

## Proposed Changes to Existing Measure for HEDIS®<sup>1</sup> MY 2027: Pharmacotherapy Management of COPD Exacerbation (PCE)

NCQA seeks comments on proposed modifications to the HEDIS Health Plan *Pharmacotherapy Management of COPD Exacerbation* (PCE) measure. As currently specified, PCE assesses whether appropriate medications were dispensed following a chronic obstructive pulmonary disease (COPD) exacerbation for Medicaid, commercial and Medicare members aged 40 years and older.

The 2025 Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines include updates to pharmacotherapy recommendations for patients who experience COPD exacerbations.<sup>2</sup> To align with these updated guidelines, NCQA tested several updates to the PCE measure in the commercial and Medicare populations using data from OptumLabs<sup>®</sup><sup>3</sup> Data Warehouse (OLDW) National View. While NCQA did not test the updated specifications in the Medicaid population, the updated PCE measure is still slated to be reported for all product lines. Medicaid health plan performance will be evaluated following the first year of reporting if this measure is approved for HEDIS.

### Proposed updates to the PCE measure for MY 2027 are outlined below:

**Additional Exclusion for Members with Asthma** – Clinical guidelines state that individuals with comorbid asthma and COPD should prioritize asthma treatment recommendations over COPD treatment. Given that pharmacotherapies for asthma differ from those for COPD, NCQA proposes an additional exclusion for individuals with two or more asthma diagnoses during the measurement period. During testing, this resulted in the exclusion of 2.2% (n = 114,324) of commercial members and 4.3% (n = 344,313) of Medicare members from the initial population.

**Denominator** – Currently, the PCE denominator is the count of COPD exacerbations (acute inpatient or emergency department [ED] visits) between January 1 and November 30 of the Measurement Year (MY). The updated PCE measure denominator would be the count of members with a qualifying COPD exacerbation event, defined by **either of the following** occurring during the measurement period:

- One or more inpatient or observation stay visits with a COPD diagnosis in any claim position.
- Two or more outpatient visits, including any combination of the following:
  - ED visits with a COPD diagnosis in any claim position.
  - Urgent care visits with a COPD diagnosis in any claim position.
  - Ambulatory care visits with a COPD *exacerbation* diagnosis in any claim position.

**Numerator** – Currently, the PCE numerator assesses two rates: 1) if a systemic corticosteroid is dispensed within 14 days of a COPD exacerbation event; and 2) if a bronchodilator is dispensed within 30 days of a COPD exacerbation event. The updated numerator would be one rate and would include members in the denominator who had a dispensing event for **all of the following** in the measurement period:

- At least one short-acting medication (short-acting muscarinic antagonist [SAMA] **or** short-acting beta agonist [SABA]).
- At least one long-acting muscarinic antagonist (LAMA).<sup>4</sup>
- At least one long-acting beta agonist (LABA).<sup>4</sup>

<sup>1</sup> HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

<sup>2</sup> <https://goldcopd.org/2025-gold-report/>

<sup>3</sup> Data for this analysis was obtained from the OptumLabs® Data Warehouse. The OptumLabs® Data Warehouse contains de-identified administrative claims and other data elements, representing a diverse mixture of ages, ethnicities and geographical regions across the United States. The claims data in OLDW includes medical and pharmacy claims, laboratory results and enrollment records for commercial and Medicare Advantage enrollees. Study data were accessed using techniques compliant with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and, because this study involved analysis of pre-existing, de-identified data, it was exempt from Institutional Review Board approval.

<sup>4</sup> LAMA and LABA medications can be dispensed either separately or as a combined LAMA/LABA formulation.

## Measure Performance

Testing showed that the updated measure would be feasible for plans to report, with an average of 45.1% of commercial plans and 73.1% of Medicare plans producing reportable rates with at least 30 denominator events. Reporting feasibility is similar to that of the current PCE measure.

The updated PCE measure also showed variation in performance across plans and room for improvement. On average, 19.3% (10<sup>th</sup> percentile: 10.6%; 90<sup>th</sup> percentile: 26.4%) of commercial plans and 23.7% (10<sup>th</sup> percentile: 17.4%; 90<sup>th</sup> percentile: 30.4%) of Medicare plans dispensed the appropriate pharmacotherapies for members who experienced a COPD exacerbation during the measurement period.

Advisory panel members, including experts with respiratory and technical expertise, strongly supported the proposed updates to PCE for MY 2027 to bring the measure into alignment with clinical guidelines.

NCQA seeks feedback on the following questions:

1. Do you support the proposed updates to the PCE measure for MY 2027?
2. Do you support the use of any claim position to identify COPD exacerbation events among members in the denominator?

Supporting documents include the current measure specification, evidence workup and performance data.

**NCQA acknowledges the contributions of the Respiratory, Geriatric and Technical Measurement Advisory Panels.**

## Pharmacotherapy Management of COPD Exacerbation (PCE)

| Measure title                                       | Pharmacotherapy Management of COPD Exacerbation  | Measure ID | PCE |
|---|--|------------|-----|
| <b>Description</b>                                  | <p>The percentage of <del>COPD exacerbations for</del> persons 40 years of age and older who had a <del>chronic obstructive pulmonary disease (COPD) exacerbation or used acute care for COPD during inpatient discharge or ED visit on or between January 1–November 30 of</del> the measurement period and were dispensed appropriate <del>COPD</del> medications <del>during the measurement period</del>. <del>Two rates are reported:</del></p> <p><del>Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event.</del></p> <p><del>Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.</del></p>  |            |     |
| <b>Measurement period</b>                           | January 1–December 31.   |            |     |
| <b>Copyright and disclaimer notice</b>              | <p>Refer to the complete copyright and disclaimer information at the front of this publication.</p> <p>NCQA website: <a href="http://www.ncqa.org">www.ncqa.org</a>.</p> <p>Submit policy clarification support questions via My NCQA (<a href="https://my.ncqa.org">https://my.ncqa.org</a>).</p>   |            |     |
| <b>Clinical recommendation statement/ rationale</b> | <p><del>Patients with chronic obstructive pulmonary disorder (COPD) who experience exacerbations are at higher risk for repeat exacerbations, more rapid decline in lung function, and reduced exercise capacity, and these effects are more pronounced for patients with severe COPD. Proper and timely therapy following an exacerbation, including pharmacotherapy, can slow disease progression and reduce the risk of future exacerbations. Guidelines recommend the use of bronchodilators and systemic steroids as treatment for COPD exacerbations. COPD is a lung disease characterized by the chronic presence of respiratory symptoms due to abnormalities and/or emphysema causing persistent, often progressive airway obstruction and acute exacerbations, or “flare ups” (ALA, n.d.). COPD is primarily caused by harmful exposure to gases, including cigarette smoke which is the most common cause of the condition globally (Agarwal, Raja, and Brown, 2023).</del></p> <p><del>Clinical guidelines offer standards for COPD treatment options to manage COPD and its impact on one's quality of life. Proper treatment of COPD via appropriate pharmacotherapy can help individuals manage COPD exacerbations and long-term maintenance care (GOLD, 2025).</del></p> |            |     |
| <b>Citations</b>                                    | <p><del>Donaldson, G.C., T.A.R. Seemungal, A. Bhowmik, and J.A. Wedzicha. 2002. “Relationship Between Exacerbation Frequency and Lung Function Decline in Chronic Obstructive Pulmonary Disease.” <i>Thorax</i> 57:847–52.</del></p>   |            |     |

