NQF #0391 Breast Cancer Resection Pathology Reporting- pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade

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.

<table>
<thead>
<tr>
<th>NQF #: 0391</th>
<th>NQF Project: Cancer Project</th>
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<tbody>
<tr>
<td>(for Endorsement Maintenance Review)</td>
<td></td>
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<tr>
<td>Original Endorsement Date: Jul 31, 2008</td>
<td>Most Recent Endorsement Date: Jul 31, 2008</td>
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</table>

BRIEF MEASURE INFORMATION

De.1 Measure Title: Breast Cancer Resection Pathology Reporting- pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade

Co.1.1 Measure Steward: American Medical Association - Physician Consortium for Performance Improvement

De.2 Brief Description of Measure: Percentage of breast cancer resection pathology reports that include the pT category (primary tumor), the pN category (regional lymph nodes) and the histologic grade.

2a1.1 Numerator Statement: Reports that include the pT category, the pN category and the histologic grade

2a1.4 Denominator Statement: All breast cancer resection pathology reports (excluding biopsies)

2a1.8 Denominator Exclusions: Documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade (eg, re-excision without residual tumor; non-carcinomas)

1.1 Measure Type: Process

2a1. 25-26 Data Source: Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry, Paper Records

2a1.33 Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team

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, OPPORTUNITY, 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.
**NQF #0391 Breast Cancer Resection Pathology Reporting - pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade**

### 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.)

### Subject/Topic Areas (Check all the areas that apply):
- Cancer
- Cancer: Breast

### Cross Cutting Areas (Check all the areas that apply):

#### 1a.1 Demonstrated High Impact Aspect of Healthcare:
Affects large numbers, A leading cause of morbidity/mortality, Severity of illness

#### 1a.2 If “Other,” please describe:

#### 1a.3 Summary of Evidence of High Impact:  
*Provide epidemiologic or resource use data:*

- The American Cancer Society’s most recent estimates for breast cancer in the United States are for 2011:
  - About 230,480 new cases of invasive breast cancer will be diagnosed in women.
  - About 57,650 new cases of carcinoma in situ (CIS) will be diagnosed (CIS is non-invasive and is the earliest form of breast cancer).
  - About 39,520 women will die from breast cancer

Breast cancer is the second leading cause of cancer death in women, exceeded only by lung cancer. The chance that breast cancer will be responsible for a woman’s death is about 1 in 36 (about 3%).

#### 1a.4 Citations for Evidence of High Impact cited in 1a.3:  

### 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:

A complete set of pathology descriptors is necessary for breast cancer management. This is so that the doctor can track the stages of the cancer. If a cancer resection pathology report is not complete this can lead to incorrect classification as well as delays in the treatment process. The evidence based checklist produced by The College of American Pathologists (CAP) contains essential pathologic parameters that are recommended to be included in cancer resection pathology reports.

#### 1b.2 Summary of Data Demonstrating Performance Gap:  
*Variation or overall less than optimal performance across providers:*

[For Maintenance - Description of the data or sample for measure results reported]

The CAP recently conducted a structured audit of breast cancer pathology report adequacy at 86 institutions. Overall, 32% of eligible reports were missing at least one of the ten CAP-recommended breast cancer elements.

CMS Physician Quality Reporting Initiative/System (PQRI/S)

This measure was used in the 2008 (claims), 2009 (claims and registry) and 2010 (claims and registry) CMS Physician Quality Reporting Initiative/System (PQRI/S) as #99 Breast Cancer Patients with a pT and pN category and histological grade. There is a gap in care as shown by this 2008 data; with 35.87% of patients reported on not receiving the optimal care.

- 10th percentile: 25.00%
- 25th percentile: 50.00%
- 50th percentile: 75.00%
- 75th percentile: 100.00%
- 90th percentile: 100.00%

#### 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


Confidential CMS PQRI 2008 Performance Information by Measure. Jan-Sept TAP file

1b.4 Summary of Data on Disparities by Population Group: [For Maintenance – Descriptive statistics for performance results for this measure by population group]
We are not aware of any publications/evidence outlining disparities in pathologic reporting however the National Cancer Institute and AHRQ’s National Healthcare Disparities Report has shown that disparities exist in cancer incidence and deaths by race, ethnicity and socioeconomic status.

