

Quality ID #052: Chronic Obstructive Pulmonary Disease (COPD): Spirometry Evaluation and Long-Acting Inhaled Bronchodilator Therapy

2026 COLLECTION TYPE:

MERIT-BASED INCENTIVE PAYMENT SYSTEM (MIPS) CLINICAL QUALITY MEASURE (CQM)

MEASURE TYPE:

Process

DESCRIPTION:

Percentage of patients aged 18 years and older with a diagnosis of COPD with a documented FEV1/FVC < 70% measured by spirometry, who are symptomatic, and were prescribed a long-acting inhaled bronchodilator.

INSTRUCTIONS:

Reporting Frequency:

This measure is to be submitted a minimum of once per performance period for denominator eligible cases as defined by the denominator criteria.

Intent and Clinician Applicability:

This measure is intended to reflect the quality of services provided for patients with COPD. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions as defined by the numerator based on the services provided and the measure-specific denominator coding.

Measure Strata and Performance Rates:

There are 2 Submission Criteria for this measure:

- 1) Patients diagnosed with COPD who have documented airflow obstruction (FEV1/FVC < 70%) as measured by spirometry in the medical record.
- AND
- 2) Patients diagnosed with COPD who have documented airflow obstruction (FEV1/FVC < 70%) and are symptomatic, who were prescribed a long-acting bronchodilator.

This measure contains two submission criteria which together ensure that the proper evaluation and treatment is provided for patients with COPD and that patients without COPD are not provided inappropriate therapy. Submission Criteria 1 evaluates whether spirometry was performed for patients diagnosed with COPD and results confirming airflow obstruction are documented. Submission Criteria 2 evaluates whether a long-acting inhaled bronchodilator was prescribed for COPD patients who have symptoms.

This measure will be calculated with 2 performance rates:

- 1) Percentage of patients aged 18 years and older with a diagnosis of COPD who have a documented airflow obstruction (FEV1/FVC < 70%) as measured by spirometry.
- 2) Percentage of patients aged 18 years and older with a diagnosis of COPD who have documented airflow obstruction (FEV1/FVC < 70%) and are symptomatic, who were prescribed a long-acting inhaled bronchodilator.

Submission of the two performance rates is required for this measure. A simple average, which is the sum of the performance rates divided by the number of the performance rates will be used to calculate performance.

Implementation Considerations:

For the purposes of MIPS implementation, this patient-process measure is submitted a minimum of once per patient for the performance period. The most advantageous quality data code will be used if the measure is submitted more than once.

Telehealth:

NOT TELEHEALTH ELIGIBLE: This measure is not appropriate for nor applicable to the telehealth setting.

Patient encounters for this measure conducted via telehealth should be removed from the denominator eligible patient population. Therefore, if the patient meets all denominator criteria but the encounter is conducted via telehealth, it would be appropriate to remove them from the denominator eligible patient population. Telehealth eligibility is at the measure level for inclusion within the denominator eligible patient population and based on the measure specification definitions which are independent of changes to coding and/or billing practices.

Measure Submission:

The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this collection type for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. The coding provided to identify the measure criteria: Denominator or Numerator, may be an example of coding that could be used to identify patients that meet the intent of this clinical topic. When implementing this measure, please refer to the 'Reference Coding' section to determine if other codes or code languages that meet the intent of the criteria may also be used within the medical record to identify and/or assess patients. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

SUBMISSION CRITERIA 1: PATIENTS DIAGNOSED WITH COPD WHO HAVE DOCUMENTED AIRFLOW OBSTRUCTION (FEV1/FVC < 70%) AS MEASURED BY SPIROMETRY IN THE MEDICAL RECORD.

DENOMINATOR (CRITERIA 1):

All patients aged 18 and older with a diagnosis of COPD.

Denominator Criteria 1 (Eligible Cases):

Patients aged \geq 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, J44.89, J44.9

AND

Patient encounter during the performance period (CPT): 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99424, 99426

WITHOUT

Encounters conducted via telehealth: M1426

NUMERATOR (CRITERIA 1):

Patients with documented spirometry and confirmed airflow obstruction (FEV1/FVC < 70%).

