Breast Cancer Resection Pathology Reporting
Measure #99 – pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade

Colorectal Cancer Resection Pathology Reporting
Measure #100 – pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade

Barrett’s Esophagus
Measure #249 – Esophageal biopsies with a diagnosis of Barrett’s esophagus that also include a statement on dysplasia

Radical Prostatectomy Pathology Reporting
Measure #250 – Reports include the pT category, the pN category, the Gleason score and a statement about margin status

Immunohistochemical (IHC) Evaluation of HER2 for Breast Cancer Patients
Measure #251 – Quantitative HER2 evaluation by IHC uses the system recommended by the ASCO/CAP guidelines

Lung cancer reporting (biopsy/cytology specimens) (New)
Measure #395 – Pathology reports based on biopsy and/or cytology specimens with a diagnosis of non small cell lung cancer classified into specific histologic type or classified as NSCLC-NOS with an explanation included in the pathology report

Lung cancer reporting (resection specimens) (New)
Measure #396 - Pathology reports based on resection specimens with a diagnosis of primary lung carcinoma that include the pT category, pN category and for non small cell lung cancer, histologic type

Proposed New Melanoma reporting (New)
Measure #397 – Pathology reports for primary malignant cutaneous melanoma that include the pT category and a statement on thickness and ulceration and for pT1, mitotic rate
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These Measures are intended to assist physicians in enhancing quality of care. They are designed for use by any physician who manages the care of a patient for a specific condition or for diagnosis or prevention. These Measures are not clinical guidelines and do not establish a standard of medical care. The College has not tested its Measures for all potential applications.

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THE SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.
**Measure #99: Breast Cancer Resection Pathology Reporting**

**pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade**

This measure may be used as an Accountability measure

### Measure Description

**Clinical Performance Measure**

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

**Denominator:**
All breast cancer resection pathology reports (excluding biopsies)

**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)

**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

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

Patient management and treatment guidelines promote an organized approach to providing quality care. The (American College of Surgeons Commission on Cancer) CoC requires that 90% of pathology reports that include a cancer diagnosis contain the scientifically validated data elements outlined in the surgical case summary checklist of the College of American Pathologists (CAP) publication Reporting on Cancer Specimens.

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.

TNM staging information is included in factors proven to be of prognostic import and useful in clinical patient management.

**Rationale for the measure:**
Therapeutic decisions for breast cancer management are stage driven and cannot be made without a complete set of pathology descriptors. Incomplete cancer resection pathology reports may result in misclassification of patients, rework and delays, and suboptimal management. The College of American Pathologists (CAP) has produced evidence-based checklists of essential pathologic parameters that are recommended to be included in cancer resection pathology reports. These checklists have been endorsed as a voluntary standard by National Quality Forum (NQF) and are considered the reporting standard by the College of American Pathologists.
Commission on Cancer (CoC) of the American College of Surgeons (ACS).

The CAP recently conducted a structured audit of breast cancer pathology report adequacy at 86 institutions. Overall, 35% of eligible reports were missing at least one of the ten CAP-recommended breast cancer elements. Cancer Care Ontario (CCO) conducted a similar study in 2005 and found that 25% of breast cancer pathology reports did not include all of the information required by the CAP standards.

While the exact percentage of breast cancer resection pathology reports that are missing the pT category, the pN category and the histologic grade is unknown, these are essential elements in breast cancer treatment decisions and should be included in every pathology report when possible.

Data capture and calculations:
Calculation for Performance
For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

Numerator (A) Includes:
- Reports that include the pT category, the pN category and the histologic grade

Denominator (PD) Includes:
- Breast cancer resection pathology reports (excluding biopsies)

Denominator Exclusions (C) Include:
- Documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade

INSTRUCTIONS:
This measure is to be reported each time a breast cancer resection surgical pathology examination is performed during the reporting period for breast cancer patients. Each unique CPT Category I code submitted on the claim will be counted for denominator inclusion. It is anticipated that clinicians who examine breast tissue specimens following resection in a laboratory or institution will submit this measure. Independent laboratories (ILs) and independent diagnostic testing facilities (IDTFs), using indicator Place of Service 81, are not included in PQRS. If the specimen is not primary breast tissue (eg, liver, lung), report only CPT II code 3250F.

Measure Reporting via Claims: ICD-9-CM/ICD-10-CM diagnosis codes and CPT codes are used to identify patients who are included in the measure’s denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the appropriate ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and the appropriate CPT Category II code OR the CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reason not otherwise specified. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

Measure Reporting via Registry: ICD-9-CM/ICD-10-CM diagnosis codes and CPT codes are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

Measure Specifications – Breast Cancer Resection Pathology Reporting- pT category and pN category with histologic grade

A. Administrative claims data
Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

Note: Patients with multiple pathology reports related to the same breast tumor will be counted only once. Pathology reports for the same breast neoplasm addressed in previous pathology reports up to six months following the index resection pathology report will not be included in assessing this clinical performance measure.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All breast cancer resection pathology reports (excluding biopsies)


AND

- CPT service codes: 88307, 88309

After October 1, 2015

- ICD-10 diagnosis codes: C50.011, C50.012, C50.019, C50.021, C50.022, C50.029, C50.111, C50.112, C50.119, C50.121, C50.122, C50.129, C50.211, C50.212, C50.219, C50.221, C50.222, C50.229, C50.311, C50.312, C50.319, C50.321, C50.322, C50.329, C50.411, C50.412, C50.419, C50.421, C50.422, C50.429, C50.511, C50.512, C50.519, C50.521, C50.522, C50.529, C50.611, C50.612, C50.619, C50.621, C50.622, C50.629, C50.811, C50.812, C50.819, C50.821, C50.822, C50.829, C50.911, C50.912, C50.919, C50.921, C50.922, C50.929

AND

- CPT service codes: 88307, 88309

Denominator Exclusion: 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)

- Append modifier to CPT Category II code (in development): 3260F-1P

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

- Report the CPT Category II code (in development) designated for this numerator:
3260F – pT (primary tumor), pN (regional lymph node), and histologic grade documented in pathology report
  o Use the -8P modifier when pT (primary tumor), pN (regional lymph node), and histologic grade not documented in pathology report; reason not otherwise specified

Or

3250F – Specimen site other than anatomic location of primary tumor
Measure #100: Colorectal Cancer Resection Pathology Reporting
pT category (primary tumor) and pN category (regional lymph nodes) with histologic grade

This measure may be used as an Accountability measure

Measure Description

<table>
<thead>
<tr>
<th>Clinical Performance Measure</th>
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<tbody>
<tr>
<td><strong>Numerator:</strong> Reports that include the pT category, the pN category and the histologic grade</td>
</tr>
<tr>
<td><strong>Denominator:</strong> All colon and rectum cancer resection pathology reports</td>
</tr>
<tr>
<td><strong>Denominator Exclusions:</strong> Documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade (eg; non-carcinomas; anal canal)</td>
</tr>
<tr>
<td><strong>Measure:</strong> Percentage of colon and rectum cancer resection pathology reports that include the pT category (primary tumor), the pN category (regional lymph nodes) and the histologic grade</td>
</tr>
</tbody>
</table>

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:
Patient management and treatment guidelines promote an organized approach to providing quality care. The (American College of Surgeons Committee on Cancer) CoC requires that 90% of pathology reports that include a cancer diagnosis contain the scientifically validated data elements outlined in the surgical case summary checklist of the College of American Pathologists (CAP) publication Reporting on Cancer Specimens.