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]


<table>
<thead>
<tr>
<th>Quantity</th>
<th>Quality</th>
<th>Consistency</th>
<th>Does the measure pass subcriterion 1c?</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-H</td>
<td>M-H</td>
<td>M-H</td>
<td>Yes</td>
</tr>
<tr>
<td>L</td>
<td>M-H</td>
<td>M</td>
<td>Yes [IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No]</td>
</tr>
<tr>
<td>M-H</td>
<td>L</td>
<td>M-H</td>
<td>Yes [IF potential benefits to patients clearly outweigh potential harms: otherwise No]</td>
</tr>
<tr>
<td>L-M-H</td>
<td>L-M-H</td>
<td>L</td>
<td>No</td>
</tr>
</tbody>
</table>

Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service

Does the measure pass subcriterion 1c?

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): Cancer pathology reports contain information which is critical for patient management and for cancer surveillance, resource planning, and quality purposes.

1c.2-3 Type of Evidence (Check all that apply):
Clinical Practice Guideline

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): The measure focus is on better classification of patients with breast cancer through pathology reporting.

1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): The description of evidence review in the guideline did not address the overall quantity of studies in the body of evidence. However, 457 articles are cited in NCCN’s breast cancer guideline’s reference section.
CAP Guidelines on Breast Cancer Protocol include 22 articles/studies in the References section.

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): The quality of the body of evidence supporting the guideline recommendation is summarized according to the NCCN categories of evidence and consensus as being based on “lower-level evidence”. Lower-level evidence is later described as evidence that may include non-randomized trials; case series; or when other data are lacking, the clinical experience of expert physicians.

1c.7 Consistency of Results across Studies (Summarize the consistency of the magnitude and direction of the effect): Although there is no explicit statement regarding the overall consistency of results across studies in the guidelines supporting the measures, the recommendation received uniform NCCN consensus that the intervention is appropriate.

1c.8 Net Benefit (Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms): A complete set of pathology descriptors is necessary for breast cancer management. This is so that the doctor can track the stages of the cancer. If a cancer resection pathology report is not complete this can lead to incorrect classification as well as delays in the treatment process. The evidence based checklist produced by The College of American Pathologists (CAP) contains essential pathologic parameters that are recommended to be included in cancer resection pathology reports.

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? No

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: A panel of experts with members from each of the NCCN Member Institutions develops the NCCN Guidelines. Specialties that must be included on a particular panel are identified before that panel is convened but also evolve as the standard of care changes over time. This multidisciplinary representation varies from panel to panel. The NCCN Guidelines Panel Chairs are charged with ensuring that representatives of all treatment strategies are included. Many of the panels also include a patient representative, especially when issues of long-term care and patient preference are paramount in the panel’s considerations.

NCCN publishes individual disclosures of potential conflicts of interest for panel members, NCCN Guidelines staff, and NCCN senior management. Relationships disclosed include research funding, participation in advisory groups, participation in speakers’ bureaus, employment, and equity or patent ownership. Beginning in 2010, the NCCN Board of Directors has directed that panel members compensation from external sources be less than published thresholds. These thresholds are <= $20,000 from a single entity and <= $50,000 in aggregate from any source.

The CAP protocol is revised by a multi-disciplinary team of experts.

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

1c.12 If other, identify and describe the grading scale with definitions: Panel members identify the level of evidence supporting each recommendation. These categories are:

• Category 1: Based upon high-level evidence, there is uniform NCCN consensus that the intervention is appropriate.
• Category 2A: Based upon lower-level evidence, there is uniform NCCN consensus that the intervention is appropriate.
• Category 2B: Based upon lower-level evidence, there is NCCN consensus that the intervention is appropriate.
• Category 3: Based upon any level of evidence, there is major NCCN disagreement that the intervention is appropriate.

1c.13 Grade Assigned to the Body of Evidence: NCCN: 2A; CAP is not available.