Numerator Instructions:

Documentation of spirometry results of (FEV1/FVC < 70%) can take place before the performance period. The intent of Submission Criteria 1 is to ensure accurate diagnosis of COPD in patients with respiratory symptoms such as dyspnea, chronic cough or sputum production, and/or a history of exposure to risk factors for the disease is appropriate by having documentation of spirometry results of FEV1/FVC < 70%, which is required to make the COPD diagnosis.

NUMERATOR NOTE:

Denominator Exception(s) are determined on the date of the denominator eligible encounter. If there is a diagnosis of COPD, but there is no documented spirometry within five years of the date of the encounter, and the current spirometry result is \geq 70%, an exception may be reported.

Numerator Options:

Performance Met:

Spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and reviewed (M1214)

OR

Denominator Exception:

Documentation of medical reason(s) for not documenting and reviewing spirometry results (e.g., patients with dementia or tracheostomy) (M1215)

OR

Denominator Exception:

No history of spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) and present spirometry is \geq 70% (M1213)

OR

Denominator Exception:

Documentation of system reason(s) for not documenting and reviewing spirometry results (e.g., spirometry equipment not available at the time of the encounter) (M1217)

OR

Performance Not Met:

No spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and/or no spirometry performed with results documented during the encounter (M1216)

AND

SUBMISSION CRITERIA 2: PATIENTS DIAGNOSED WITH COPD WHO HAVE DOCUMENTED AIRFLOW OBSTRUCTION (FEV1/FVC < 70%) AND ARE SYMPTOMATIC, WHO WERE PRESCRIBED A LONG-ACTING BRONCHODILATOR.

DENOMINATOR (CRITERIA 2):

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

Denominator Criteria 2 (Eligible Cases):

Patients aged \geq 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, J44.89, J44.9

AND

Patient encounter during the performance period (CPT): 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99424, 99426

WITHOUT

Encounters conducted via telehealth: M1426

AND

Spirometry results documented (FEV1/FVC < 70%): G8924

AND

Patient has COPD symptoms (e.g., dyspnea, cough/sputum, wheezing): M1218

NUMERATOR (CRITERIA 2):

Symptomatic COPD 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:

Performance Met:

Long-acting inhaled bronchodilator prescribed (G9695)

OR

Denominator Exception:

Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator (e.g., patient intolerance or history of side effects) (G9696)

OR

Denominator Exception:

Documentation of system reason(s) for not prescribing a long-acting inhaled bronchodilator (e.g., cost of treatment or lack of insurance) (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, diagnosis and management of COPD, and specifically prescription for long-acting inhaled bronchodilators, remains suboptimal.

Although spirometry use has increased, it remains underutilized to confirm airflow obstruction and accurately diagnose COPD (CDC, 2012; Nishi et al., 2013; Rodwin et al., 2023). Studies show proper COPD diagnosis with spirometry is done on just over half of patients in the US and Canada (Boulet et al., 2013; Bourbeau et al., 2008; Collins et al., 2015; Nishi et al., 2013; Perez et al., 2012; Yu et al., 2013). A study of physician-diagnosed COPD patients hospitalized for exacerbations found that 22% of patients did not have COPD upon spirometry testing (Prieto Centurion, et al., 2012). Treatment of presumed COPD without accurate diagnosis and understanding of true etiology of symptoms results in patients not receiving medication that would improve symptoms and quality of life, prevent exacerbations and reduce costly use of emergency and hospital services. Patients may be exposed to adverse effects of unneeded medication and or delays in true diagnosis and management of another condition increasing overall cost of care (Boulet et al., 2013; Bourbeau et al., 2008; CDC, 2012; Collins et al., 2015; Joo et al., 2011). Several recent studies emphasize the association between both under- and over-diagnosis of COPD with increased respiratory symptoms and health care utilization (Gershon et al., 2018; Farooqi et al., 2022).

