NATIONAL QUALITY FORUM
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Memo

July 28, 2020

To: Consensus Standards Approval Committee (CSAC)

From: Primary Care and Chronic Illness Project Team

Re: Primary Care and Chronic Illness Fall 2019, Track 1 Measures

COVID-19 Updates

Considering the recent COVID-19 global pandemic, many organizations needed to focus their attention on the public health crisis. In order to provide greater flexibility for stakeholders and continue the important work in quality measurement, the National Quality Forum (NQF) extended commenting periods and adjusted measure endorsement timelines for the Fall 2019 cycle.

Commenting periods for all measures evaluated in the Fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered one of two tracks:

Track 1: Measures Continuing in Fall 2019 Cycle
Measures that did not receive public comments or only received comments in support of the Standing Committees' recommendations will be reviewed by the CSAC.

- **Exceptions**
  Exceptions were granted to measures if non-supportive comments received during the extended post-comment period were similar to those received during the pre-evaluation meeting period and have already been adjudicated by the respective Standing Committees during the measure evaluation Fall 2019 meetings.

Track 2: Measures Deferred to Spring 2020 Cycle
Fall 2019 measures requiring further action or discussion from a Standing Committee were deferred to the Spring 2020 cycle. This includes measures where consensus was not reached or those that require a response to public comments received. Measures undergoing maintenance review will retain endorsement during that time. Track 2 measures will be reviewed during the CSAC's meeting in November.

During the CSAC meeting on July 28-29, the CSAC will review Fall 2019 measures assigned to Track 1. Evaluation summaries for measures in track 1 have been described in this memo and related Primary Care and Chronic Illness draft report. A list of measures assigned to Track 2 can be found in the Executive Summary section of the Primary Care and Chronic Illness draft report for tracking purposes and will be described further in a subsequent report. Measures in track 2 will be reviewed by the CSAC on November 17-18, 2020.

CSAC Action Required

The CSAC will review recommendations from the Primary Care and Chronic Illness project at its July 28-29, 2020 meeting and vote on whether to uphold the recommendations from the Committee.

This memo includes a summary of the project, measure recommendations, themes identified and responses to the public and member comments and the results from the NQF member expression of support. The following documents accompany this memo:

1. Primary Care and Chronic Illness Draft Report. The draft report includes measure evaluation details on all measures that followed Track 1. Measures that followed Track 2 will be reviewed during the CSAC's meeting in November. The complete draft report and supplemental materials are available on the project webpage.

Background

NQF has endorsed more than 40 measures addressing improvements in primary care and care for chronic illnesses. NQF reviews measures in these important healthcare areas under a consolidated measure portfolio that reflects the importance of addressing chronic illness in primary care settings. Measures may focus on nonsurgical eyes or ears, nose, and throat conditions; endocrine conditions; musculoskeletal conditions; nonacute pulmonary conditions; or nonacute infectious disease conditions.

Draft Report

The Primary Care and Chronic Illness, Track 1 draft report presents the results of the evaluation of 3 measures considered under the Consensus Development Process (CDP). Three are recommended for endorsement

The measures were evaluated against the 2019 version of the measure evaluation criteria.

	Maintenance	New	Total
Measures under consideration	3	0	3
Measures recommended for endorsement	3	0	3

CSAC Action Required

Pursuant to the CDP, the CSAC is asked to consider endorsement of 3 candidate consensus measures.

Measures Recommended for Endorsement

- 0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD (National Committee for Quality Assurance

Overall Suitability for Endorsement: Yes-20; No-0

- 1800: Asthma Medication Ratio (National Committee for Quality Assurance)

Overall Suitability for Endorsement: Yes- 21; No-0

- 2856: Pharmacotherapy Management of COPD Exacerbation (National Committee for Quality Assurance)

Overall Suitability for Endorsement: Yes- 18; No-4

Comments and Their Disposition

NQF received no comments on the measures being considered for track 1.

Member Expression of Support

Throughout the 16-week continuous public commenting period, NQF members had the opportunity to express their support ("support" or "do not support") for each measure submitted for endorsement consideration to inform the Committee's recommendations. No NQF members provided their expressions of support.

Removal of NQF Endorsement

One measure previously endorsed by NQF has not been resubmitted for maintenance of endorsement or has been withdrawn during the endorsement evaluation process. Endorsement for this measure will be removed.

Measure	Measure Description	Reason for Removal of Endorsement
0054 Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis (ART)	The percentage of patients 18 years of age and older who were diagnosed with rheumatoid arthritis and who were dispensed at least one ambulatory prescription for a disease-modifying anti-rheumatic drug (DMARD).	Developer is not seeking re-endorsement.

Appendix A: CSAC Checklist

The table below lists the key considerations to inform the CSAC's review of the measures submitted for endorsement consideration.

Key Consideration	Yes/No	Notes
Were there any process concerns raised during the CDP project? If so, briefly explain.	No	
Did the Standing Committee receive requests for reconsideration? If so, briefly explain.	No	
Did the Standing Committee overturn any of the Scientific Methods Panel's ratings of Scientific Acceptability? If so, state the measure and why the measure was overturned.	No	
If a recommended measure is a related and/or competing measure, was a rationale provided for the Standing Committee's recommendation? If not, briefly explain.	N/A	
Were any measurement gap areas addressed? If so, identify the areas.	No	
Are there additional concerns that require CSAC discussion? If so, briefly explain.	No	

Appendix B: Measures Not Recommended for Endorsement

Not applicable.

