

Simcoe Muskoka
Regional Cancer Program



Royal Victoria
Regional Health Centre

Cancer Care Ontario
Action Cancer Ontario

The Team

Lindsey Crawford
Regional Vice President

Dr. Bryn Pressnail
Clinical Program Director and
Clinical Staging Lead

Tracey Keighley-Clarke
Program Director
Simcoe Muskoka Regional
Cancer Program

Dr. Rob El-Maraghi
Chief of Oncology

Dr. Gerard Morton
Head, Radiation
Treatment Program

Dr. Sara Rask
Regional Quality Lead,
Systemic Treatment

Dr. Michael Anderson
Surgical Oncology Lead &
Chair Multidisciplinary
Cancer Conferences

Dr. John Nadeau
Regional Cancer
Imaging Lead

Dr. Marianne Belau
Regional Palliative
Care Lead

Dr. Russell Price
Regional Cancer
Pathology Lead

Dr. Danusia Gzik
Regional Primary
Care Lead

Dr. George Lougheed
Regional Breast Imaging
Lead

SIMCOE MUSKOKA REGIONAL CANCER PROGRAM e-newsletter

Message From the Regional Vice President



As Regional Vice President for the Simcoe Muskoka Regional Cancer Program (SMRCP), I am responsible for the quality and performance of cancer services in our region. Quality cancer care is described as safe, effective, patient-centered, timely, efficient, equitable and coordinated. Our regional cancer planning is almost complete and will provide us with direction and actions to decrease variation in our patients' experiences across the region. Look for the Regional Cancer Plan launch in June!

Patients and their family/caregivers are the real experts about the quality of the cancer system. They know first hand what works and what needs to be improved. The SMRCP has just established the Patient and Family Advisory Council (PFAC). This group is just a first step towards integrating patients and families into our teams to help monitor our cancer system performance and target improvements for better outcomes. **We encourage all patients to be active members of their health care team!**

From a health system perspective, cancer patients often receive a combination of treatments which may include surgery, radiation and systemic treatment such as chemotherapy. Cancer Care Ontario and the Cancer Quality Council of Ontario are making it easier to learn how Ontario's cancer system is doing by providing 'at-a-glance' views of Ontario's performance on the Cancer System Quality Index (CSQI). The Index also presents cancer system performance for each of Ontario's 14 Local Health Integration Networks (LHIN) including the North Simcoe Muskoka LHIN. The 9th annual public release of the Cancer System Quality Index will be held on May 15th, 2013 between 9:00 – 10:30 am. An event will be held at the SMRCP with a web-link available to any interested regional partners. The launch will provide an overview of the results of the 2013 CSQI release, www.csqi.on.ca, and have a panel discussion about "**Strengthening Integration for Seamless and Effective Patient Care**". I hope you can join us!

Lindsey Crawford
Regional Vice President

Time to Screen

Cancer Care Ontario (CCO) has recently launched the "*Time To Screen*" campaign; a call to action to encourage at least 100,000 additional Ontarians to participate in breast, cervical and colorectal screening over the next 6 months. Specifically, the Time to Screen campaign is encouraging:

- average risk men and women aged 50 to 74 to screen for colorectal cancer every 2 years using a Fecal Occult Blood Test
- average risk women aged 50 to 74 to screen for breast cancer every 2 years with mammography
- women aged 30 to 69 who are identified as high risk for breast cancer to have a mammogram and MRI every year
- women aged 21 to 70 to screen for cervical cancer every 3 years with a Pap test

Research shows that regularly screening for breast, cervical and colorectal cancer saves lives. **Visit the CCO website and send a friend or family member a CCO e-card to help save lives and spread the message about the importance of cancer screening.**

https://www.cancercare.on.ca/pcs/screening/time_to_screen/

And if you haven't done so already, take the Time to Screen tool at Ontario.ca/screenforlife to learn when you need to start cancer screening!



SIMCOE MUSKOKA REGIONAL CANCER PROGRAM e-newsletter



Spotlight on Community Partner



*Boozhoo, Aanii, Aisance-kwe dizhnaakaz, Niigig/Waabsheshe dodem.
G'chimnissing doonjibaa, Cancer Care Ontario/Anishinaabe O'Semmanookii
noongam.*

Hello, my name is Lisa Beedie. I am a proud band member of Beausoleil First Nation from the Otter/Martin clan. I work at Cancer Care Ontario within the Aboriginal Cancer Control Unit and my role is the Tobacco Wise Lead South.

The Aboriginal Tobacco Program (ATP) is part of the Prevention and Cancer Control Unit at Cancer Care Ontario, and it is an honour to be based out of the North Simcoe Muskoka Regional Cancer Program.