Surgical resection is the primary therapy for most colorectal carcinomas, and the most important prognostic indicators are related to the pathologic findings in the resection specimen. The anatomic extent of disease is by far the most important prognostic factor in colorectal cancer. Pathologic staging depends on pathologic documentation of the anatomic extent of disease, whether or not the primary tumor has been completely removed. If a biopsied tumor is not resected for any reason (eg, when technically unfeasible) and if the highest T and N categories or the M1 category of the tumor can be confirmed microscopically, the criteria for pathologic classification and staging have been satisfied without total removal of the primary cancer.

Rationale for the measure:
Therapeutic decisions for colorectal cancer management are stage driven and cannot be made without a complete set of pathology descriptors. Incomplete cancer resection pathology reports may result in misclassification of patients, rework and delays, and suboptimal management. The College of American Pathologists (CAP) has produced evidence-based checklists of essential pathologic parameters that are recommended to be included in cancer resection pathology reports. These checklists have been endorsed as a voluntary standard by National Quality Forum (NQF) and are considered the reporting standard by the Commission on Cancer (CoC) of the American College of Surgeons (ACS).

The CAP recently conducted a structured audit of colorectal cancer pathology report adequacy at 86
institutions. Overall, 34% of eligible reports were missing at least one of the ten CAP-recommended colorectal cancer elements. Cancer Care Ontario (CCO) conducted a similar study in 2005 and found that 31% of colorectal cancer pathology reports did not include all of the information required by the CAP standards.

While the exact percentage of colorectal cancer resection pathology reports that are missing the pT category, the pN category and the histologic grade is unknown, these are essential elements in colorectal cancer treatment decisions and should be included in every pathology report when possible.

Data capture and calculations:
Calculation for Performance
For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.

Numerator (A) Includes:
- Reports that include the pT category, the pN category and the histologic grade

Denominator (PD) Includes:
- Colon and rectum cancer resection pathology reports (excluding biopsies)

Denominator Exclusions (C) Include:
- Documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade

INSTRUCTIONS2: This measure is to be reported each time a colorectal cancer resection surgical pathology examination is performed during the reporting period for colorectal cancer patients. Each unique CPT Category I code submitted on the claim will be counted for denominator inclusion. It is anticipated that clinicians who examine colorectal tissue specimens following resection in a laboratory or institution will submit this measure. Independent Laboratories (ILs) and Independent Diagnostic Testing Facilities (IDTFs), using indicator Place of Service 81, are not included in PQRS. If the specimen is not primary colorectal tissue (eg, liver, lung), report only G8723.

Measure Reporting via Claims: ICD-9-CM/ICD-10-CM diagnosis codes and CPT codes are used to identify patients who are included in the measure’s denominator. Quality-data codes are used to report the numerator of the measure. When reporting the measure via claims, submit the appropriate ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and the appropriate quality-data code. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

Measure Reporting via Registry: ICD-9-CM/ICD-10-CM diagnosis codes and CPT codes are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

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Measure Specifications –Colorectal Cancer Resection Pathology Reporting- pT category and pN category with histologic grade

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All colon and rectum cancer resection pathology reports (excluding biopsies)

ICD-9 diagnosis codes: 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9, 154.0, 154.1, 154.8

AND

CPT service code: 88309

After October 1, 2015

ICD-10 diagnosis codes: C18.0, C18.1, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9, C19, C20, C21.2, C21.8

AND

CPT service code: 88309

Denominator Exclusion: Documentation of medical reason(s) for not including the pT category, the pN category or the histologic grade (eg; non-carcinomas; anal canal)

- Use G code: G8722

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

- Report the G code designated for this numerator:

  G8721 – pT (primary tumor), pN (regional lymph node), and histologic grade documented in pathology report

  Or

  G8723 – Specimen site other than anatomic location of primary tumor

  Or

  G8724 – pT (primary tumor), pN (regional lymph node), and histologic grade not documented in pathology report; reason not specified
Measure #249 Esophageal biopsies with a diagnosis of Barrett’s esophagus that also include a statement on dysplasia

This measure may be used as an Accountability measure

Measure Description: This is a physician-specific measure based on esophageal biopsies with a diagnosis of Barrett’s esophagus that also include a statement about dysplasia

<table>
<thead>
<tr>
<th>Clinical Performance Measure</th>
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</thead>
<tbody>
<tr>
<td><strong>Numerator:</strong></td>
</tr>
<tr>
<td>Esophageal biopsy reports with the histologic finding of Barrett’s mucosa that contain a statement about dysplasia (present, absent, or indefinite and if present, contains appropriate grading).</td>
</tr>
<tr>
<td><strong>Denominator:</strong></td>
</tr>
<tr>
<td>All esophageal biopsy reports that document the presence of Barrett’s mucosa.</td>
</tr>
<tr>
<td><strong>Denominator Exclusions:</strong></td>
</tr>
<tr>
<td>Esophageal biopsy reports with malignant neoplasms; documentation of medical reason for not reporting the histologic finding of Barrett’s mucosa, e.g. absences of metaplasia (and therefore not commenting on dysplasia).</td>
</tr>
<tr>
<td><strong>Measure:</strong> Percentage of patients with esophageal biopsy reports for Barrett’s esophagus that contain a statement about dysplasia.</td>
</tr>
</tbody>
</table>

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

The diagnosis of Barrett’s esophagus requires systematic biopsy of the abnormal-appearing esophageal mucosa to document intestinal metaplasia and to detect dysplasia.3,4

Rationale for the measure:

Endoscopy is the technique of choice used to identify suspected Barrett’s esophagus and to diagnose complications of GERD. Biopsy must be added to confirm the presence of Barrett’s epithelium and to evaluate for dysplasia (PQRI measure #62, ACG, 2005).5

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5 Ibid.
There is a rapidly rising incidence of adenocarcinoma of the esophagus in the United States. A diagnosis of Barrett’s esophagus increases a patient’s risk for esophageal adenocarcinoma by 30 to 125 times that of people without Barrett’s esophagus (although this risk is still small 0.4% to 0.5% per year). Esophageal adenocarcinoma is often not curable, partly because the disease is frequently discovered at a late stage and because treatments are not effective. A diagnosis of Barrett’s esophagus could allow for appropriate screening of at risk patients as recommended by the American College of Gastroenterology.