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., 2012; Sharif, et al., 2013; Keller, et al., 2020; Ghosh, et al, 2019). 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. Although recent guidelines state dual long-acting bronchodilator medication are "preferred" for treatment initiation, patients well-controlled on one long-acting bronchodilator do not necessarily require escalation. For this reason, prescription of one or more long-acting bronchodilators is all that is required to meet the measure.

CLINICAL RECOMMENDATION STATEMENTS:

Spirometry:

Recommendation 1: ACP, ACCP, ATS, and ERS recommend that spirometry should be obtained to diagnose airflow obstruction in patients with respiratory symptoms (Grade: strong recommendation, moderate-quality evidence). Spirometry

should not be used to screen for airflow obstruction in individuals without respiratory symptoms (Grade: strong recommendation, moderate-quality evidence)" (Qaseem, et al., 2011).

"COPD should be considered in any patient with dyspnea, chronic cough or sputum production, and/or a history of exposure to risk factors for the disease. Spirometry is required to make the diagnosis in this clinical context; the presence of post-bronchodilator $FEV_1/FVC < 0.70$ confirms the presence of persistent airflow limitation and thus of COPD in patients with appropriate symptoms and significant exposure to noxious stimuli. Spirometry is the most reproducible and objective measurement of airflow limitation. It is a noninvasive and readily available test" (GOLD 2022).

Inhaled Bronchodilators:

In patients with chronic obstructive pulmonary disease who complain of dyspnea or exercise intolerance, we recommend long-acting beta-agonist (LABA)/long-acting muscarinic antagonist (LAMA) combination therapy over LABA or LAMA monotherapy (strong recommendation, moderate quality evidence) (Nicci et al, 2020).

LABA and LAMAs are preferred over short-acting agents except for patients with only occasional dyspnea (Evidence A), and for immediate relief of symptoms in patients already on long-acting bronchodilators for maintenance therapy. When initiating treatment with long-acting bronchodilators, the preferred choice is a combination of a LAMA and a LABA. In patients with persistent dyspnea on a single long-acting bronchodilator treatment should be escalated to two (Evidence A). The combination can be given as a single inhaler or multiple inhaler treatment (GOLD 2023).

REFERENCES:

Center for Disease Control and Prevention (CDC). Chronic obstructive pulmonary disease among adults—United States, 2011. *MMWR Morb Mortal Wkly Rep.* 2012; 61 (46): 938-43.

Nishi SPE, Wang Y, Kuo Y, et al. Spirometry use among older adults with chronic obstructive pulmonary disease:1999-2008. *Ann Am Thorac Soc* 2013; 10(6): 565-573. doi: 10.1513/AnnalsATS.201302-037OC

Rodwin BA, DeRycke EC, Han L, et al. Characteristics associated with spirometry guideline adherence in VA patients hospitalized with chronic obstructive pulmonary disease. *J Gen Intern Med.* 2023;38(3):619-626.[Epub 2022 Oct 14]. doi: 10.1007/s11606-022-07826-5

Boulet L, Bourbeau J, Skomro R, et al. Major gaps in asthma, sleep, and chronic obstructive pulmonary disease: a road map for knowledge translation. *Can Resp J.* 2013; 20(4):265-9. doi: 10.1155/2013/496923

Bourbeau J, Sebaldt RJ, Day A, et al. Practice patterns in the management of chronic obstructive pulmonary disease in primary practice: the CAGE study. *Can Resp J.* 2008;15(1):13-9. doi: 10.1155/2008/173904.

