Cancer Program
Practice Profiles (CP³R)
Stage III Colon Cancer

Improving the Quality of
Cancer Care at CoC-Approved
Cancer Programs
Registries as Tools To Assess the Quality of Cancer Care

- Chemotherapy in hospital-based registries is under-reported (Wingo et al, 2001)
- Cancer registries provide the infrastructure for collecting data on the quality of care (Malin et al, 2002)
- Enhanced data on ACT in population based registries could become a valuable source for monitoring the quality of care (Ayanian et al, 2003)
- Enhanced registry data could be a valuable component of population based data systems for assessing quality of care (Cress et al, 2003)
Criteria for Selecting Quality Care Measure

- Evidence based
- Commonly occurs in approved programs
- Logical to providers and programs
- Aspect of care that can be improved by providers and programs
- Evaluation from existing sources
Treatment Modality Reported for Stage III Colon Cancers: 1990 - 2002

5-Year Relative Survival Rates
- Surgery & ACT: 66.7%
- Surgery Alone: 50.5%

Legend:
- Surgery Alone
- Surgery & Chemo
- Surgery, Chemo & BRM
- Other Rx w/ or w/o Surgery
### Colon Cancer

#### Pathologic Stage

<table>
<thead>
<tr>
<th>Pathologic Stage</th>
<th>Adjuvant Therapy</th>
<th>Surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1-3, N1-2, M0</td>
<td>5-FU/leucovorin(^h) (category 1) or Capecitabine(^h) or FOLFOX(^h)</td>
<td>History and physical every 3 mo for 2 y, then every 6 mo for a total of 5 y. CEA(^i) every 3 mo for 2 y, then every 6 mo for a total of 5 y for T2 or greater lesions. CT may be considered for patients at high risk for recurrence. Colonoscopy(^a) in 1 y, repeat in 1 y if abnormal or at least every 2-3 y(^m) if negative for polyps. If no preoperative colonoscopy due to obstructing lesion, colonoscopy in 3-6 mo.</td>
</tr>
<tr>
<td>T4, N1-2, M0</td>
<td>5-FU/leucovorin(^h) (category 1) or Capecitabine(^h) or FOLFOX(^h) or 5-FU/leucovorin + RT(^h)(^j) (category 2B)</td>
<td>See Recurrence and Workup (COL-9)</td>
</tr>
</tbody>
</table>

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\(^a\) All patients with colon cancer should be counselled for family history. Patients with suspected hereditary non-polyposis colon cancer (HNPCC), familial adenomatous polyposis (FAP) and attenuated FAP see the NCCN Colorectal Screening Guidelines.

\(^b\) There are insufficient data to recommend the use of molecular markers to determine adjuvant therapy.

\(^c\) See Principles of Adjuvant Therapy (COL-D).

\(^d\) See Principles of Radiation Therapy (COL-E).


\(^f\) CT scan may be useful for patients at high risk for recurrence (eg, perineural or venous invasion of tumor or poorly differentiated tumors).

\(^g\) If patient potential candidate for further intervention.


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Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.
Design: Identifying Reported Stage III Colon Cancers

- Diagnosis Years: 1998 – 2002
- Number of eligible cases = 57,258
- Mean # cases per diagnosis year ≈ 11,900
- Number of CoC-Approved programs = 1,353
  Mean # of cases per program ≈ 10

Patients <70 years of age at diagnosis: 46.8%
Male patients: 47.4%
Mean age of patients: 67.2 (m), 70.3 (f)
### Design: Registry Codes Indicating Concordance

<table>
<thead>
<tr>
<th>FORDS Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Chemotherapy administered as first course therapy, but the type and number of agents is not documented in patient record.</td>
</tr>
<tr>
<td>02</td>
<td>Single-agent chemotherapy administered as first course therapy.</td>
</tr>
<tr>
<td>03</td>
<td>Multi-agent chemotherapy administered as first course therapy.</td>
</tr>
<tr>
<td>82</td>
<td>Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age).</td>
</tr>
<tr>
<td>85</td>
<td>Chemotherapy was not administered because the patient died prior to planned or recommended therapy.</td>
</tr>
<tr>
<td>86</td>
<td>Chemotherapy was not administered. It was recommended by the patient’s physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.</td>
</tr>
<tr>
<td>87</td>
<td>Chemotherapy was not administered. It was recommended by the patient’s physician, but this treatment was refused by the patient, a patient’s family member, or the patient’s guardian. The refusal was noted in patient record.</td>
</tr>
<tr>
<td>88</td>
<td>Chemotherapy was recommended, but it is unknown if it was administered.</td>
</tr>
</tbody>
</table>
Project Hypotheses

