

**Measure #52 (NQF 0102): Chronic Obstructive Pulmonary Disease (COPD): Long-Acting Inhaled Bronchodilator Therapy – National Quality Strategy Domain: Effective Clinical Care**

**2017 OPTIONS FOR INDIVIDUAL MEASURES:**  
**CLAIMS ONLY**

**MEASURE TYPE:**

Process

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of COPD (FEV1/FVC < 70%) and who have an FEV1 less than 60% predicted and have symptoms who were prescribed a long-acting inhaled bronchodilator

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per performance period** for all COPD patients seen during the performance period. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Reporting:**

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 reported on the claim(s) representing the eligible encounter.

**DENOMINATOR:**

All patients aged 18 years and older with a diagnosis of COPD (FEV1/FVC < 70%), who have an FEV1 < 60% predicted and have symptoms (e.g., dyspnea, cough/sputum, wheezing)

**Denominator Criteria (Eligible Cases):**

Patients aged ≥ 18 years on date of encounter

**AND**

**Diagnosis for COPD (ICD-10-CM):** J41.0, J41.1, J41.8, J42, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9

**AND**

**Patient encounter during the performance period (CPT):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**WITHOUT**

**Telehealth Modifier:** GQ, GT

**NUMERATOR:**

Patients who were prescribed a long-acting inhaled bronchodilator

**Definition:**

**Prescribed** – Includes patients who are currently receiving medication(s) that follow the treatment plan recommended at an encounter during the performance period, even if the prescription for that medication was ordered prior to the encounter.

*NUMERATOR NOTE: The correct combination of numerator code(s) must be reported on the claim form in order to properly report this measure. The “correct combination” of codes may require the submission of multiple numerator codes.*

**Numerator Quality-Data Coding Options:**

**If patient is not eligible for this measure because spirometry results demonstrate FEV1/FVC ≥70%, FEV1 ≥ 60% predicted or patient does not have COPD symptoms, report:**

*(One quality-data code [G8925 or G8926] is required on the claim form to submit this numerator option)*

**Denominator Exclusion: G8925:** Spirometry test results demonstrate FEV1/FVC  $\geq$  70%, FEV1  $\geq$  60% predicted or patient does not have COPD symptoms

**OR**

**Spirometry Test not Performed or Documented**

**Denominator Exclusion: G8926:** Spirometry test not performed or documented, reason not given

**OR**

**Patient Prescribed Long-Acting Inhaled Bronchodilator Therapy**

*(Two quality-data codes [G9695 & G8924] are required on the claim form to submit this numerator option)*

**Performance Met: G9695:** Long-acting inhaled bronchodilator prescribed

**AND**

**G8924:** Spirometry test results demonstrate FEV1/FVC  $<$  70%, FEV1  $<$  60% predicted and patient has COPD symptoms (e.g., dyspnea, cough/sputum, wheezing)

**OR**

**Patient not Documented to have Long-Acting Inhaled Bronchodilator Prescribed for Medical, Patient, or System Reasons**

*(Two quality-data codes [G9696, G9697, or G9698 & G8924] are required on the claim form to submit this numerator option)*

**Denominator Exception: G9696:** Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator

**OR**

**Denominator Exception: G9697:** Documentation of patient reason(s) for not prescribing a long-acting inhaled bronchodilator

**OR**

**Denominator Exception: G9698:** Documentation of system reason(s) for not prescribing a long-acting inhaled bronchodilator

**AND**

**G8924:** Spirometry test results demonstrate FEV1/FVC  $<$  70%, FEV1  $<$  60% predicted and patient has COPD symptoms (e.g., dyspnea, cough/sputum, wheezing)

**OR**

**Patient not Documented to have Long Acting Inhaled Bronchodilator Prescribed, Reason not Otherwise Specified**

*(Two quality-data codes [G9699 & G8924] are required on the claim form to submit this numerator option)*

**Performance Not Met: G9699:** Long-Acting inhaled bronchodilator not prescribed, reason not otherwise specified

**AND**

**G8924:** Spirometry test results demonstrate FEV1/FVC  $<$  70%, FEV1  $<$  60% predicted and patient has COPD symptoms (e.g., dyspnea, cough/sputum, wheezing)

