

Quality ID #395: Lung Cancer Reporting (Biopsy/Cytology Specimens) – National Quality Strategy  
Domain: Communication and Care Coordination

**2018 OPTIONS FOR INDIVIDUAL MEASURES:**  
**CLAIMS ONLY**

**MEASURE TYPE:**  
Outcome

**DESCRIPTION:**  
Pathology reports based on biopsy and/or cytology specimens with a diagnosis of primary 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 submitted **each time** a patient's pathology report addresses specimens with a diagnosis of non-small cell lung cancer; however, only one quality-data code (QDC) per date of service for a patient is required. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Submission:**  
The listed denominator criteria is used to identify the intended patient population. The numerator quality-data codes included in this specification are used to submit the quality actions allowed by the measure. All measure-specific coding should be submitted on the claim(s) representing the eligible encounter.

**DENOMINATOR:**  
Biopsy and cytology specimen reports with a diagnosis of primary non-small cell lung cancer

**Denominator Criteria (Eligible Cases):**

Patients ≥ 18 years of age on date of encounter

**AND**

**Diagnosis for lung cancer (ICD-10-CM):** C34.00, C34.01, C34.02, C34.10, C34.11, C34.12, C34.2, C34.30, C34.31, C34.32, C34.80, C34.81, C34.82, C34.90, C34.91, C34.92

**AND**

**Patient encounter during performance period (CPT):** 88104, 88108, 88112, 88173, 88305

**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:**

**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:**

**Denominator Exclusion: 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 Classified**  
**Performance Met: 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 a Medical Reason**

**Denominator Exception: G9419:**

Documentation of medical reason(s) for not including 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**

**Non-Small Cell Lung Cancer Biopsy and Cytology Specimen Reports not Classified, Reason not Given Performance Not Met: 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

**RATIONALE:**

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.

**CLINICAL RECOMMENDATION STATEMENTS:**

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.

Travis WD, Brambilla E, Noguchi M, et al. International Association for the Study of Lung Cancer/American Thoracic Society/European Respiratory Society International Multidisciplinary Classification of Lung Adenocarcinoma. Journal of Thoracic Oncology 2011; 6:244-285.

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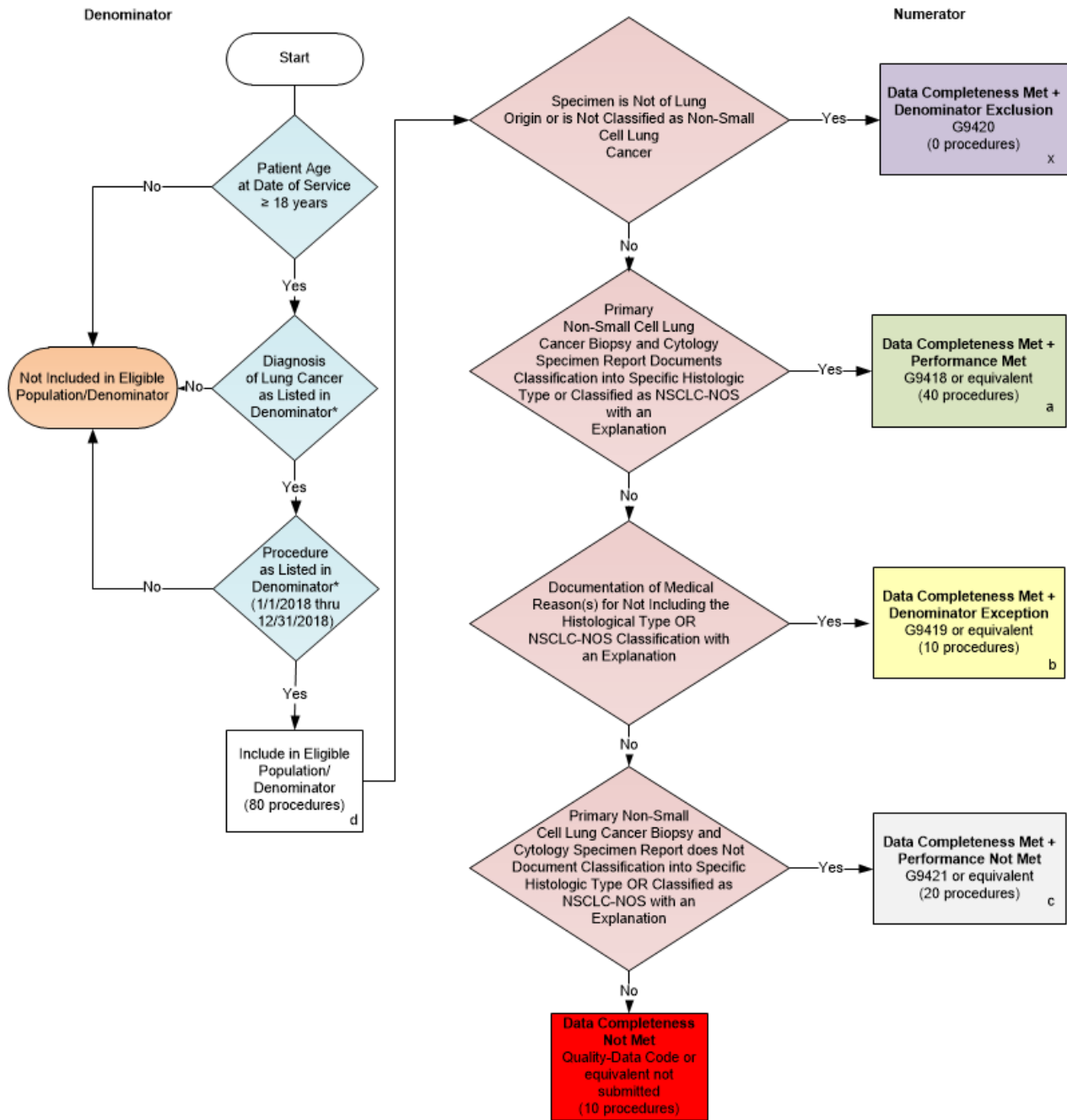
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## 2018 Claims Flow for Quality ID #395: Lung Cancer Reporting (Biopsy/Cytology Specimens)



