Focus on:
Cancer System Quality Index

Cancer System Quality Index

The Cancer Quality Council of Ontario has reported on the performance of the cancer system in Ontario since 2005. The most recent Cancer System Quality Index (CSQI) was released in May and demonstrates progress across the spectrum of quality dimensions. In the North East these measures have provided guidance to quality improvement plans and projects in an effort to build on our successes and to address those areas where we are falling short. As an important provider of cancer services in the region I would encourage you to visit the full CSQI website at www.csqi.on.ca to learn more about our collective performance in the North East.

Mark Hartman
Regional Vice President, Northeast Cancer Centre

New Surgical Oncology Lead

Hello. I am excited to be taking on the role of Surgical Oncology Lead for the North East. I consider myself a true 'northern Ontario girl' having been raised in Thunder Bay, and living and practicing in North Bay since I finished my training. It is a great place to live. And, the medical community here is top notch. I’m glad to be part of it.

There are two quality improvement initiatives in the works. The first is looking at positive margin rates in prostate cancer. A chart review is underway in North Bay, Timmins, Sudbury and Sault St Marie. The urologists and pathologists are looking at factors that may be elevating the positive margin rate and ways in which this can be improved. The second project is looking at margins in rectal cancer. Total Mesorectal Excision (TME) is the technique used in rectal cancer to remove all the lymph nodes while preserving bladder and sexual function. It is well established that TME decreases loco-regional recurrence of rectal cancer. Drs. Caycedo and Snider will be reviewing charts and pathology reports to see how we’re doing and looking for any improvements that can be made.

Currently, I am working hard to get to know everyone and learn more about the programs that are in place and the areas where improvements can be made. If anyone has any suggestions or questions, feel free to email me at shegge@hsnsudbury.ca

Susan Hegge MD FRCPSC
The breast cancer mortality rate in Canada is the lowest it has been since 1950. The decline in female breast cancer mortality rates since the mid-1980s is likely the result of a combination of increased screening mammography and the use of more effective adjuvant therapies following breast cancer surgery\(^1\). A recent summary of evidence reported that using mammography to screen for breast cancer resulted in a 21% reduction in breast cancer mortality in women aged 50–69\(^2\). While more women are participating in breast cancer screening, rates have plateaued over the last years and still fall short of the national target of 70%. Ideally, 100% of screening should take place within an organized screening program, such as the Ontario Breast Screening Program (OBSP) to receive the full benefit of quality assurance, patient invitation, reminders and recall. North East Ontario reported the largest proportion of total screening that took place through the OBSP, at 88%, compared to 46% in Ontario.

### TABLE 1: Percentage of screen eligible women (ages 50-69) who received a screening mammogram within 2009-10 by OBSP and non-OBSP centres in North East Ontario and Ontario\(^3\).

<table>
<thead>
<tr>
<th></th>
<th>North East Ontario</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Screening Participation Rate (%)</td>
<td>OBSP</td>
<td>Non-OBSP</td>
</tr>
<tr>
<td></td>
<td>58.3%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

The cervical cancer mortality rate in Canada continues to decline. This is largely due to the widespread, regular screening with the Pap test. It is anticipated that immunization with the Human Papillomavirus (HPV) vaccine will further reduce the incidence and mortality of cervical cancer, but not eliminate it; therefore cervical screening with the Pap test is still necessary\(^1\). The percentage of screen-eligible women aged 20–69 with at least one Pap test between 2008-2010 was 71.0% and 72.4% in North East Ontario and Ontario respectively. As part of Cancer Care Ontario’s Integrated Cancer Screening Strategy, the Ontario Cervical Screening Program (OCSP) is undergoing redevelopment. A population-based cancer screening registry will allow invitations and recalls to women who are due to be screened, notification to women of their screening test results, and development of mechanisms to ensure women with abnormal screening tests receive follow-up.

### UPDATED CERVICAL SCREENING GUIDELINES

The Ontario Cervical Screening Program has recently released updated guidelines\(^4\). Key recommendations for screening average risk, asymptomatic women using primary screening with Pap cytology testing are:

- **Age of Screening Initiation:** Cytology testing should commence at 21 years of age for sexually active women.
- **Screening Interval:** Women should be screened every three years
- **Age of Screening Cessation:** Screening may be discontinued after age 70 if there is an adequate negative cytology screening history in the previous 10 years (i.e. 3 negative cytology tests)

\(^1\) Canadian Cancer Society’s Steering Committee on Cancer Statistics. Canadian Cancer Statistics 2012. Toronto, ON: Canadian Cancer Society; 2012


\(^3\) CSQI 2012 www.csqi.on.ca (accessed May 16, 2012)

The burden of colorectal cancer (CRC) in North East Ontario is high. In Ontario, CRC is the third most common cancer diagnosed and the second leading cause of cancer deaths, after lung cancer. North East Ontario has amongst the highest CRC incidence and mortality rates in the province. Regular screening has been shown to reduce CRC deaths, yet screening rates are low.