- $H_0$: Cancer registry treatment data are complete
- $H_0$: Surveyors reviewing the study at survey will not impact reporting and measurement
- $H_0$: No variation between CoC programs in regard to standards of care for cancer patients
Surveyor/Intervention Preparation

- Establish their role as a facilitator
- Complete evaluation of “intervention” within 2 weeks
- CDROM:
  - Copies of Background Presentations
  - PowerPoint Presentations
  - Surveyor Guidelines for Interacting with Cancer Programs
- One-on-One Primers with NCDB staff:
  - Every surveyor prior to their first presentation of the \( CP^3R \).
Please enter your User ID and Password.

User ID: 0000999
Password: ••••••
OK  Clear

Forgot your password? 

If you forgot your User ID, please contact CoC Director of Operations. 

To set up a Hint question, that will allow you to recover password if you forget.

Unauthorized use of this System is forbidden. Penalties will be taken against unauthorized users.

Activity Menu

- Facility and Staff Contact Information
  - Facility Search

- FIPS
  - Facility Information Profile System: Services and Resources
  - Facility Information Profile System: Facility Search
  - FIPS Training Guide

- American Cancer Society Hospital Locator

- NCDB Data Transmission
  - Submit/Resubmit Patient Level Data to the NCDB
  - Authorize Third Party Submission
  - History and Edits of Patient Level Data Submission to the NCDB

- NCDB Statistics
  - Diagnosis and Treatment Comparisons
  - Cancer Program Practice Profile Reports: Stage III Colon Cancer
# Ranking Table

**Stage III Colon Cancers by First Course Therapy**

NCDB Demo Facility - CA, Los Angeles, CA - 20000021

<table>
<thead>
<tr>
<th>COMPARISON GROUP</th>
<th>HOSPITALS IN GROUP</th>
<th>QUARTILE RANK</th>
<th>ORDINAL RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Surgery &amp; ACT</td>
<td>Surgery Alone</td>
</tr>
<tr>
<td>US</td>
<td>1353</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Category</td>
<td>319</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>State</td>
<td>73</td>
<td>1</td>
<td>4</td>
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<tr>
<td>ACS Division</td>
<td>121</td>
<td>1</td>
<td>4</td>
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</tbody>
</table>
## Hospital Comparison Table

### Stage III Colon Cancers by First Course Therapy

**NCDB Demo Facility - CA, Los Angeles, CA - 20000021**

<table>
<thead>
<tr>
<th>WHO?</th>
<th>SURGERY &amp; ACT</th>
<th></th>
<th>SURGERY ALONE</th>
<th></th>
<th>OTHER SPECIFIED Rx</th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cases</td>
<td>95% CI</td>
<td>cases</td>
<td>95% CI</td>
<td>cases</td>
<td>95% CI</td>
<td>cases</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>wt%</td>
<td>Lower</td>
<td>Upper</td>
<td>n</td>
<td>wt%</td>
<td>Lower</td>
</tr>
<tr>
<td><strong>My Hospital</strong></td>
<td>42</td>
<td>86.33</td>
<td>76.71</td>
<td>95.95</td>
<td>4</td>
<td>9.62</td>
<td>1.36</td>
</tr>
<tr>
<td><strong>Hosp. in My State</strong></td>
<td>2102</td>
<td>61.12</td>
<td>59.49</td>
<td>62.75</td>
<td>1252</td>
<td>36.69</td>
<td>35.08</td>
</tr>
<tr>
<td><strong>Hosp. in My ACS Div.</strong></td>
<td>3982</td>
<td>66.03</td>
<td>64.84</td>
<td>67.22</td>
<td>1913</td>
<td>31.55</td>
<td>30.38</td>
</tr>
<tr>
<td><strong>Hosp. in My Category</strong></td>
<td>10880</td>
<td>65.53</td>
<td>64.81</td>
<td>66.25</td>
<td>5204</td>
<td>30.68</td>
<td>29.98</td>
</tr>
<tr>
<td><strong>All Hosp. in US</strong></td>
<td>37231</td>
<td>65.91</td>
<td>65.52</td>
<td>66.30</td>
<td>17329</td>
<td>30.06</td>
<td>29.69</td>
</tr>
</tbody>
</table>