Collins BF, Feemster LC, Rinne ST, Au DH. Factors predictive of airflow obstruction among veterans with presumed empirical diagnosis and treatment of COPD. *Chest.* 2015; 147(2):369-76. doi: 10.1378/chest.14-0672

Perez X, Wisnivesky JP, Lurslurchachai L, et al. Barriers to adherence to COPD guidelines among primary care providers. *Respir Med* 2012; 106(3):374-81. doi: 10.1016/j.rmed.2011.09.010

Yu WC, Fu SN, Tai EL. Spirometry is underused in the diagnosis and monitoring of patients with chronic obstructive pulmonary disease (COPD). *Int J Chron Obstruct Pulmon Dis.* 2013; 8:389-395. doi: [10.2147/COPD.S48659](https://doi.org/10.2147/COPD.S48659)

Prieto Centurion VP, Huang F, Naureckas ET, et al. Confirmatory spirometry for adults hospitalized with a diagnosis of asthma or chronic obstructive pulmonary disease exacerbation. *BMC Pulm Med.* 2012; 12:73. doi: 10.1186/1471-2466-12-73. doi: 10.1007/s11606-011-1770-1.

Joo MJ, Au DH, Fitzgibbon ML, et al. Determinants of spirometry use and accuracy of COPD diagnosis in primary care. *J Gen Intern Med.* 2011; 26(11):1272-7.

Gershon AS, Thiruchelvam D, Chapman KR, et al. Health services burden of undiagnosed and overdiagnosed COPD.

Chest. 2018;153(6):1336-1346. doi: 10.1016/j.chest.2018.01.038

Farooqi MAM, Ma J, Ali MU, et al. Prevalence and burden of COPD misclassification in the Canadian Longitudinal Study on Aging (CLSA). BMJ Open Respir Res. 2022; 9(1): e001156. doi: 10.1136/bmjresp-2021-001156.

Asche CV, Leader S, Plauschinat C, et al. Adherence to current guidelines for chronic obstructive pulmonary disease (COPD) among patients treated with combination of long-acting bronchodilators or inhaled corticosteroids. Int J Chron Obstruct Pulmon Dis. 2012;7:201-9. doi: 10.2147/COPD.S25805.

Fitch K, Iwasaki K, Pyenson B, et al. Variation in adherence with Global Initiative for Chronic Obstructive Lung Disease (GOLD) drug therapy guidelines: a retrospective actuarial claims data analysis. Curr Med Res Opin. 2011; 27(7):1425-9. doi: 10.1185/03007995.2011.583230

Nantsupawat T, Limsuwat C, Nugent K. Factors affecting chronic obstructive pulmonary disease early rehospitalization. Chron Respir Dis. 2012;9 (2):93-8. doi: 10.1177/1479972312438703.

Sharif R, Cuevas CR, Wang Y, et al. Guideline adherence in management of stable chronic obstructive pulmonary disease. Respir Med. 2013; 107(7):1046-52. doi: 10.1016/j.rmed.2013.04.001.

Keller T, Spece LJ, Donovan LM, et al. Association of guideline-recommended COPD inhaler regimens with mortality, respiratory exacerbations, and quality of life. A secondary analysis of the long-term oxygen treatment trial. Chest 2020; 158(2):529-538. doi: 10.1016/j.chest.2020.02.073

Ghosh S, Anderson WH, Putcha N, et al. Alignment of inhaled chronic obstructive pulmonary disease therapies with published strategies. Analysis of the global initiative for chronic obstructive disease recommendations in SPIROMICS. Ann Am Thorac Soc, 16(2)(2019), pp 200-208. doi: 10.1513/AnnalsATS.201804-283OC

Qaseem, A., Wilt, T. J., Weinberger, S. E., Hanania, N. A., Criner, G., Molen, T. v., . . . Shekelle, P. (2011). Diagnosis and Management of Stable Chronic Obstructive Pulmonary Disease: A Clinical Practice Guideline Update from the American College of Physicians, American College of Chest Physicians, American Thoracic Society, and European Respiratory Society. Annals of Internal Medicine, 155(3), 179-191. Retrieved from <https://doi.org/10.7326/0003-4819-155-3-201108020-00008>.