1c.14 Summary of Controversy/Contradictory Evidence: No controversy or contradictory evidence provided.
1c.15 Citations for Evidence other than Guidelines (Guidelines addressed below):

1c.16 Quote verbatim, the specific guideline recommendation (Including guideline # and/or page #):
All invasive breast carcinomas, with the exception of medullary carcinoma should be graded. The grading system used must be specified in the report; the Nottingham combined histologic grade (Elston-Ellis modification of Scarff-Bloom-Richardson grading system) is recommended. Within each stage grouping there is a relation between histologic grade and outcome (CAP).

All patients with breast cancer should be assigned a clinical stage of disease, and if appropriate evaluation is available, a pathologic stage of disease. The routine use of staging allows for efficient identification of local treatment options, assists in identifying systemic treatment options, allows the comparison of outcomes results across institutions and clinical trials, and provides baseline prognostic information (NCCN).


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: Same as in 1.c.10 above.

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

1c.22 If other, identify and describe the grading scale with definitions: Panel members identify the level of evidence supporting each recommendation. These categories are:

• Category 1: Based upon high-level evidence, there is uniform NCCN consensus that the intervention is appropriate.
• Category 2A: Based upon lower-level evidence, there is uniform NCCN consensus that the intervention is appropriate.
• Category 2B: Based upon lower-level evidence, there is NCCN consensus that the intervention is appropriate.
• Category 3: Based upon any level of evidence, there is major NCCN disagreement that the intervention is appropriate.

1c.23 Grade Assigned to the Recommendation: NCCN: 2A; CAP not available

1c.24 Rationale for Using this Guideline Over Others: It is the PCPI policy to use guidelines, which are evidence-based, applicable to physicians and other health-care providers, and developed by a national specialty organization or government agency. In addition, the PCPI has now expanded what is acceptable as the evidence base for measures to include documented quality improvement (QI) initiatives or implementation projects that have demonstrated improvement in quality of care.

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: Moderate 1c.26 Quality: Moderate 1c.27 Consistency: Moderate

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...
**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.

2.1 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

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):* Reports that include the pT category, the pN category and the histologic grade

2a1.2 Numerator Time Window *(The time period in which the target process, condition, event, or outcome is eligible for inclusion):* Each final report during measurement period

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):* For EHR:

For Claims Specifications

CPT Category II code: 3260F – pT (primary tumor), pN (regional lymph node), and histologic grade documented in pathology report

2a1.4 Denominator Statement *(Brief, narrative description of the target population being measured):* All breast cancer resection pathology reports (excluding biopsies)

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):* 12 consecutive months

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):* For EHR:

For Claims/Administrative:


ICD-10-CM diagnosis codes: C50.011, C50.012, C50.019, C50.111, C50.112, C50.119, C50.211, C50.212, C50.219, C50.311, C50.312, C50.319, C50.411, C50.412, C50.419, C50.511, C50.512, C50.519, C50.611, C50.612, C50.619, C50.811, C50.812, C50.819, C50.911, C50.912, C50.919, C50.021, C50.022, C50.029, C50.121, C50.122, C50.129, C50.221, C50.222, C50.229

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
NQF #0391 Breast Cancer Resection Pathology Reporting - pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade

<table>
<thead>
<tr>
<th>C50.321, C50.322, C50.329, C50.421, C50.422, C50.429, C50.521, C50.522, C50.529, C50.621, C50.622, C50.629, C50.821, C50.822, C50.829, C50.921, C50.922, C50.929</th>
</tr>
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<tbody>
<tr>
<td>AND</td>
</tr>
<tr>
<td>CPT Codes: 88307, 88309</td>
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</table>

### 2a1.8 Denominator Exclusions (Brief narrative description of exclusions from the target population):

Documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade (eg; re-excision without residual tumor; non-carcinomas)

### 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):

The PCPI methodology uses three categories of reasons for which a patient may be excluded from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For this measure exceptions may include documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade (eg; re-excision without residual tumor). Where examples of exceptions are included in the measure language, these examples are coded and included in the eSpecifications. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exception. Additional details by data source are as follows:

For EHR:
eSpecification currently under development. Data elements (using Quality Data Model) required for the measure attached.