Standard endoscopy with biopsy currently is the most reliable means of establishing a diagnosis of Barrett’s esophagus. The definitive diagnosis of Barrett’s esophagus requires a pathologist’s review of an esophageal biopsy. Dysplasia is the first step in the neoplastic process, and information about dysplasia is crucial for clinical decision-making directing therapy. The presence and grade of dysplasia cannot be determined by routine endoscopy, and pathologist’s review of a biopsy is essential for recognition of dysplasia.

Endoscopic surveillance detects curable neoplasia in patients with Barrett’s esophagus.

**Data capture and calculations:**

**Calculation for Performance**

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Numerator (A) Includes:**
- Esophageal biopsy reports with the histologic finding of Barrett’s mucosa that contain a statement about dysplasia (present, absent or indefinite and if present, contains appropriate grading)

**Denominator (PD) Includes:**
- All esophageal biopsy reports that document the presence of Barrett’s mucosa.

**Denominator Exclusions (C) Include:** Esophageal biopsy reports with malignant neoplasms; esophageal biopsy reports noting absence of intestinal metaplasia - documentation of medical reason for not reporting the histologic finding of Barrett’s mucosa, e.g. absences of metaplasia (and therefore not commenting on dysplasia).

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6 Barrett’s Esophagus, National Digestive Diseases Information Clearinghouse, HHS www.digestive.niddk.nih.gov
9 CAP 06 AP118 The Nuance of Inflammation in the Gastrointestinal Tract: How to Become Your Gastroenterologist’s Best Friend, Robert E Petras, MD, FCAP, FACG http://www.cap.org/apps/docs/annual_meeting/cap_06/course_materials/inflammation_in_the_gastrointestinal_tract.pdf
INSTRUCTIONS:\(^{13}\):
This measure is to be reported each time a patient’s surgical pathology report demonstrates Barrett’s Esophagus; however, only one QDC per date of service for a patient is required. This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Claims:
ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. CPT Category II codes or quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and the appropriate CPT Category II code OR quality-data code OR the CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reason not otherwise specified. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

Measure Reporting via Registry:
ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

Administrative claims data
Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

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\(^{13}\) CMS 2014 PQRS Individual measure claims registry specification supporting documents
Measure Specifications – Esophageal biopsies with a diagnosis of Barrett’s Esophagus that also include a statement about dysplasia

Denominator (Eligible Population): All esophageal biopsy reports that document the presence of Barrett’s mucosa.

- CPT codes:
  - CPT code – 88305 Level IV – Surgical pathology, gross and microscopic examination

  AND

- ICD-9 codes:
  - 530.85 Barrett’s esophagus

After October 1, 2015

- CPT codes:
  - CPT code – 88305 Level IV – Surgical pathology, gross and microscopic examination

  AND

- ICD-10 codes:
  - K22.70, K22.710, K22.711, K22.719

Denominator Exclusion: Documentation of medical reason for not reporting the histologic finding of Barrett’s mucosa (eg, malignant neoplasm or absence of intestinal metaplasia). [For patient with appropriate exclusion criteria, report 3125F with modifier 1P]

Numerator: Esophageal biopsy reports with the histologic finding of Barrett’s mucosa that contain a statement about dysplasia (present, absent, or indefinite and if present, contains appropriate grading.)

- 3126F Esophageal biopsy report with a statement about dysplasia (present, absent, or indefinite and if present, contains appropriate grading)
  - Use the -8P modifier when the pathology report does not include a statement about dysplasia (present, absent, or indefinite and if present, contains appropriate grading)
  - Use the -1P modifier when the pathology report documents medical reason(s) for not reporting the histological finding of Barrett’s mucosa (eg, malignant neoplasm or absence of intestinal metaplasia)

Or

- G8797 – Specimen site other than anatomic location of esophagus
Radical Prostatectomy

Measure #250 – the pT category, the pN category, Gleason score and a statement about margin status

This measure may be used as an Accountability measure

Measure Description: This is a measure based on whether radical prostatectomy pathology report includes the pT category, the pN category, the Gleason score and a statement about margin status.

<table>
<thead>
<tr>
<th>Clinical Performance Measure</th>
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<tbody>
<tr>
<td><strong>Numerator:</strong></td>
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<tr>
<td><strong>Denominator:</strong></td>
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<tr>
<td><strong>Denominator Exclusions:</strong></td>
</tr>
<tr>
<td><strong>Measure:</strong></td>
</tr>
</tbody>
</table>

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

Patient management and treatment guidelines promote an organized approach to providing quality care. The (American College of Surgeons Committee on Cancer) CoC requires that 90% of pathology reports that include a cancer diagnosis contain the scientifically validated data elements outlined in the surgical case summary checklist of the College of American Pathologists (CAP) publication Reporting on Cancer Specimens. The College regards the reporting elements in the “Surgical Pathology Cancer Case Summary (Checklist)” portion of the protocols as essential elements of the pathology report. However, the manner in which these elements are reported is at the discretion of each specific pathologist, taking into account clinician preferences, institutional policies, and individual practice.

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Pathologic staging is usually performed after surgical resection of the primary tumor. Pathologic staging depends on pathologic documentation of the anatomic extent of disease, whether or not the primary tumor has been completely removed.\textsuperscript{16}

**Rationale for the measure:**

Therapeutic decisions for prostate cancer management are stage driven and cannot be made without a complete set of pathology descriptors. Incomplete pathology reports for prostate cancer may result in misclassification of patients, rework and delays, and suboptimal management. The College of American Pathologists Cancer Committee has produced an evidence-based protocol/checklist of essential pathologic parameters that are recommended to be included in prostate cancer resection pathology reports. Conformance of pathology reports with the CAP checklist is a requirement for Cancer Center certification by the ACS.

The protocol recommends the use of the TNM Staging System for carcinoma of the prostate of the American Joint Committee on Cancer (AJCC) and the International Union Against Cancer (UICC).\textsuperscript{17 18} The radical prostatectomy checklist also includes extraprostatic extension.\textsuperscript{19}

In a study of cancer recurrence following radical prostatectomy, it was noted that “The relatively high proportion of patients who have biopsy-proven local recurrence who have organ-confined disease is probably inaccurate and, in large part, reflects undersampling and underrecognition of extraprostatic extension.”\textsuperscript{20}

The CAP Q probes data (2006) indicates that 11.6% of prostate pathology reports had missing elements. Extent of invasion (pTNM) was most frequently missing (52.1% of the reports missing elements), and extraprostatic extension was the second most frequently missing (41.7% of the reports missing elements). Margin status was missing in 8.3% of reports.

