NATIONAL QUALITY FORUM

Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the submitting standards web page.

NQF #: 0225 **NQF Project:** Cancer Project
(for Endorsement Maintenance Review) **Original Endorsement Date:** Mar 01, 2007 **Most Recent Endorsement Date:** Mar 01, 2007
BRIEF MEASURE INFORMATION
De.1 **Measure Title:** 0225: At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.
Co.1.1 **Measure Steward:** Commission on Cancer, American College of Surgeons
De.2 **Brief Description of Measure:** Percentage of patients >18yrs of age, who have primary colon tumors (epithelial malignancies only), experiencing their first diagnosis, at AJCC stage I, II or III who have at least 12 regional lymph nodes removed and pathologically examined for resected colon cancer.
2a1.1 **Numerator Statement:** >=12 regional lymph nodes pathologically examined.
2a1.4 **Denominator Statement:** Include, if all of the following characteristics are identified: 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
2a1.8 **Denominator Exclusions:** Exclude, if any of the following characteristics are identified: Age <18; not a first or only cancer diagnosis; non-epithelial and non-invasive tumors; metastatic disease (AJCC Stage IV); not treated surgically at the reporting facility
1.1 **Measure Type:** Process 2a1. 25-26 **Data Source:** Electronic Clinical Data : Registry, Paper Records 2a1.33 **Level of Analysis:** Facility 1.2-1.4 **Is this measure paired with another measure?** No De.3 **If included in a composite, please identify the composite measure** (*title and NQF number if endorsed*)**:**

STAFF NOTES (*issues or questions regarding any criteria*)
Comments on Conditions for Consideration:
Is the measure untested? Yes☐ No☐ If untested, explain how it meets criteria for consideration for time-limited endorsement:
1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (*check De.5*)**:** **5. Similar/related endorsed or submitted measures** (*check 5.1*)**:** **Other Criteria:**
Staff Reviewer Name(s):

1. IMPACT, OPPORTUITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT

Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See guidance on evidence.
Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. **(evaluation criteria)**

1a. High Impact: H☐ M☐ L☐ I ☐
(*The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.*)

De.4 **Subject/Topic Areas** *(Check all the areas that apply)*: Cancer, Cancer : Colorectal
De.5 **Cross Cutting Areas** (*Check all the areas that apply*): Care Coordination, Disparities

1a.1 **Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, Frequently performed procedure, Patient/societal consequences of poor quality

1a.2 **If "Other," please describe:**

1a.3 **Summary of Evidence of High Impact** *(Provide epidemiologic or resource use data)*:
The American College of Pathologists (1999) recommended that a minimum of 12 lymph nodes be examined to accurately identify AJCC Stage III colon cancer. The American Joint Committee on Cancer (5th edition) indicated that it was desirable to obtain at least 12 lymph nodes in radical colon resections (1997). The AJCC (6th edition) modifed this recommendation to obtain at least 7-14 lymph nodes, but included rectal resections among the procedures associated with this numeric recommendation. By its 7th edition, citing data from NCI/SEER, clearly noted the postitive relationship between the number of nodes pathologically examined and patient survival.

1a.4 **Citations for Evidence of High Impact cited in 1a.3:** 1. Compton CC, Fielding LP, Burgart LJ, et al. Prognostic factors in colorectal cancer. College of American Pathologists Consensus Statement 1999. Arch Pathol Lab Med 2000; 124:979-994. 2. Fleming ID, Cooper JS, Donald EH, et al (eds). AJCC Cancer Staging Manual, Fifth edtion. Lippincott-Raven 1997, p. 84. 3. Greene FL, Page DL, Fleming ID, et al (eds.) AJCC Cancer Staging Manual, Sixth edition. Spinger 2002, p. 114. 4. Edge SB, Byrd DR, Compton CC, et al (eds.) AJCC Cancer Staging Manual, Seventh edition. Spinger 2010, p. 153

1b. Opportunity for Improvement: H☐ M☐ L☐ I ☐
(*There is a demonstrated performance gap - variability or overall less than optimal performance*)

1b.1 **Briefly explain the benefits (improvements in quality) envisioned by use of this measure:**
Improved survival for patients with a greater number of lymph nodes resected ;greater accuracy of staging for patients, and consequently appropriate post-surgical care

1b.2 **Summary of Data Demonstrating Performance Gap** *(Variation or overall less than optimal performance across providers)*:
[*For Maintenance* – *Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.*]
There are a substancial number of reports in the literature that comment on the variation of pathological examinaiton of regional lymph nodes in resected colon cancer specimens.