Appendix C: NQF Member Expression of Support Results

No NQF expressions of member support received.

Appendix D: Details of Measure Evaluation

Rating Scale: H=High; **M**=Moderate; **L**=Low; **I**=Insufficient; **NA**=Not Applicable

Measures Recommended

0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD

Submission | Specifications

Description: This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.

Numerator Statement: The number of patients with at least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date.

Denominator Statement: All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.

Exclusions: This measure excludes patients who use hospice services, and those with nonacute inpatient stays.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 02/11/2020

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-6; M-14; L-0; I-0**; 1b. Performance Gap: **H-4; M-16; L-1; I-0**

Rationale:

- The developer provided a logic model demonstrating that appropriate diagnosis of COPD would guide care resulting in decreased frequency and severity of exacerbations, urgent care and emergency department visits, and inpatient hospital stays
- The developer cited the 2020 GOLD guidelines for COPD, which recommend spirometry for confirmation of COPD diagnosis.
- The developer provided performance data from 2016-2018 to suggest performance gap and variation exists at the health plan level (commercial, Medicare, Medicaid).
- The developer is unable to collect performance data at the health plan level stratified by race, ethnicity, or language. However, literature was cited that women and African Americans are more likely to not have a COPD diagnosis at all stages of airflow obstruction.
- The Committee had no concerns about evidence or performance gap of the measure.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-2; M-19; L-0; I-0**; 2b. Validity: **H-1; M-17; L-3; I-0**

Rationale:

- Reliability testing was done at the performance score level on 365 commercial plans, 124 Medicaid plans, and 355 Medicare plans. The signal-to-noise ratio yielded a reliability score ranging from 0.9 to 1.0.
- Construct validity was conducted correlating this measure to two measures hypothesizing a positive correlation on performance. One measure addresses testing in pharyngitis, and the second measure addresses controlling high blood pressure. Correlation scores were weak for commercial and Medicare

plans (less than 3.0), but with a positive correlation. Correlation scores were 0.48 for Medicaid plans, indicating a stronger correlation.

- The Committee expressed concern about the measures used for comparison in the construct validity testing; however, they were satisfied with the developer's response that those measures were based on diagnostic testing, and suggested that the tests chosen were as proximate to the measure of interest as the data allowed them to be.

3. Feasibility: H-7; M-13; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:

- The measure has information collected during the provision of care, and was coded by someone other than person obtaining original information.
- The Committee had no concerns with feasibility of the measure.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-21; No Pass-0** 4b. Usability: **H-3; M-14; L-4; I-0**

Rationale:

- The measure is currently used in public reporting and accountability programs.
- Per the developer, more Medicaid plans and fewer Medicare plans reported the measure in 2014 compared with 2013 and 2012, which may help explain why the average performance rates did not substantially improve. The developer noted an opportunity to increase performance rates by increasing attention and utilization of this measure.
- The developer did not report any unintended consequences.

5. Related and Competing Measures

- This measure is related or competing to the following measures:
  - 0091 COPD: Spirometry Evaluation
  - 0102 COPD: Inhaled Bronchodilator Therapy
  - 2856 Pharmacotherapy Management of COPD Exacerbation

6. Standing Committee Recommendation for Endorsement: **Y-20**; **N-1**

Rationale

- The Standing Committee recommended the measure for continued endorsement.

7. Public and Member Comment

No member of public comments received.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

9. Appeals

1800 Asthma Medication Ratio

Submission | Specifications

Description: The percentage of patients 5-64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.

Numerator Statement: The number of patients with persistent asthma who have a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.

Denominator Statement: All patients 5-64 years of age as of December 31 of the measurement year who have persistent asthma by meeting at least one of the following criteria during both the measurement year and the year prior to the measurement year:

• At least one emergency department visit with asthma as the principal diagnosis

• At least one acute inpatient encounter or discharge with asthma as the principal diagnosis

• At least four outpatient visits, observation visits, telephone visits, or online assessments on different dates of service, with any diagnosis of asthma AND at least two asthma medication dispensing events for any controller or reliever medication. Visit type need not be the same for the four visits.

• At least four asthma medication dispensing events for any controller medication or reliever medication

Exclusions: 1) Exclude patients who had any of the following diagnoses any time during the patient's history through the end of the measurement year (i.e., December 31):

-COPD

-Emphysema

-Obstructive Chronic Bronchitis

-Chronic Respiratory Conditions Due To Fumes/Vapors

-Cystic Fibrosis

-Acute Respiratory Failure

2) Exclude any patients who had no asthma medications (controller or reliever) dispensed during the measurement year.

