John Nadeau, North Simcoe Muskoka • Dr. Jason Ashley, North East • Dr. Neety Panu, North West



Strategic Goals and Priority Areas

In November, 2010, Cancer Care Ontario's third cancer plan, *Ontario Cancer Plan 2011-2015* (OCP III) was released. (<http://ocp.cancercare.on.ca/>) The plan focuses on cancer control from the perspective of the patient, and is driven by the need to ensure quality across the system.



Through a process of stakeholder engagement, the Cancer Imaging Program has set seven strategic goals to support the overall achievement of OCP III's Goals and Strategic Priorities. They are to:

- 1) Improve the quality of cancer imaging
- 2) Improve patient access to cancer imaging
- 3) Improve early detection and diagnosis
- 4) Integrate cancer imaging in the patient journey
- 5) Facilitate and accelerate evidence-based change
- 6) Improve communication both within the radiology community and between radiology and referring physicians/ front-line patient care staff
- 7) Optimize the safe utilization of cancer imaging

CCO identified early focus areas for the Cancer Imaging Program through a process of consultation with the Program's Regional Leads, CCO clinical programs, and – recognizing the interdisciplinary interactions of the cancer imaging team – other clinical experts involved in patient cancer care.

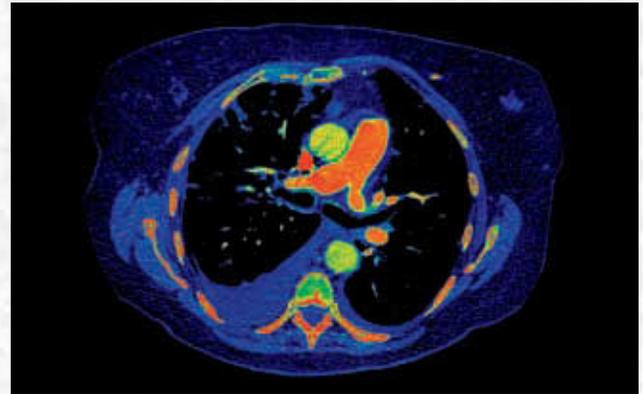
CCO surveyed clinical community perceptions of imaging access and concerns regarding imaging in summer, 2010. Cancer care providers across a wide range of expertise and all steps in the patient journey responded.

Four high-level areas of priority emerged. These have been further developed in the run-up to our second year as a program. They are:

- 1) **Developing and Fostering an Imaging Community of Practice**, to continue:
 - ▶▶ Engaging the radiology and referring-physician community
 - ▶▶ Ensuring issues impacting timely, high-quality cancer imaging are identified and addressed
- 2) **Imaging Appropriateness**: To move towards ensuring that Ontario's cancer patients receive the right imaging test at the right time

3) **Timely Access to Imaging**: To support and ensure timely, equitable access to quality imaging across the province. As a result of feedback, we have prioritized interventional radiology for oncologic procedures as an area of focus.

4) **Standardized/Synoptic Reporting**: To ensure key radiology report information is communicated to the appropriate experts, such as the referring physician to facilitate timely clinical decision-making and promote a consistent approach to the interpretation of diagnostic and prognostic factors.



Focus area Accomplishments and Next Steps:

Development and Fostering of an Imaging Community of Practice

Accomplishments:

- ▶▶ All regional Cancer Imaging Leads are in place and meeting monthly to build inter-region relationships and share information on regional activities and priorities
- ▶▶ Leads working within their regions on local and provincial cancer imaging issues and developing a network to continue/enhance dialogue

Next Steps:

- ▶▶ Continue development of an imaging community of practice to strengthen initial relationships
- ▶▶ Continue collaboration with other CCO program groups such as the Diagnostic Assessment Program, Prevention and Cancer Control to ensure ongoing identification of factors related to cancer imaging that impact patient care

Imaging Appropriateness

Accomplishments:

- ▶▶ Guidelines are being developed through the Program in Evidence-Based Care. These standards define, clarify and communicate the role of imaging for each major disease site. This is led by the Cancer Imaging Program and co-sponsored by Prevention and Cancer Control and CCO's disease site group for breast.
- ▶▶ Best-practice standards identified for imaging throughout the patient journey in lung and colorectal cancers by relating the Disease Pathway Maps to consolidated national and international guidelines.