For Claims/Administrative:
Documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade (eg; re-excision without residual tumor)
Append modifier to CPT Category II code: 3260F-1P
OR
If the specimen is not primary breast tissue (e.g., liver, lung) report:
CPT II 3250F: Specimen site other than anatomic location of primary tumor

### 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):

We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.

### 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.):

No risk adjustment or risk stratification.

### 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:

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
**Type of Score:** Rate/proportion

**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

**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.):*

To calculate performance rates:
1. Find the patients who meet the initial patient population (ie, the general group of patients that the performance measure is designed to address).
2. From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical.
3. From the patients within the denominator, find the patients who qualify for the Numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
4. From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator exception when exceptions have been specified [for this measure: exceptions may include documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade (eg; re-excision without residual tumor)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. Although the exception cases are removed from the denominator population for the performance calculation, the number of patients with valid exceptions should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

See calculation algorithm attached in 2a1.21.

**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):)*

Not applicable. The measure does not require sampling or a survey.

**Data Source** *(Check all the sources for which the measure is specified and tested). If other, please describe:*

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry, Paper Records

**Data Source/Data Collection Instrument** *(Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):* Not Applicable

**Data Source/data Collection Instrument Reference Web Page URL or Attachment:**

**Data Dictionary/Code Table Web Page URL or Attachment:**

Attachment

AMA-PCPI_0391_PATH BreastCancerResectionPathologyReporting_DataElements_1 2012.pdf
2a1.33 Level of Analysis (Check the levels of analysis for which the measure is specified and tested): Clinician: Group/Practice, Clinician: Individual, Clinician: Team

2a1.34-35 Care Setting (Check all the settings for which the measure is specified and tested): Ambulatory Care: Clinician Office, Laboratory

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):
AMA-PCPI Testing Project
- The data sample came from four sites representing various types, locations and sizes
- Three of the practices were urban, and one was more rural; each located in a different state
- The sample consisted of 25 breast cancer pathology reports per site for a total of 100 patients
- Data collected from patients seen between January 1, 2009 and December 31, 2009
- Data abstraction performed between June 10, 2010 and December 8, 2010

2a2.2 Analytic Method (Describe method of reliability testing & rationale):
Data abstracted from randomly sampled patient records were used to calculate inter-rater reliability for the measure.

Patients were randomly selected from visits for a diagnosis of breast cancer.
Data analysis included:
- Percent agreement
- Kappa statistic to adjust for chance agreement

2a2.3 Testing Results (Reliability statistics, assessment of adequacy in the context of norms for the test conducted):
Overall, this measure is highly reliable.
Reliability (N, % Agreement, Kappa)
Numerator (100, 100%, kappa not calculable*)
Denominator (100, 100%, 1.00)
Exceptions (100, 100%, kappa not calculable*)
Overall (100, 100%, 1.00)

* Kappa statistics cannot be calculated because of complete agreement. Confidence intervals cannot be calculated because to do so would involve dividing by zero which cannot be done. Those that are not calculable have only ¼ cells populated.

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:
The measure focus is on better classification of patients with breast cancer through pathology reporting.

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):
An expert panel was used to assess face validity of the measure. This panel consisted of the following # members, with representation from the following specialties:

David L. Witte, MD, PhD, FCAP (Co-Chair, pathology)
Susan R. Snyder, PhD, MBA (Co-Chair, methodology)
Nancy Baxter, MD, PhD (colorectal surgery)
2b2.2 Analytic Method (Describe method of validity testing and rationale; if face validity, describe systematic assessment):
All PCPI performance measures are assessed for content validity by a panel of expert work group members during the development process. Additional input on the content validity of draft measures is obtained through a 30-day public comment period and by also soliciting comments from a panel of consumer, purchaser, and patient representatives convened by the PCPI specifically for this purpose. All comments received are reviewed by the expert work group and the measures adjusted as needed. Other external review groups (eg, focus groups) may be convened if there are any remaining concerns related to the content validity of the measures.

The expert panel was used to assess face validity of the measure. This panel consisted of X members, with representation from the following specialties: nephrology, pediatric nephrology, endocrinology, nursing, methodology, internal medicine, preventive medicine and family medicine.

The aforementioned panel was asked to rate their agreement with the following statement:

The scores obtained from the measure as specified will accurately differentiate quality across providers.