Global Initiative for Chronic Obstructive Lung Disease (GOLD). Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease.2022 Report. Available from: <https://goldcopd.org/2022-gold-report/>

Global Initiative for Chronic Obstructive Lung Disease (GOLD). Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease.2022 Report. Available from: <https://goldcopd.org/2023-gold-report/>

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**2026 Clinical Quality Measure Flow for Quality ID #052:
Chronic Obstructive Pulmonary Disease (COPD): Spirometry Evaluation
and Long-Acting Inhaled Bronchodilator Therapy
Multiple Performance Rates**

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

ACCOUNTABILITY REPORTING IN THE CMS MIPS PROGRAM SAMPLE CALCULATIONS

Overall Data Completeness (All Submission Criteria)*=

$$\frac{\text{Performance Met (a}^1+\text{a}^2=80) + \text{Denominator Exception (b}^1+\text{b}^2+\text{b}^3+\text{b}^4+\text{b}^5=20) + \text{Performance Not Met (c}^1+\text{c}^2=40)}{\text{Eligible Population / Denominator (d}^1+\text{d}^2=160 \text{ patients})} = \frac{140 \text{ patients}}{160 \text{ patients}} = 87.50\%$$

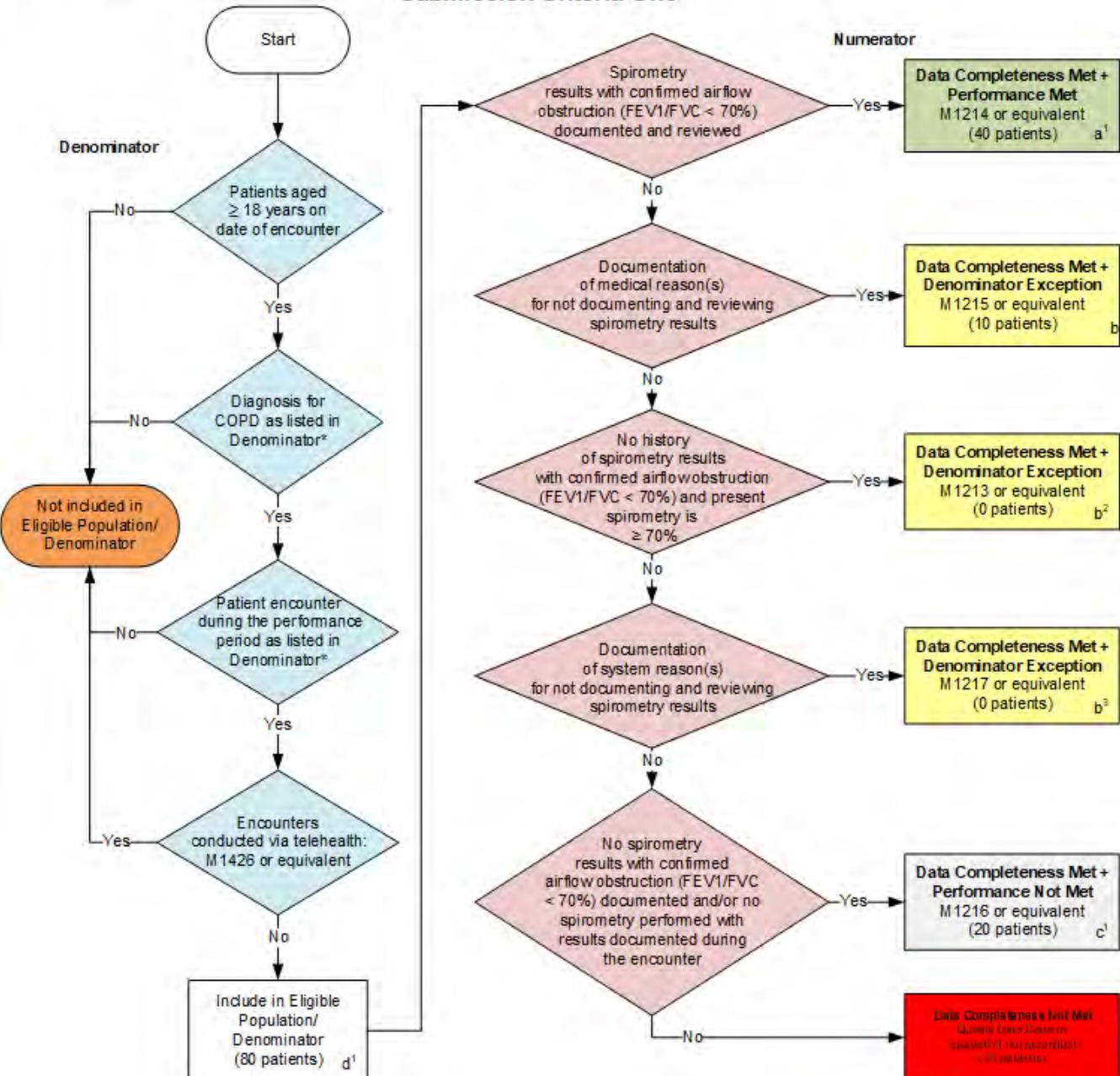
Overall Performance Rate (Simple Average)*=