**RATIONALE:**

Despite major efforts to broadly disseminate the Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines and use of COPD performance measures across different specialty societies, management of COPD, and specifically prescription for long-acting inhaled bronchodilators, remains suboptimal. Studies show a wide range of deficiencies in adherence to guidelines regarding long-acting inhaled bronchodilator use across different settings (Asche et al., 2012; CDC, 2012; Fitch, et al., 2011; Nantsupawat et al., 2012; Perez et al., 2011; Sharif, et al., 2013). Underuse of bronchodilators were found related to hospital readmissions and to increased total costs of services when compared to patient care adhering to GOLD guidelines (Asche et al., 2012; Nantsupawat et al., 2012).

Suboptimal COPD management has implications for severity of illness, disease progression, patient quality of life and health status, exacerbations (and associated costs) and mortality. Improved adherence to COPD management guidelines, specifically appropriate use of long-acting inhaled bronchodilators, has the potential to improve clinical outcomes and cost of care related to COPD. As a result, we believe this measure will continue to increase appropriate long-acting inhaled bronchodilator use, improving patient management and total costs of COPD.

**CLINICAL RECOMMENDATION STATEMENTS:**

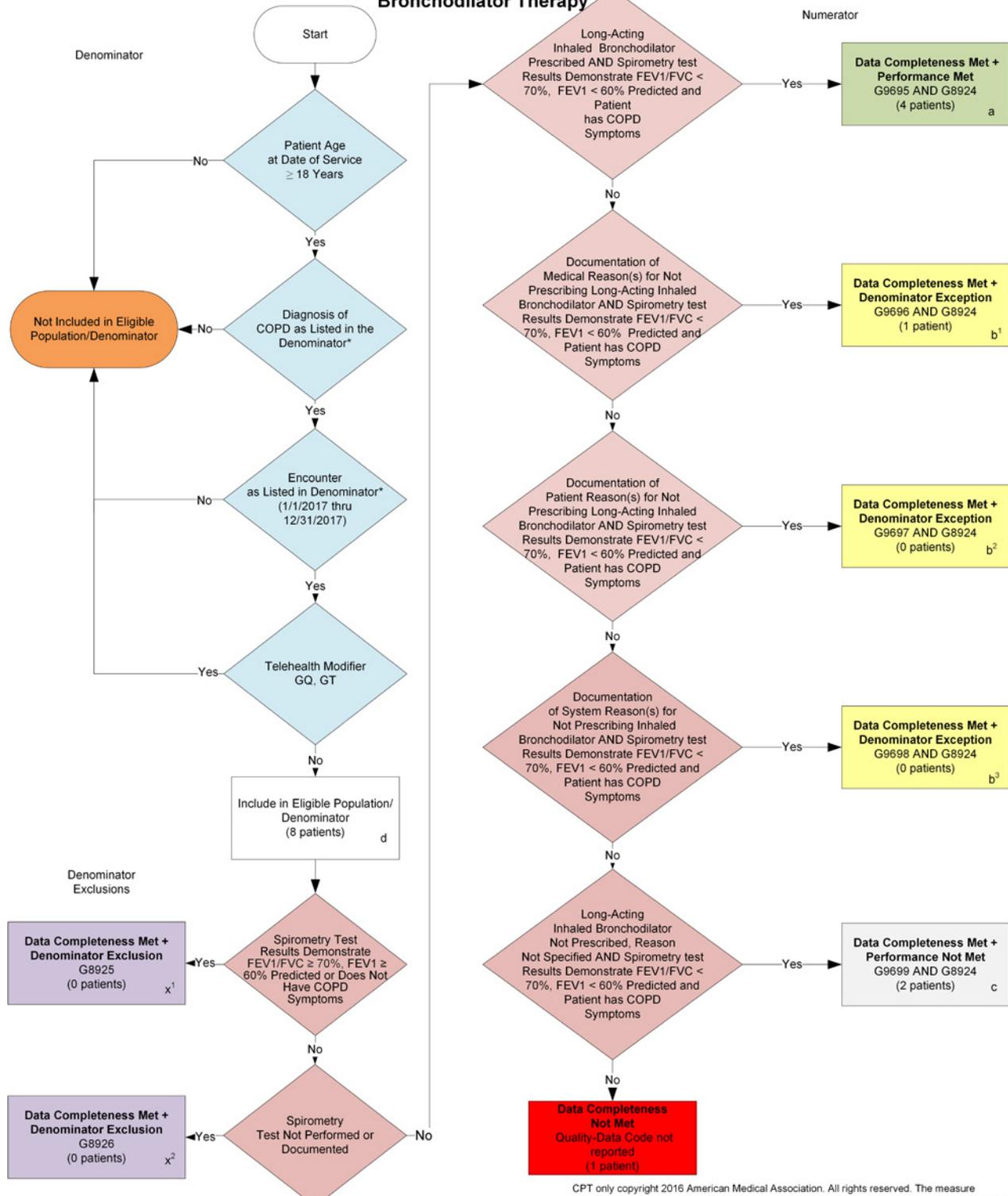
Recommendation 3: For stable COPD patients with respiratory symptoms and FEV1 < 60% predicted, ACP, ACCP, ATS, and ERS recommend treatment with inhaled bronchodilators (Grade: strong recommendation, moderate-quality evidence). Recommendation 4: ACP, ACCP, ATS, and ERS recommend that clinicians prescribe monotherapy using either long-acting inhaled anticholinergics or long-acting inhaled  $\beta$ -agonists for symptomatic patients with COPD and FEV1 <60% predicted. (Grade: strong recommendation, moderate-quality evidence). Clinicians should base the choice of specific monotherapy on patient preference, cost, and adverse effect profile. Monotherapy with a long-acting inhaled agent (long-acting anticholinergic, long-acting  $\beta$ -agonist, or corticosteroid) was superior to placebo or short-acting anticholinergic therapy in reducing exacerbations (Qaseem et al, 2011)