\*See the posted Measure Specification for specific coding and instructions to submit this measure.  
NOTE: Submission Frequency: Procedure

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The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.  
v2

## 2018 Claims Flow for Quality ID #395: Lung Cancer Reporting (Biopsy/Cytology Specimens)

### SAMPLE CALCULATIONS:

Data Completeness=

$$\frac{\text{Denominator Exclusion (x=0 procedures)} + \text{Performance Met (a=40 procedures)} + \text{Denominator Exception (b=10 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population/Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a=40 procedures)}}{\text{Data Completeness Numerator (70 procedures) - Denominator Exclusion (x=0 procedures) - Denominator Exception (b=10 procedures)}} = \frac{40 \text{ procedures}}{60 \text{ procedures}} = 66.67\%$$

\*See the posted Measure Specification for specific coding and instructions to submit this measure.

NOTE: Submission Frequency: Procedure

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**2018 Claims Flow for Quality ID**  
**#395: Lung Cancer Reporting (Biopsy/Cytology Specimens)**

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for claims data submission.

1. Start with Denominator
2. Check Patient Age:
  - a. If the Age is greater than or equal to 18 years of age at Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
  - b. If the Age is greater than or equal to 18 years of age at Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.
3. Check Patient Diagnosis:
  - a. If Diagnosis of Lung Cancer as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis of Lung Cancer as Listed in the Denominator equals Yes, proceed to check Encounter Performed.
4. Check Procedure Performed:
  - a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Procedure as Listed in the Denominator equals Yes, include in the Eligible Population.
5. Denominator Population:
  - a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 procedures in the Sample Calculation.
6. Start Numerator
7. Check Specimen is Not of Lung Origin or is Not Classified as Non-Small Cell Lung Cancer:
  - a. If Specimen is Not of Lung Origin or is Not Classified as Non-Small Cell Lung Cancer equals Yes, include in the Data Completeness Met and Denominator Exclusion.
  - b. Data Completeness Met and Denominator Exclusion letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter x equals 0 procedures in the Sample Calculation.
  - c. If Specimen is Not of Lung Origin or is Not Classified as Non-Small Cell Lung Cancer equals No, proceed to check 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.
8. Check 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:

- a. If 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 equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 40 procedures in Sample Calculation.
  - c. If 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 equals No, proceed to check Documentation of Medical Reason(s) for Not Including the Histological Type OR NSCLC-NOS Classification with an Explanation
9. Check Documentation of Medical Reason(s) for Not Including the Histological Type OR NSCLC-NOS Classification with an Explanation:
- a. If Documentation of Medical Reason(s) for Not Including the Histological Type OR NSCLC-NOS Classification with an Explanation equals Yes, include in the Data Completeness Met and Denominator Exception.
  - b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 10 procedures in the Sample Calculation.
  - c. If Documentation of Medical Reason(s) for Not Including the Histological Type OR NSCLC-NOS Classification with an Explanation equals No, proceed to 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 .
10. Check 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:
- a. If 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 equals Yes, include in Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 20 procedures in the Sample Calculation.
  - c. If 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 equals No, proceed to Data Completeness Not Met.
11. Check Data Completeness Not Met:
- a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 procedures have been subtracted from the Date Completeness Numerator in the Sample Calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Denominator Exclusion (x=0 procedures)} + \text{Performance Met (a=40 procedures)} + \text{Denominator Exception (b=10 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population/Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=40 procedures)}}{\text{Data Completeness Numerator (70 procedures)} - \text{Denominator Exclusion (x=0 procedures)} - \text{Denominator Exception (b=10 procedures)}} = \frac{40 \text{ procedures}}{60 \text{ procedures}} = 66.67\%$$