$$\frac{\text{Performance Rate One (66.67\%)} + \text{Performance Rate Two (66.67\%)}}{\text{Number of Performance Rates (2)}} = \frac{133.34\%}{2} = 66.67\%$$

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

NOTE: Submission Frequency: Patient-Process

Submission Criteria One



SAMPLE CALCULATIONS: SUBMISSION CRITERIA ONE

Data Completeness=

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

Performance Rate=

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

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

NOTE: Submission Frequency: Patient-Process

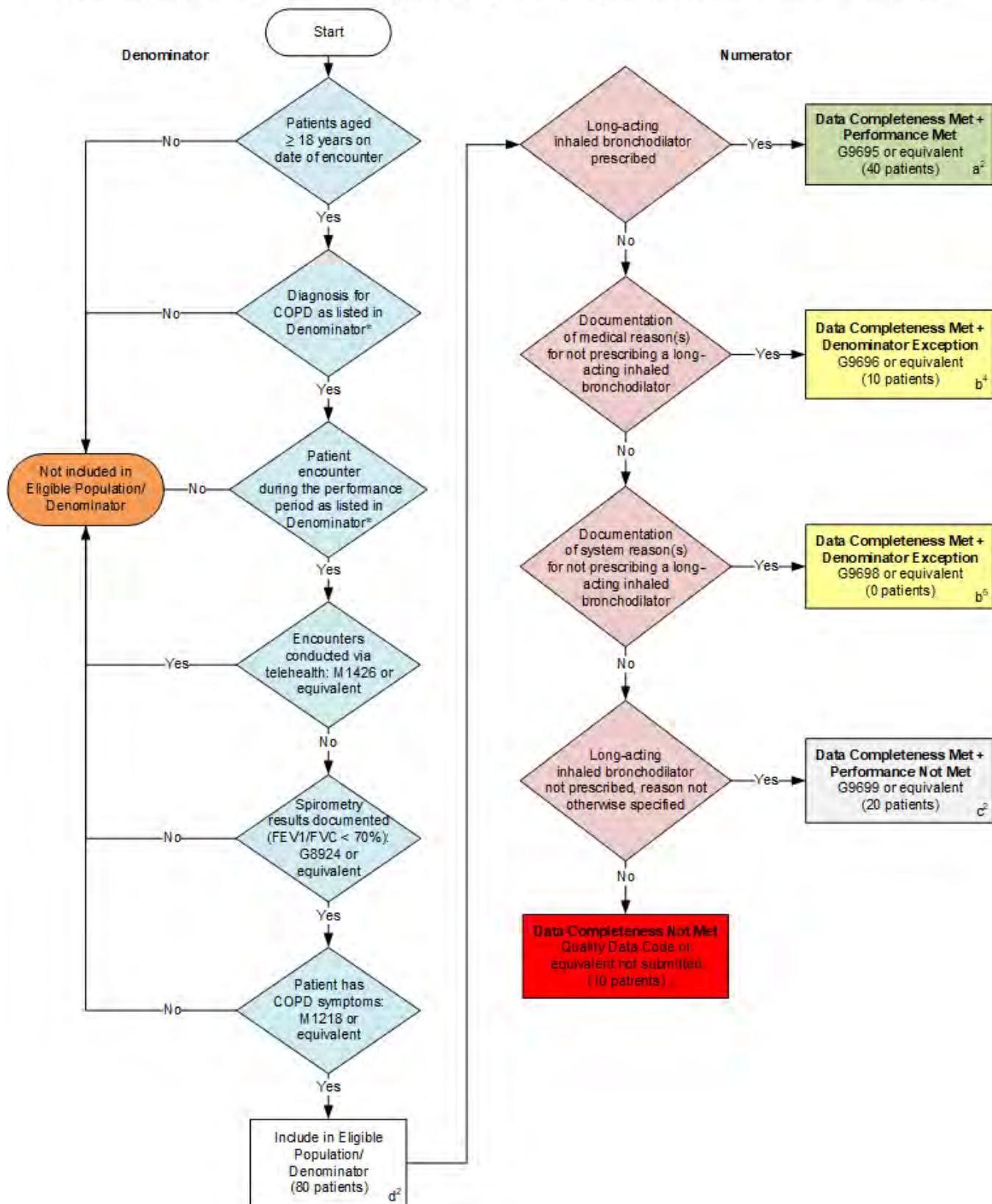
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Submission Criteria Two