A sampling from prostate cancer cases in 2000 through 2001\textsuperscript{21} from the College of Surgeons National Cancer Data Base found only 48.2% of surgical pathology reports for prostate cancer documented pathologic stage similar to the more recent data from the CAP Q probes study. The NCDB data showed the Gleason score was present 86.3% of the time, slightly less than the 100% compliance found in the CAP Q probes study and that margin status was present in 84.9% of reports.

**Data capture and calculations:**

\textsuperscript{16} Ibid.  
\textsuperscript{21} Spencer, BA, et al. Variations in Quality of Care for Men with Early-Stage Prostate Cancer. \textit{J Clin Oncol} 26:3735-3742.
**Calculation for Performance**

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Numerator (A) Includes:**
- Radical prostatectomy pathology reports that include the pT category, the pN category, the Gleason score and a statement about margin status.

**Denominator (PD) Includes:**
- All radical prostatectomy pathology reports

**Denominator Exclusions (C) Include:**
- Documentation of medical reason for exclusion (e.g., specimen originated from other malignant neoplasms, secondary site prostatic carcinomas, and transurethral resections of the prostate (TURP))

**INSTRUCTIONS**:

This measure is to be reported each time a radical prostatectomy surgical pathology examination is performed during the reporting period for prostate patients. Each unique CPT Category I code or quality-data code submitted on the claim will be counted for denominator inclusion. It is anticipated that clinicians who examine prostate tissue specimens following resection in a laboratory or institution will submit this measure. Independent Laboratories (ILs) and Independent Diagnostic Testing Facilities (IDTFs), using indicator Place of Service 81, are not included in PQRS. If the specimen is not primary prostate tissue (e.g., breast, lung), report only G8798.

**Measure Reporting via Claims:**

ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. CPT Category II codes or quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed ICD-9-CM /ICD-10-CM diagnosis codes, CPT codes, and the appropriate CPT Category II code OR quality-data codes OR the CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reason not otherwise specified. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

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Measure Specifications – Measure #250: Pathology Report content for Radical Prostatectomy

B. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

**Denominator (Eligible Population):** All radical prostatectomy pathology reports

- **CPT code:**
  - 88309 - Level VI - Surgical pathology, gross and microscopic examination

  AND

- **ICD-9 code:**
  - 185 – malignant neoplasm of prostate

After October 1, 2015:

- **ICD-10 code:**
  - C61

**Denominator Exclusion:** Documentation of medical reason for exclusion (e.g. specimen originated from other malignant neoplasms, secondary site prostatic carcinomas, or transurethral resections of the prostate (TURP) [For patient with appropriate exclusion criteria, report 3267F with modifier 1P.]

**Numerator:** Radical prostatectomy pathology reports that include the pT category, the pN category, Gleason score and a statement about margin status

- Report the following CPT Category II code to confirm the inclusion of the designated elements in a radical prostatectomy pathology report:
  - 3267F – pathology report includes pT category, pN category, Gleason score and statement about margin status
    - Use the -8P modifier when the pathology report does not include pT category, pN category, Gleason score and statement about margin status
    - Use the -1P modifier to Category II code 3267F to report documented circumstances that appropriately exclude patients from the denominator.

  Or **G8798** – Specimen site other than anatomic location of prostate
Measure #251 – Quantitative HER2 evaluation by IHC uses the system recommended by the ASCO/CAP guidelines

This measure may be used as an Accountability measure

Measure Description: This is a measure based on whether quantitative evaluation of HER2 by immunohistochemistry (IHC) uses the system recommended in the ASCO/CAP Guidelines for Human Epidermal Growth Factor Receptor 2 Testing in breast cancer

Clinical Performance Measure

Numerator:
Breast cancer patients receiving quantitative breast tumor HER2 IHC evaluation using the ASCO/CAP recommended manual system or a computer-assisted system consistent with the optimal algorithm for HER2 testing as described in the current ASCO/CAP guideline

Denominator:
All breast cancer patients with quantitative breast tumor evaluation by HER2 IHC [defined by CPT codes 88360-quantitative tumor immunohistochemistry, manual; 88361-quantitative tumor immunohistochemistry, computer-assisted plus ICD-9 codes for breast cancer]

Denominator Exclusions:
None

Measure: Percentage of patients with quantitative breast tumor HER2 IHC evaluation using the ASCO/CAP recommended manual system or a computer-assisted system consistent with the optimal algorithm for HER2 testing as described in the current ASCO/CAP guidelines

Positive HER2 test. (p.3998)
Must report a HER2 test result as positive if: (a) IHC 3+ positive or (b) ISH positive using either a single-probe ISH or dual-probe ISH (Table 1; Figs 1 to 3). This assumes that there is no apparent histopathologic discordance observed by the pathologist (Table 2).

Equivocal HER2 test. (p. 3998)
Must report a HER2 test result as equivocal and order reflex test on the same specimen (unless the pathologist has concerns about the specimen) using the alternative test if: (a) IHC 2+ equivocal or (b) ISH equivocal using single-probe ISH or dual-probe ISH (Table 1; Figs 1 to 3). This assumes that there is no apparent histopathologic discordance observed by the pathologist (Table 2). Note that there are some rare breast cancers (eg. gland-forming tumors, micropapillary carcinomas) that show IHC 1+ staining that is intense but incomplete (basolateral or U shaped) and that are found to be HER2 amplified. The pathologist should consider also reporting these specimens equivocal and request reflex testing using the alternative test.

Negative HER2 test. (p. 3998)
Must report a HER2 test result as negative if a single test (or all tests) performed on a tumor specimen show: (a) IHC 1+ negative or IHC 0 negative or (b) ISH negative using single-probe ISH or dual-probe ISH (Table 1; Figs 1 to 3). This assumes that there is no apparent histopathologic discordance observed by the pathologist (Table 2).

Indeterminate HER2 test (p.3999)
Must report a HER2 test result as indeterminate if technical issues prevent one or both tests (IHC and ISH) performed on a tumor specimen from being reported as positive, negative, or equivocal. This may occur if specimen handling was inadequate, if artifacts (crush or edge artifacts) make interpretation difficult, or if the analytic testing failed. Another specimen should be requested for testing, if possible, and a comment should be included in the pathology report documenting intended action.

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

“Positive HER2 test. – Based on a literature review of clinical trials, international studies and protocols, expert consensus, and US Food and Drug Administration Panel findings, a positive HER2 test is defined as either ... uniform intense membrane staining of >30% of invasive tumor cells... or FISH result of amplified HER2 gene copy number (average of > six gene copies/nucleus for test systems without internal control probe) or HER2/CEP 17 ratio of more than 2.2, where CEP 17 is a centromeric probe for chromosome 17 on which the HER2 gene resides. The 30% [criterion] for a positive IHC is further discussed in Appendix G."24

From Appendix G:
“...For IHC assays of HER2 protein expression, the original US Food and Drug Administration-approved interpretation guidelines provide insufficient specificity. Several experts, including those serving as central reviewers on clinical trials, have specified that a threshold of more than 30% of tumor (rather than the originally specified 10%) should show strong circumferential membrane staining for a positive result. This means that according to this guideline, strong circumferential staining of 30% or less of cells would be considered equivocal and be subjected to confirmatory FISH testing."25

Rationale for the measure:
Through a cooperative effort with the American Society of Clinical Oncologists (ASCO) and the CAP, new guidelines for Human Epidermal Growth Factor 2 testing in breast cancer were published in January 2007 and revised in 2013. The ASCO/CAP Guideline recommendations for quantitative HER2 IHC evaluation were designed to enhance concordance with FISH assays for HER2 Amplified and Non-amplified tumor status.