1b.3 **Citations for Data on Performance Gap: [*For Maintenance* –** *Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*]
1. Chang GJ, Rodriguez-Bigas MA Skibber JM et al. Lymph node evaluation and survival after curative resection of colon cancer: systematic review. JNCI 2007; 99(6)L433-441. 2. Le Voyer TE, Sigurdson ER, Hamlin AL et al. Colon cancer survival is associated with increasing number of lymph nodes analyzed: a secondary survey of intergroup trial INT-0089. J Clin Oncol 2003; 21:2912-2919. 3. Sarli L, Bader G, Lusco D, et al. Number of lymph nodes examined and prognosis of TNM stage II colorectal cancer. European Journal of Cancer 2005; 41:272-279. 4. Swanson RS, Compton CC, Stewart AK, Bland KI. The prognosis of T3N0 clon cancer is dependent on the number of lymph nodes examined. Ann Surg Oncol 2003; 10(1):65-71.

1b.4 Summary of Data on Disparities by Population Group: [*For **Maintenance –Descriptive statistics for performance results for this measure by population group*]**
Data demonstrate variation based upon patient age, gender, tumor grade and anatomic location of the tumor in the colon.

1b.5 Citations for Data on Disparities Cited in 1b.4: [*For **Maintenance – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*]**
See 1b.3

1c. Evidence (*Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.*)
Is the measure focus a health outcome? Yes☐ No☐ If not a health outcome, rate the body of evidence.

Quantity: H☐ M☐ L☐ I☐ Quality: H☐ M☐ L☐ I☐ Consistency: H☐ M☐ L☐ I☐

Quantity	Quality	Consistency	Does the measure pass subcriterion1c?
M-H	M-H	M-H	**Yes**☐
L	M-H	M	**Yes**☐ IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise **No**☐
M-H	L	M-H	**Yes**☐ IF potential benefits to patients clearly outweigh potential harms: otherwise **No**☐
L-M-H	L-M-H	L	**No** ☐

Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service	**Does the measure pass subcriterion1c?** **Yes**☐ IF rationale supports relationship

1c.1 Structure-Process-Outcome Relationship *(Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process- health outcome; intermediate clinical outcome-health outcome)*:
Process

1c.2-3 Type of Evidence *(Check all that apply)*:
Clinical Practice Guideline, Systematic review of body of evidence (other than within guideline development)

1c.4 Directness of Evidence to the Specified Measure *(State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population)*:
Observational studies

1c.5 Quantity of Studies in the Body of Evidence *(Total number of studies, not articles)*: Multiple observational studies

1c.6 Quality of Body of Evidence (*Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events*): Medium/High level evidence

1c.7 Consistency of Results across Studies *(Summarize the consistency of the magnitude and direction of the effect):* Moderate to high level of consistency

1c.8 Net Benefit *(Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms)*:

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? Yes

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: National Comprehensive Cancer Network (NCCN)

1c.11 System Used for Grading the Body of Evidence: Other

1c.12 If other, identify and describe the grading scale with definitions: Level I, IIA, IIB, III

1c.13 Grade Assigned to the Body of Evidence: IIA

1c.14 Summary of Controversy/Contradictory Evidence: 1. There is a lack of consensus as to the minimal number of lymph nodes that necessarily have to be examined to acurately identify AJCC stage III colon cancer. 2. Studies using registry/administrative data have shown that the proportion of patients within a hospital who undergo an "adequate" lymph node examination may not be associated with a survival benefit at the hospital level.

1c.15 Citations for Evidence other than Guidelines*(Guidelines addressed below)*:
See 1b.3

1c.16 Quote verbatim, the specific guideline recommendation *(Including guideline # and/or page #)*:
For stage II (pN0) colon cancer, if less than 12 lymph nodes are initially identified, it is recommended that the pathologist go back to the specimen and resubmit more tissue of potential lymph nodes. If 12 lymph nodes are still not identified, a comment in the report should indicate that an extensive search for lymph nodes was undertaken.

1c.17 Clinical Practice Guideline Citation: NCCN Clinical Practice Guidelines - www.nccn.org

1c.18 National Guideline Clearinghouse or other URL:

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? Yes

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: National Comprehensive Cancer Network (NCCN)

1c.21 System Used for Grading the Strength of Guideline Recommendation: Other

1c.22 If other, identify and describe the grading scale with definitions: Level I, IIA, IIB, III

1c.23 Grade Assigned to the Recommendation: IIA

1c.24 Rationale for Using this Guideline Over Others: Broad recognition of the NCCN clinical guidelines as the "gold-standard".