Bronchodilator medications are given on either an as-needed basis or a regular basis to reduce or prevent symptoms (Evidence A). Bronchodilator medications are central to symptom management in COPD. Inhaled therapy is preferred. Long-acting inhaled bronchodilators are convenient and more effective at producing maintained symptom relief than short-acting bronchodilators. Based on efficacy and side effects, inhaled bronchodilators are preferred over oral bronchodilators. (Evidence A) (GOLD, 2015)

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## 2017 Claims Individual Measure Flow #52 NQF #0102: Chronic Obstructive Pulmonary Disease (COPD): Long-Acting Inhaled Bronchodilator Therapy



\*See the posted Measure Specifications for specific coding and instructions to report this measure.  
NOTE: Reporting Frequency: Patient-process

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**2017 Claims Individual Measure Calculation**  
**#52 NQF #0102: Chronic Obstructive Pulmonary Disease (COPD): Long-Acting Inhaled  
Bronchodilator Therapy**

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Denominator Exclusion (x}^1\text{+x}^2\text{=0 patients) + Performance Met (a=4 patients) + Denominator Exception (b}^1\text{+b}^2\text{+b}^3\text{=1 patient) + Performance Not Met (c=2 patients)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met b=4 patients}}{\text{Data Completeness Numerator (7 patients) – Denominator Exclusions (x}^1\text{+x}^2\text{=0 patients) Denominator Exception (b}^1\text{+b}^2\text{+b}^3\text{= 1 patient)}} = \frac{4 \text{ patients}}{6 \text{ patients}} = 66.67\%$$

\*See the posted Measure Specifications for specific coding and instructions to report this measure.  
NOTE: Reporting Frequency: Patient-process

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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.  
v1