CLINICAL RECOMMENDATION STATEMENTS:
Recommendations. The Update Committee recommends that HER2 status (HER2 negative or positive) be determined in all patients with invasive (early stage or recurrence) breast cancer on the basis of one or more HER2 test results (negative, equivocal, or positive). Testing criteria define HER2-positive status when (on observing within an area of tumor that amounts to >10% of contiguous and homogeneous tumor cells) there is evidence of protein over expression (IHC) or gene amplification (HER2 copy number or HER2/CEP17 ratio by ISH based on counting at least 20 cells within the area). If results are equivocal (revised criteria), reflex testing should be performed using an alternative assay (IHC or ISH). Repeat testing should be considered if results seem discordant with other histopathologic findings.26

Data capture and calculations:

Calculation for Performance
For performance purposes, this measure is calculated by creating a fraction with the following components:

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25 Ibid.

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CPT © 2010 American Medical Association.
Revised February 17, 2014
Numerator, Denominator, and Denominator Exclusions.

**Numerator (A) Includes:**

Breast cancer patients receiving quantitative breast tumor HER2 IHC evaluation using the ASCO/CAP recommended manual system or a computer-assisted system consistent with the optimal algorithm for HER2 testing as described in the ASCO/CAP guideline

**Denominator (PD) Includes:**

All breast cancer patients with quantitative breast tumor evaluation by HER2 IHC

**Denominator Exclusions (C) Include:**

- None

**INSTRUCTIONS**

This measure should be reported each time a quantitative HER2 IHC pathology examination is performed during the reporting period for patients with breast cancer; however, **only one QDC per date of service** for a patient is required. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Reporting via Claims:**

ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and the appropriate CPT Category II code OR the CPT Category II code with the modifier. The modifiers allowed for this measure is: 8P- reason not otherwise specified. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

**Measure Reporting via Registry:**

ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

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27 CMS 2014 PQRS Individual measure claims registry specification supporting documents
Measure Specifications – Quantitative HER2 evaluation by immunohistochemistry (IHC) uses the ASCO/CAP recommended system

C. Administrative claims data
Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All breast cancer patients with quantitative breast tumor evaluation by HER2 IHC

  AND

- CPT codes: Quantitative IHC Evaluation – 88360 or 88361 (The CPT descriptor for 88360 and 88361 is, "Morphometric analysis, tumor immunohistochemistry (eg, Her-2/neu, estrogen receptor/progesterone receptor), quantitative or semi-quantitative, each antibody.")

After October 1, 2015:

- ICD-10 diagnosis codes for breast cancer: C50.011, C50.012, C50.019, C50.021, C50.022, C50.029, C50.111, C50.112, C50.119, C50.121, C50.122, C50.129, C50.211, C50.212, C50.219, C50.221, C50.222, C50.229, C50.311, C50.312, C50.319, C50.321, C50.322, C50.329, C50.411, C50.412, C50.419, C50.421, C50.422, C50.429, C50.511, C50.512, C50.519, C50.521, C50.522, C50.529, C50.611, C50.612, C50.619, C50.621, C50.622, C50.629, C50.811, C50.812, C50.819, C50.821, C50.822, C50.829, C50.911, C50.912, C50.919, C50.921, C50.922, C50.929
  AND

- CPT codes: Quantitative IHC Evaluation – 88360 or 88361 (The CPT descriptor for 88360 and 88361 is, "Morphometric analysis, tumor immunohistochemistry (eg, Her-2/neu, estrogen receptor/progesterone receptor), quantitative or semi-quantitative, each antibody.")

Denominator Exclusion: None. [There are no performance exclusions for these codes. Do not report modifier 1P, 2P, or 3P with this code.]
**Numerator:** Breast cancer patients receiving quantitative breast tumor HER2 IHC evaluation using the ASCO/CAP recommended manual system or a computer-assisted system consistent with the optimal algorithm for HER2 testing as described in the ASCO/CAP guideline

- Report one of the following CPT Category II codes to confirm the use of the recommended scoring system:
  - **3394F** – Quantitative HER2 IHC evaluation consistent with scoring system defined in the ASCO/CAP guidelines
    - Use the -8P modifier when the evaluation was not consistent with scoring system defined in the ASCO/CAP guidelines
  - **3395F** – Quantitative non-HER2 IHC evaluation (e.g., testing for estrogen or progesterone receptors, [ER/PR]) performed

**Performance Measure:**

- **3394F + 3395F**

Claims identified by CPT code 88360 or 88361 and breast cancer ICD-9 codes

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**Measure #395 Lung Cancer Reporting (biopsy/cytology specimens)**

This measure may be used as an Accountability measure

**Measure Description:** This is a physician-specific measure based on biopsy and/or cytology specimens with a diagnosis of non small cell lung cancer classified into specific histologic type or classified as NSCLC-NOS with an explanation included in the pathology report

<table>
<thead>
<tr>
<th>Clinical Performance Measure</th>
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<tbody>
<tr>
<td><strong>Numerator:</strong></td>
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<tr>
<td><strong>Denominator:</strong></td>
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<tr>
<td><strong>Denominator Exclusions:</strong></td>
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<tr>
<td><strong>Measure:</strong></td>
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</tbody>
</table>
The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

To address advances in oncology, molecular biology, pathology, radiology, and surgery of lung adenocarcinoma, an international multidisciplinary classification was sponsored by the International Association for the Study of Lung Cancer, American Thoracic Society, and European Respiratory Society. This new adenocarcinoma classification is needed to provide uniform terminology and diagnostic criteria, especially for bronchioloalveolar carcinoma (BAC), the overall approach to small non-resection cancer specimens, and for multidisciplinary strategic management of tissue for molecular and immunohistochemical studies.

For small biopsies and cytology, we recommend that NSCLC be further classified into a more specific histologic type, such as adenocarcinoma or squamous cell carcinoma, whenever possible (strong recommendation, moderate quality evidence)…

We recommend that the term NSCLC-NOS be used as little as possible, and we recommend it be applied only when a more specific diagnosis is not possible by morphology and/or special stains (strong recommendation, moderate quality evidence).