Based on the NQF descriptions for rating the evidence, what was the developer's assessment of the quantity, quality, and consistency of the body of evidence?
1c.25 Quantity: High **1c.26** Quality: Moderate **1c.27** Consistency: High

Was the threshold criterion, *Importance to Measure and Report*, met?
(*1a & 1b must be rated moderate or high and 1c yes*) Yes☐ No☐
Provide rationale based on specific subcriteria:

For a new measure if the Committee votes NO, then STOP.
For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **(evaluation criteria)**

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See guidance on measure testing.

S.1 Measure Web Page *(In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for this measure can be obtained? Yes

S.2 If yes, provide web page URL: http://www.facs.org/cancer/qualitymeasures.html

2a. RELIABILITY. Precise Specifications and Reliability Testing: H☐ M☐ L☐ I ☐

2a1. Precise Measure Specifications. (*The measure specifications precise and unambiguous.*)

2a1.1 Numerator Statement *(Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome)*:
>=12 regional lymph nodes pathologically examined.

2a1.2 Numerator Time Window *(The time period in which the target process, condition, event, or outcome is eligible for inclusion)*:
Not applicable

2a1.3 Numerator Details *(All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*:
Regional Lymph Nodes Examined [NAACCR Item#830] = 12-90

2a1.4 Denominator Statement *(Brief, narrative description of the target population being measured)*:
Include, if all of the following characteristics are identified:
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

2a1.5 Target Population Category *(Check all the populations for which the measure is specified and tested if any)*: Adult/Elderly Care

2a1.6 Denominator Time Window *(The time period in which cases are eligible for inclusion)*:
Typically a 12 month, calendar year, time period

2a1.7 Denominator Details (*All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses)*:
Surgical Procedure of the Primary Site at This Facility [NAACCR Item#670] = 30-80

2a1.8 Denominator Exclusions *(Brief narrative description of exclusions from the target population)*:
Exclude, if any of the following characteristics are identified:
Age <18; not a first or only cancer diagnosis; non-epithelial and non-invasive tumors; metastatic disease (AJCC Stage IV); not treated surgically at the reporting facility

2a1.9 Denominator Exclusion Details *(All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses)*:
See: http://www.facs.org/cancer/ncdb/cp3rv2-measurespecs-1211.pdf

2a1.10 Stratification Details/Variables *(All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses)*:
No stratification applied

2a1.11 Risk Adjustment Type *(Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13)*: No risk adjustment or risk stratification **2a1.12 If "Other," please describe:**

2a1.13 Statistical Risk Model and Variables *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.)*:

2a1.14-16 Detailed Risk Model Available at Web page URL (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

2a1.17-18. Type of Score: Rate/proportion

2a1.19 Interpretation of Score *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)*: Better quality = Higher score

2a1.20 Calculation Algorithm/Measure Logic*(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.)*:

2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:

2a1.24 Sampling (Survey) Methodology. If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):
See: http://www.facs.org/cancer/ncdb/cp3rv2-measurespecs-1211.pdf

2a1.25 Data Source *(Check all the sources for which the measure is specified and tested*). If other, please describe:
Electronic Clinical Data : Registry, Paper Records

2a1.26 Data Source/Data Collection Instrument (*Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.*): Hospital cancer registry data, reported to the American College of Surgeons, Commission on Cancer, National Cancer Data Base

2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment: URL
http://www.naaccr.org/StandardsandRegistryOperations/VolumeII.aspx

2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:
URL
http://www.facs.org/cancer/coc/fordsmanual.html

2a1.33 Level of Analysis (*Check the levels of analysis for which the measure is specified and tested)*: Facility

2a1.34-35 Care Setting *(Check all the settings for which the measure is specified and tested)*: Hospital/Acute Care Facility

2a2. Reliability Testing. (*Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.*)

2a2.1 Data/Sample *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:
This measure has been implemented by the ACoS CoC since 2007 across all CoC-accredited cancer programs, and reports on approximately 37,800 cases per year to almost 1,400 cancer programs.

