April 2007 UPDATE

ASCO/NCCN Quality Measures: Breast and Colorectal Cancers
American Society of Clinical Oncology (ASCO)
National Comprehensive Cancer Network (NCCN)

Background
The ASCO/NCCN Quality Measures were built upon the quality measures developed for the ASCO’s National Initiative on Cancer Care Quality (NICCQ) and recommendations of the NCCN Breast Cancer, Colon Cancer, and Rectal Cancer Guidelines. Content and methodology panels were convened in a series of meetings to select a small number of measures for breast and colorectal cancers based on clinical impact, scientific acceptability, usefulness, potential for improvement, reliability and feasibility. Seven measures (three breast cancer, two rectal cancer, one colon cancer, and one colorectal cancer) were selected and specified.

Collaboration with the American College of Surgeon’s Commission on Cancer
Using separate processes and methodologies, the Commission on Cancer (CoC) of the American College of Surgeons (ACoS) developed a similar set of measures for breast and colorectal cancer and submitted them to the National Quality Forum (NQF) for endorsement as part of the NQF Cancer Project. Facilitated by the NQF, the ACoS, ASCO and NCCN agreed to synchronize their developed measures to ensure that a unified set were put forth to the public.

The measures presented in Table 1 and Table 2 below are common to ASCO/NCCN and CoC. The measures in Table 1 were endorsed by the NQF. The measure in Table 3 was developed and specified by ASCO and NCCN.

Measure Implementation
Please note that 100% compliance for each measure is not the expected outcome, given that patients may not receive recommended care for reasons such as refusal or contraindications to treatment, which are not currently captured as exclusions in this set of measures.

Next Steps
The measures will be updated regularly to reflect changes in their evidence base in consultation with the CoC. The measures are being tested in a variety of data sources, including ASCO’s Quality Oncology Practice Initiative (QOPI). The CoC is developing reporting templates for each of these measures using data reported by cancer registries from CoC-approved cancer programs (for more information, go to http://www.facs.org/cancer/ncdb/index.html).

Additional Information
For more information please contact:

NCCN
cancerqualitymeasures@nccn.org
215.690.0300

ASCO
qualitymeasures@asco.org
703.519.1449

Kristen McNiff, MPH
215.690.0300

Copyright © 2006, 2007 American Society of Clinical Oncology and National Comprehensive Cancer Network, Inc. All rights reserved. No part of these measures may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission by ASCO and NCCN.
**TABLE 1**

**BREAST CANCER MEASURES**

Through a collaborative process, ASCO, NCCN and the Commission on Cancer (CoC) agreed upon common specifications of the measures below. These measures were submitted by the CoC to the National Quality Forum (NQF) and endorsed by the NQF in April 2007.

**CoC WEBPAGE:** [http://www.facs.org/cancer/ncdb/qualitymeasures.html](http://www.facs.org/cancer/ncdb/qualitymeasures.html)

**NQF WEBPAGE:** [www.qualityforum.org](http://www.qualityforum.org)

Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer.

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
</table>
| Hospital or systems-level performance | Accountability | • Women  
• Age 18-69 at time of diagnosis  
• Known or assumed first or only cancer diagnosis  
• Primary tumors of the breast  
• Epithelial malignancy only  
• AJCC Stage I, II, or III  
• Surgically treated by breast conservation surgery (surgical excision less than mastectomy)  
• All or part of first course of treatment performed at the reporting facility  
• Known to be alive within 1 year (365 days) of diagnosis | Radiation therapy to the breast initiated within 1 year (365 days) of date of diagnosis |

**Evidence**

NICCQ Measure: BR-2C2a. [http://www.jco.org/cgi/content/abstract/24/4/626](http://www.jco.org/cgi/content/abstract/24/4/626)  

NCCN Guideline Recommendations v2.2006  

BINV-2. Recommends radiation therapy for patients receiving BCS.

Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1c, or Stage II or III hormone receptor negative breast cancer.

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
</table>
| Hospital or systems-level performance | Accountability | • Women  
• Age 18-69 at time of diagnosis  
• Known or assumed first or only cancer diagnosis  
• Primary tumors of the breast  
• Epithelial malignancy only  
• AJCC T1c, or Stage II or III  
• Primary tumor is estrogen receptor negative and progesterone receptor negative  
• All or part of first course of treatment performed at the reporting facility  
• Known to be alive within 4 months (120 days) of diagnosis | Consideration or administration of multi-agent chemotherapy initiated within 4 months (120 days) of date of diagnosis |

**Evidence**

NICCQ Measure: BR-2B3. [http://www.jco.org/cgi/content/abstract/24/4/626](http://www.jco.org/cgi/content/abstract/24/4/626)  

NCCN Guideline Recommendations v2.2006  

BINV-4, 7-8. Recommends adjuvant chemotherapy for patients with ER and PR negative tumors.
**Tamoxifen or third generation aromatase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1c or Stage II or III hormone receptor positive breast cancer.**

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
</table>
| Hospital or systems-level performance | Accountability | • Women  
• Age >=18 at time of diagnosis  
• Known or assumed first or only cancer diagnosis  
• Epithelial malignancy only  
• AJCC T1c, or Stage II or III  
• Primary tumor is estrogen receptor positive or progesterone receptor positive  
• All or part of first course of treatment performed at the reporting facility  
• Known to be alive within 1 year (365 days) of diagnosis | Consideration or administration of tamoxifen or third generation aromatase inhibitor initiated within 1 year (365 days) of date of diagnosis |

**Evidence**

NICCQ Measure: BR-2B1. [http://www.jco.org/cgi/content/abstract/24/4/626](http://www.jco.org/cgi/content/abstract/24/4/626)

NCCN Guideline Recommendations v2.2006

BINV-5, 6 and 9 and BINV-E. Recommends hormonal therapy for patients with tumors > 0.5 cm or with positive lymph nodes and positive ER and/or PR receptors. NCCN recommends the use of aromatase inhibitors for post-menopausal patients only. NCCN does not differentiate between patients who have or have not been taking tamoxifen for risk reduction.