|                             |   |
|-----------------------------|---|
|                             | <p><u>Spencer, S., P.M.A. Calverley, P.S. Burge, and P.W. Jones. 2004. "Impact of Preventing Exacerbations on Deterioration of Health Status in COPD." European Respiratory Journal 23:698-702.</u></p> <p><u>Global Initiative for Chronic Obstructive Lung Disease (GOLD). 2020. "Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease." <a href="https://goldcopd.org/wp-content/uploads/2019/11/GOLD-2020-REPORT-ver1.0wms.pdf">https://goldcopd.org/wp-content/uploads/2019/11/GOLD-2020-REPORT-ver1.0wms.pdf</a></u></p> <p><u>Agarwal, A.K.; Raja, A.; Brown, B.D (2023). Chronic obstructive pulmonary disease. <i>StatPearls [Internet]</i>, StatPearls Publishing, 7 August 2023. PMID: 32644707.</u></p> <p><u>American Lung Association. (n.d.). COPD trends brief. <a href="https://www.lung.org/research/trends-in-lung-disease/copd-trends-brief/copd-burden">https://www.lung.org/research/trends-in-lung-disease/copd-trends-brief/copd-burden</a></u></p> <p><u>Global Initiative for Chronic Obstructive Lung Disease (2025). <i>Global strategy for the prevention, diagnosis and management of COPD: 2025 report</i>. Global Initiative for Chronic Obstructive Lung Disease, Inc. <a href="https://goldcopd.org/2025-gold-report/">https://goldcopd.org/2025-gold-report/</a></u></p> |
| <b>Characteristics</b>      |   |
| <b>Scoring Type</b>         | Proportion.<br>Process.   |
| <b>Product lines</b>        | <ul style="list-style-type: none"> <li>Commercial.</li> <li>Medicaid.</li> <li>Medicare.</li> </ul>   |
| <b>Stratifications</b>      | None.   |
| <b>Risk adjustment</b>      | None.   |
| <b>Improvement notation</b> | Increased score indicates improvement.  |
| <b>Guidance</b>             | <p><b>Data collection methodology:</b> Administrative. Refer to <a href="#">General Guideline: Data Collection Methods</a> for additional information.</p> <p><b>Date specificity:</b> Dates must be specific enough to determine the event occurred in the period being measured.</p> <p><b>Which services count?</b> When using claims, use all paid, suspended, pending and denied claims.</p> <p><b>Other guidance:</b> The measure is based on episodes; therefore, it is possible for the denominator to include multiple events for the same person.</p>   |
| <b>Definitions</b>          |   |
| <b>Active prescription</b>  | <p>A prescription is considered active if the "days supply" indicated on the date when the person was dispensed the prescription is the number of days or more between that date and the relevant date.</p> <p>For an acute inpatient stay, the relevant date is the date of admission.</p>   |

|                           |  |
|---------------------------|--|
| <b>Direct transfer</b>    | <p><i>For an ED visit, the relevant date is the date of service.</i></p> <p>When the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by 1 calendar day or less.</p> <ul style="list-style-type: none"> <li>• <i>For example:</i> <ul style="list-style-type: none"> <li>– An inpatient <u>or observation stay</u> discharge on June 1, followed by an admission to another inpatient setting on June 1, <i>is a direct transfer</i>.</li> <li>– An inpatient <u>or observation stay</u> discharge on June 1, followed by an admission to an inpatient setting on June 2, <i>is a direct transfer</i>.</li> <li>– An inpatient <u>or observation stay</u> discharge on June 1, followed by an admission to another inpatient setting on June 3, <i>is not a direct transfer</i>; these are two distinct inpatient stays.</li> </ul> </li> </ul> <p><b>COPD episode date</b></p> <p>The date of service for any acute inpatient <u>or -observation stay</u> discharge, <u>or ED/urgent care visit or other outpatient visit</u> during the intake period with a <u>principal</u> diagnosis of COPD.</p> <p><i>For an acute inpatient <u>or observation stay</u> discharge, the episode date is the date of discharge.</i></p> <p><i>For direct transfers (to acute or nonacute settings), the episode date is the discharge date from the transfer admission.</i></p> <p><i>For an ED, <u>urgent care or outpatient</u> -visit, the episode date is the date of service.</i></p> |
| <b>Intake period</b>      | <p>January 1 of the measurement period to November 30 of the measurement period. The intake period captures eligible episodes of treatment.</p>  |
| <b>Initial population</b> | <p><i>Measure item count: EpisodePerson.</i></p> <p><i>Attribution basis: Enrollment.</i></p> <ul style="list-style-type: none"> <li>• <i>Benefits:</i> Medical and pharmacy.</li> <li>• <i>Continuous enrollment:</i> <u>Episode date through 30 days after the episode date</u><u>The measurement period</u>.</li> <li>• <i>Allowable gap:</i> <u>None more than one gap of ≤45 days during the measurement period. No gaps on the last day of the measurement period.</u></li> </ul> <p><i>Ages: 40 years of age or older as of the first day of the measurement period.</i></p> <p><i>Event: COPD exacerbation.</i></p> <p><b>Step 1.</b> Identify all persons who had <u>a COPD episode during the intake period</u>. <u>Either of the following during the intake period</u><u>meet criteria:</u></p> <ul style="list-style-type: none"> <li>• <u>An acute inpatient or observation stay dischargeacute inpatient discharge with a diagnosis of COPD (Chronic Obstructive Pulmonary Diseases Value Set) on the discharge claim.</u> To identify acute inpatient and observation stay discharges: <ol style="list-style-type: none"> <li>1. <u>Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) and observation stays (Observation Stay Value Set).</u></li> <li>2. <u>Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).</u></li> </ol> </li> </ul>   |

3. Identify the discharge date for the stay.

- At least two ED, urgent care or other outpatient visits (any combination of the following) with different dates of service during the intake period:

- An ED visit (ED Value Set) with a principal diagnosis of COPD, emphysema or chronic bronchitis (Chronic Obstructive Pulmonary Diseases Value Set).
- An urgent care visit (Outpatient and Telehealth Value Set with POS code 20) with a diagnosis of COPD (Chronic Obstructive Pulmonary Diseases Value Set).
- Any outpatient visit (Outpatient and Telehealth Value Set) with a diagnosis of a COPD exacerbation (Chronic Obstructive Pulmonary Diseases Exacerbation Value Set).

Multiple visits on the same date are counted as one episode.

**Step 2.** Exclude ED, urgent care or other outpatient visits that result in an acute inpatient or observation stay.

To identify admissions to an acute inpatient or observation stay care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) and observation stays (Observation Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the admission date for the stay.

- An acute inpatient discharge with a principal diagnosis of COPD, emphysema or chronic bronchitis (Chronic Obstructive Pulmonary Diseases Value Set) on the discharge claim. To identify acute inpatient discharges:
  1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
  2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
  3. Identify the discharge date for the stay.