2a2.2 Analytic Method *(Describe method of reliability testing & rationale)*:
Cancer registry case records reported to the NCDB are reviewed annually, annualized hospital performance rates are provided back to CoC accredited cancer programs via the CoC´s Cancer Program Practice Profile Report (CP3R) using the denominator and numerator criteria documented in response to items 2a1.3 and 2a1.7, respectively, in the Specifications section. (http://www.facs.org/cancer/ncdb/cp3r.html)

2a2.3 Testing Results *(Reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:
The CoC as been able to track an upward trend in cancer program compliance with this measure. For cases diagnosed in 2008 the mean program performance rate is 80.4%, while the median was 83.3%. These rates continue to document an increase in aggregate performance rate over time. In 2007, the median performance rate was almost 79%, and mean performance rate was 75%. Analysis of data from 2009 indicate the mean program performance rate has increased to 81.5%, with a median value of 85.7%. Low performance outliers have been observed continuously over time. For example, in 2008 2.5% (n=34) of programs had a performance rate below 41%.

2b. VALIDITY. Validity, Testing, including all Threats to Validity: H☐ M☐ L☐ I ☐

2b1.1 Describe how the measure specifications *(measure focus, target population, and exclusions)* **are consistent with the evidence cited in support of the measure focus (***criterion 1c)* **and identify any differences from the evidence:**

2b2. Validity Testing. (*Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)*

2b2.1 Data/Sample *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:
See 2a2.1. This measure has been implemented across all CoC-accredited cancer programs and subject to local review by standing committies of these hospitals and site surveyors at the time of accreditation site visits.

2b2.2 Analytic Method *(Describe method of validity testing and rationale; if face validity, describe systematic assessment)*:
Performance rates are reviewed and discussed, randomly selected charts are reviewed by the site surveyor to ascertain the completness and validity of the data recorded in the local cancer registry and reported to the NCDB and included in the CP3R reporting application.

2b2.3 Testing Results *(Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment)*:
This measure has a high degree of user acceptability, the measure denominator and numerator are viewed by the clinical constituency within these cancer programs as valid and an appropriate reflection of the standard of care described in NCCN clinical guidelines.

POTENTIAL THREATS TO VALIDITY. (*All potential threats to validity were appropriately tested with adequate results.*)

2b3. Measure Exclusions. (*Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.*)

2b3.1 Data/Sample for analysis of exclusions *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:

2b3.2 Analytic Method (*Describe type of analysis and rationale for examining exclusions, including exclusion related to patient*

preference):

2b3.3 Results *(Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):*

2b4. Risk Adjustment Strategy. (*For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.*)

2b4.1 Data/Sample *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:

2b4.2 Analytic Method (*Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables)*:

2b4.3 Testing Results *(Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata)*:

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment:

2b5. Identification of Meaningful Differences in Performance. (*The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.*)

2b5.1 Data/Sample *(Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:

2b5.2 Analytic Method *(Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance)*:

2b5.3 Results *(Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*:

2b6. Comparability of Multiple Data Sources/Methods. (*If specified for more than one data source, the various approaches result in comparable scores.*)

2b6.1 Data/Sample *(Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:

2b6.2 Analytic Method *(Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure)*:

2b6.3 Testing Results *(Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted)*:

2c. Disparities in Care: H☐ M☐ L☐ I ☐ NA☐ (*If applicable, the measure specifications allow identification of disparities.*)

2c.1 If measure is stratified for disparities, provide stratified results *(Scores by stratified categories/cohorts)*:

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:
This measure was not specified to report stratified performance rates, however the CoC´s recently released (2011) "real clinical time" Rapid Quality Reporting System (RQRS) (http://www.facs.org/cancer/ncdb/rqrs.html) reports back measure-specific performance rates by a number of strata, eg. patient age, sex, ethnicity, insurance status, and area-based SES. RQRS hosts a prosective treatment alert system, and so performance rates are both high and consistant with clinical expectation, however room for potential improvment remains. In a comparative analysis of 16 NCI/NCCCP pilot sites using RQRS with a comparative group of 25 other CoC-accredited cancer programs also using RQRS revealed that at NCCCP cancer programs female patients more frequently received adjuvant chemotherapy (88.2%) than did males (86.3.9%). Comparative rates from the 25 non-NCCCP programs showed almost no difference in performance rates for this measure based upong patient sex. However, there was an almost 5% difference between the proportion of patients under the age of 50 having 12+ lymph nodes examined, compared to patients 70 or older (89.1% v 85.5%). Analysis from cases diagnosed 2008-2010.