The above strategy for classification of adenocarcinoma versus other histologies and the terminology… should be used in routine diagnosis and future research and clinical trials, so that there is uniform classification of disease cohorts in relationship to tumor subtypes…

Rationale for the measure:

Lung cancer is the most frequent cause of major cancer incidence and mortality worldwide… The classifications of lung cancer published by the World Health Organization (WHO) in 1967, 1981, and 1999 were written primarily by pathologists for pathologists. Only in the 2004 revision, relevant genetics and clinical information were introduced. Nevertheless, because of remarkable advances over the last 6 years in our understanding of lung adenocarcinoma, particularly in area of medical oncology, molecular biology, and radiology, there is a pressing need for a revised classification, based not on pathology alone, but rather on an integrated multidisciplinary platform…

For the first time, this classification addresses an approach to small biopsies and cytology in lung cancer diagnosis… Recent data regarding EGFR mutation predicting responsiveness to EGFR-TKIs, toxicities, and therapeutic efficacy have established the importance of distinguishing squamous cell carcinoma from adenocarcinoma and non-small cell lung carcinoma (NSCLC) not otherwise specified (NOS) in patients with advanced lung cancer. Approximately 70% of lung cancers are diagnosed and staged by small biopsies or cytology rather than surgical resection specimens, with increasing use of transbronchial needle aspiration (TBNA), endobronchial ultrasound-guided TBNA and esophageal ultrasound-guided needle aspiration. Within the NSCLC group, most pathologists can identify well- or moderately-differentiated squamous cell carcinomas or adenocarcinomas, but specific diagnoses are more difficult with poorly differentiated tumors. Nevertheless, in small biopsies and/or cytology specimens, 10 to 30% of specimens continue to be diagnosed as NSCLC-NOS.
Measure Specifications – Pathology reports based on biopsy and/or cytology specimens with a diagnosis of non small cell lung cancer classified into specific histologic type or classified as NSCLC-NOS with an explanation included in the pathology report

INSTRUCTIONS:
This measure is to be reported each time a patient’s pathology report addresses specimens with a diagnosis of non-small cell lung cancer; however, only one QDC per date of service for a patient is required. This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Claims:
ICD-9-CM/ICD-10-CM diagnosis codes, and CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. Quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed ICD-9-CM/ICD-10-CM diagnosis codes, and CPT codes, and the appropriate quality-data code.

Measure Reporting via Registry:
ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. The numerator options as described in the quality-data codes are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)
**Denominator (Eligible Population):** Biopsy and cytology specimen reports with a diagnosis of non small cell lung cancer

- CPT code(s) 88305 and 88307

AND

- ICD-9 codes
  - 162.2, Malignant neoplasm of main bronchus
  - 162.3, Malignant neoplasm of upper lobe, bronchus or lung
  - 162.4, Malignant neoplasm of middle lobe, bronchus or lung
  - 162.5, Malignant neoplasm of lower lobe, bronchus or lung
  - 162.8, Malignant neoplasm of other parts of bronchus or lung (includes malignant neoplasm of contiguous or overlapping sites of bronchus or lung whose point of origin cannot be determined)
  - 162.9, Malignant neoplasm of bronchus and lung, unspecified

After October 1, 2015:

- ICD-10 codes
  - C34.00, Malignant neoplasm of unspecified main bronchus
  - C34.01, Malignant neoplasm of right main bronchus
  - C34.02, Malignant neoplasm of left main bronchus
  - C34.10, Malignant neoplasm of upper lobe, unspecified bronchus or lung
  - C34.11, Malignant neoplasm of upper lobe, right bronchus or lung
  - C34.12, Malignant neoplasm of upper lobe, left bronchus or lung
  - C34.2, Malignant neoplasm of middle lobe, bronchus or lung
  - C34.30, Malignant neoplasm of lower lobe, unspecified bronchus or lung
  - C34.31, Malignant neoplasm of lower lobe, right bronchus or lung
  - C34.32, Malignant neoplasm of lower lobe, left bronchus or lung
  - C34.80, Malignant neoplasm of overlapping sites of unspecified bronchus and lung
  - C34.81, Malignant neoplasm of overlapping sites of right bronchus and lung
  - C34.82, Malignant neoplasm of overlapping sites of left bronchus and lung
  - C34.90, Malignant neoplasm of unspecified part of unspecified bronchus and lung
  - C34.91, Malignant neoplasm of unspecified part of right bronchus and lung
  - C34.92, Malignant neoplasm of unspecified part of left bronchus and lung

**Denominator Exclusion:** Documentation of medical reason for not classifying the NSCLC lung cancer into histology type. [For patient with appropriate exclusion criteria (e.g. cytology on lymph nodes done in association with surgical resection of lung tumor, report on small cell lung cancer, reports on large cell neuroendocrine cancer), report CPT II code TBD with modifier 1P TBD]

**Numerator:** Biopsy and cytology specimen reports with a diagnosis of non small cell lung cancer classified into histology type (squamous cell carcinoma, adenocarcinoma) OR classified as NSCLC-NOS with explanation included in the pathology report

- CPT II code TBD

**Performance Measure Calculation:**

CPT II biopsy/cytology codes TBD
NUMERATOR:
Biopsy and cytology specimen reports with a diagnosis of primary non-small cell lung cancer classified into specific histologic type (squamous cell carcinoma, adenocarcinoma) OR classified as NSCLC-NOS with an explanation included in the pathology report

Numerator Quality-Data Coding Options for Reporting Satisfactorily:
Non-Small Cell Lung Cancer Biopsy and Cytology Specimen Reports Classified
G9418: Primary Non-small cell lung cancer biopsy and cytology specimen report documents classification into specific histologic type OR classified as NSCLC-NOS with an explanation

OR

Non-Small Cell Lung Cancer Biopsy and Cytology Specimen Reports not Classified for Medical Reasons
G9419: Documentation of medical reason(s) for not reporting the histological type OR NSCLC-NOS classification with an explanation (e.g., biopsy taken for other purposes in a patient with a history of primary non-small cell lung cancer or other documented medical reasons)

OR

If patient is not eligible for this measure because the specimen is not of lung origin or is not classified as non-small cell lung cancer report:
G9420: Specimen site other than anatomic location of lung or is not classified as primary non-small cell lung cancer

OR

Non-Small Cell Lung Cancer Biopsy and Cytology Specimen Reports not Classified, Reason not given
G9421: Primary non-small cell lung cancer biopsy and cytology specimen report does not document classification into specific histologic type OR classified as NSCLC-NOS with an explanation
Measure #396  Lung Cancer Reporting (Resection)

This measure may be used as an Accountability measure

Measure Description: This is a physician-specific measure based on resection specimens for primary lung carcinoma which include the pT category, pN category and for NSCLC, histologic type

