Quality measures for breast and colorectal cancers

American Society of Clinical Oncology and National Comprehensive Cancer Network in collaboration with the American College of Surgeons Commission on Cancer

Formulated by the American Society of Clinical Oncology (ASCO) and the National Comprehensive Cancer Network (NCCN,) and endorsed by the National Quality Forum (NQF) in April 2007, these quality measures are the most current for breast and colorectal cancers.

The ASCO/NCCN quality measures were built upon measures developed for ASCO's National Initiative on Cancer Care Quality (http://jco.ascopubs.org/cgi/reprint/24/4/626) and recommendations of the NCCN Breast Cancer, Colon Cancer, and Rectal Cancer Guidelines (http://www.nccn.org). 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.

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.

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.

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. 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 www.facs.org/cancer/ncdb/index.html.

Additional Information

For more information please contact:

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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

NQF WEBPAGE: 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.

Application	Type	Denominator	Numerator
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	Radiation therapy to the breast initiated within 1 year (365 days) of date of diagnosis

		• Known to be alive within 1 year (365 days) of diagnosis	

Evidence

NICCQ Measure: BR-2C2a. 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.

Application	Type	Denominator	Numerator
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	Consideration or administration of multi-agent chemotherapy initiated within 4 months (120 days) of date of diagnosis

		days) of diagnosis	

Evidence

NICCQ Measure: BR-2B3. 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.

Application	Type	Denominator	Numerator
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

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 MEASURE

THROUGH A COLLABORATIVE PROCESS, ASCO, NCCN AND THE COMMISSION ON CANCER (COC) AGREED UPON COMMON SPECIFICATIONS OF THE MEASURE BELOW. THIS MEASURE WAS 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

NQF WEBPAGE: 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.

Application	Type	Denominator	Numerator
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	Consideration or administration of chemotherapy initiated within 4 months (120 days) of date of

		performed at the reporting facility • Known to be alive within 4 months (120 days) of diagnosis	diagnosis

Evidence

NICCQ Measure: CO-2B3a, Combined CO-2B1a and CO-2B1b.

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.

TABLE 2.			
COLORECTAL CANCER MEASURES THROUGH A COLLABORATIVE PROCESS, ASCO, NCCN AND THE COMMISSION ON CANCER (COC) AGREED UPON COMMON SPECIFICATIONS OF THE MEASURES BELOW.			
At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.			
Application	Type	Denominator	Numerator
Hospital or systems-level performance	Surveillance	• 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

NICCQ Measure: CO-2A8. 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.

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

Application	Type	Denominator	Numerator
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	Consideration or administration of radiation therapy initiated within 6 months (180 days) of date of diagnosis

		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	

Evidence

NICCQ Measure: CO-2C1a. 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.			
Application	Type	Denominator	Numerator
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 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

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.