## 2017 Claims Individual Measure Flow

### #52 NQF #0102: Chronic Obstructive Pulmonary Disease (COPD): Long-Acting Inhaled Bronchodilator Therapy

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator
2. Check Patient Age:
  - a. If the Age is greater than or equal to 18 years of age on 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 on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.
3. Check Patient Diagnosis:
  - a. If Diagnosis of COPD as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis of COPD as Listed in the Denominator equals Yes, proceed to check Encounter Performed.
4. Check Encounter Performed:
  - a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Encounter as Listed in the Denominator equals Yes, proceed to Telehealth Modifier.
5. Check Telehealth Modifier:
  - a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
  - b. If Encounter as Listed in the Denominator equals No, include in the Eligible population.
6. 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 8 patients in the sample calculation.
7. Start Numerator
8. Check Spirometry Test Results Demonstrate  $FEV1/FVC \geq 70\%$ ,  $FEV1 \geq 60\%$  Predicted OR does not have COPD Symptoms:
  - a. If Spirometry Test Results Demonstrate  $FEV1/FVC \geq 70\%$ ,  $FEV1 \geq 60\%$  Predicted OR does not have COPD Symptoms equals Yes, include in 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 patients in Sample Calculation.

- c. If Spirometry Test Results Demonstrate  $FEV1/FVC \geq 70\%$ ,  $FEV1 \geq 60\%$  Predicted OR does not have COPD Symptoms equals No, proceed to Spirometry Test not Performed or Documented.
9. Check Spirometry Test not Performed or Documented:
  - a. If Spirometry Test not Performed or Documented equals Yes, include in 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 patients in Sample Calculation.
  - c. If Spirometry Test not Performed or Documented equals No, proceed to Long-Acting Inhaled Bronchodilator Therapy Prescribed AND Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms.
10. Check Long-Acting Inhaled Bronchodilator Therapy Prescribed AND Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms:
  - a. If Long-Acting Inhaled Bronchodilator Therapy Prescribed AND Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms 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 4 patients in Sample Calculation.
  - c. If Long-Acting Inhaled Bronchodilator Therapy Prescribed AND Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD symptoms equals No, proceed to check Documentation of Medical Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator Therapy AND Spirometry Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms.
11. Check Documentation of Medical Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms:
  - a. If Documentation of Medical Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms equals Yes, include in 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<sup>1</sup> equals 1 patient in the Sample Calculation.
  - c. If Documentation of Medical Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms equals No, proceed to check Documentation of Patient Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms.
12. Check Documentation of Patient Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms:
  - a. If Documentation of Patient Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of  $FEV1/FVC < 70\%$ ,  $FEV1 < 60\%$  Predicted and Patient has COPD Symptoms equals Yes, include in 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<sup>2</sup> equals 0 patients in the Sample Calculation.
  - c. If Documentation of Patient Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of FEV1/FVC < 70%, FEV1 <60% Predicted and Patient has COPD Symptoms equals No, proceed to check Documentation of System Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of FEV1/FVC < 70%, FEV1 <60% Predicted and Patient has COPD Symptoms.
13. Check Documentation of System Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of FEV1/FVC < 70%, FEV1 <60% Predicted and Patient has COPD Symptoms:
- a. If Documentation of System Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in 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<sup>3</sup> equals 0 patients in the Sample Calculation.
  - c. If Documentation of System Reason(s) for Not Prescribing Long-Acting Inhaled Bronchodilator AND Spirometry Results of FEV1/FVC < 70%, FEV1 <60% Predicted and Patient has COPD Symptoms equals No, proceed to check Spirometry Results FEV1/FVC < 70%, FEV1 ≥ 60% Predicted OR Does not have COPD Symptoms.
14. Check Long-Acting Inhaled Bronchodilator not Prescribed, Reason Not Specified AND Results of FEV1/FVC < 70%, FEV1 ≥ 60% Predicted and Patient has COPD Symptoms:
- a. If Long-Acting Inhaled Bronchodilator not Prescribed, Reason not Specified AND results of FEV1/FVC < 70%, FEV1 ≥ 60% Predicted and Patient has COPD Symptoms 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 2 patients in the Sample Calculation.
  - c. If Long-Acting Inhaled Bronchodilator not Prescribed, Reason not Specified AND results of FEV1/FVC < 70%, FEV1 ≥ 60% Predicted and Patient has COPD Symptoms equals No, proceed to check Data Completeness Not Met.
15. Check Data Completeness Not Met
- a. If Data Completeness Not Met equals No, Quality Data Code not reported. 1 patient has been subtracted from Data Completeness numerator in the sample calculation.