**Step 2.** Identify all COPD episodes. For each person identified in step 1, identify all acute inpatient discharges and ED visits. An acute inpatient discharge and ED visit on the same date are counted as one COPD episode. Multiple ED visits on the same date are counted as one COPD episode. Do not include ED visits that result in an inpatient stay (Inpatient Stay Value Set).

**Step 323.** Test for direct transfers. For episodes with a direct transfer to an acute or nonacute setting for any diagnosis the episode date is the discharge date from the last admission.

To identify admissions to and discharges from inpatient settings:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the admission and discharge dates for the stay.

**Note:** The direct transfer does not require a COPD diagnosis.

**Step 434.** Exclude both the initial discharge and the direct transfer discharge if the last discharge occurs after November 30 of the measurement

|                               |  |
|-------------------------------|--|
|                               | <del>period Calculate continuous enrollment. All episodes that were not excluded remain in the initial population.</del>   |
| <b>Denominator exclusions</b> | <p><b>Persons with a date of death.</b><br/>Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit.</p> <p><b>Persons in hospice or using hospice services.</b><br/>Persons who use hospice services (<u>Hospice Encounter Value Set</u>; <u>Hospice Intervention Value Set</u>) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.</p> <p><b>Persons with asthma.</b><br/><u>Persons with two or more diagnoses of asthma (Asthma Value Set) on the same or different dates of service during the measurement period or the year prior to the measurement period.</u></p>  |
| <b>Denominator</b>            | The initial population minus denominator exclusions.   |
| <b>Numerator</b>              | <p><b>Appropriate COPD medications.</b><br/><u>Persons who had dispensing events for all of the following medications on the same or different dates of service during the measurement period:</u></p> <ul style="list-style-type: none"> <li>• <u>At least 1one short-acting muscarinic antagonist (SAMA) or short-acting beta agonist (SABA) (Short Acting COPD Medications List), and</u></li> <li>• <u>At least one of the following:</u> <ul style="list-style-type: none"> <li>— <u>At least 1One long-acting beta-agonist (LABA) (LABA Medications List) and</u></li> <li>— <u>At least 1one long-acting muscarinic antagonist (LAMA) (LAMA Medications List).</u></li> <li>— <u>One LABA/LAMA combination medication (LABA and LAMA Combination Medications List).</u></li> </ul> </li> </ul> <p><b>Note:</b> <u>Dispensing events that occur prior to the COPD exacerbation event meet criteria. Include all prescriptions that were dispensed during the measurement period, including those even if prior to the COPD exacerbation event.</u></p> <p><b>Numerator 1: Systemic corticosteroid.</b><br/><u>Persons who were dispensed a prescription for systemic corticosteroid (Systematic Corticosteroid Medications List) on or 14 days after the episode date. Count systemic corticosteroids that are active on the relevant date.</u></p> <p><b>Numerator 2: Bronchodilator.</b><br/><u>Persons who were dispensed a prescription for a bronchodilator (Bronchodilator Medications List) on or 30 days after the episode date. Count bronchodilators that are active on the relevant date.</u></p> |
| <b>Summary of changes</b>     | <ul style="list-style-type: none"> <li>• <u>Updated the measure description.</u></li> <li>• <u>Updated clinical recommendation language to be consistent with updated clinical practice guidelines.</u></li> </ul>   |

|  | <ul style="list-style-type: none"> <li>Removed the definition of active prescription and replaced the definition of episode date with COPD episode date.</li> <li>Changed the measure item count from episode to person.</li> <li>Expanded the continuous enrollment period to the measurement period.</li> <li>Expanded the allowable gap period to allow one gap up to 45 days.</li> <li>Revised the initial population event criteria.</li> <li>Added an asthma exclusion to the <i>Denominator exclusions</i> section.</li> <li>Revised the numerator criteria; removed numerator 2.</li> <li>Revised the data elements tables.</li> </ul>   |  |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
|--|--|--|--------------|------------------------|--|---------|----------|-----------------------|-------------------|--|------------|--|-------------|--|------------------|--|-------------------------|--|------|-----------|
| <b>Data element tables</b>   | <p>Organizations that submit HEDIS data to NCQA must provide the following data elements.</p> <p><b>Table PCE-1/2/3: Data Elements for Pharmacotherapy Management of COPD Exacerbation</b></p> <table border="1"> <thead> <tr> <th>Metric</th> <th>Data Element</th> <th>Reporting Instructions</th> </tr> </thead> <tbody> <tr> <td><u>Appropriate COPD Medications Sy</u><br/><u>stemic Corticosteroid</u></td> <td>Benefit</td> <td>Metadata</td> </tr> <tr> <td rowspan="6"><u>Bronchodilator</u></td> <td>InitialPopulation</td> <td><u>Repeat per Metric</u><br/><u>Report once</u></td> </tr> <tr> <td>Exclusions</td> <td><u>Report once</u><br/><u>Repeat per Metric</u></td> </tr> <tr> <td>Denominator</td> <td><u>Report once</u><br/><u>Repeat per Metric</u></td> </tr> <tr> <td>NumeratorByAdmin</td> <td><u>Report once</u><br/><u>For each Metric</u></td> </tr> <tr> <td>NumeratorBySupplemental</td> <td><u>Report once</u><br/><u>For each Metric</u></td> </tr> <tr> <td>Rate</td> <td>(Percent)</td> </tr> </tbody> </table> | Metric   | Data Element | Reporting Instructions | <u>Appropriate COPD Medications Sy</u><br><u>stemic Corticosteroid</u> | Benefit | Metadata | <u>Bronchodilator</u> | InitialPopulation | <u>Repeat per Metric</u><br><u>Report once</u> | Exclusions | <u>Report once</u><br><u>Repeat per Metric</u> | Denominator | <u>Report once</u><br><u>Repeat per Metric</u> | NumeratorByAdmin | <u>Report once</u><br><u>For each Metric</u> | NumeratorBySupplemental | <u>Report once</u><br><u>For each Metric</u> | Rate | (Percent) |
| Metric   | Data Element   | Reporting Instructions                         |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
| <u>Appropriate COPD Medications Sy</u><br><u>stemic Corticosteroid</u> | Benefit  | Metadata                                       |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
| <u>Bronchodilator</u>  | InitialPopulation  | <u>Repeat per Metric</u><br><u>Report once</u> |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
|  | Exclusions   | <u>Report once</u><br><u>Repeat per Metric</u> |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
|  | Denominator  | <u>Report once</u><br><u>Repeat per Metric</u> |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
|  | NumeratorByAdmin   | <u>Report once</u><br><u>For each Metric</u>   |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
|  | NumeratorBySupplemental  | <u>Report once</u><br><u>For each Metric</u>   |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |
|  | Rate   | (Percent)                                      |              |                        |  |         |          |                       |                   |  |            |  |             |  |                  |  |                         |  |      |           |

# **Pharmacotherapy Management of COPD Exacerbation (PCE)**

## **Measure Workup**

### **Topic Overview**

#### **Health Importance & Quality Measurement Considerations**

Chronic obstructive pulmonary disease (COPD) is a lung disease characterized by the chronic presence of respiratory symptoms due to abnormalities and/or emphysema, causing persistent, often progressive airway obstruction (GOLD, 2025). COPD is primarily caused by harmful exposure to gases, including cigarette smoke, which is the most common cause of the condition globally (Agarwal et al., 2023). Exposure to these harmful gases commonly occurs in lived environments where someone may be smoking and/or inhaling secondhand smoke, and in occupational environments where chemical fumes and dust inhalation is present.