<table>
<thead>
<tr>
<th>Clinical Performance Measure</th>
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<tbody>
<tr>
<td><strong>Numerator:</strong> Pathology reports based on resection specimens with a diagnosis of primary lung carcinoma that include the pT category, pN category and for non small cell lung cancer, histologic type (squamous cell carcinoma, adenocarcinoma and NOT NSCLC-NOS)</td>
</tr>
</tbody>
</table>

| **Denominator:** Pathology reports for resection specimens for primary lung carcinoma |

<table>
<thead>
<tr>
<th><strong>Denominator Exclusions:</strong> Reports on</th>
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</thead>
<tbody>
<tr>
<td>- Metastatic disease to lung</td>
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<tr>
<td>- Benign tumors</td>
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<tr>
<td>- Malignant tumors other than carcinomas</td>
</tr>
<tr>
<td>- Inadequate surgical specimens</td>
</tr>
</tbody>
</table>

| **Measure:** Percentage of pathology reports for primary lung carcinoma resection specimens that include the pT category, pN category and for non small cell lung cancer, histologic type (squamous cell carcinoma, adenocarcinoma and NOT NSCLC-NOS) |
The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

The TNM staging system of the American Joint Committee on Cancer (AJCC) and the International Union Against Cancer (UICC) is recommended for non-small cell lung cancer. Small cell lung cancer has been more commonly classified according to a separate staging system as either “limited” or “extensive” disease, but based on analysis of the International Association for the Study of Lung Cancer (IASLC) database, TNM staging is also recommended for small cell lung cancer.\textsuperscript{iv}

The purpose of pathologic evaluation is to precisely classify the histologic type of lung cancer and to determine all staging parameters as recommended by the AJCC including tumor size, the extent of invasion (pleural and bronchial), adequacy of surgical margins, and presence or absence of lymph node metastasis.

Pathologic evaluation is performed to classify the histologic type of the lung cancer, determine the extent of invasion, determine whether it is primary lung cancer or metastatic cancer, establish the cancer involvement status of the surgical margins (i.e., positive or negative margins), and do molecular diagnostic studies to determine whether certain gene mutations are present. \textsuperscript{iv}

A new lung cancer TMN staging system was developed by the International Association of the Study of Lung Cancer (IASLC) and adopted by the American Joint Commission for Cancer (AJCC) (7th edition, 2010). This new staging system is applicable to both NSCLC and SCLC based on studies by the IASLC which demonstrated the prognostic significance of the various stage designations in both diseases... application of the TNM system will not change how patients are treated; however, clinical research studies should begin to utilize the TNM system, because it will allow for more precise assessments of prognosis and specific therapy in the future. Therefore, the SCLC algorithm was revised in 2011 to include the TNM staging information. \textsuperscript{iv}

Rationale for the measure:

The TNM staging revisions (AJCC 7\textsuperscript{th} edition) became effective for all new cases diagnosed after January 1, 2010. The new staging system is applicable to both NSCLC and, for the first time, SCLC. There are significant changes in staging, particularly in T3 for NSCLC. For these reasons, we believe a gap exists in the appropriate and consistent use of the new \textit{p}T standards for lung cancer. (CAP Performance Measures Working Group)
Measure Specifications – Pathology reports based on resection specimens with a diagnosis of primary lung carcinoma that includes the pT category, pN category and for NSCLC histologic type (squamous cell carcinoma, adenocarcinoma and NOT NSCLC-NOS)

INSTRUCTIONS:
This measure is to be reported each time a patient’s pathology report addresses specimens with a diagnosis of non-small cell lung cancer; however, only one QDC per date of service for a patient is required. This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Claims:
ICD-9-CM/ICD-10-CM diagnosis codes, and CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. Quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed ICD-9-CM/ICD-10-CM diagnosis codes, and CPT codes, and the appropriate quality-data code.

Measure Reporting via Registry:
ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes and patient demographics are used to identify patients who are included in the measure’s denominator. The numerator options as described in the quality-data codes are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Denominator (Eligible Population): Pathology reports based on resection specimens with a diagnosis of primary non small cell lung cancer

- CPT code(s)
  - 88309 Level IV – Surgical pathology, gross and microscopic examination (comment: will capture lung - total/lobe/segment resection as well as other specimens listed under 88309)

AND

- ICD-9 codes
  - 162.3, Malignant neoplasm of upper lobe, bronchus or lung
  - 162.4, Malignant neoplasm of middle lobe, bronchus or lung
  - 162.5, Malignant neoplasm of lower lobe, bronchus or lung
  - 162.8, Malignant neoplasm of other parts of bronchus or lung (includes malignant neoplasm of contiguous or overlapping sites of bronchus or lung whose point of origin cannot be determined)
  - 162.9, Malignant neoplasm of bronchus and lung, unspecified

OR

- ICD-10 codes
  - C34.00, Malignant neoplasm of unspecified main bronchus
  - C34.01, Malignant neoplasm of right main bronchus
  - C34.02, Malignant neoplasm of left main bronchus
  - C34.10, Malignant neoplasm of upper lobe, unspecified bronchus or lung
  - C34.11, Malignant neoplasm of upper lobe, right bronchus or lung
  - C34.12, Malignant neoplasm of upper lobe, left bronchus or lung
  - C34.2, Malignant neoplasm of middle lobe, bronchus or lung
  - C34.30, Malignant neoplasm of lower lobe, unspecified bronchus or lung
  - C34.31, Malignant neoplasm of lower lobe, right bronchus or lung
  - C34.32, Malignant neoplasm of lower lobe, left bronchus or lung
  - C34.80, Malignant neoplasm of overlapping sites of unspecified bronchus and lung
  - C34.81, Malignant neoplasm of overlapping sites of right bronchus and lung
  - C34.82, Malignant neoplasm of overlapping sites of left bronchus and lung
  - C34.90, Malignant neoplasm of unspecified part of unspecified bronchus and lung
  - C34.91, Malignant neoplasm of unspecified part of right bronchus and lung
  - C34.92, Malignant neoplasm of unspecified part of left bronchus and lung
**Numerator:** Lung cancer pathology reports with pT category, pN category and for non-small cell lung carcinoma (NSCLC) histologic type (squamous cell carcinoma, adenocarcinoma and NOT NSCLC-NOS)

Primary Lung Carcinoma that Include the pT category, pN category and for Non-Small Cell Lung Cancer, Histologic Type (Squamous Cell Carcinoma, Adenocarcinoma and NOT NSCLC-NOS)

G9422: Primary lung carcinoma resection report documents pT category, pN category and for Non-small Cell Lung Cancer, Histologic Type (Squamous Cell Carcinoma, Adenocarcinoma and NOT NSCLC-NOS)

OR

Primary Lung Carcinoma that Include the pT category, pN category and for Non Small Cell Lung Cancer, Histologic Type (Squamous Cell Carcinoma, Adenocarcinoma) not Documented for Medical Reasons

G9423: Documentation of medical reason for NOT including pT category, pN category and histologic type [For patient with appropriate exclusion criteria (e.g. metastatic disease, benign tumors, malignant tumors other than carcinomas, inadequate surgical specimens)]

OR

If patient is not eligible for this measure because the specimen is not of lung origin, or is classified as NSCLC-NOS report:

G9424: Specimen site other than anatomic location of lung, OR classified as NSCLC-NOS

OR

Primary Lung Carcinoma that Include the pT category, pN category and for Non Small Cell Lung Cancer, Histologic Type (Squamous Cell Carcinoma, Adenocarcinoma) not Documented, Reason not Given

G9425: Primary lung carcinoma resection report does **not** document pT category, pN category and for Non-small Cell Lung Cancer, Histologic Type (Squamous Cell Carcinoma, Adenocarcinoma)
Measure #397 Melanoma Reporting

This measure may be used as an Accountability measure

**Measure Description:** This is a measure based on whether melanoma pathology reports for excision of primary malignant cutaneous melanomas include the pT category and a statement on thickness and ulceration and for pT1, mitotic rate.

