Use of Clinical Practice Guidelines for Cancer Surgery (Example: Colorectal Cancer)

Most patients receiving colorectal cancer surgery were treated according to current guideline.

What's new this year?
This report presents new data for the period of September to October 2006.

See table on next page.
Use of Clinical Practice Guidelines - colorectal cancer surgery

Percent of colorectal cancer resections with 12 or more lymph nodes reported, by LHIN, Sept 1 - Oct. 31, 2006

<table>
<thead>
<tr>
<th>LHINs/Regional Cancer Programs</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>77%</td>
</tr>
<tr>
<td>Erie St. Clair*</td>
<td>59%</td>
</tr>
<tr>
<td>South West</td>
<td>76%</td>
</tr>
<tr>
<td>Waterloo Wellington</td>
<td>75%</td>
</tr>
<tr>
<td>Hamilton-Niagara-Haldimand-Brim*</td>
<td>85%</td>
</tr>
<tr>
<td>Central West</td>
<td>57%</td>
</tr>
<tr>
<td>Mississauga Halton</td>
<td>81%</td>
</tr>
<tr>
<td>Toronto Central</td>
<td>83%</td>
</tr>
<tr>
<td>Central South</td>
<td>80%</td>
</tr>
<tr>
<td>Central East</td>
<td>80%</td>
</tr>
<tr>
<td>South East</td>
<td>73%</td>
</tr>
<tr>
<td>Champlain</td>
<td>76%</td>
</tr>
<tr>
<td>North Simcoe Muskoka*</td>
<td>94%</td>
</tr>
<tr>
<td>North East</td>
<td>73%</td>
</tr>
<tr>
<td>North West*</td>
<td>65%</td>
</tr>
</tbody>
</table>


Notes:
1. *Significantly different from the provincial average
What do the results show?

- 77% of colorectal cancer surgeries had 12 or more lymph nodes reported (per the provincial standard) between September and October 2006. This is a statistically significant improvement from 70% in 2005. Figure 1
- There was less variation in adherence rates among LHINs than in previous years, with results ranging from 57% to 94% (vs. 32% - 86% in 2005).
- Results for two of the LHINs were statistically significantly higher than the provincial average (Hamilton-Niagara-Haldimand-Brant and North Simcoe Muskoka), while results for three LHINs were statistically lower (Central West, Erie St. Clair and North West).
- Performance on this measure has consistently improved over the past
three years.

**Why is this important to patient care?**

- The U.S. National Cancer Institute, the American Joint Committee on Cancer and the International Union Against Cancer all recommend that, for adequate staging, at least 12 lymph nodes be removed and reported from patients having colon or rectum resection for cancer.\(^1\) The adequate removal of lymph nodes, and their subsequent reporting, is important for proper cancer staging and treatment.
- More accurate staging allows for better decision making for adjuvant therapy (supplemental treatment following cancer surgery) and has been shown to improve survival.\(^2\)
- It should be recognized that there are appropriate clinical situations that would prevent collection of 12 lymph nodes in some patients. Therefore reaching 100% for this measure is not expected.

**How does Ontario compare?**

- There are no current and comparable data from other jurisdictions.

**What is being done?**

- CCO is developing a colon and rectum cancer surgery and pathology guideline that will include a focus on lymph nodes and other colorectal surgical quality requirements (2007).
- Using regional- and hospital-level data on compliance with this guideline, local cancer surgery and pathology programs are making changes to their protocols and procedures and improving the indicator.
- CCO is providing tools and support to hospitals to improve their performance in this area.
- CCO's Surgical Oncology Program is supporting a colorectal cancer community of practice which encourages dissemination of best practice information regarding lymph node assessment and other quality improvements related to cancer care.

**Technical Information**

**Definitions**

- The number of nodes reported was identified by an experienced cancer pathology coder based upon a review of eligible pathology reports submitted to Cancer Care Ontario via the Pathology Information Management System. Eligible reports are from surgical resection of invasive carcinomas of the colon and rectum over a two-month period.
- This analysis focused on resections and did not include cytology.
biopsies, polypectomies, transanal excisions, or local excisions

Data Sources
- Cancer Care Ontario, Pathology Information Management System

Data Quality

Completeness
- From the total number of resection cases during the 2006 sample period, 772 reports were selected for review. The selection was based on the sample size needed to achieve a confidence interval of ± 10% for hospitals, ± 7% for LHINs and ± 2% for the province for pathology report completeness rates from September 1 to October 31, 2006.

Accuracy
- Comparisons between 2006 and 2005 and 2004 data for this indicator should be interpreted with caution:
  - The sample period differed for each of the three years: from June to August in 2004 and from April to September in 2005 and from September 1 to October 31 in 2006.
  - The sampling methodology was different in 2004 (convenience sample) than in 2005 and 2006 (random sample).
  - The sample sizes are: 418 reports in 2004, 1,431 reports in 2005 and 772 reports in 2006.

Notes