3) Exclude patients in hospice.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 02/11/2020

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-4; M-17; L-1; I-0**; 1b. Performance Gap: **H-10; M-12; L-0; I-0**

Rationale:

- The developer provided a logic model that linking dispensing long-term asthma controller medication to patients with persistent asthma will lead to improved management of asthma symptoms as well as reduction in frequency and severity of asthma exacerbations.
- The developer cited updated evidence by the Global Initiative for Asthma, Global Strategy for Asthma Management and Prevention, 2019.
- The Committee noted that there is potential of new guidelines coming out in the future that emphasize that newer approaches using combinations of long-acting beta agonists with corticosteroids are serving as both immediate and long-term relief. The developer noted that the measure would be relooked at if new guidelines are released in the future.
- The developer provided performance data from 2016-2018 to suggest performance gap and variation exists at the health plan level (commercial and Medicaid).
- The developer is unable to collect performance data at the health plan level stratified by race, ethnicity, or language. However, literature was cited that Black children were found to be more likely to have very poorly controlled asthma, as well as use long-term systemic corticosteroids.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-2; M-20; L-0; I-0**; 2b. Validity: **H-1; M-18; L-3; I-0**

Rationale:

- Reliability testing was done at the performance score level on 389 commercial plans and 248 Medicaid plans. The signal-to-noise ratio yielded mean reliability scores of 0.83 (commercial plans) and 0.95 (Medicaid).
- The developer conducted performance measure score validity testing through what was termed construct validity analysis examining, whether the age strata within this measure were correlated with one another using the Pearson correlation test. The developer hypothesized that organizations that perform well in one age stratum should perform well on all strata. Their hypothesis was confirmed with results of their analysis.
- The developer also assessed validity of a Kaiser Permanente Southern California health plan by assessing whether the asthma medication ratio measure is a clinically meaningful predictor of improved asthma outcomes. Their hypothesis was confirmed with results of the validity analysis.
- The Committee discussed the validity with exclusions of patients 65 and older, as well as concerns for instances when multiple inhalers are dispensed as artificial fills; for example, with younger beneficiaries sometimes having multiple rescue inhalers that are not always used but are required for multiple locations such as schools, camps, and split households. However, the Committee agreed there were too few of these instances to pose a true threat to validity.

3. Feasibility: H-16; M-6; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:

- The measure has all data elements in defined fields in electronic claims.
- The Committee had no concerns with feasibility of the measure.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-18; No Pass-4** 4b. Usability: **H-0; M-16; L-6; I-0**

Rationale:

- The measure is currently used in public reporting and accountability programs.
- The performance rates increased slightly, by roughly 2 percentage points, from 2016 to 2018, across both commercial plans and Medicaid (totals). Per developer, this increase may be correlated with a decrease in the number of plans reporting the measure over the same time period.
- The Committee expressed concern that health plan performance on the measure hasn't improved. There was a concern that the health plans may not be able to make meaningful change in provider behavior and patient behavior. The Committee also noted some clinicians and patients may continue to have fears associated with use of steroids. Nonetheless, the Committee noted improvement, especially in the bottom quartiles based on year-over-year plan performance.
- The developer did not report any unintended consequences.

5. Related and Competing Measures

- This measure is related to the following measure:
  - 0047 Asthma: Pharmacologic Therapy for Persistent Asthma

6. Standing Committee Recommendation for Endorsement: **Y-18**; **N-4**

Rationale

- The Standing Committee recommended the measure for continued endorsement.

7. Public and Member Comment

No member of public comments received.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

9. Appeals

2856 Pharmacotherapy Management of COPD Exacerbation

Submission | Specifications

Description: This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or emergency department visit on or between January 1 and November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported:

1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event.

2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.

Numerator Statement: Numerator #1 (Systemic corticosteroids): The number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date.

Numerator #2 (Bronchodilators): The number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date.

*The Episode Date is the date of service for any acute inpatient discharge or emergency department claim/encounter during the 11-month intake period with a principal diagnosis of COPD.

Denominator Statement: All patients age 40 years or older as of January 1 of the measurement year with a COPD exacerbation as indicated by an acute inpatient discharge or ED encounter with a principal diagnosis of COPD.

Exclusions: This measure excludes patients who use hospice services, and patients with nonacute inpatient stays.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 02/11/2020

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-2; M-20; L-0; I-0**; 1b. Performance Gap: **H-5; M-17; L-0; I-0**

<u>Rationale</u>:

- The Committee noted that this measure is a process measure that assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.
- The developer provided a logic model that articulates the connection between acute COPD exacerbation, use of corticosteroids and inhaled SABAs, and improved health outcomes.
- Evidence from the 2015 submission was updated from the 2015 GOLD Guidelines for COPD to the 2020 GOLD Guidelines for COPD. Evidence from the 2015 submission was updated from the 2013 ICSI Guidelines. ICSI guidelines have been retired, and ICSI has endorsed the VA/DoD Guideline for COPD from 2014.
- The 2020 GOLD standards note that systemic corticosteroids *can* be used, but that long-acting bronchodilators would be a preferred choice, potentially being dispensed at discharge. This may be the reason that performance data has leveled off starting in 2018.
- The Committee again noted the disparity gap in the literature and expressed the concern that claims data do not reflect this critical information, but a wide and persistent performance gap exists in each plan category. The Committee called attention to the developer's referencing several studies that describe disparities present in the quality of care for COPD as well as disease burden.
- The Committee also noted that there is increasing alignment among European practices with using eosinophil counts as therapeutic indicators for systemic corticosteroid treatment for COPD.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-2; M-19; L-1; I-0**; 2b. Validity: **H-0; M-22; L-0; I-0**