<table>
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<tr>
<th>Clinical Performance Measure</th>
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<tbody>
<tr>
<td><strong>Numerator:</strong> Pathology reports for primary malignant cutaneous melanoma that include the pT category and a statement on thickness and ulceration and for pT1, mitotic rate</td>
</tr>
<tr>
<td><strong>Denominator:</strong> All melanoma pathology reports for primary malignant cutaneous melanoma</td>
</tr>
<tr>
<td><strong>Denominator Exclusions:</strong> Reports with/for:</td>
</tr>
<tr>
<td>• Inadequate sample (e.g. poorly fixed, too small)</td>
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<tr>
<td>• Metastatic melanoma</td>
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<tr>
<td>• Non-cutaneous melanoma</td>
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<tr>
<td>• Melanoma in situ/Tis</td>
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<tr>
<td>• Benign melanocytic lesions</td>
</tr>
<tr>
<td>• Fragmented/curettage specimens</td>
</tr>
</tbody>
</table>

**Measure:** Percentage of primary malignant cutaneous melanoma pathology reports that include the pT category and a statement on thickness and ulceration and for pT1, mitotic rate

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

In patients with localized melanoma (Stage I or II), Breslow tumor thickness, ulceration and mitotic rate are the three most important characteristics of the primary tumor predicting outcome...iv
### Rationale for the measure:

In the evidence-based derivation of the 2010 AJCC staging system, mitotic rate greater than or equal to 1 per mm² was independently associated with worse disease-specific survival, especially in patients with melanoma less than or equal to 1.0 mm thick. As such, mitotic rate has replaced Clark level as a criterion for upstaging patients with melanomas less than or equal to 1.0 mm in thicknesses from IA to IB. **Error! Bookmark not defined.**

Until now, routine histopathologic reporting of primary melanomas has infrequently included an assessment of mitotic rate. Even in a geographic area with a high melanoma incidence, such as Queensland, Australia, fewer than 50% of pathology reports on primary melanomas documented mitotic rate in a recent study assessing the completeness of histopathologic reporting of melanoma. Similarly, in another recently published study undertaken at the H. Lee Moffitt Cancer Center in Florida, 47% of outside pathology reports for patients with thin (<=1 mm) or in situ melanoma did not mention mitotic rate. Moreover, clinicians involved in the care of patients with primary melanomas have not generally considered mitotic rate as an important factor to be considered when discussing prognosis with patients and planning their treatment.⁴

In addition to the specific gap noted above, recent research and the publication of new guidelines in 2012 indicate newer tumor characteristics for more precise staging with implications for treatment outcomes. For these reasons, we believe there is a gap in reporting of these new characteristics in melanoma pathology reports. (CAP Performance Measures Working Group)

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**Measure Specifications** – Melanoma pathology report that includes the pT category and a statement on thickness and ulceration AND for pT1, mitotic rate

**INSTRUCTIONS:**

This measure is to be reported each time a patient’s pathology report addresses specimens with a diagnosis of malignant cutaneous melanoma; **however, only one QDC per date of service for a patient is required.** This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Reporting via Claims:**

ICD-9-CM/ICD-10-CM diagnosis codes, and CPT odes, and patient demographics are used to identify patients who are included in the measure’s denominator. Quality-data codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed ICD-9-CM/ICD-10-CM diagnosis codes, and CPT codes, and the appropriate quality-data code.

**Measure Reporting via Registry:**

ICD-9-CM/ICD-10-CM diagnosis codes, CPT codes and patient demographics are used to identify patients who are included in the measure’s denominator. The numerator options as described in the quality-data codes are used to report the numerator of the measure.
The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
**Denominator (Eligible Population):** All pathology reports for primary cutaneous malignant melanoma for patients 18 through 75 years of age on date of encounter

- **CPT code**
  - 88305 Level IV – Surgical pathology, gross and microscopic examination
    - (Comment: will capture skin, other than cyst/tag/debridement/plastic repair, it will also capture Lymph node, biopsy as well as other specimens under 88305.)

  **AND**

- **ICD-9 code**  
  Diagnosis for malignant cutaneous melanoma (ICD-9-CM) [for use 1/1/2015-9/30/2015]: 172.0, 172.1, 172.2, 172.3, 172.4, 172.5, 172.6, 172.7, 172.8, 172.9

After October 1, 2015:

- **Diagnosis for malignant cutaneous melanoma (ICD-10-CM) [for use 10/01/2015-12/31/2015]:** C43.0, C43.20, C43.21, C43.22, C43.30, C43.31, C43.39, C43.4, C43.51, C43.52, C43.59, C43.60, C43.61, C43.62, C43.70, C43.71, C43.72, C43.8, C43.9,

**Numerator:** Pathology reports for primary malignant cutaneous melanoma that include the pT category and a statement on thickness and ulceration and for pT1, mitotic rate

**Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

Pathology Reports that Include the pT Category and a Statement on Thickness and Ulceration and for pT1, mitotic rate

- **G9428:** Pathology report includes the pT Category and a statement on thickness and ulceration and for pT1, mitotic rate

**OR**

Pathology Reports that does not Include the pT Category and a Statement on Thickness and Ulceration and for pT1, mitotic rate, not Documented for Medical Reasons

- **G9429:** Documentation of medical reason(s) for not reporting pT Category and a statement on thickness and ulceration and for pT1, mitotic rate (e.g., negative skin biopsies in a patient with a history of melanoma or other documented medical reasons)

**OR**

If patient is not eligible for this measure because the specimen is not of cutaneous origin

- **G9430:** Specimen site other than anatomic cutaneous location

**OR**

Pathology Reports that does not Include the pT Category and a Statement on Thickness and Ulceration and for pT1, mitotic rate, Reason not Given

- **G9431:** Pathology report does not include the pT Category and a statement on thickness and ulceration and for pT1, mitotic rate
Works Cited