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, *Scientific Acceptability of Measure Properties*, met?
(*Reliability and Validity must be rated moderate or high*) Yes☐ No☐
Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. **(evaluation criteria)**

C.1 Intended Purpose/ Use *(Check all the purposes and/or uses for which the measure is intended)*: Public Reporting, Quality Improvement (Internal to the specific organization), Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Regulatory and Accreditation Programs

3.1 Current Use *(Check all that apply; for any that are checked, provide the specific program information in the following questions)*: Regulatory and Accreditation Programs, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Quality Improvement (Internal to the specific organization)

3a. Usefulness for Public Reporting: H☐ M☐ L☐ I ☐
(*The measure is meaningful, understandable and useful for public reporting.*)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large *(If used in a public reporting program, provide name of program(s), locations, Web page URL(s)).* If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: **[*For Maintenance* –** *If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.***]**
This measure is currently in use by ACoS CoC, with performance rates reported back to >1,500 CoC accredited cancer programs since 2007. Over the past five years this measure has been made available primarily for the purposes of QI, however the CoC´s 2012 Program Standards (http://www.facs.org/cancer/coc/cocprogramstandards2012.pdf) now include expected a minimum performance rate for this measure to be achieved and documented, as well as a commendation recognition for centers that publicly report clinical performance metrics and outcomes. While the CoC anticipates that programs will increasingly self-select to publicly report their own performance rates within the context of the communities they serve, a national public reporting program will require an external mandate (i.e. Federal requirements).

3a.2.**Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting**. If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results**:** This measure has been the subject of much review in the literature (see responses regarding ´Importance´ above), which may limit this measure´s perceived appropriateness and utility for public reporting.

3.2 **Use for other Accountability Functions (payment, certification, accreditation).** If used in a public accountability program, provide name of program(s), locations, Web page URL(s)**:**

3b. Usefulness for Quality Improvement: H☐ M☐ L☐ I ☐
(*The measure is meaningful, understandable and useful for quality improvement.*)

3b.1. **Use in QI.** If used in quality improvement program, provide name of program(s), locations, Web page URL(s):
[*For Maintenance* – *If not used for QI, indicate the reasons and describe progress toward using performance results for improvement*].
See response to 3a.1 above.

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. If usefulness was demonstrated *(e.g., QI initiative),* describe the data, method and results:
See response to Q3a.2, above. This measure was endorsed by the NQF in 2007 as a QI measure, for the reasons acknowledged previously, and has been implemented by the CoC to allow cancer centers to assess and monitor local performance related to the coordination of care and clinical process between surgeons and pathologists which are potentially actionable.

Overall, to what extent was the criterion, *Usability*, met? H☐ M☐ L☐ I ☐
Provide rationale based on specific subcriteria:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. **(evaluation criteria)**

4a. Data Generated as a Byproduct of Care Processes: H☐ M☐ L☐ I ☐

4a.1-2 **How are the data elements needed to compute measure scores generated?** *(Check all that apply).*
Data used in the measure are**:**
Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

4b. Electronic Sources: H☐ M☐ L☐ I ☐

4b.1 **Are the data elements needed for the measure as specified available electronically** *(Elements that are needed to compute measure scores are in defined, computer-readable fields)***:** Some data elements are in electronic sources

4b.2 **If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources:** The ACoS/CoC implementation of this measure is framed around the feasibility of data collection and reporting considerations. Cancer registries in the United States depend on a multitude of information sources in order to completely abstract case records and be in compliance with State, Federal and private sector accreditation requirements. There is continuing work within the cancer registry and surveillance community, lead largely by the CDC/NPCR program, to help prepare the registries for the universal implementation of EHRs, but until such a time presents itself, registry data will depend upon some level of human review and intervention to ensure data are complete and accurately recorded.

4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H☐ M☐ L☐ I ☐

4c.1 **Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:**
This measure, as specified, is unlikely to be systematically susceptable to under-reporting due to the integral dependence of the measure upon information routinely documented and reported following pathologic examination of colon tissue specimens. The

CoC´s 2012 Program Standards (http://www.facs.org/cancer/coc/cocprogramstandards2012.pdf) now require direct review and oversight of this measure and the data supporting the denominator and numerator be monitiord by an attending physician (Cancer Liaison Physician, CLP) on staff at the center on a quarterly basis.