Scale 1-5, where 1=Strongly Disagree; 3=Neither Disagree nor Agree; 5=Strongly Agree

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):
The results of the expert panel rating of the validity statement were as follows:  N = 12;  Mean rating = 3.75
Frequency Distribution of Ratings
1 - 2 (Disagree)
2 – 0
3 - 2 (Neither Disagree nor Agree)
4 - 3
5 - 5 (Agree)

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):
AMA-PCPI Testing Project

- The data sample came from four sites representing various types, locations and sizes
- Three of the practices were urban, and one was more rural; each located in a different state
- The sample consisted of 25 breast cancer pathology reports per site for a total of 100 patients
- Data collected from patients seen between January 1, 2009 and December 31, 2009.
- Data abstraction performed between June 10, 2010 and December 8, 2010.

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
2b3.2 **Analytic Method** *(Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference):*
Specifications allowed for exceptions for medical reasons. Exceptions were analyzed for frequency and variability across providers.

2b3.3 **Results** *(Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):*
- Exception rate for this measure was 3.00%
- Reliability of exceptions was 100% agreement; with a kappa of 1.00.

**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):*
This measure is not risk adjusted.

2b4.2 **Analytic Method** *(Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables):*
This measure is not risk adjusted.

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):*
Not Applicable.

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):*
AMA-PCPI Testing Project

The data sample came from four sites representing various types, locations and sizes
Three of the practices were urban, and one was more rural; each located in a different state
The sample consisted of 25 breast cancer pathology reports per site for a total of 100 patients
Data collected from patients seen between January 1, 2009 and December 31, 2009.
Data abstraction performed between June 10, 2010 and December 8, 2010.

CMS Physician Quality Reporting Initiative:
4,374 cases were reported on for the 2009 program, the most recent year for which data is available.

The following information is for the 2009 program, the only year for which such data is available.
Clinical Condition and Measure: PQRI/S #99 Breast Cancer Resection Pathology Reports pT category, the pN category and the histologic grade

# Eligible Professionals: 7,241
# Professionals Reporting >=1 Valid QDC: 4,373
% Professionals Reporting >=1 Valid QDC: 60.39%
# Professionals Satisfactorily Reporting: 2,770
% Professionals Reporting: 63.34%

2b5.2 **Analytic Method** *(Describe methods and rationale to identify statistically significant and practically/meaningfully differences*
in performance):
AMA-PCPI Testing Project
Manual abstraction was performed to calculate performance on the measure and range across sites.

CMS Physician Quality Reporting Initiative 2009:
The inter-quartile range (IQR) was calculated to determine the performance on this measure.

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):
AMA-PCPI Testing Project
Scores on this measure: N= 100; Performance Rate= 85%; Range= 48%-100%

CMS Physician Quality Reporting Initiative:
Scores on this measure: N = 26,573;  Performance Rate = 64.13 %
10th percentile: 25.00%
25th percentile: 50.00%
50th percentile: 75.00%
75th percentile: 100.00%
90th percentile: 100.00%

The inter-quartile range (IQR) provides a measure of the dispersion of performance. The IQR is 50, and indicates that 50% of physicians have performance on this measure ranging from 50.00% and 100.00% and 10% of physicians achieve 25% or less in terms of performance rate.


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):
This test was not performed for this measure.

2b6.2 Analytic Method (Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure):
This test was not performed for this 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):
This test was not performed for this measure.

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): We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:
The PCPI advocates that performance measure data should, where possible, be stratified by race, ethnicity, and primary language to assess disparities and initiate subsequent quality improvement activities addressing identified disparities, consistent with recent national efforts to standardize the collection of race and ethnicity data. A 2008 NQF report endorsed 45 practices including stratification by the aforementioned variables. A 2009 IOM report recommends collection of the existing Office of Management
and Budget (OMB) race and Hispanic ethnicity categories as well as more fine-grained categories of ethnicity (referred to as granular ethnicity and based on one’s ancestry) and language need (a rating of spoken English language proficiency of less than very well and one’s preferred language for health-related encounters).”(2)

References:


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): Professional Certification or Recognition Program, Public Reporting, Quality Improvement (Internal to the specific organization)

3.1 Current Use (Check all that apply; for any that are checked, provide the specific program information in the following questions): Public Reporting, Professional Certification or Recognition Program, 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.]