**Colon Cancer Measures**

Through a collaborative process, ASCO, NCCN and the Commission on Cancer (CoC) agreed upon common specifications of the measures below. The measures were submitted by the CoC to the National Quality Forum (NQF) and endorsed by the NQF in April 2007.


NQF Webpage: [www.qualityforum.org](http://www.qualityforum.org)

Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer.

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
</table>
| Hospital or systems-level performance | Accountability | • Age 18-79 at time of diagnosis  
• Known or assumed to be first or only cancer diagnosis  
• Primary tumors of the colon  
• Epithelial malignancy only  
• AJCC Stage III  
• All or part of first course of treatment performed at the reporting facility  
• Known to be alive within 4 months (120 days) of diagnosis | Consideration or administration of chemotherapy initiated within 4 months (120 days) of date of diagnosis |

**Evidence**

NICCQ Measure: CO-2B3a, Combined CO-2B1a and CO-2B1b. [http://www.jco.org/cgi/content/abstract/24/4/626](http://www.jco.org/cgi/content/abstract/24/4/626)

NCCN Guideline Recommendations v2.2006

COL-4: T3-4, N1-2, M0 patients should receive adjuvant chemotherapy.
At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
</table>
| Hospital or systems-level performance | Quality Improvement | - Age >=18 at time of diagnosis  
- Known or assumed to be first or only cancer diagnosis  
- Primary tumors of the colon  
- Epithelial malignancy only  
- AJCC Stage I, II, or III  
- Surgical resection performed at the reporting facility                                                                                     | >=12 regional lymph nodes pathologically examined                        |

Evidence
NCCQ Measure: CO-2A8. [http://www.jco.org/cgi/content/abstract/24/4/626](http://www.jco.org/cgi/content/abstract/24/4/626)

NCCN Guideline Recommendations v2.2006
COL-2: Appropriate colon cancer surgery - colectomy with en bloc removal of regional lymph nodes. AND  
COL-A: AJCC and CAP recommend examination of a minimum of 12 lymph nodes to accurately identify stage II colorectal cancers.  
REC-A: Biopsy or remove clinically suspicious nodes beyond the field of resection if possible. Extended resection not indicated in the absence of clinically suspected nodes.

### Table 2.

**COLORECTAL CANCER MEASURE**
THROUGH A COLLABORATIVE PROCESS, ASCO, NCCN AND THE COMMISSION ON CANCER (CoC) AGREED UPON COMMON SPECIFICATIONS OF THE MEASURE BELOW.

Radiation therapy is considered or administered within 6 months (180 days) of diagnosis for patients under the age of 80 with clinical or pathologic AJCC T4N0M0 or Stage III receiving surgical resection for rectal cancer.

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
</table>
| Hospital or systems-level performance | Surveillance | - Age 18-79 at time of diagnosis  
- Known or assumed to be first or only cancer diagnosis  
- Primary tumors of the rectum  
- Epithelial malignancy only  
- AJCC clinical or pathologic AJCC T4N0M0 or Stage III  
- All or part of first course of treatment performed at the reporting facility  
- Known to be alive within 6 months (180 days) of diagnosis                                                                                   | Consideration or administration of radiation therapy initiated within 6 months (180 days) of date of diagnosis |

Evidence
NCCQ Measure: CO-2C1a. [http://www.jco.org/cgi/content/abstract/24/4/626](http://www.jco.org/cgi/content/abstract/24/4/626)

NCCN Guideline Recommendations v2.2006
REC-3/REC-B/REC-C: cT3, N0 or T any, N1-2 should receive neoadjuvant chemo/RT combination  
OR adjuvant chemotherapy +/- RT  
OR cT4 and/or locally unresectable should receive neoadjuvant chemo/RT combination
**TABLE 3.**

**RECTAL CANCER MEASURE**

The measure below was developed and specified by ASCO and NCCN.

Postoperative adjuvant chemotherapy is considered or administered within 9 months (270 days) of diagnosis for patients under the age 80 years with AJCC stage II or stage III rectal cancer.

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
</table>
| Hospital or systems-level | Accountability | • Age 18-79 at time of diagnosis  
• Known or assumed to be first or only cancer diagnosis  
• Primary tumors of the rectum  
• Epithelial malignancy only  
• AJCC clinical or pathologic AJCC Stage II or Stage III  
• Known to be alive within 9 months (270 days) of diagnosis | Consideration or administration of postoperative adjuvant chemotherapy initiated within 9 months (270 days) of date of diagnosis |

**Evidence**

NICCQ Measure: CO-2B3a. [http://www.jco.org/cgi/content/abstract/24/4/626](http://www.jco.org/cgi/content/abstract/24/4/626)

NCCN Guideline Recommendations v2.2006

REC-3/REC-B: cT3, N0 or T any, N1-2 should receive neoadjuvant concurrent chemo/RT OR adjuvant chemotherapy. OR cT4 and/or locally unresectable should receive neoadjuvant concurrent chemo/RT combination. Postoperative therapy is indicated in all patients who receive preoperative therapy, regardless of the surgical pathology results.