Within this position, it is my responsibility to bring a provincial lens to the prevention and reduction of commercial tobacco use within the First Nations, Inuit and Metis (FNIM) population. Additionally, I build capacity within Tobacco-Wise FNIM communities among both FNIM and non-FNIM policy makers, health care administrators and health and social care practitioners. My work includes education, awareness, partnership development and collaboration, as well as supporting the Regional Cancer Programs regarding health promotion within FNIM locally, regionally and provincially.

To understand our population, it is important to recognize that Ontario is home to a diverse group of FNIM peoples. There are more FNIM people in Ontario than in any other province in Canada; our population of 242, 490 accounts for 2% of the provincial population, and our rates of cancer are increasing.

Please feel free to contact me. I look forward to meeting with you. I can be reached at: Lisa.Beedie@cancercare.on.ca or 416.971.9800 ext. 2662

Quality in Radiation Oncology

'Personalized Cancer Medicine' is a buzzword often heard in health care these days. It refers to medical interventions tailored to an individual cancer patient. This is something that we have been doing in radiation oncology for a very long time. Each radiation plan is based on a computed tomography (CT) scan of the patient, where the radiation oncologist marks out the precise areas of disease requiring treatment (tumour(s) and/or suspected areas of microscopic cancer cells.) Therefore, radiation plans are not transferable between patients and tend to have an expiry date associated with the end of a course treatment. Any further therapy would require a new customized plan.

Modern technology in radiation oncology provides remarkable ways to deliver high doses of radiation to the cancer while sparing healthy tissues that lie in close proximity. However, these capabilities are accompanied by increased reliance on complex computer systems, presenting new challenges for the radiation team to ensure that *what you see* on the computer is actually *what you get* when the treatment is administered.

I'll use an example of a typical late stage lung cancer patient to illustrate these concepts and show the steps taken at the SMRCC to ensure the quality of our 'personalized radiation medicine' is first-rate.

Lung tumours tend to move while we breathe (okay, that may have sounded obvious.) However, what may surprise you is that the degree of motion is highly patient dependent. Therefore we use something called a 4 dimensional CT simulation scan to visualize the patient's internal anatomy *during* respiration (the 4th dimension is time!) This allows us to ensure that when the radiation oncologist marks out the tumour, they've captured every position that tumour may be at any given time.

Education

LEAP—Learning Essential Approaches to Palliative and End-of-Life Care

Horseshoe Resort, Barrie
April 26 and April 27, 2013
[click here](#) to register or for more information go to www.palliativecarenetworksm.ca

Webinar: Ethical Issues Palliative Care Rounds

May 14, 2013
12:00–13:00
Broadcast from RVH, RM 4141 or can be accessed from your own computer by [clicking here](#)

New Ideas, Trends and Advances in Palliative Care—The Human Side of Medicine

June 13, 2013
Collingwood, Ontario
[click here](#) to register or for more information go to www.palliativecarenetworksm.ca

SAVE THE DATE!

Updates in Oncology 2013
Tuesday, June 18, 2013
8:30—4:00
Orillia, Ontario

For registration and questions email: nsmsscreening@rvh.on.ca

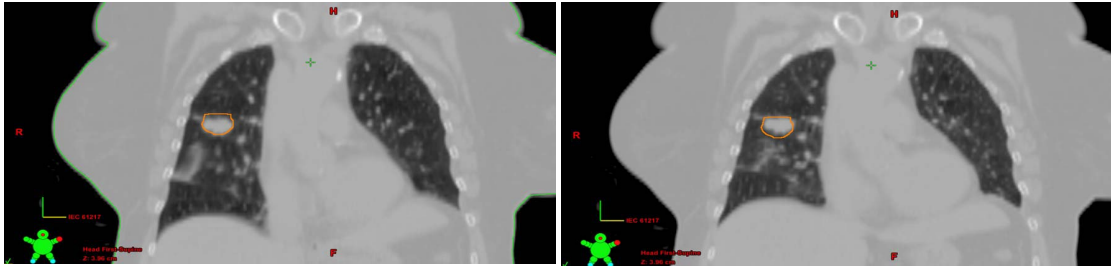


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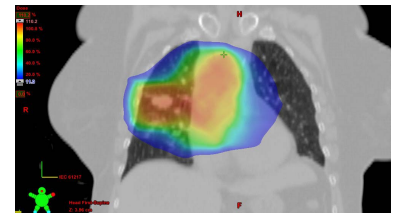


Quality in Radiation Oncology (Con't)

In the picture below, the left side shows a coronal view (from the front) through the patient when breathing in, while the picture on the right shows the same position while breathing out. The orange line encompasses all tumour positions during the breathing cycle, and serves as the basis for our 'target' for radiation therapy.