Rationale:

- The Committee viewed the reliability testing as appropriate with sufficient results.
    - Commercial: the overall reliability result for bronchodilators and systemic corticosteroids was 0.66/0.65; however, ranged 0.41 – 0.89/0.43 – 0.88 in the 10^{th}-90^{th} percentiles.
    - Medicare: the overall reliability result for bronchodilators and systemic corticosteroids was 0.86/0.81; however, ranged from 0.62-0.98/0.53 – 0.97 in the 10^{th}-90^{th} percentiles.
    - Medicaid: the overall reliability result for bronchodilators and systemic corticosteroids was 0.94/0.94, with consistently high range of 0.81-0.99/0.84-0.99 in the 10^{th}-90^{th} percentiles.
- Validity concerns expressed were related to confounding factors from having inhaled corticosteroid medications provided at the hospital bedside but not reflected in the drug claims.
- The developer provided updated validity testing from the 254 Commercial health plans, 390 Medicare plans, and 201 Medicaid health plans that submitted data on this measure to HEDIS in 2017. The developer conducted performance measure score validity testing via health-plan-level Pearson correlation analysis between the measure's two components, as well as statin therapy measures.
    - Pearson correlation coefficients between dispensing systemic corticosteroids and bronchodilators was 0.45, 0.52, and 0.82 for Medicare, Commercial, and Medicaid plans, respectively.
    - Performance on Pearson correlation coefficients between these two indicators and statin therapy measures ranged from 0.25-0.68.
    - This suggests mostly moderate correlations, which was the result hypothesized by the developer, and suggests some comparability in the quality constructs of the measure indicators.
    - The developer previously did face validity by three expert panels in the 2016 submission of the measure.
- The developer noted that their measures are beginning to combine EHR, HIE, claims and registry data, but that this measure does not draw on those broader data sources.

3. Feasibility: H-6; M-16; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:

- No concerns from the Committee were discussed.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-22; No Pass-0** 4b. Usability: **H-0; M-19; L-2; I-0**

Rationale:

- No concerns were discussed by the Committee.

5. Related and Competing Measures

- No related or competing measures noted.

6. Standing Committee Recommendation for Endorsement: **Y-21**; **N-0**

Rationale

- The Standing Committee recommended the measure for continued endorsement.

7. Public and Member Comment

No member of public comments received.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

9. Appeals

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Primary Care and Chronic Illness Fall 2019 Review Cycle

CSAC Review and Endorsement

July 28-29, 2020

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Standing Committee Recommendations

- Six measures reviewed for Fall 2019
  - Two measures reviewed by the Scientific Methods Panel
- Three measures recommended for endorsement
  - NQF 0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD
  - NQF 1800 Asthma Medication Ratio
  - NQF 2856 Pharmacotherapy Management of COPD Exacerbation
- Three measures deferred to Spring 2020 due to COVID-19 extended commenting periods
  - NQF 0059 Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)
  - NQF 0061 Comprehensive Diabetes Care: Blood Pressure Control
  - NQF 0575 Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control

Overarching Issues

- Use of Socioeconomic Status in Risk Adjustment for Intermediate Outcomes
  - The Committee expressed an overall concern about the lack of social risk adjustment for many of the measures reviewed.
  - The Committee emphasized that many social risk factors may predispose certain populations to have lower performance rates, especially in such areas as diabetes-related intermediate outcome measures.
  - Issues related to poverty, food insecurity, health literacy, and cultural factors play a significant role in the incidence and prevalence of diseases like diabetes.
  - The Committee noted that the same holds true for respiratory conditions as well.

Public and Member Comment and Member Expressions of Support

- No public comments received
- No NQF member expressed support or concern for the measures

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Timeline and Next Steps

Process Step	Timeline
CSAC Endorsement Meeting	July 28 - 29, 2020
Appeals Period	August 3 – September 1, 2020

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Project Contact Info

- Project team:
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THANK YOU.

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Primary Care and Chronic Illness, Fall 2019 Cycle, Track 1 Measures: CDP Report

DRAFT REPORT CSAC REVIEW
JULY 28-29, 2020

This report is funded by the Department of Health and Human Services under contract HHSM-500-2017-00060I Task Order HHSM-500-T0001

http://www.qualityforum.org

Contents

Executive Summary

Primary care comprises a variety of services provided to patients that cover a wide span of practice domains. This includes not only primary care clinicians but other clinicians who provide primary care services. Central to the concept of primary care is the patient, with parallel components consisting of practitioners and the healthcare system broadly. The central ideas to primary care are based on comprehensive first contact and continuing care for biological and behavioral conditions affecting any organ system. Beyond diagnosis and treatment of acute and chronic illnesses in a variety of healthcare settings, primary care also addresses issues associated with health promotion, disease prevention, health maintenance, counseling, and patient education.