4d. Data Collection Strategy/Implementation: H☐ M☐ L☐ I ☐

A.2 **Please check if either of the following apply** (*regarding proprietary measures*)**:**
4d.1 **Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues** *(e.g., fees for use of proprietary measures)***:**
1) The infrastructure to monitor compliance with this measure has been in place since 2005 to assess and feed-back to the >1,500 Commission on Cancer accredited centers performance rates for this measure. CoC accredited cancer programs account for 70-80% of patients affected by this measure. This measure is currently reported to CoC accredited programs through the National Cancer Data Base (NCDB) using the Cancer Program Practice Profile Report (CP3R) web-based audit and feed-back reporting tool. The CP3R is generally described at: www.facs.org/cancer/ncdb/cp3roverview.pdf, and specifications for this measure are provided at: www.facs.org/cancer/ncdb/cp3rmeasurespecs.pdf. In addition, this measure is also reported to over 250 cancer programs participating in its "real clinical time" feedback reporting tool through its Rapid Quality Response System (RQRS). An overview of the RQRS is available at: www.facs.org/cancer/ncdb/qualitytools.html. Both of these reporting tools have been utilized in the cancer registry community and will not produce an undue burden on the data collection network. 2) The data for this measure are key elements already collected in all hospital registries. This measure has been reviewed using cancer registry data. The CoC data demonstrates variation in the measure. Registries have demonstrated the ability to identify gaps in data collection and to correctly identify therapy in the majority of cases. The measure is readily implemented.

Overall, to what extent was the criterion, *Feasibility*, met? H☐ M☐ L☐ I ☐
Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes☐ No☐
Rationale:

If the Committee votes No, STOP.
If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.

5. COMPARISON TO RELATED AND COMPETING MEASURES

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.

5.1 **If there are related measures *(either same measure focus or target population)* or competing measures *(both the same measure focus and same target population*), list the NQF # and title of all related and/or competing measures:**

5a. Harmonization

5a.1 **If this measure has EITHER the same measure focus OR the same target population as NQF-endorsed measure(s): Are the measure specifications completely harmonized?**

5a.2 **If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden:**

5b. Competing Measure(s)

5b.1 **If this measure has both the same measure focus and the same target population as NQF-endorsed measure(s): Describe why this measure is superior to competing measures** *(e.g., a more valid or efficient way to measure quality)***; OR**

provide a rationale for the additive value of endorsing an additional measure. *(Provide analyses when possible)*:

CONTACT INFORMATION

Co.1 **Measure Steward (Intellectual Property Owner):** Commission on Cancer, American College of Surgeons, 633 N Saint Clair Street, Chicago, Idaho, 60611-3211

Co.2 **Point of Contact:** Andrew, Stewart, MA, astewart@facs.org, 312-202-5285-

Co.3 **Measure Developer if different from Measure Steward:** Commission on Cancer, American College of Surgeons, 633 N Saint Clair Street, Chicago, Illinois, 60611-3211

Co.4 **Point of Contact:** Andrew, Stewart, MA, astewart@facs.org, 312-202-5285-

Co.5 **Submitter:** Andrew, Stewart, MA, astewart@facs.org, 312-202-5285-, Commission on Cancer, American College of Surgeons

Co.6 **Additional organizations that sponsored/participated in measure development:**

Co.7 **Public Contact:** Andrew, Stewart, MA, astewart@facs.org, 312-202-5285-, Commission on Cancer, American College of Surgeons

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 **Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.**

Christopher (Chris) Pezzi, MD, FACS (Abington Memorial Hospital, Abington PA); Lawrence Shulman, MD (Dana Farber Cancer Institute, Boston MA); Stephen Edge, MD, FACS (Roswell Park Cancer Institute, Buffalo NY); Richard Swanson, MD, FACS (Partners Health Care, Boston MA); Peter Enzinger, MD (Dana Farber Cancer Institute, Boston MA); Elin Sigurdson, MD, FACS (Fox Chase Cancer Center, Philadelphia PA); Mitchell Posner, MD, FACS (University of Chicago, Chicago IL); Anthony Robbins, MD, PhD (American Cancer Society)

This panel meets at least once a calendar quarter to review quality measures currently supported and implemented by the ACoS Commission on Caner and to invstigate and consider/review development of possible new measures.

Ad.2 **If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:**

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.3 **Year the measure was first released:** 2007
Ad.4 **Month and Year of most recent revision:** 06, 2007
Ad.5 **What is your frequency for review/update of this measure?** Annual
Ad.6 **When is the next scheduled review/update for this measure?** 05, 2012

Ad.7 **Copyright statement:**

Ad.8 **Disclaimers:**

Ad.9 **Additional Information/Comments:**

Date of Submission (*MM/DD/YY*): 10/03/2011