In this case, the radiation oncologist has identified additional areas where the likelihood of microscopic cancer cells is high (central lymph nodes) and a radiation therapist designed a customized plan, as shown to the right. The red indicates areas of high dose for the cancer. You can see how the plan is able to drop the radiation dose down (blue) as we move away from the target, so that we minimize collateral damage to nearby healthy organs like the heart and spinal cord.



Now, to make sure that *what you see is what you get*, we have two crucial steps:

First, a linear accelerator (linac) is being asked to perform a very complex and carefully coordinated sequence of motions and dose control in executing this plan. We need to make sure this is done correctly prior to applying the treatment to the patient. Therefore, we transfer the plan to a patient simulating device that is embedded with hundreds of tiny radiation detectors. A physics associate recalculates the dose on the device and perform measurements with the actual patient plan to verify that the complex patterns of radiation can be accurately administered by the linac.

Secondly, since radiation treatments are delivered in small daily portions over several weeks, we need to make sure we properly aim the radiation at the patient's tumour every day or all of our meticulous planning and quality assurance is wasted. To accomplish this, the linacs are equipped with an auxiliary CT-like scanning system called 'cone beam CT'. This system allows us to take 3 dimensional images of the patient's internal anatomy while they are on the linac treatment couch, just prior to turning the radiation treatment beam on. A radiation therapist carefully matches the patient anatomy to the plan, and makes adjustments until the tumour is lined up to within a millimeter or two (the lighter rectangular window in the picture on the left shows the cone beam CT superimposed over the planning CT). The treatment can then be confidently delivered.



It's the marriage of all of these complex sub systems and processes that has allowed us to take radiation oncology to the next level. For example, if we were not able to 'see' the tumour right before treatment using cone beam CT, then we would not be able to apply the necessary small margins in planning that allow to safely prescribe and deliver such large, effective doses of radiation to the cancer. However, as the complexity increases so do the demands on quality assurance for equipment, systems and processes. Everyone in the radiation team: physicists; physics associates; electronics technologists; clerks; nurses; radiation therapists and oncologists, play a key role in ensuring that our patients receive top quality radiation therapy every day at the SMRCC.

SIMCOE MUSKOKA REGIONAL CANCER PROGRAM e-newsletter

Quality in Radiation Oncology

Radiation therapy is an essential component of the treatment of many cancers. The Simcoe Muskoka Regional Cancer Centre (SMRCC) Radiation Treatment program has a comprehensive quality assurance (QA) program. In simple terms, our QA program consists of checks and balances which ensures the consistent, safe and optimal delivery of radiation therapy to achieve the best possible patient care and outcomes.

Why is this necessary? Basically, because the administration of radiation carries a significant potential risk of harm to the patient. A principle that guides us is to keep the exposure or dose to normal tissues as low as reasonably achievable while delivering the required dose to the necessary area of the body. This principle is known as the ALARA (as low as reasonably achievable) principle.

The development of an optimal treatment plan and the delivery of radiotherapy treatment is highly complex as it involves many steps and many individuals. Similarly, the QA processes are also highly complex. Each step ensures the safe delivery of the treatment.

The Radiation treatment program is part of a multidisciplinary cancer program. Our multidisciplinary team works in close co-operation and is comprised of:

- Radiation Oncologists
- Radiation Physicists
- Radiation Therapists
- Oncology Nurses
- Electronics Technologists
- Administrative Support Personnel (clerks, information technology, etc)

Examples of how quality is integrated within the program:

- Many second checks by Radiation Therapists and Physics throughout treatment planning and treatment delivery
- Multidisciplinary Radiation Quality Practice Committee
- Development of standard evidence-based disease site specific protocols in line with the Cancer Care Ontario standards and the Canadian Partnership for Quality Radiotherapy (CPQR) guidelines
- Mandatory educational qualifications for healthcare professionals
- Radiation safety program to meet legislated requirements
- Cancer Care Ontario targets and reporting (volumes, wait-times, incidents) and provincial committee participation (including Communities of Practice)
- Radiation Oncologist peer review of all treatment plans, as well as multidisciplinary review
- Incident learning team – analyzes treatment discrepancy reports for trends and recommends process improvements
- Performing daily, monthly and annual calibration of the treatment machines and equipment
- Data quality audits

The goal of the Radiation Treatment program is to maintain a safe environment and provide high quality care.

SAVE THE DATE!

SMRCP proudly present:



The hot topics in cancer care.
Tailored to your practice. Delivered to you.

**Tuesday, June 18th
8:30—4:00 pm
Casino Rama Conference Centre
Orillia, ON**

For registration and questions:
Email nsmsscreening@rvh.on.ca