NQF has endorsed more than 40 measures addressing improvements in primary care and care for chronic illnesses. NQF reviews measures in these important healthcare areas under a consolidated measure portfolio that reflects the importance of addressing chronic illness in primary care settings. Measures may focus on nonsurgical eyes or ears, nose, and throat conditions; endocrine conditions; musculoskeletal conditions; nonacute pulmonary conditions; or nonacute infectious disease conditions.

During this cycle, the Primary Care and Chronic Illness Standing Committee's discussion remained primarily focused on the measures under consideration for maintenance review, but this led to broader measurement discussions related to the use of practice guidelines to determine measurement targets for intermediate outcomes measures. The Committee also noted key considerations related to social risk factors and how those will not only impact clinical outcomes but intermediate clinical targets as well, such as HbA1c and blood pressure goals. For this project, the Standing Committee evaluated six measures undergoing maintenance review against NQF's standard evaluation criteria.

Due to circumstances around the COVID-19 global pandemic, commenting periods for all measures evaluated in the Fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered into one of two tracks:

Track 1: measures continuing its review in Fall 2019 Cycle:

Recommended for Endorsement:

- **NQF 0577** Use of Spirometry Testing in the Assessment and Diagnosis of COPD
- **NQF 1800** Asthma Medication Ratio
- **NQF 2856** Pharmacotherapy Management of COPD Exacerbation

Track 2: measures deferred to Spring 2020 Cycle:

- **NQF 0059** Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)
- **NQF 0061** Comprehensive Diabetes Care: Blood Pressure Control
- **NQF 0575** Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control

This report contains details of the evaluation of measures assigned to *Track 1* and are continuing in the Fall 2019 cycle. The detailed evaluation summary of measures assigned to *Track 2* and deferred to the

Spring 2020 cycle will be included in a subsequent report. Brief summaries of the Fall 2019 *Track 1* measures currently under review are included in the body of the report; detailed summaries of the Committee's discussion and ratings of the criteria for each measure are in Appendix A.

Introduction

Health care spending in the U.S. increased from $10,271 in 2016 to $10,739 per person in 2017 and is expected to reach $15, 825 per person by 2050.[1,2] The direct cost of treating chronic illnesses in 2016 was the equivalent of 5.8 percent of the U.S. gross domestic product (GDP), with the most expensive condition attributable to diabetes.[3] While staggering, the direct and indirect costs of chronic illnesses are compounded by the burden of infectious diseases. Chronic illnesses, such as chronic obstructive pulmonary disease (COPD), the third leading cause of death in the United States, are complex, debilitating, and long-lasting conditions associated with significant clinical and economic burden.[4] Although the prevalence of COPD varies by state, over 15.3 million Americans have been diagnosed with COPD, while a considerable amount of people with the disease are unaware of their status.[4] An estimated $36 billion were attributed to the burden of COPD in 2010 with a projected increase to $49 billion in 2020.[5] These numbers are expected to increase with the aging population thus imposing significant pressure on health care spending.[3]

In 2017, NQF consolidated and streamlined the endorsement process for a broad set of measures related to primary care and chronic illness, with the formation of the Primary Care and Chronic Illness Consensus Development Process (CDP) project. Efforts to improve prevention and manage treatment of chronic illnesses require performance measurements to assess current strategies or practices and capture the complexity of primary care and chronic illnesses. High-quality performance measurement is essential to improve diagnosis, treatment, and management of conditions.

NQF has endorsed more than 40 measures addressing improvements in primary care and care for chronic illnesses. NQF will review measures in these important healthcare areas under a consolidated measure portfolio that reflects the importance of caring for chronic illness in primary care settings. Measures may focus on nonsurgical eyes or ears, nose, and throat conditions; diabetes care, osteoporosis; Human Immunodeficiency Virus (HIV); rheumatoid arthritis; gout; back pain; asthma; chronic obstructive pulmonary disease (COPD); and acute bronchitis. In this review cycle, measures span persistent asthma, comprehensive diabetes care, spirometry testing in the assessment and diagnosis of COPD, and management of COPD exacerbation.

NQF Portfolio of Performance Measures for Primary Care and Chronic Illness Conditions

The Primary Care and Chronic Illness Standing Committee (Appendix C) oversees NQF's portfolio of Primary Care and Chronic Illness measures (Appendix B) that includes measures for ear, nose, throat (ENT), eye care; endocrine; infectious disease; musculoskeletal; pulmonary; and other. This portfolio contains 43 total measures: 36 process measures, five outcome measures, one intermediate outcome measure, and one composite measure (see table below).

Table 1. NQF Primary Care and Chronic Illness Portfolio of Measures

	Process	Outcome	Intermediate Outcome	Composite
Ears, Nose, Throat (ENT), Eye Care	10	–	–	–
Endocrine	6	3	–	1
Infectious Disease	8	2	1	–
Musculoskeletal	6	–	–	–
Pulmonary	5	–	–	–
Other	1	–	–	–
Total	36	5	1	1

The remaining measures have been assigned to other portfolios. These include healthcare-associated infection measures (Patient Safety), care coordination measures (Geriatrics and Palliative Care), imaging efficiency measures (Cost and Resource Use), and a variety of condition- or procedure-specific outcome measures (Cardiovascular, Cancer, Renal, etc.).