There are two types of COPD: emphysema and chronic bronchitis. Emphysema is defined as a chronic lung disease with restricted breathing, frequently associated with the inhalation of harmful gases (GOLD, 2025). Chronic bronchitis, or CB, is the persistent presence of a cough with mucus or phlegm over three months consistently per year (GOLD, 2025). These two types can often occur together in COPD patients, and the severity of the symptoms can vary (American Lung Association, n.d.). Currently, there is no cure for COPD; however, there are treatment options to manage the disease and its impact on one's quality of life. Failure to treat COPD properly can lead to poor respiratory health outcomes that contribute to severe conditions such as lung cancer and heart disease (American Lung Association, n.d.). Clinical guidelines outline appropriate pharmacotherapy and non-pharmacotherapy strategies to manage COPD exacerbations and long-term maintenance care.

#### **Prevalence & disparities**

COPD typically presents in smokers and individuals ages 40 years and older, and the likelihood of being diagnosed with COPD increases with age (Agarwal et al., 2023). Despite COPD prevalence rates declining among adults ages 18-44, the rates have remained elevated in women, smokers, individuals ages 65+, non-working adults, individuals with lower education rates and individuals living in rural areas (Liu et al., 2023). According to the CDC, approximately 16 million adults have been diagnosed with COPD; however, it is estimated that millions more are living with the disease without a diagnosis (Agarwal et al., 2023; CDC, 2024).

People of all ethnic backgrounds are at risk of COPD; however, Black and Hispanic individuals are less likely to receive a COPD diagnosis despite the presence of symptoms (Forno et al., 2023). Both groups have lower prevalence rates of COPD compared to non-Hispanic White individuals but experience worsened outcomes, including higher mortality rates (Forno et al., 2023). Disparities in prevalence have been associated with socioeconomic status, environmental exposures, health care access, health care quality, systemic inequities and the use of race-based reference values when diagnosing using spirometry (Forno et al., 2023; Wang et al., 2024). Historically, lung function prediction equations did not consider the influence of social determinants of health on lung functionality and were based on racially-biased data (Davidson et al., 2024). For instance, National Health and Nutrition Survey (NHANES) III data falsely indicated that forced expiratory volume (FEV) and forced vital capacity (FVC) in African American individuals was 12-15% lower than non-Hispanic White individuals. This resulted in symptomatic African American individuals being underdiagnosed due to seemingly normal lung function resulting from pseudoscientific notions about inherent biological differences (Davidson et al., 2024). Despite efforts by governing COPD organizations to standardize practices, many health care providers still maintain implicit or explicit biases towards patients, which can impact how care is delivered.

**Individual/population health relevance**

COPD exacerbations can have significant impacts on quality of life, thus requiring risk factors and triggers to be managed appropriately. Exacerbations can lead to worsened respiratory symptoms, including increased breathlessness, coughing and sputum production (Machado et al., 2023). Frequent exacerbations can lead to more frequent hospitalizations, increased medication use and a feeling of a lack of control over one's health. Over time, COPD exacerbations are linked to an accelerated decline in lung functionality and an increased risk of mortality (Machado et al., 2023).

COPD exacerbations directly impact the long-term health and functionality of one's lungs. Tissue damage, inflammation and oxidative stress (a process that damages DNA and cellular structures) resulting from exacerbations accelerate the decline of lung function (Easter et al., 2020). As individuals age with COPD, they also experience inflammaging, which is the chronic low-grade inflammation associated with aging that contributes to diminished functionality (Easter et al., 2020). While the underlying damage done to lungs is irreversible, improvement to lung function is possible with appropriate treatment and lifestyle changes.

**Financial importance & cost-effectiveness**

COPD has been associated with both direct and indirect economic burdens to the U.S. health care system and society. The estimated financial burden annually is estimated to be around \$3.6 billion (Yawn et al., 2021). In 2019, it was determined that direct costs for COPD in the United States were approximately \$31.3 billion and are projected to grow to \$60.5 billion by 2029 (Mannino et al., 2024). Prescription and hospital-related care are significant cost drivers in COPD care. The average annual costs for COPD care are approximately \$4,300 per patient (Agarwal et al., 2023). Annually, COPD medical costs equate to a total of approximately \$24 billion for patients ages 45 years old and older, with prescription drugs making up \$11.9 billion and inpatient costs accounting for \$6.3 billion (Agarwal et al., 2023).

Insurance coverage via government (Medicaid, Medicare) and private (commercial) insurance can impact a patient's ability to seek and continue care. Cost of care heavily correlates to misuse and underuse of COPD medication, often requiring a combination of personal strategies and physician-patient conversation to address (O'Toole et al., 2022). In order to reduce personal financial burdens associated with treatment, patients and physicians may use several strategies to mitigate impact. Strategies to streamline prescriptions and manage personal costs include pharmacy coupons, medication samples and close collaboration with their physicians to change or adjust prescriptions to meet insurance requirements (O'Toole et al., 2022).

**Quality measure landscape**

There are 15 health care quality measures relevant to COPD diagnosis, treatment and outcomes, 6 of which are specified for health plans.\* Three out of 15 measures focus on diagnostic activities for COPD and 6 focus on health outcomes for patients with COPD. The remaining 6 (including the HEDIS<sup>†</sup> *Pharmacotherapy Management of COPD Exacerbation* [PCE] measure) focus on pharmacological treatments for COPD. A full list of the COPD-related measures identified are listed in the appendix.

While a number of these measures may drive accountability for positive health outcomes, COPD prevention and the non-pharmaceutical aspects of COPD care, there is a gap in measures focused on COPD diagnostics and pharmaceutical treatment. The American Thoracic Society's (ATS) COPD:

\* See Appendix A

† HEDIS is a registered trademark of the National Committee for Quality Assurance.

*Spirometry Evaluation* measure is endorsed by the Consensus-Based Entity (CBE) and aligns with current clinical guidelines for COPD diagnostics but is not included in major national quality accountability programs such as MIPS, CMS Stars or HEDIS. NCQA's *Use of Spirometry Testing in the Assessment and Diagnosis of COPD* (SPR) measure once filled this gap, but it was retired in 2019 because it was underutilized by health plans.

Of the six measures focused on pharmaceutical treatment for COPD, only one (the ATS' CBE-endorsed *COPD: Inhaled Bronchodilator Therapy* measure) is fully aligned with current clinical guidelines. NCQA is working to respecify the PCE measure to correct misalignments with clinical guidelines for pharmacological COPD treatment strategies. As currently specified, the measure's clinical considerations are out of date, despite being used in multiple national quality accountability programs. The four remaining measures also only partially align with guidelines for COPD care.

Public health concerns surrounding respiratory health suggest the need for a better accountability structure for respiratory conditions such as COPD. The field of quality measurement can support this need by filling gaps in the current landscape of quality measures for COPD. To do so, measures should be created or refined to incentivize evidence-based clinical activities for COPD diagnosis and pharmacological care.