Next Steps:

- ▶▶ Develop and implement a strategy to increase referring physician awareness of the most-appropriate imaging test for lung and colorectal cancer patients
- ▶▶ Develop – through evidence and consensus agreement – minimal technical standards for imaging for lung and colorectal cancer
- ▶▶ Assess current practice for appropriate imaging referrals for lung and colorectal cancer patients
- ▶▶ Continue the Imaging Appropriateness initiative for other disease sites

Timely Access to Imaging – Interventional Radiology for Oncology

Accomplishments:

- ▶▶ Identified priority procedures for follow-up (CT-guided lung biopsies, and peripherally inserted central catheters and port-a-caths) based on volume, impact on patient care, and perception of access issues
- ▶▶ Designed templates to obtain standardized, self-reported data for wait times, demand, and capacity. Regional Cancer Imaging Leads engaged Institutions and, data were provided on a voluntary basis. Data was obtained from institutions performing >10 CT-guided lung biopsies and inserting >50 peripherally inserted central catheters annually
- ▶▶ Identified system-level data related to volumes for these procedures

Next Steps:

- ▶▶ Identify contributing factors to wait times for priority interventional radiology procedures
- ▶▶ Develop metrics and indicators to assess wait times and access for oncologic interventional radiology procedures
- ▶▶ Develop prioritized action plan to reduce wait times, if present/relevant

Standardized/Synoptic Reporting

Accomplishments:

- ▶▶ Developed a rectal cancer MRI synoptic report, led by Dr. Erin Kennedy and jointly funded by CCO and the Canadian Cancer Society through the Cancer Services Innovation Partnership. This initiative originated with the Colorectal Champions group, which is supported by CCO's Surgical Oncology Program. The Cancer Imaging Program has committed to championing the provincial implementation of the report.

Next Steps:

- ▶▶ Deploy provincially the synoptic report developed for rectal cancer MRI
- ▶▶ Investigate the expansion of synoptic reporting to other disease sites

Summary

In its early stages, the Cancer Imaging Program focused on engaging stakeholders to identify quality issues related to cancer imaging and to work towards the development of provincial strategies to address priority areas. This focus continues to ensure timely access to accurate diagnosis and safe, high-quality care – one of the goals of CCO's Ontario Cancer Plan.

With our Cancer Imaging Leads in place, regions have a direct contact to access information on the progress of each initiative and a conduit to provide feedback and input into the provincial agenda.

We are confident of our future and impatient for tomorrow. We encourage you to become involved by participating in CCO sponsored activities and by supporting and advising your regional leads..



Positron Emission Tomography (PET) Imaging in Ontario

In addition to the provincial program committee, consisting of regional leadership, the Cancer Imaging Program also is accountable for Cancer Care Ontario's Evidence-Based Positron Emission Tomography (PET) Program.

PET is a type of nuclear medicine diagnostic imaging exam that reveals changes in biochemistry (e.g., sugar metabolism) before changes in anatomy are visible. This information may change how the illness is managed.

Ontario has nine, hospital-based scanners in five cities that perform PET scans as part of the provincial program. These scans are available to Ontario patients through four streams, depending on the clinical circumstances:

- 1) As an insured service, where there is sufficient evidence both that the PET scan will benefit the patient and that it has advantages over other tests.
- 2) Through a registry, which provides access to PET for emerging indications – those where there is some evidence of clinical utility, but insufficient evidence for the indication to be recommended as an insured service – while building evidence to enable a decision to be made.
- 3) As part of a clinical trial, conducted to test a hypothesis that the PET scan improves diagnosis and treatment decisions in cases where there is little or no published evidence.
- 4) Through the PET Access Program which considers, on a case-by-case basis, requests from physicians for the provision of PET scans for patients who may benefit, but who do not meet the eligibility criteria of the other streams.

In the fall of 2009, the Ministry of Health and Long-Term Care approached CCO about transitioning oversight of components of the PET program to CCO. Effective April 1, 2010, CCO is accountable for:

- ▶▶ A body of experts (the provincial PET Steering Committee) to advise on issues affecting access to PET in Ontario, including indications to be funded and the geographic location of services
- ▶▶ Evaluation of emerging indications in the Ontario setting through the PET registry
- ▶▶ Selected clinical trials guided by the PET Steering Committee
- ▶▶ A case-by-case review program (PET Access Program)
- ▶▶ Continuous evidence review to ensure the Ontario program remains aligned with emerging evidence on the clinical utility of PET
- ▶▶ Ongoing communications to promote equitable access to PET for Ontario patients

For more information on the indications for PET scanning, the Program, and Ontario's Evidence-Based approach, visit www.petscansontario.ca.

