Use of Guidelines for Treatment of Stage 3 Colon Cancer

Most stage 3 colon cancer patients receiving chemotherapy at a cancer centre after surgery are treated according to the provincial guideline. Some care that varies from the guideline may be due to legitimate factors that cannot yet be accounted for given the data currently available.

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<th>Goal</th>
<th>As of this report</th>
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<td>Concordance with guidelines for stage 3 colon cancer</td>
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What's new this year?
The indicator is presented for the first time in CSQI 2007. It looks at all patients referred to a cancer centre with stage 3 colon cancer and measures the percent receiving guideline concordant treatment, non-guideline concordant treatment, or no treatment at all, within defined timeframes. This analysis includes only those patients referred to a cancer centre for which valid stage is available. As such, this is not a population-based measure.

See table next page.
What do the results show?

- The provincial guideline for Stage 3 colon cancer recommends 5-FU based chemotherapy after surgery. 96% of patients receiving chemotherapy in a cancer centre were treated with a 5-FU based drug regimen.
- The indicator shows that overall, 70% of patients receive adjuvant therapy within 90 days of resection, with 62% receiving the guideline concordant drug regimens at a cancer centre (6% received it outside the cancer centre where data available to CCO does not allow for identifying drug regimen).
• There was wide variation across cancer centres in the percent of referred patients receiving therapy within 90 days of surgery with the range from 46% to 91%.
• Non concordance with the guideline therapy does not necessarily mean inappropriate treatment. Many patients may not be fit for the guideline treatment due to age, poor performance status, or other conditions. Others may be on clinical trials and receiving different therapy than what is indicated in the guidelines. Oral chemotherapy drugs, such as Capecitabine, have strong evidentiary support and are being used increasingly yet are not well reported and may appear in this indicator as non concordant.
• The indicator does not measure the percent of all new incident cases with the given disease and stage in Ontario that receive therapy according to the guidelines. This is because stage data is available only for cases referred to a Regional Cancer Centre. This population level indicator will be feasible once valid stage data is available for all incident cases in Ontario.

Why is this important to patient care?
• Adherence to treatment guidelines is expected to lead to improved outcomes for patients.
• The volume of clinical research related to cancer care is enormous. Therefore, when reviewing such large amounts of research, it is difficult to find, integrate, and interpret the research, which is not organized in a way that easily supports individual and team decision-making. Clinical treatment guidelines are a way for a small group of experts to review all relevant data and to provide the benefit of this knowledge in an easy to use format for all practitioners.

How does Ontario compare?
• There are no readily available comparators for these measures.

What is being done?
• Cancer Care Ontario is supporting the development of communities of practice that will allow for the dissemination of best practices for quality indicators related to cancer care. Related initiatives include information and education strategies to improve compliance with guidelines, focusing on providing regional and hospital performance data to those who influence and effect positive changes in practice.
• CCO is holding regional cancer programs accountable for their performance on adhering to provincial clinical practice guidelines.
• CCO has launched an effort aimed at collecting valid and reliable stage data for 90% of all incident stageable cases in Ontario. This will greatly enhance the ability to produce meaningful stage based indicators.

Technical information
Definitions

Colon cancer chemotherapy:
• Calculations for each of the four segments in the Stack Bar Chart:
  o Denominator: Stage 3 Colon cancer cases under 75 years of age referred to an RCC following a resection (where the resection is done in 2005).
  o Numerator 1: Cases receiving 5-FU based adjuvant chemotherapy at the RCC within 90 days of resection
  o Numerator 2: Cases receiving non 5-FU based adjuvant chemotherapy at the RCC within 90 days of resection
  o Numerator 3: Cases receiving adjuvant chemotherapy elsewhere (a non RCC) within 90 days of resection (regimen unknown for these)
  o Numerator 4: Cases not receiving adjuvant chemotherapy within 90 days of resection
  o Note: Cases that received only palliative radio and/or chemotherapy within 90 days of resection were excluded from the denominator and all numerators.
• The 5-FU based guideline regimen may contain any combination of drugs with that includes 5-fluorouracil (including combinations with Leucovorin and Oxaliplatin).
• Only therapy started 90 days or sooner following resection is considered concordant.
• Cases 75 years of age and older are excluded from this analysis as they often have clinical conditions that render them unfit to receive the guideline therapy.

Data Sources
• Cancer Care Ontario, Activity Level Reporting
• Cancer Care Ontario. Ontario Cancer Registry
Data Quality

Completeness:

- The analyses were limited to the sub-set of the patients in the province for whom valid stage and chemotherapy data were available. No reliable data were available from Princess Margaret Hospital and Peel Regional Cancer Centre for the time periods included at the time of calculation.

Accuracy:

- The accuracy of these measures depends on accurate reporting of patient stage, treatments and participation in clinical trials. The results could be skewed depending on the accuracy with which each centre recorded these items. The accuracy of the data has not yet been fully audited.
- Some centres treated too few patients to support definitive comments on the appropriate use of these therapies. A total of 472 Stage 3 Colon cases and 495 Stage 2/3 Rectum cases were referred to an RCC following a 2005 resection for the indicated stage levels. The number of cases by centre ranged from 20 to 118 for Colon and from 13 to 104 for Rectum.
- It is not yet possible to determine if patients receiving care that is not concordant with CCO guidelines are getting appropriate care for specific clinical circumstances, participation in a clinical trial, or other factors.
- Comparisons between centres must be made with caution as there was no additional adjustment of the findings to account for possible differences in the patient populations between the centres, such as age, performance status, or other conditions.