## Priorities for High-Quality Care

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The content below summarizes the key components of existing COPD guidelines, from prevention to follow-up care, while the final section highlights systemic issues such as underdiagnosis, misdiagnosis and health care access disparities that hinder optimal COPD management.

### Prevention

COPD prevention centers on identifying and mitigating risk factors and promoting protective health behaviors. The most critical intervention is smoking abstinence or cessation, which significantly reduces the risk of developing COPD and slows disease progression. Individuals who use cigarettes experience a greater incidence and prevalence of COPD compared to non-smokers, and recent studies suggest that e-cigarette use drives similar outcomes (GOLD, 2025). Smoking cessation has been shown to reduce the rate of lung function decline in individuals with COPD and is associated with improved COPD symptoms, fewer exacerbations and reduced mortality (Department of Veterans Affairs & Department of Defense, 2021; Stevermer et al., 2021). Among individuals with COPD, sustained smoking cessation can lead to a 39% reduction in all-cause mortality over five years (Nici et al., 2020).

While clinical guidelines for COPD recommend tailoring smoking cessation treatment to individual needs and tobacco dependence, combined behavioral therapy and pharmacotherapy appear to be most effective (Stevermer et al., 2021). Behavioral techniques may include intensive practical counseling, patient education and social support, while pharmacotherapies may include varenicline, bupropion, nortriptyline and nicotine replacement therapies (USPSTF, 2022; Liu et al., 2023; Machado et al., 2023).

Other (non-smoking) exposures to environmental and occupational pollutants play a substantial role in COPD risk. Recent estimates suggest that 50% of the total attributable risk of COPD can be linked to ambient air pollution from biomass fuels, household particulates (including secondhand smoke) and occupational dust and fumes (Forno et al., 2023). While many of these factors are not managed in typical care settings, awareness of risk factors can help individuals make informed

choices and recognize symptoms such as chronic cough, dyspnea and wheeze for timely intervention (USPSTF, 2022).

Preventing and managing respiratory diseases during childhood may also help to prevent COPD. Asthma and serious respiratory infections such as pneumonia and bronchitis can contribute to airway remodeling in children. Reducing the severity of these conditions through timely and appropriate pediatric care can prevent COPD by limiting the airway remodeling that can lead to irreversible airway obstruction (Wang et al., 2024; CDC, 2024).

## Diagnosis & initial assessment

COPD diagnoses begin with a clinician identifying persistent symptomatology (most notably, chronic cough, dyspnea and wheezing) in the context of COPD risk factors. After identifying potential cases, COPD is diagnosed using a spirometer: a device that quantifies the degree of airway obstruction by measuring the volume and speed of exhaled air (Easter et al., 2020). While physical examinations, validated symptom questionnaires and simpler measures of expiratory airflow (i.e., peak expiratory flow) can support COPD diagnoses, spirometry is the only clinically recommended approach for diagnosing COPD (USPSTF, 2022; Machado et al., 2023). Spirometry testing is not recommended for asymptomatic individuals; however, targeted screening is advised for individuals with chronic cough, sputum production, dyspnea, wheezing or significant exposure to risk factors such as smoking or occupational hazards (Liu et al., 2023).

The standard diagnostic criterion using spirometry is a post-bronchodilator FEV<sub>1</sub>/FVC ratio of less than 0.7, indicating non-fully reversible airflow obstruction (USPSTF, 2022; Liu et al., 2023; Machado et al., 2023). This criterion distinguishes COPD from asthma, which is indicated by excessive variability in expiratory lung function (Yawn et al., 2021). While COPD and asthma present similar symptoms, clinical guidelines emphasize the need to follow distinct treatment pathways for each condition. If a patient is diagnosed with both asthma and COPD, guidelines direct clinicians to primarily refer to asthma guidelines for pharmacotherapy (USPSTF, 2022).

The Global Initiative for Chronic Obstructive Lung Disease (GOLD) recommends a combined initial assessment strategy to classify diagnosed cases of COPD by the severity of airflow obstruction, level of symptoms and frequency of previous exacerbations. This initial assessment informs both pharmacologic and non-pharmacologic management strategies and helps identify patients at risk for rapid disease progression (USPSTF, 2022; Machado et al., 2023). Severity of airway obstruction is assessed using spirometry and defined by four ranges of actual FEV<sub>1</sub> values as a percentage of expected FEV<sub>1</sub> values (USPSTF, 2022):

- GOLD 1 (mild, FEV<sub>1</sub> ≥ 80% of expected)
- GOLD 2 (moderate, 50% ≤ FEV<sub>1</sub> <80% of expected)
- GOLD 3 (severe, 30% ≤ FEV<sub>1</sub> <50% of expected)
- GOLD 4 (very severe, FEV<sub>1</sub> <30% of expected)

GOLD recommends defining levels of symptoms and exacerbation frequencies using a combined assessment tool that sorts individuals into Group A, B, or E. This tool, termed “ABE” relies primarily on patient exacerbation histories and secondarily on patient-reported symptoms using the COPD Assessment Test (CAT) and modified Medical Research Council (mMRC) dyspnea scale (GOLD, 2025). The CAT uses a 0 to 5 scale to assess the degree to which COPD impacts an individual’s cough, sputum production, dyspnea, activity limitation and sleep. The mMRC scales dyspnea symptoms from 0 to 4. Patients in mMRC Grade 0 only report breathlessness with strenuous exercise, while patients in mMRC Grade 4 report breathlessness that inhibits outdoor activities, dressing or undressing.

These results are combined to assign COPD patients to group A, B or E, as follows:

- Group A:
  - Exacerbations per year: 0-1 (none leading to hospitalization)
  - CAT score: 0-9
  - mMRC score: 0-1
- Group B:
  - Exacerbations per year: 0-1 (none leading to hospitalization)
  - CAT score: 10+
  - mMRC score: 2+
- Group E:
  - Exacerbations per year: 2+ (none leading to hospitalization) OR 1+ exacerbations leading to hospitalization
  - CAT score: NA
  - mMRC score: NA

#### Initial treatment

After diagnosis and initial assessment, individuals diagnosed with COPD are treated by managing acute exacerbations, reducing risk factors and using appropriate pharmacological and non-pharmacological interventions. In some cases, addressing exacerbations may necessitate systemic antibiotics, short courses of systemic corticosteroids (SCSs), short-acting beta-agonists (SABAs) and supplemental oxygen (Liu et al., 2023; Machado et al., 2023; Mannino et al., 2024). Hospital admission should be considered in cases of severe exacerbation symptoms such as use of accessory muscles, tachypnea, hypoxemia, hypercapnia or failure to respond to outpatient therapy (Machado et al., 2023).

Once acute exacerbations are stabilized, the focus of COPD treatment shifts to reducing risk factors—most importantly, smoking cessation. This involves a combination of counseling (including both behavior modification strategies and social support) and pharmacotherapy, including varenicline, bupropion, nortriptyline and nicotine replacement therapy (GOLD, 2025). Clinicians should engage in disease-specific self-management education with all patients, including recognizing environmental pollutants and developing exacerbation action plans. In many cases resistance and aerobic training and pulmonary rehabilitation may be relevant as well. Patients should also receive appropriate vaccinations to prevent respiratory infections that may contribute to COPD exacerbations, including influenza, pneumococcal, COVID-19, respiratory syncytial virus (for those over 60), tetanus, diphtheria and acellular pertussis and zoster (for those over 50) (GOLD, 2025).