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



SAMPLE CALCULATIONS: SUBMISSION CRITERIA TWO

Data Completeness=

$$\frac{\text{Performance Met (a}^2\text{=40 patients)} + \text{Denominator Exception (b}^4\text{+b}^5\text{=10 patients)} + \text{Performance Not Met (c}^2\text{=20 patients)}}{\text{Eligible Population / Denominator (d}^2\text{=80 patients)}} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a}^2\text{=40 patients)}}{\text{Data Completeness Numerator (70 patients)} - \text{Denominator Exception (b}^4\text{+b}^5\text{=10 patients)}} = \frac{40 \text{ patients}}{60 \text{ patients}} = 66.67\%$$

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

NOTE: Submission Frequency: Patient-Process

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**2026 Clinical Quality Measure Flow Narrative for Quality #052:
Chronic Obstructive Pulmonary Disease (COPD): Spirometry Evaluation and Long-Acting Inhaled
Bronchodilator Therapy**

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

Accountability Reporting in the CMS MIPS Program Sample Calculations

Overall Data Completeness equals Performance Met (a¹ plus a² equals 80 patients) plus Denominator Exception (b¹ plus b² plus b³ plus b⁴ plus b⁵ equals 20 patients) plus Performance Not Met (c¹ plus c² equals 40 patients) divided by Eligible Population/Denominator (d¹ plus d² equals 160 patients). All equals 140 patients divided by 160 patients. All equals 87.50 percent.

Overall Performance Rate equals Performance Rate One (66.67 percent) plus Performance Rate Two (66.67 percent) divided by Number of Performance Rates (2 rates). All equals 133.34% divided by 2. All equals 66.67 percent.

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

NOTE: Submission Frequency: Patient-Process

Submission Criteria One

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, 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, proceed to check *Diagnosis for COPD as listed in Denominator**
3. Check *Diagnosis for COPD as listed in the Denominator**:
 - a. If *Diagnosis for COPD as listed in the Denominator** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Diagnosis for COPD as listed in the Denominator** equals Yes, proceed to check *Patient encounter during the performance period as listed in Denominator**
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 *Encounters conducted via telehealth*.
5. Check *Encounters conducted via telehealth*:
 - a. If *Encounters conducted via telehealth* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Encounters conducted via telehealth* equals No, include in *Eligible Population/Denominator*.

6. 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 d¹ equals 80 patients in the Sample Calculation.

7. Start Numerator

8. Check *Spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and reviewed*:

- a. If *Spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and reviewed* 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 a1 equals 40 patients in the Sample Calculation.

- b. If *Spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and reviewed* equals No, proceed to check *Documentation of medical reason(s) for not documenting and reviewing spirometry results*.

9. Check *Documentation of medical reason(s) for not documenting and reviewing spirometry results*:

- a. If *Documentation of medical reason(s) for not documenting and reviewing spirometry results* 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 b¹ equals 10 patients in the Sample Calculation.