CMS Physician Quality Reporting Initiative/System (PQRI/S)

This measure was used in the 2008 (claims), 2009 (claims and registry) and 2010 (claims and registry) CMS Physician Quality Reporting Initiative/System (PQRI/S) as #99 Breast Cancer Patients with a pT and pN category and histological grade. There is a gap in care as shown by this 2008 data; with 35.87% of patients reported on not receiving the optimal care.

10th percentile: 25.00%
25th percentile: 50.00%
50th percentile: 75.00%
75th percentile: 100.00%
90th percentile: 100.00%
The PCPI believes that the reporting of participation information is a beneficial first step on a trajectory toward the public reporting of performance results, which is appropriate since the measure has been tested and the reliability of the performance data has been validated. Continued NQF endorsement will facilitate our ongoing progress toward this public reporting objective.

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: The PCPI believes that the reporting of participation information is a beneficial first step on a trajectory toward the public reporting of performance results, which is appropriate since the measure has been tested and the reliability of the performance data has been validated. Continued NQF endorsement will facilitate our ongoing progress toward this public reporting objective.

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): This measure may be used in a Maintenance of Certification program.

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].

All PCPI measures are suitable for use in quality improvement initiatives and are made freely available on the PCPI website and through the implementation efforts of medical specialty societies and other PCPI members. The PCPI strongly encourages the use of its measures in QI initiatives and seeks to provide information on such initiatives to PCPI members.

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: The PCPI believes that the use of PCPI measures in quality improvement initiatives is a beneficial way to gather scientific data with which to improve physician performance. This is appropriate since the measure has been tested and the reliability of the performance data has been validated. NQF endorsement will facilitate our ongoing progress toward this quality improvement objective.

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:

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition

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): ALL data elements in electronic health records (EHRs)

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:

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:
We are not aware of any unintended consequences related to this measurement.

<table>
<thead>
<tr>
<th>4d. Data Collection Strategy/Implementation:</th>
<th>H M L I</th>
</tr>
</thead>
</table>

**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):*

This measure was found to be reliable and feasible for implementation.

Overall, to what extent was the criterion, *Feasibility*, met? | H M L I |

Provide rationale based on specific subcriteria:

**OVERALL SUITABILITY FOR ENDORSEMENT**

<table>
<thead>
<tr>
<th>Does the measure meet all the NQF criteria for endorsement?</th>
<th>Yes No</th>
</tr>
</thead>
</table>

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/lor 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**

<table>
<thead>
<tr>
<th>Co.1 Measure Steward (Intellectual Property Owner):</th>
<th>American Medical Association - Physician Consortium for Performance Improvement, 515 N State Street, Chicago, Illinois, 60654</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co.2 Point of Contact:</td>
<td>Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, <a href="mailto:mark.antman@ama-assn.org">mark.antman@ama-assn.org</a>, 312-464-5056-</td>
</tr>
<tr>
<td>Co.3 Measure Developer if different from Measure Steward:</td>
<td>American Medical Association - Physician Consortium for Performance Improvement, 515 N State Street, Chicago, Illinois, 60654</td>
</tr>
</tbody>
</table>
NQF #0391 Breast Cancer Resection Pathology Reporting- pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade

| Co.4 Point of Contact: | Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, mark.antman@ama-assn.org, 312-464-5056- |
| Co.5 Submitter: | Molly, Siegel, molly.siegel@ama.assn.org, 312-464-4901-, American Medical Association - Physician Consortium for Performance Improvement |
| Co.6 Additional organizations that sponsored/participated in measure development: | College of American Pathologists |
| Co.7 Public Contact: | Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, mark.antman@ama-assn.org, 312-464-5056-, American Medical Association - Physician Consortium for Performance Improvement |

### 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.

Our expert panel included 14 members including pathologists, surgeons, radiologists and methodologists.