Initial pharmacologic therapy is guided by the results of the initial assessment and should account for comorbidities and patient preferences. Asthma comorbidities are particularly critical to consider, as pharmacologic therapy for combined COPD/asthma presentations should be based on clinical guidelines for asthma rather than COPD. Non-asthmatic COPD patients in Group A of the GOLD ABE tool should receive a long-acting muscarinic antagonist (LAMA) or long-acting beta-agonists (LABA); however, a LAMA is preferred as monotherapy. Non-asthmatic COPD patients in Group B or E present more significant symptoms or exacerbation risk and should receive a combination of LABA and LAMA therapeutics. In some cases, Group E patients with elevated blood eosinophil counts can receive inhaled corticosteroids (ICS) in addition to a LABA and LAMA; however, guidelines recommend withdrawing ICS in patients experiencing no response, significant side effects, or severe or recurrent pneumonia. All non-asthmatic COPD patients may also receive a short-acting beta agonist for acute symptom relief (VA/DOD, 2021; Ejike et al., 2021). Maintenance oral corticosteroids are not recommended as a routine therapeutic for any COPD patient due to lack of benefit and potential harm (Mannino et al., 2024). Oxygen

therapy is reserved for patients with documented hypoxemia, and treatment plans should be regularly reassessed to ensure optimal outcomes (GOLD, 2025; Machado et al., 2023; Mannino et al., 2024).

### Follow-Up treatment

Follow-up care for COPD is essential for optimizing long-term outcomes and minimizing exacerbations. Follow-ups should be tailored to disease severity, with more frequent evaluations for patients in GOLD 3 (severe COPD) or GOLD 4 (very severe COPD) and less frequent evaluations for patients in GOLD 1 (mild COPD) or GOLD 2 (moderate COPD) (USPSTF, n.d.). After any exacerbation, a timely follow-up visit is recommended to reassess symptoms, evaluate treatment response and adjust the care plan as needed (Machado et al., 2023). As with initial treatment, individuals with asthma and COPD should receive follow-up pharmacologic treatment based on clinical guidelines for asthma rather than COPD.

A comprehensive follow-up includes reassessing symptoms and exacerbation history using the GOLD ABE tool, evaluating inhaler technique and adherence and adjusting pharmacologic therapy accordingly (USPSTF, n.d.). If symptoms or exacerbations do not improve with a long-acting bronchodilator (LABA or LAMA) monotherapy, escalation to dual therapy (LABA + LAMA) is advised. For patients with persistent symptoms or exacerbations despite dual therapy, treatment should be guided by blood eosinophil counts. If eosinophils are  $\geq 100$  cells/ $\mu$ L, escalation to triple therapy (LABA + LAMA + ICS) is appropriate. If eosinophils are  $< 100$  cells/ $\mu$ L, clinicians may consider adding azithromycin (especially in non-smokers) or roflumilast (in patients with  $FEV_1 < 50\%$ , chronic bronchitis and prior severe exacerbations) to the existing dual therapy. In cases where triple therapy (LABA + LAMA + ICS) fail to improve symptoms or exacerbations, clinicians may consider adding dupilumab, azithromycin or roflumilast based on patient profiles (GOLD, 2025). In cases where patients experience improvements in symptoms or fewer exacerbations under ICS therapy, clinicians should consider if and when ICS therapy can be discontinued to prevent adverse effects.

In addition to refining pharmacologic therapies, follow-up care should continue to encourage smoking cessation, provide patient education and promote physical activity. Spirometry and vaccinations should be repeated annually. Additional assessments may include evaluating the need for pulmonary rehabilitation, long-term oxygen therapy (for severe resting hypoxemia), or non-invasive ventilation (for chronic hypercapnia with a history of acute respiratory failure). Palliative care, lung volume reduction and advanced imaging may be appropriate for patients with persistent symptoms or advanced disease (GOLD, 2025).

### Gaps in care

Several systemic and clinical challenges hinder the effective diagnosis and management of COPD. One of the most pressing issues is underdiagnosis and misdiagnosis, which often result from limited access to spirometry, the gold standard for diagnosing COPD. Early spirometry has been shown to decrease mortality risk by 34% for COPD patients and is associated with lower SABA use over the course of their care (Gaffney et al., 2022). Without spirometry testing, symptoms such as chronic cough, dyspnea or activity limitations can be misattributed to physical fitness challenges, upper respiratory infections, comorbid cardiovascular diseases or lung cancer. Because spirometry provides the only clear avenue for COPD identification and treatment, gaps in access can postpone appropriate treatment and worsen patient outcomes (USPSTF, 2022; Machado et al., 2023).

The presence of disparities, particularly among underserved populations, further exacerbates these diagnostic challenges. These disparities may stem from socioeconomic barriers, geographic limitations or health care system inefficiencies

(Department of Veterans Affairs & Department of Defense, 2021). Additionally, disparities in exposure to risk factors such as air pollution, occupational hazards and tobacco use contribute to unequal disease burden and outcomes (Department of Veterans Affairs & Department of Defense, 2021).

The consequences of these diagnostic issues are significant. Patients may receive no treatment due to a missed diagnosis or incorrect treatment due to misdiagnosis, both of which can lead to disease progression, increased exacerbations and reduced quality of life (GOLD, 2025). Addressing these issues requires system-level improvements in access to diagnostic tools, clinician education and equitable health care delivery.

### **Health care disparities**

While the prevalence of COPD is higher among non-Hispanic White individuals, people of color can often face additional barriers to accessing quality COPD therapies. Systemic barriers and historical mistrust in medical systems often lead to reduced engagement with health care providers, especially among Black and Hispanic patients (Ejike et al., 2021). These challenges are often compounded in rural communities where minority populations, low-income and under/uninsured individuals face the most significant obstacles for diagnoses and care (Gaffney et al., 2022).

Rural communities often face higher rates of COPD, hospitalizations and mortality due to common but complex influences. There are often higher levels of exposure to cigarette smoke, lung irritants from farming, mining or manufacturing occupations and fewer opportunities to access preventive or specialized care (Moore et al., 2019). These exposures can further exacerbate disparities in COPD outcomes in Black and Hispanic patients (Ejike et al., 2021). Rural care providers may have limited skill sets or resources, hindering their ability to deliver high-quality COPD care or education, such as tobacco cessation programs, to mitigate ongoing risk factors (Moore et al., 2019). Rural health care providers are encouraged to engage with their patients to understand occupational risk factor exposure in order to recommend appropriate screening and treatment pathways (Gandhi et al., 2023).

Additionally, occupational environments are a contributor to the health disparities in diagnosing, treating and maintaining respiratory health. Black and Hispanic individuals often make up larger proportions of low wage, high risk and increased manual labor roles in the workforce. These roles often increase exposure to high risk factors that contribute to asthma and COPD development (Gandhi et al., 2023). Individuals in these occupations may not be offered comprehensive health insurance which limits access to high-quality primary care. In addition, symptom flare-ups and exacerbations can lead to missed work and lower work productivity, which, if not salaried, can impact their financial wellbeing (Gandhi et al., 2023).