Primary Care and Chronic Illness Measure Evaluation

On February 11, 2020, the Primary Care and Chronic Illness Standing Committee evaluated 6 measures undergoing maintenance review against NQF's standard measure evaluation criteria. Three measures were assigned to *Track 1* and are continuing in the Fall 2019 cycle. The detailed evaluation summary of the three measures assigned to *Track 2* and deferred to the Spring 2020 cycle will be included in a subsequent report.

Table 2. Primary Care and Chronic Illness Measure Evaluation Summary – Track 1

	Maintenance	New	Total
Measures under consideration	3	0	3
Measures recommended for endorsement	3	0	3

Comments Received Prior to Committee Evaluation

NQF solicits comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments for a continuous 16-week period during each evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on December 5, 2019 and closed on May 24, 2020. No comments were submitted and shared with the Committee prior to the measure evaluation meeting(s) (Appendix F).

Comments Received After Committee Evaluation

Considering the recent COVID-19 global pandemic, many organizations needed to focus their attention on the public health crisis. In order to provide greater flexibility for stakeholders and continue the

important work in quality measurement, the National Quality Forum (NQF) extended commenting periods and adjusted measure endorsement timelines for the Fall 2019 cycle.

Commenting periods for all measures evaluated in the Fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered one of two tracks:

Track 1: Measures Continuing in Fall 2019 Cycle
Measures that did not receive public comments or only received comments in support of the Standing Committees' recommendations will move forward to the CSAC for review and discussion during its meeting on July 28-29.

- **Exceptions**
  Exceptions were granted to measures if non-supportive comments received during the extended post-comment period were similar to those received during the pre-evaluation meeting period and have already been adjudicated by the respective Standing Committees during the measure evaluation Fall 2019 meetings.

Track 2: Measures Deferred to Spring 2020 Cycle
Fall 2019 measures requiring further action or discussion from a Standing Committee were deferred to the Spring 2020 cycle. This includes measures where consensus was not reached or those that require a response to public comments received. Measures undergoing maintenance review will retain endorsement during that time.

During the Fall 2019 CSAC meeting on July 28-29, the Consensus Standards Approval Committee (CSAC) will review all measures assigned to Track 1. A list of measures assigned to Track 2 can be found in the Executive Summary section of this report for tracking purposes, but these measures will be reviewed by CSAC on November 17 and 18, 2020.

The extended public commenting period with NQF member support closed on May 28, 2020. Following the Committee's evaluation of the measures under consideration, NQF received no comments from individuals or organizations pertaining to the draft report and to the track 1 measures under consideration.

Throughout the extended public commenting period, NQF members had the opportunity to express their support ('support' or 'do not support') for each measure submitted for endorsement consideration to inform the Committee's recommendations. No NQF members provided their expression of support.

Overarching Issues

During the Standing Committee's discussion of the measures, several overarching issues emerged that were factored into the Committee's ratings and recommendations for multiple measures and are not repeated in detail with each individual measure.

Use of Socioeconomic Status in Risk Adjustment for Intermediate Outcomes

The Committee expressed an overall concern about the lack of social risk adjustment for many of the measures reviewed. The Committee emphasized that many social risk factors may predispose certain populations to have lower performance rates especially in such areas as diabetes-related intermediate

outcome measures. Issues related to poverty, food insecurity, health literacy and cultural factor play a significant role in the incidence and prevalence of diseases like diabetes. The Committee noted that the same holds true for respiratory conditions as well.

Summary of Measure Evaluation: Fall 2019 Measures, Track 1

The following brief summaries of the measure evaluation highlight the major issues that the Committee considered. Details of the Committee's discussion and ratings of the criteria for each measure are included in Appendix A.

0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD (National Committee for Quality Assurance): Recommended

Description: This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.; **Measure Type**: Process; **Level of Analysis**: Health Plan; **Setting of Care**: Outpatient Services; **Data Source**: Claims

The Standing Committee recommended the measure for continued endorsement. The measure focus for NQF 0577 is related to diagnosis and ensuring that beneficiaries are both appropriately diagnosed and assessed for condition severity. The Committee agreed that the evidence behind this measure was robust and sufficient. This measure is more complicated as it involves both claims data as well as abstraction from the medical record. It was noted that spirometry is often not submitted for billing. The Committee agreed there is a continuing opportunity for improvement in the performance gap of the measure. One Committee member inquired why providers are not automatically performing spirometry testing, given that desktop spirometry is more available and inexpensive. The developer speculated it could be due to a gap in care coordination and the providers may not know of the new diagnosis of COPD. One Committee member noted there is also the existing barrier of getting patients to follow up at a provider's office. Another Committee member noted that sometimes spirometry testing and the billing for the test can occur prior to the new diagnosis of COPD.

One Committee member expressed a concern related to gap, especially as it relates to data supporting clinical disparities and the issue of using race as a marker within diagnoses. In general, the Committee also expressed the importance of having disparities data available based on patient self-identification of race and ethnicity, rather than by the provider. The Committee did not note significant issues related to reliability but expressed some concerns on blood pressure, bone density testing and pharyngitis as comparators for convergent validity. The developer clarified that those measures were based on diagnostic testing and suggested that the tests chosen were as proximate to the measure of interest as the data allowed. The Committee noted that this measure has been in use for several years and expressed no concerns related to its implementation burden. The Committee noted that all six of the measures considered are publicly reported and used in multiple accountability applications with no issues related to implementation. The Committee noted a high degree of churn within the markets between patients use of providers and plans as well as a large amount of consolidation within healthcare that will affect measures of this types and did not express further concerns related to usability. The Committee noted a treatment measure for COPD that was not diagnostic and did not consider this a competing metric.