NCDB, CoC, ACoS. / Colon Cancer Reports v1.0 / January 26, 2005
## Case Reporting Table

**Reported Colon Cancers by Year and First Course Therapy**

**NCDB Demo Facility - CA, Los Angeles, CA - 20000021**

<table>
<thead>
<tr>
<th>Dx Year</th>
<th>REPORTED COLON CASES</th>
<th>REPORTED STAGE III CASES</th>
<th>FIRST COURSE THERAPY</th>
<th>STAGE III CASES OVER 70 YEARS OF AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>1998</td>
<td>29</td>
<td>7</td>
<td>24.14</td>
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<tr>
<td>1999</td>
<td>41</td>
<td>13</td>
<td>31.71</td>
<td>11</td>
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<td>2000</td>
<td>24</td>
<td>10</td>
<td>41.67</td>
<td>8</td>
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<tr>
<td>2001</td>
<td>32</td>
<td>9</td>
<td>28.13</td>
<td>9</td>
</tr>
<tr>
<td>2002</td>
<td>36</td>
<td>10</td>
<td>27.78</td>
<td>8</td>
</tr>
</tbody>
</table>

*Click a year to modify: [1998](#), [1999](#), [2000](#), [2001](#), [2002](#)*
### NCDB Demo Facility - CA, Los Angeles, CA

**Edit 2000 Data**


<table>
<thead>
<tr>
<th>Modify Record</th>
<th>Accession Number</th>
<th>Diag. Date</th>
<th>Sex</th>
<th>Birth Date</th>
<th>Surgery Of Primary Site</th>
<th>Chemotherapy</th>
<th>Immuno Therapy</th>
<th>Hormone Therapy</th>
<th>Radiation Therapy</th>
<th>Other Treatment</th>
<th>Censor This Case?</th>
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</thead>
<tbody>
<tr>
<td><strong>edit 1</strong></td>
<td>2000000007</td>
<td>8/11/2000</td>
<td>M</td>
<td>7/23/1938</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Move mouse pointer over codes for coding info. Click Submit button to replace current value(s).

**CHEMOTHERAPY:**

0 None, chemotherapy was not part of the planned first course of therapy; not customary therapy for this cancer.

1 Chemotherapy administered as first course therapy, but the type and number of agents is not documented in patient record.

2 Single-agent chemotherapy administered as first course therapy.

3 Multi-agent chemotherapy administered as first course therapy.

82 Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (i.e., comorbid conditions, advanced age).

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88 Chemotherapy was recommended, but it is unknown if it was administered.

99 It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

<table>
<thead>
<tr>
<th>edit 2</th>
<th>200000010</th>
<th>5/15/2000</th>
<th>M</th>
<th>10/21/1927</th>
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<tbody>
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<td>6/30/1949</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>edit 4</td>
<td>200000044</td>
<td>7/14/2000</td>
<td>M</td>
<td>11/3/1925</td>
<td>40</td>
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<td>0</td>
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<td>F</td>
<td>12/13/1930</td>
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<td>M</td>
<td>8/23/1934</td>
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<td>87</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Early Assessment of Local Registry Data Reconciliation Activity

Chemotherapy:
- 1324/1721 (77%) cases changed coded values:
  - “none” or “unknown” to either:
    - “administered” or “not administered for medical reasons”

  - (42%) Chemotherapy Administered
  - (28%) Not Administered: Comorbid Conditions (85% cases >75)
  - (11%) Not Administered: Patient Refused (60% cases >75)
  - (9%) Not Administered: Patient Died (66% cases followed <=2 months)
Survey Cycle / Evaluation Design

G1
G2
G3
G4
G5
G6

1st Assessment:
March 2006

2nd Assessment:
March 2007

3rd Assessment:
December 2009

Compare Impact Over All Groups

Surveyed
Not Surveyed

Concordant
Non-Concordant

2005  2006  2007  2008