### **Digital Considerations**

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As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conduct a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework.

The updates being considered for this measure reevaluation do not impact digital feasibility. Therefore, an assessment is not included.

## References

Agarwal, A. K., et al. (2023). *Chronic obstructive pulmonary disease*. StatPearls Publishing.

American Lung Association. (n.d.). *COPD trends brief: Burden*. <https://www.lung.org/research/trends-in-lung-disease/copd-trends-brief/copd-burden>

Centers for Disease Control and Prevention. (2024, June 3). *Chronic obstructive pulmonary disease (COPD)*. U.S. Department of Health & Human Services. <https://www.cdc.gov/cdi/indicator-definitions/chronic-obstructive-pulmonary-disease.html>

Davidson, S. R., et al. (2024). Race adjustment of pulmonary function tests in the diagnosis and management of COPD: A scoping review. *International Journal of Chronic Obstructive Pulmonary Disease*, 19, 969–980. <https://doi.org/10.2147/COPD.S430249>

Department of Veterans Affairs & Department of Defense. (2021). *VA/DoD clinical practice guideline for the management of chronic obstructive pulmonary disease*. <https://www.healthquality.va.gov/guidelines/CD/copd/VADODCOPDCPGFinal508.pdf>

Easter, M., Bollenbecker, S., Barnes, J. W., & Krick, S. (2020). Targeting aging pathways in chronic obstructive pulmonary disease. *International Journal of Molecular Sciences*, 21(18), 6924. <https://doi.org/10.3390/ijms21186924>

Ejike, C. O., et al. (2021). Contribution of individual and neighborhood factors to racial disparities in respiratory outcomes. *American Journal of Respiratory and Critical Care Medicine*, 203(8), 987–997. <https://doi.org/10.1164/rccm.202002-0253OC>

Forno, E., et al. (2023). Asthma and chronic obstructive pulmonary disease. *Clinics in Chest Medicine*, 44(3), 519–530. <https://doi.org/10.1016/j.ccm.2023.03.008>

Gaffney, A. W., et al. (2022). Health care disparities across the urban-rural divide: A national study of individuals with COPD. *The Journal of Rural Health*, 38, 207–216. <https://doi.org/10.1111/jrh.12525>

Gandhi, S. A., Heinzerling, A., Flattery, J., & Cummings, K. J. (2023). Occupational contributions to respiratory health disparities. *Clinics in Chest Medicine*, 44(3), 635–649. <https://doi.org/10.1016/j.ccm.2023.03.016>

Global Initiative for Chronic Obstructive Lung Disease. (2025). *Global strategy for the prevention, diagnosis and management of COPD: 2025 report*. <https://goldcopd.org/2025-gold-report/>

Liu, Y., Carlson, S. A., Watson, K. B., Xu, F., & Greenlund, K. J. (2023). Trends in the prevalence of chronic obstructive pulmonary disease among adults aged  $\geq 18$  years—United States, 2011–2021. *MMWR Morbidity and Mortality Weekly Report*, 72, 1250–1256. <https://doi.org/10.15585/mmwr.mm7246a1>

Machado, A., et al. (2023). Impact of acute exacerbations of COPD on patients' health status beyond pulmonary function: A scoping review. *Pulmonology*, 29(6), 518–534. <https://doi.org/10.1016/j.pulmoe.2022.04.004>

Mannino, D. M., et al. (2024). National and local direct medical cost burden of COPD in the United States from 2016 to 2019 and projections through 2029. *Chest*, 165(5), 1093–1106. <https://doi.org/10.1016/j.chest.2023.11.040>

Moore, P., et al. (2019). COPD and rural health: A dialogue on the National Action Plan. *The Journal of Rural Health*, 35(4), 424–428. <https://doi.org/10.1111/jrh.12346>

Nici, L., et al. (2020). Pharmacologic management of chronic obstructive pulmonary disease: An official American Thoracic Society clinical practice guideline. *American Journal of Respiratory and Critical Care Medicine*, 201(9), e56–e69. <https://doi.org/10.1164/rccm.202003-0625ST>

O'Toole, J., et al. (2022). Understanding barriers to and strategies for medication adherence in COPD: A qualitative study. *BMC Pulmonary Medicine*, 22, 98. <https://doi.org/10.1186/s12890-022-01892-5>

Stevermer, J. J., et al. (2021). Pharmacologic management of COPD exacerbations: A clinical practice guideline from the AAFP. *American Family Physician*, 104(1), Online.

U.S. Preventive Services Task Force. (2022). *Screening for chronic obstructive pulmonary disease*. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/chronic-obstructive-pulmonary-disease-screening#fullrecommendationstart>

Wang, J. Z., et al. (2024). Race-based pulmonary function testing correction in COPD inhaler therapy trials: A systematic review. *International Journal of Chronic Obstructive Pulmonary Disease*, 19, 2285–2297. <https://doi.org/10.2147/COPD.S475875>

Yawn, B. P., Mintz, M. L., & Doherty, D. E. (2021). GOLD in practice: COPD treatment and management in the primary care setting. *International Journal of Chronic Obstructive Pulmonary Disease*, 16, 289–299. <https://doi.org/10.2147/COPD.S222664>

## Appendix A: Nationally Used Health Care Quality Measures Relevant to COPD Prevention, Care and Outcomes

| Measure Focus             | Measure Name  | Steward   | CBE Endorsed?       | Level of Analysis                                  |
|---------------------------|---|---|---------------------|--|
| Diagnosis                 | COPD: Spirometry Evaluation   | American Thoracic Society   | Yes                 | Clinician: Group/Practice                          |
|                           | COPD: Assessment of Oxygen Saturation   | Physician Consortium for Performance Improvement                    | Endorsement removed | Clinicians: Individual                             |
|                           | Use of Spirometry Testing in the Assessment and Diagnosis of COPD                         | National Committee for Quality Assurance                            | Yes                 | Health Plan (retired)                              |
| Pharmacological treatment | COPD: Inhaled Bronchodilator Therapy  | American Thoracic Society   | Yes                 | Clinician: Group/Practice                          |
|                           | COPD w/Exacerbations: Use of LABA Therapy   | ActiveHealth Management   | No                  | Any/all  |
|                           | Management of Poorly Controlled COPD  | ActiveHealth Management   | Endorsement removed | Health Plan; Population                            |
|                           | COPD Treatment Ratio  | Pharmacy Quality Alliance   | No                  | Clinician: Group/Practice and Individual           |
|                           | Adherence to LABAs in COPD Patients   | Pharmacy Quality Alliance   | No                  | Clinician: Group/Practice and Individual           |
|                           | Pharmacotherapy Management of COPD Exacerbation   | National Committee for Quality Assurance                            | Yes                 | Health Plan  |
| Outcomes                  | 30-Day All-Cause Risk-Standardized Readmission Rate Following COPD Hospitalization        | Centers for Medicare & Medicaid Services                            | Yes                 | Facility   |
|                           | 30-Day All-Cause Risk-Standardized Mortality Rate Following COPD Hospitalization          | Centers for Medicare & Medicaid Services                            | Yes                 | Facility   |
|                           | Improvement in Dyspnea  | Centers for Medicare & Medicaid Services                            | No                  | Facility   |
|                           | COPD/Asthma in Older Adults Admission Rate  | Agency for Healthcare Research and Quality                          | Endorsement removed | Facility   |
|                           | Health-Related Quality of Life in COPD Patients Before and After Pulmonary Rehabilitation | American Association of Cardiovascular and Pulmonary Rehabilitation | Endorsement removed | Clinician: Group/Practice                          |
|                           | Functional Capacity in COPD Patients Before and After Pulmonary Rehabilitation            | American Association of Cardiovascular and Pulmonary Rehabilitation | Endorsement removed | Clinician: Group/Practice and Individual; Facility |