- b. If *Documentation of medical reason(s) for not documenting and reviewing spirometry results* equals No, proceed to check *No history of spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) and present spirometry is ≥ 70%*.

10. Check *No history of spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) and present spirometry is ≥ 70%*:

- a. If *No history of spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) and present spirometry is ≥ 70%* 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 b² equals 0 patients in the Sample Calculation.

- b. If *No history of spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) and present spirometry is ≥ 70%* equals No, proceed to check *Documentation of system reason(s) for not documenting and reviewing spirometry results*.

11. Check *Documentation of system reason(s) for not documenting and reviewing spirometry results*:

- a. If *Documentation of system reason(s) for not documenting and reviewing spirometry results* 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 b³ equals 0 patients in the Sample Calculation.

b. *If Documentation of system reason(s) for not documenting and reviewing spirometry results equals No, proceed to check No spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and/or no spirometry performed with results documented during the encounter.*

12. *Check No spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and/or no spirometry performed with results documented during the encounter:*

a. *If No spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and/or no spirometry performed with results documented during the encounter equals Yes, include in Data Completeness Met and Performance Not Met*

- *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 c¹ equals 20 patients in the Sample Calculation.*
- b. *If No spirometry results with confirmed airflow obstruction (FEV1/FVC < 70%) documented and/or no spirometry performed with results documented during the encounter equals No, proceed to check Data Completeness Not Met.*

13. *Check Data Completeness Not Met:*

- *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: Submission Criteria One

Data Completeness equals Performance Met (a¹ equals 40 patients) plus Denominator Exception (b¹ plus b² plus b³ equals 10 patients) plus Performance Not Met (c¹ equals 20 patients) divided by Eligible Population/Denominator (d¹ equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.50 percent.

Performance Rate equals Performance Met (a¹ equals 40 patients) divided by Data Completeness Numerator (70 patients) minus Denominator Exception (b¹ plus b² plus b³ equals 10 patients). All equals 40 patients divided by 60 patients. All equals 66.67 percent.

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

NOTE: Submission Frequency: Patient-Process

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.

Submission Criteria Two

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, 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, proceed to check *Diagnosis for COPD as listed in Denominator**
 3. Check *Diagnosis for COPD as listed in Denominator**:
 - a. If *Diagnosis for COPD as listed in Denominator** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Diagnosis for COPD as listed in Denominator** equals Yes, proceed to check *Patient encounter during the performance period as listed in Denominator**
 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 *Encounters conducted via telehealth*.
 5. Check *Encounters conducted via telehealth*.
 - a. If *Encounters conducted via telehealth* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Encounters conducted via telehealth* equals No, proceed to check *Spirometry results documented (FEV1/FVC < 70%)*.
 6. Check *Spirometry results documented (FEV1/FVC < 70%)*:
 - a. If *Spirometry results documented (FEV1/FVC < 70%)* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Spirometry results documented (FEV1/FVC < 70%)* equals Yes, proceed to check *Patient has COPD symptoms*.
 7. Check *Patient has COPD symptoms*:
 - a. If *Patient has COPD symptoms* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patient has COPD symptoms* equals Yes, include in *Eligible Population/Denominator*.
 8. 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^2 equals 80 patients in the Sample Calculation.
 9. Start Numerator
 10. 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 a² 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*.

11. 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 b⁴ 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 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 b⁵ 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*.
 - *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 c² equals 20 patients in the Sample Calculation.
- b. 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*:

- 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: Submission Criteria Two

Data Completeness equals Performance Met (a² equals 40 patients) plus Denominator Exception (b⁴ plus b⁵ equals 10 patients) plus Performance Not Met (c² equals 20 patients) divided by Eligible Population/Denominator (d² equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.50 percent.

Performance Rate equals Performance Met (a^2 equals 40 patients) divided by Data Completeness Numerator (70 patients) minus Denominator Exception (b^4 plus b^5 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

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.