

CANCER CARE'S RESPONSE TO QUESTIONS FROM THE AGENDA:

“CCO recognizes that there is a significant amount of evidence regarding the value of PET as part of a patient's cancer care.

In Ontario, access to PET scans is funded by different 'streams' according to the strength of the evidence. There are 23 indications (i.e., clinical scenarios for PET scanning), all supported by evidence to show there is a benefit. There are also 2 active provincial clinical trials to build evidence, and a case-by-case review program (“PET Access Program”). The indications are listed by funding stream on the PET Scans Ontario website:

<https://www.petscansontario.ca/cms/One.aspx?siteId=69866>.

i. 15 indications are funded as part of the Ontario Health Insurance Plan (OHIP), all supported by strong evidence of impact to patient management. There are an additional 4 indications that have been recommended by the PET Steering Committee for inclusion as part of OHIP; for these indications, access to PET scanning is being provided through other funding streams until the recommendations can be implemented.

ii. 6 indications are funded by CCO via PET Registries. These Registries provide access to PET scans for patients where there the evidence is weak but compelling, or where the impact to management in the Ontario setting is unclear.

All patients receive a PET scan as part of their care, and a small amount of data is collected and linked to administrative health data to inform implementation in Ontario.

Previous PET Registries have led to additions to OHIP, with an additional two of the current PET Registry indications awaiting implementation in the OHIP Schedule of Benefits. These recommendations are based on analysis of the Registry data and other scientific literature; CCO has kept these two Registries open to facilitate patient access to PET scanning until the indications become OHIP-covered.

iii. Provincially funded clinical trials provide access to patients while gathering robust data to inform the potential role of PET scanning.

Trials are recommended when little evidence exists, and/or clinical trial-type data is required to determine what the appropriate imaging should be (e.g., whether patient outcomes are improved if a PET scan replaces one or multiple other tests).

There are 2 provincial trials open to patient accrual.

iv. To ensure patients have access to PET scanning for any scenario where there may be benefit, CCO operates a case-by-case review program, “PET Access.”

If a patient does not meet criteria for any of the OHIP, PET Registry or Clinical Trial indications, their treating physician can submit an application to the PET Access Program.

Each application is reviewed by an external panel of three clinical experts, which includes both treating and imaging expertise.

An expedited process within the PET Access Program is also being used to facilitate patient access to PET scanning for 2 indications that have been recommended for inclusion as part of OHIP but not yet implemented.

The PET Steering Committee continually reviews emerging evidence. This includes data from randomized controlled trials, systematic reviews of the peer-reviewed literature as well as analysis of Ontario data.

CCO continues to work to be responsive to emerging indications for the use of PET, increasing patient access through the introduction of newly funded indications for Ontario patients.

All minutes from the PET Steering Committee meetings are publicly available, as are the Evidence Reviews:

i. <http://www.petscansontario.ca/about/stgcte/>

ii. https://www.cancercare.on.ca/toolbox/qualityguidelines/specialized_services/pet_recommendation_reports/.

Oversight for PET scanning in Ontario is shared between the Ministry of Health and Long-Term Care (for insured services) and Cancer Care Ontario (for uninsured services). Insured services comprise ~82% of all PET scans.

Volumes have more than doubled from 2010/11 to 2016/17 (6,647 → 13,554).

PET scan utilization by region, overall, and for some disease-sites, is publicly reported through the Cancer System Quality Index at www.csqi.on.ca. We leverage these and related data to predict future demands and, where PET is being underused, we work with clinical leaders across the province to raise awareness of referring physicians in the community.

Since 2011:

- i. There have been four additions to the Schedule of Benefits related to the use of PET in cases of esophageal cancer, metastatic squamous cell carcinoma, liver metastases from colorectal cancer, and nasopharyngeal carcinoma;
- ii. PET Registries, described above, have been opened for aggressive and indolent lymphoma staging, pediatric oncology, medically intractable epilepsy, and anal canal cancer. Two additional registries are planned (recurrent prostate cancer with PSMA-PET, and indications for Ga68-DOTATATE for neuroendocrine tumours), and;
- iii. Three provincial clinical trials have been launched to develop evidence on the use of PET for muscle-invasive bladder cancer, advanced breast cancer and cardiac sarcoidosis.

The PET Access Program continues to receive applications from referring physicians for any age or indication, so that there is a mechanism to consider any clinical condition. We work with relevant clinical disciplines to ensure the appropriate expertise contributes to each review.

Cancer Care Ontario's oversight for uninsured PET scanning in Ontario commenced in 2010.

Other than correspondence from Dr. Webster, CCO has not received correspondence critical of the Ontario program nor has there been published commentary that we are aware of since 2010.

- i. We are aware of an editorial that predates 2010 (JNM, 2005). The editorial discusses 'Health Technology Assessment' and is critical of Cancer Care Ontario and the Ministry of Health and Long-Term Care's use of the 2001 review performed by the Institute of Clinical Evaluative Sciences.

CCO was approached by the Canadian Association of Nuclear Medicine (CANM) to partner on a one-day symposium to be held prior to the CANM's annual scientific meeting in April 2017. The PET Symposium was a collaborative effort, with the agenda developed together with CCO and the CANM to include patient perspectives, and treating and imaging physician perspectives for each disease site of focus. Post-symposium feedback from event participants was extremely positive, with many highlighting their support for this multidisciplinary approach in the evaluation comments. As a result, the CANM continues to reach out to explore whether there may be opportunities for collaboration in the future, including CCO as part of the dialogue in the nuclear medicine community on the use of PET scanning.

PET is a vital part of patient care. As indicated above, CCO monitors utilization of PET scanning. This helps identify where outreach activities (e.g., discussions with regional clinical leadership and/or educational opportunities) may be helpful to encourage the use of PET scanning or to understand current barriers facing patients.

CCO regularly partners with relevant stakeholder groups to ensure there is appropriate expertise to help guide and support initiatives outside of adult oncology (e.g., the Pediatric Oncology Group of Ontario; CorHealth Ontario [previously Cardiac Care Network]).

CCO operates a Helpline to assist referring physicians if they have questions regarding processes for referrals, or to provide information to patients and interested parties on PET scanning in Ontario.

CCO has engaged with local physicians in the past to learn more about PET scanning needs in their communities. Physicians are encouraged to submit a referral to the PET Access Program if they feel their patients would benefit from receiving a PET scan.

PET and CT are both excellent imaging tools, which are used to diagnose and stage cancer patients. The value and timing of these imaging modalities may vary depending on the disease, indication, and the patient's status. Both tools must be used appropriately and in situations where the results of the test support high-quality patient care.

In many situations, CCO has developed guidelines to guide the work up of patients with suspected or diagnosed cancer. CCO incorporates evidence-based guidance as to which specific tests are recommended, at which time point during a patient's care. These disease pathway maps are developed with large, multidisciplinary expert panels and each draft pathway is distributed for external review and consultation prior to publication. Disease pathway management maps can be found here: <https://www.cancercare.on.ca/ocs/qpi/dispathmgmt/>.
i. E.g., Here is the lung cancer diagnosis map: <https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=349969>
For each indication, the PET Steering Committee – consulting with other clinical stakeholders – consider the role of PET as part of the patient pathway (e.g., are other tests beneficial prior to the PET scan, or can the PET scan replace other testing?).