## HEDIS Health Plan Performance Rates: Pharmacotherapy Management of COPD Exacerbations (PCE)

### BRONCHODILATOR INDICATOR

**Table 1. HEDIS PCE Measure Performance—Medicaid Plans**

| Measurement Year | Total Number of Plans (N) | Number of Plans Reporting (N (%)) | Performance Rates (%) |                    |                 |                 |                 |                 |                 |
|------------------|---------------------------|-----------------------------------|-----------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  |                           |                                   | Mean                  | Standard Deviation | 10th Percentile | 25th Percentile | 50th Percentile | 75th Percentile | 90th Percentile |
| 2024*            | 276                       | 219 (79.4)                        | 82.1                  | 8.7                | 70.9            | 78.9            | 84.4            | 87.5            | 91.0            |
| 2023             | 278                       | 214 (77.0)                        | 81.3                  | 9.5                | 67.2            | 78.8            | 83.6            | 87.9            | 90.0            |
| 2022             | 272                       | 208 (76.5)                        | 83.0                  | 8.6                | 72.9            | 80.5            | 85.2            | 87.7            | 90.5            |

\*For 2024, the average denominator across Medicaid plans was 641.0 episodes, with a standard deviation of 658.3.

**Table 2. HEDIS PCE Measure Performance—Commercial Plans**

| Measurement Year | Total Number of Plans (N) | Number of Plans Reporting (N (%)) | Performance Rates (%) |                    |                 |                 |                 |                 |                 |
|------------------|---------------------------|-----------------------------------|-----------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  |                           |                                   | Mean                  | Standard Deviation | 10th Percentile | 25th Percentile | 50th Percentile | 75th Percentile | 90th Percentile |
| 2024*            | 398                       | 201 (50.5)                        | 82.4                  | 7.0                | 74.4            | 78.8            | 82.4            | 86.5            | 90.9            |
| 2023             | 420                       | 204 (48.6)                        | 82.4                  | 9.1                | 75.0            | 78.6            | 82.8            | 87.1            | 91.3            |
| 2022             | 417                       | 187 (44.8)                        | 81.8                  | 10.6               | 74.4            | 79.5            | 83.1            | 87.7            | 90.3            |

\*For 2024, the average denominator across commercial plans was 124.4 episodes, with a standard deviation of 134.7.

**Table 3. HEDIS PCE Measure Performance—Medicare Plans**

| Measurement Year | Total Number of Plans (N) | Number of Plans Reporting (N (%)) | Performance Rates (%) |                    |                 |                 |                 |                 |                 |
|------------------|---------------------------|-----------------------------------|-----------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  |                           |                                   | Mean                  | Standard Deviation | 10th Percentile | 25th Percentile | 50th Percentile | 75th Percentile | 90th Percentile |
| 2024*            | 700                       | 467 (66.7)                        | 84.1                  | 6.6                | 75.8            | 80.8            | 84.9            | 88.4            | 91.3            |
| 2023             | 760                       | 469 (61.7)                        | 83.2                  | 7.9                | 75.7            | 80.0            | 84.2            | 87.9            | 90.8            |
| 2022             | 750                       | 477 (63.6)                        | 83.6                  | 6.9                | 75.0            | 80.1            | 84.3            | 88.2            | 91.3            |

\*For 2024, the average denominator across Medicare plans was 755.9 episodes, with a standard deviation of 2,190.6.

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## SYSTEMIC CORTICOSTEROID INDICATOR

**Table 4. HEDIS PCE Measure Performance—Medicaid Plans**

| Measurement Year | Total Number of Plans (N) | Number of Plans Reporting (N (%)) | Performance Rates (%) |                    |                 |                 |                 |                 |                 |
|------------------|---------------------------|-----------------------------------|-----------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  |                           |                                   | Mean                  | Standard Deviation | 10th Percentile | 25th Percentile | 50th Percentile | 75th Percentile | 90th Percentile |
| 2024*            | 276                       | 219 (79.4)                        | 69.7                  | 10.4               | 55.5            | 63.2            | 70.9            | 76.7            | 81.8            |
| 2023             | 278                       | 214 (77.0)                        | 69.8                  | 10.8               | 55.3            | 63.5            | 71.4            | 77.4            | 82.9            |
| 2022             | 272                       | 208 (76.5)                        | 70.8                  | 10.1               | 56.0            | 65.6            | 72.5            | 77.7            | 82.4            |

\*For 2024, the average denominator across Medicaid plans was 641.0 episodes, with a standard deviation of 658.3.

**Table 5. HEDIS PCE Measure Performance—Commercial Plans**

| Measurement Year | Total Number of Plans (N) | Number of Plans Reporting (N (%)) | Performance Rates (%) |                    |                 |                 |                 |                 |                 |
|------------------|---------------------------|-----------------------------------|-----------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  |                           |                                   | Mean                  | Standard Deviation | 10th Percentile | 25th Percentile | 50th Percentile | 75th Percentile | 90th Percentile |
| 2024*            | 398                       | 201 (50.5)                        | 76.3                  | 8.0                | 66.7            | 71.9            | 76.7            | 80.6            | 86.8            |
| 2023             | 420                       | 204 (48.6)                        | 76.4                  | 9.5                | 67.3            | 72.9            | 77.1            | 81.4            | 87.1            |
| 2022             | 417                       | 187 (44.8)                        | 75.5                  | 11.4               | 65.8            | 71.9            | 77.2            | 82.6            | 84.7            |

\*For 2024, the average denominator across plans was 124.4 episodes, with a standard deviation of 134.7.

**Table 6. HEDIS PCE Measure Performance—Medicare Plans**

| Measurement Year | Total Number of Plans (N) | Number of Plans Reporting (N (%)) | Performance Rates (%) |                    |                 |                 |                 |                 |                 |
|------------------|---------------------------|-----------------------------------|-----------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  |                           |                                   | Mean                  | Standard Deviation | 10th Percentile | 25th Percentile | 50th Percentile | 75th Percentile | 90th Percentile |
| 2024*            | 700                       | 467 (66.7)                        | 74.4                  | 8.2                | 64.7            | 70.3            | 75.5            | 79.3            | 83.9            |
| 2023             | 760                       | 469 (61.7)                        | 74.3                  | 8.7                | 65.4            | 70.2            | 74.7            | 79.2            | 84.1            |
| 2022             | 750                       | 477 (63.6)                        | 74.3                  | 8.2                | 64.7            | 70.3            | 75.1            | 79.5            | 83.3            |

\*For 2024, the average denominator across Medicare plans was 755.9 episodes, with a standard deviation of 2,190.6.

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