### TABLE 2: Age-standardized Colorectal Cancer incidence and mortality rates: North East LHIN vs. Ontario (2007)\(^1\)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Incidence Rate</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>North East</td>
<td>Ontario</td>
</tr>
<tr>
<td>Male</td>
<td>70.7%</td>
<td>58.5%</td>
</tr>
<tr>
<td>Female</td>
<td>45.2%</td>
<td>40.4%</td>
</tr>
</tbody>
</table>

Regular screening using a fecal occult blood test (FOBT) for individuals aged 50 and older, followed by a colonoscopy for those with an abnormal FOBT, can reduce deaths from colorectal cancer by ~ 16%\(^2\). Strong evidence is emerging for the use of flexible sigmoidoscopy to screen for CRC as it has been shown to reduce death from CRC\(^3\). People may undergo colonoscopy for many reasons – for screening if they are at increased risk, as follow-up to a positive FOBT, to investigate symptoms, and for surveillance if they have had colorectal cancer or other diseases. Some average risk people may also choose to be screened using colonoscopy instead of FOBT. Taking the above into account, the CSQI 2012 reported whether Ontarians are up-to-date with colorectal tests. Reported in this fashion, just over half of Ontarians aged 50-74 were up-to-date with colorectal tests. More importantly, this means that just under half of Ontarians aged 50-74 still need to be screened for CRC to realize the full benefit of mortality reduction from screening.

### TABLE 3: Up-to-date with Colorectal Tests: North East LHIN vs. Ontario in 2009-2010\(^4\)

<table>
<thead>
<tr>
<th>% of men and women of screen-eligible age (50-74) who have completed:</th>
<th>North East</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>a FOBT in a 2 year interval (2009-2010)</td>
<td>25.0%</td>
<td>27.4%</td>
</tr>
<tr>
<td>at least one of FOBT in previous 2 years, flexible sigmoidoscopy in previous 5 years or colonoscopy in the previous 10 years (2010)</td>
<td>53.7%</td>
<td>53.3%</td>
</tr>
</tbody>
</table>

To assist primary care in increasing their CRC screening rates, Cancer Care Ontario (CCO) distributed ColonCancerCheck Screening Activity Reports (CCC SAR) to over 7500 Ontario Patient Enrolment Model (PEM) family physicians. In summer 2012 CCO will be transitioning the distribution of the CCC SAR to a secure electronic format. The CCC SAR provides a detailed review of colorectal screening activities for enrolled patients, including FOBT and colonoscopy data. The electronic version of the report offers an interactive search feature and the ability to sort data and customizes how to view the information contained within it. The new report will allow physicians to generate lists of the patients who require follow up. It also provides aggregate practice screening rates with average screening rates for patients enrolled with PEM family physicians in the Local Health Integration Network and across Ontario.

To access the report, a physician must register for ONE\(^5\)ID, eHealth Ontario’s identity and access management system. A registration drive to grant Patient Enrollment Model Physicians a ONE\(^5\)ID login is now under way. eHealth Ontario team members will be calling all physicians to book a registration appointment. In some larger practices with ten or more physicians, an office administrator will be trained to register the practice.

Questions about the registration process can be directed to: ONEIDBusinessSupport@ehealthontario.on.ca.

---

Radiation oncology treatment has always emphasized quality and safety. Recent rapid advancements in treatment planning and delivery have significant potential to improve outcomes for cancer patients.

What new treatments are available for patients in the North East? In the past, treatment planning was limited to simple field designs planned using a standard CT image. Currently at the Northeast Cancer Centre (NECC) and Algoma District Cancer Program (ADCP), radiation for many patients is planned utilizing Four Dimensional CT scans (4DCT). 4DCT provides 3D images of a tumour and its surrounding normal structures, and also captures the movement of the anatomy with respirations.

Treatment has also evolved from simple beam arrangements to Intensity-Modulated Radiotherapy Treatment (IMRT). IMRT delivers radiation more precisely to the tumor while relatively sparing the surrounding normal tissues. IMRT has been shown to minimize acute treatment-related morbidity, making dose escalation feasible which may ultimately improve local tumor control.

The CSQI reports Ontario Cancer Centres’ progress in the utilization of IMRT. The NECC and ADCP perform very favourably compared to Ontario rates for Head and Neck, Prostate and Breast cancer. In fact we are the only region of the province to achieve 100% utilization of IMRT in breast cancer treatment.

In addition to these advancements, we now have a cone beam CT incorporated into our treatment linear accelerators. This allows for daily CT imaging while the patient is positioned on the treatment table. Using specialized computer software, these images are compared to the images taken during the planning CT scan. Known as Image Guided Radiation Treatment (IGRT), this technology allows for any necessary adjustments to be made to the patient's position and/or radiation beams in order to more precisely target radiation at the tumour and avoid healthy surrounding tissue.

With these advancements, higher and more effective radiation doses can safely be delivered to tumours with fewer side effects compared with conventional radiotherapy techniques of the past. The ability to rapidly integrate these state of the art, highly effective technologies over the past 3 years, while maintaining rapid access to treatment for the people of North East Ontario has relied on a specially trained team including Radiation Oncologists, Medical Physicists, Dosimetrists, Radiation Therapists, and Radiation Nurses.

North East Oncology News is produced by the Editorial Advisory Board of the Northeast Cancer Centre
Editor: Mark Hartman
Assistant Editor: Dr. Amanda Hey
Advisory Board Members: Dr. J. Ashley, Dr. M. Bonin, Dr. M. Brigden, Dr. S. Hegge, Dr. A. Knight, Carol Mayer, Dr. J. Noble & Dr. S. Shehata
Production Coordinator: Merci Miron-Black
Production Assistant: Meghan Langemann

Questions or want to join our electronic distribution list?
Contact us at neoncologynews@hsnsudbury.ca

Available online at http://www.hsnsudbury.ca/NECCprimarycareresources