- David L. Witte, MD, PhD, FCAP (Co-Chair, pathology)
- Susan R. Snyder, PhD, MBA (Co-Chair, methodology)
- Nancy Baxter, MD, PhD (colorectal surgery)
- Joel V. Brill, MD, AGAF, FACG, CHCQM (gastroenterology)
- Patrick Fitzgibbons, MD, FCAP (pathology)
- M. Kay Washington, MD, PhD, FCAP (pathology)
- Mario Gonzalez, MD, FCAP, FASCP (pathology)
- Richard M Gore, MD, FACS (diagnostic radiology)
- Dana Marie Grzybicki, MD, PhD (pathology)
- Harvey W. Kaufman, MD, FCAP (pathology)
- Jonathon Myles, MD, FCAP (pathology)
- Raouf E. Nakhleh, MD, FCAP (pathology)
- Felicia Nicholson, RN, BSN (health plan representative)
- Omar Yousef, MD, FCAP (pathology)

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: 09, 2010

Ad.5 What is your frequency for review/update of this measure? Coding/Specifications updates occur annually. See additional information below.

Ad.6 When is the next scheduled review/update for this measure? 12, 2012

Ad.7 Copyright statement:

Ad.8 Disclaimers:

Ad.9 Additional Information/Comments: Coding/Specifications updates occur annually. The PCPI has a formal measurement review process that stipulates regular (usually on a three-year cycle, when feasible) review of the measures. The process can also be activated if there is a major change in scientific evidence, results from testing or other issues are noted that materially affect the integrity of the measure.

**Date of Submission (MM/DD/YY):** 10/03/2011
Basic Measure Calculation:
\[
\frac{(N)}{(D) - (E)} = \%
\]

The PCPI strongly recommends that exception rates also be computed and reported alongside performance rates as follows:

Exception Calculation:
\[
\frac{(E)}{(D)} = \%
\]

**Exception Types:**
\[E = E_1 (\text{Medical Exceptions}) + E_2 (\text{Patient Exceptions}) + E_3 (\text{System Exceptions})\]

For patients who have more than one valid exception, only one exception should be counted when calculating the exception rate.

<table>
<thead>
<tr>
<th>Initial Patient Population (IPP)</th>
<th>Denominator (D)</th>
<th>Numerator (N)</th>
<th>Denominator Exceptions (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong> The initial patient population identifies the general group of patients that the performance measure is designed to address; usually focused on a specific clinical condition (e.g., coronary artery disease, asthma). For example, a patient aged 18 years and older with a diagnosis of CAD who has at least 2 Visits during the measurement period.</td>
<td><strong>Definition:</strong> The denominator defines the specific group of patients for inclusion in a specific performance measure based on specific criteria (e.g., patient's age, diagnosis, prior MI). In some cases, the denominator may be identical to the initial patient population.</td>
<td><strong>Definition:</strong> The numerator defines the group of patients in the denominator for whom a process or outcome of care occurs (e.g., flu vaccine received).</td>
<td><strong>Definition:</strong> Denominator exceptions are the valid reasons why patients who are included in the denominator population did not receive a process or outcome of care (described in the numerator). Patients may have Denominator Exceptions for medical reasons (e.g., patient has an egg allergy so they did not receive flu vaccine); patient reasons (e.g., patient declined flu vaccine); or system reasons (e.g., patient did not receive flu Vaccine due to vaccine shortage). These cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported. This group of patients constitutes the Denominator Exception reporting population – patients for whom the numerator was not achieved and a there is a valid Denominator Exception.</td>
</tr>
<tr>
<td>From the patients who meet the Initial Patient Population criteria (IPP)</td>
<td>Find the patients who qualify for the denominator (D): ○ From the patients within the Patient Population criteria (IPP) select those people who meet Denominator selection criteria. (In some cases the IPP and D are identical).</td>
<td>Find the patients who qualify for the Numerator (N): ○ From the patients within the Denominator (D) criteria, select those people who meet Numerator selection criteria. ○ Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.</td>
<td>From the patients who did not meet the Numerator criteria, determine if the patient meets any criteria for the Denominator Exception (E1 + E2+E3). If they meet any criteria, they should be removed from the Denominator for performance calculation. As a point of reference, these cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported.</td>
</tr>
</tbody>
</table>