No comments were received on this measure.

1800 Asthma Medication Ratio (National Committee for Quality Assurance): Recommended

Description: The percentage of patients 5–64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.; **Measure Type**: Process; **Level of Analysis**: Health Plan; **Setting of Care**: Outpatient Services; **Data Source**: Claims

The Standing Committee recommended the measure for continued endorsement. The Committee noted a strong evidence base for the use of both controller and reliever medications with the history of the ratio that serves as the basis for this measure dating back to 2006. The Committee noted that newer approaches using combinations of long acting beta agonists with corticosteroids are serving as both immediate and long term relief and may at one point supersede a need for this measure. It was noted that this measure really determines how often short acting bronchodilators are being dispensed. The Committee noted a persistent gap in commercial vs Medicare and Medicaid, but also noted that there wasn't a good analysis related to disparities despite this being present in the medical literature. The developer noted that the health plans do not provide race and ethnicity data; while providers may have that information, this does not travel with claims data. The developer further noted that they have stratified some of their measures by some socioeconomic status risk adjusters such as dual eligibility status for research purposes but have not noted strong statistical indicators for a need to risk adjust.

The Committee expressed concern that the measure had shown significant performance improvement with only 1-2% improvement over the last three years. The developer noted that they do not have the ability to force plans to prioritize measures, but that the improvement—however modest—does indicate that it is responsive to improvement efforts. The Committee did not express any concerns related to the measure's reliability. The Committee expressed concern in the validity with exclusions of patients 65 and older, as well as concerns for instances when multiple inhalers are dispensed as artificial fills, for example with younger beneficiaries sometimes having multiple rescue inhalers that are not always used but are required for multiple locations such as schools, camps, and split households. Nonetheless, the Committee considered these instances as too few to pose true threats. The Committee noted that the measure is based on data generated during the usual course of asthma management using defined fields. The PCCI Committee noted that this measure is widely used within the Healthcare Effectiveness Data and Information Set (HEDIS) and by the Centers for Medicare and Medicaid Services (CMS), among others. The Committee expressed concern that health plan performance on the measure hasn't improved. There was a concern that the health plans may not be able to make meaningful change in provider behavior and patient behavior. The Committee also noted some clinicians and patients may continue to have fears associated with use of steroids. Nonetheless, the Committee noted improvement especially in the bottom quartiles based on year over year plan performance. The developer noted that adherence to controller medications is generally very poor, with commercial plans generally outperforming Medicaid on most measures. The Committee noted that copay costs for commercial beneficiaries may be quite high resulting in adherence barriers. The Committee noted one measure that was not competing and expressed no concerns related to harmonization.

No comments were received on this measure.

2856 Pharmacotherapy Management of COPD Exacerbation (National Committee for Quality Assurance): Recommended

Description This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED visit on or between January 1-November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported: 1) Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event, and 2) Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.; **Measure Type**: Process; **Level of Analysis**: Health Plan; **Setting of Care**: Outpatient Services; **Data Source**: Claims

The Standing Committee recommended the measure for continued endorsement. The Committee noted that there is increasing alignment of European practices with using eosinophil counts as therapeutic indicators for systemic corticosteroid treatment for chronic obstructive pulmonary disease (COPD). The 2020 GOLD standards note that systemic corticosteroids *can* be used, but that long acting bronchodilators would be a preferred choice and potentially being dispensed at discharge. This may be the reason that performance data has leveled off starting in 2018. The Committee again noted the disparity gap in the literature and expressed the concern that claims data does not reflect this critical information, but a wide and persistent performance gaps in each plan category. Validity concerns expressed were related to confounding factors from having inhaled corticosteroid medications provided at the hospital bedside but not reflected in the drug claims. The developer noted that their measures are beginning to combine electronic health record (EHR), health insurance exchange (HIE), claims and registry data, but that this measure does not draw on those broader data sources. The Committee did not express any concerns related to feasibility, nor for use. The Committee expressed concern that the measure has not significantly moved performance in the last several years and questioned whether feedback loops have been appropriately addressed. The Committee noted a few related measures, but none competing and with good harmonization.

No comments were received on this measure.

Measures Withdrawn from Consideration

One measure previously endorsed by NQF have not been re-submitted for maintenance of endorsement or have been withdrawn during the endorsement evaluation process. Endorsement for this measure will be removed.

Table 3. Measures Withdrawn from Consideration

Measure	Reason for withdrawal
0054 Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis (ART)	Developer is not seeking re-endorsement.

References

1 Historical | CMS. 2017 National Health Expenditures. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical. Last accessed March 2020.

2 United States | Institute for Health Metrics and Evaluation. http://www.healthdata.org/united-states. Last accessed February 2020.

