

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

- National Quality Strategy Domain: Effective Clinical Care
- Meaningful Measurement Area: Management of Chronic Conditions

**2021 COLLECTION TYPE:**  
**MIPS CLINICAL QUALITY MEASURES (CQMS)**

**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 submitted a minimum of **once per performance period** for all COPD patients seen during the performance period. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Submission Type:**  
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

**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):** 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**WITHOUT**

**Telehealth Modifier:** GQ, GT, 95, POS 02

**AND**

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

**NUMERATOR:**  
Patients who were prescribed a long-acting inhaled bronchodilator

**Definition:**

**Prescribed** – Includes patients who were “prescribed” medication at an encounter during the performance period, even if the prescription for that medication was ordered prior to the encounter.

**NUMERATOR NOTE:** Denominator Exception(s) are determined on the date of the denominator eligible encounter.

**Numerator Options:**

**OR**

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

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

**OR**

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

**OR**

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

**OR**

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

**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)

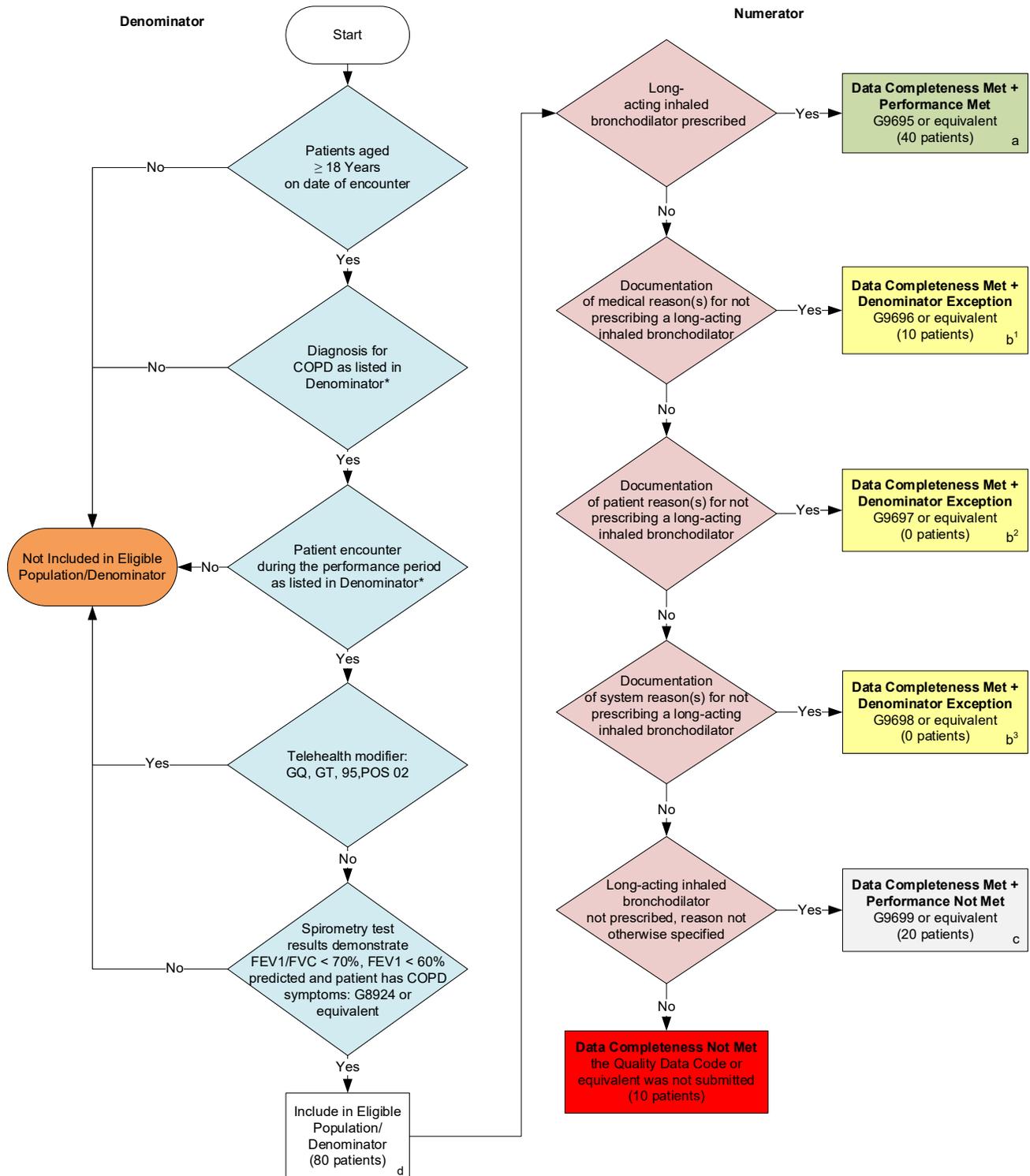
Bronchodilator medications are given on either an as-needed basis or a regular basis to reduce or prevent symptoms (Evidence A). Bronchodilator medications are central to symptom management in COPD. Inhaled therapy is preferred. Long-acting inhaled bronchodilators are convenient and more effective at 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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**2021 Clinical Quality Measure Flow for Quality ID #52 (NQF 0102):  
Chronic Obstructive Pulmonary Disease (COPD): Long-Acting Inhaled Bronchodilator Therapy**

*Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.*



**SAMPLE CALCULATIONS**

**Data Completeness=**

$$\frac{\text{Performance Met (a=40 patients)} + \text{Denominator Exception (b}^1\text{+b}^2\text{+b}^3\text{=10 patients)} + \text{Performance Not Met (c=20 patients)}}{\text{Eligible Population / Denominator (d=80 patients)}} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=40 patients)}}{\text{Data Completeness Numerator (70 patients) – Denominator Exception (b}^1\text{+b}^2\text{+b}^3\text{=10 patients)}} = \frac{40 \text{ patients}}{60 \text{ patients}} = 66.67\%$$

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

NOTE: Submission Frequency: Patient-Process

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**2021 Clinical Quality Measure Flow Narrative for Quality ID #52 (NQF 0102):  
Chronic Obstructive Pulmonary Disease (COPD): Long-Acting Inhaled Bronchodilator Therapy**

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1. Start with Denominator
2. Check *Patients aged greater than or equal to 18 years on date of encounter*.
  - a. If *Patients aged greater than or equal to 18 years on date of encounter* equals No during the measurement period, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Patients aged greater than or equal to 18 years on date of encounter* equals Yes during the measurement period, proceed to check Patient Diagnosis.
3. Check *Diagnosis of COPD as listed in the Denominator\**.
  - a. If *Diagnosis of COPD as listed in the Denominator\** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Diagnosis of COPD as listed in the Denominator\** equals Yes, proceed to check Encounter Performed.
4. Check *Patient encounter during the performance period as listed in Denominator\**.
  - a. If *Patient encounter during the performance period as listed in Denominator\** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Patient encounter during the performance period as listed in Denominator\** equals Yes, proceed to check *Telehealth modifier*.
5. Check *Telehealth modifier*.
  - a. If *Telehealth modifier* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Telehealth modifier* equals No, proceed to check *Spirometry test results demonstrate FEV1/FVC less than 70 percent, FEV1 less than 60 percent predicted and patient has COPD symptoms*.
6. Check *Spirometry test results demonstrate FEV1/FVC less than 70 percent, FEV1 less than 60 percent predicted and patient has COPD symptoms*:
  - a. If *Spirometry test results demonstrate FEV1/FVC less than 70 percent, FEV1 less than 60 percent predicted and patient has COPD symptoms* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Spirometry test results demonstrate FEV1/FVC less than 70 percent, FEV1 less than 60 percent predicted and patient has COPD symptoms* equals Yes, include in *Eligible Population/Denominator*.
7. Denominator Population:
  - 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 patients in the Sample Calculation.
8. Start Numerator

9. Check *Long-acting inhaled bronchodilator prescribed*:
  - a. If *Long-acting inhaled bronchodilator prescribed* equals Yes, include in *Data Completeness Met and Performance Met*.
    - *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 patients in the Sample Calculation.
  - b. If *Long-acting inhaled bronchodilator prescribed* equals No, proceed to check *Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator*.
10. Check *Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator*.
  - a. If *Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator* equals Yes, include in *Data Completeness Met and Denominator Exception*.
    - *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 10 patients in the Sample Calculation.
  - b. If *Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator* equals No, proceed to check *Documentation of patient reason(s) for not prescribing a long-acting inhaled bronchodilator*.
11. Check *Documentation of patient reason(s) for not prescribing a long-acting inhaled bronchodilator*.
  - a. If *Documentation of patient reason(s) for not prescribing a long-acting inhaled bronchodilator* equals Yes, include in *Data Completeness Met and Denominator Exception*.
    - *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.
  - b. If *Documentation of patient reason(s) for not prescribing a long-acting inhaled bronchodilator* equals No, proceed to check *Documentation of system reason(s) for not prescribing a long-acting inhaled bronchodilator*.
12. Check *Documentation of system reason(s) for not prescribing a long-acting inhaled bronchodilator*.
  - a. If *Documentation of system reason(s) for not prescribing a long-acting inhaled bronchodilator* equals Yes, include in *Data Completeness Met and Denominator Exception*.
    - *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.
  - b. If *Documentation of system reason(s) for not prescribing a long-acting inhaled bronchodilator* equals No, proceed to check *Long-acting inhaled bronchodilator not prescribed, reason not otherwise specified*.
13. Check *Long-acting inhaled bronchodilator not prescribed, reason not otherwise specified*:
  - a. If *Long-acting inhaled bronchodilator not prescribed, reason not otherwise specified* 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 patients in the Sample Calculation.
  - c. If *Long-acting inhaled bronchodilator not prescribed, reason not otherwise specified* equals No, proceed to check *Data Completeness Not Met*.
14. Check *Data Completeness Not Met*:
- a. If *Data Completeness Not Met*, the Quality-Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

### **Sample Calculations**

Data Completeness equals Performance Met (a equals 40 patients) plus Denominator Exception ( $b^1$  plus  $b^2$  plus  $b^3$  equals 10 patients) plus Performance Not Met (c equals 20 patients) divided by Eligible Population/Denominator (d equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.5 percent.

Performance Rate equals Performance Met (a equals 40 patients) divided by Data Completeness Numerator (70 patients) minus Denominator Exception ( $b^1$  plus  $b^2$  plus  $b^3$  equals 10 patients). All equals 40 patients divided by 60 patients. All equals 66.67 percent.

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

NOTE: Submission Frequency: Patient-Process

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