3 Waters H, Graf M. *THE COSTS OF CHRONIC DISEASE IN THE U.S.* The Milken Institute; 2018. https://milkeninstitute.org/reports/cost-chronic-diseases-us. Last accessed February 2020.

4 How Serious Is COPD | American Lung Association. https://www.lung.org/lung-health-and-diseases/lung-disease-lookup/copd/learn-about-copd/how-serious-is-copd.html. Last accessed February 2020.

5 Ford ES, Murphy LB, Khavjou O, et al. Total and state-specific medical and absenteeism costs of COPD among adults aged ≥ 18 years in the United States for 2010 and projections through 2020. *Chest*. 2015;147(1):31-45.

Appendix A: Details of Measure Evaluation

Rating Scale: H=High; **M**=Moderate; **L**=Low; **I**=Insufficient; **NA**=Not Applicable

Track 1 – Measures Recommended

0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD

Submission | Specifications

Description: This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.

Numerator Statement: The number of patients with at least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date.

Denominator Statement: All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.

Exclusions: This measure excludes patients who use hospice services, and those with nonacute inpatient stays.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 02/11/2020

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-6; M-14; L-0; I-0**; 1b. Performance Gap: **H-4; M-16; L-1; I-0**

Rationale:

- The developer provided a logic model demonstrating that appropriate diagnosis of COPD would guide care resulting in decreased frequency and severity of exacerbations, urgent care and emergency department visits, and inpatient hospital stays
- The developer cited the 2020 GOLD guidelines for COPD, which recommend spirometry for confirmation of COPD diagnosis.
- The developer provided performance data from 2016-2018 to suggest performance gap and variation exists at the health plan level (commercial, Medicare, Medicaid).
- The developer is unable to collect performance data at the health plan level stratified by race, ethnicity, or language. However, literature was cited that women and African Americans are more likely to not have a COPD diagnosis at all stages of airflow obstruction.
- The Committee had no concerns about evidence or performance gap of the measure.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-2; M-19; L-0; I-0**; 2b. Validity: **H-1; M-17; L-3; I-0**

Rationale:

- Reliability testing was done at the performance score level on 365 commercial plans, 124 Medicaid plans, and 355 Medicare plans. The signal-to-noise ratio yielded a reliability score ranging from 0.9 to 1.0.
- Construct validity was conducted correlating this measure to two measures hypothesizing a positive correlation on performance. One measure addresses testing in pharyngitis, and the second measure addresses controlling high blood pressure. Correlation scores were weak for commercial and Medicare

plans (less than 3.0), but with a positive correlation. Correlation scores were 0.48 for Medicaid plans, indicating a stronger correlation.

- The Committee expressed concern about the measures used for comparison in the construct validity testing; however, they were satisfied with the developer's response that those measures were based on diagnostic testing, and suggested that the tests chosen were as proximate to the measure of interest as the data allowed them to be.

3. Feasibility: H-7; M-13; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:

- The measure has information collected during the provision of care, and was coded by someone other than person obtaining original information.
- The Committee had no concerns with feasibility of the measure.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-21; No Pass-0** 4b. Usability: **H-3; M-14; L-4; I-0**

Rationale:

- The measure is currently used in public reporting and accountability programs.
- Per the developer, more Medicaid plans and fewer Medicare plans reported the measure in 2014 compared with 2013 and 2012, which may help explain why the average performance rates did not substantially improve. The developer noted an opportunity to increase performance rates by increasing attention and utilization of this measure.
- The developer did not report any unintended consequences.

5. Related and Competing Measures

- This measure is related or competing to the following measures:
  - 0091 COPD: Spirometry Evaluation
  - 0102 COPD: Inhaled Bronchodilator Therapy
  - 2856 Pharmacotherapy Management of COPD Exacerbation

6. Standing Committee Recommendation for Endorsement: **Y-20**; **N-1**

Rationale

- The Standing Committee recommended the measure for continued endorsement.

7. Public and Member Comment

No comments received.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

9. Appeals

1800 Asthma Medication Ratio

Submission | Specifications

Description: The percentage of patients 5-64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.

Numerator Statement: The number of patients with persistent asthma who have a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.

Denominator Statement: All patients 5-64 years of age as of December 31 of the measurement year who have persistent asthma by meeting at least one of the following criteria during both the measurement year and the year prior to the measurement year:

• At least one emergency department visit with asthma as the principal diagnosis

• At least one acute inpatient encounter or discharge with asthma as the principal diagnosis

• At least four outpatient visits, observation visits, telephone visits, or online assessments on different dates of service, with any diagnosis of asthma AND at least two asthma medication dispensing events for any controller or reliever medication. Visit type need not be the same for the four visits.

• At least four asthma medication dispensing events for any controller medication or reliever medication

Exclusions: 1) Exclude patients who had any of the following diagnoses any time during the patient's history through the end of the measurement year (i.e., December 31):

-COPD

-Emphysema

-Obstructive Chronic Bronchitis

-Chronic Respiratory Conditions Due To Fumes/Vapors

-Cystic Fibrosis

-Acute Respiratory Failure

2) Exclude any patients who had no asthma medications (controller or reliever) dispensed during the measurement year.

3) Exclude patients in hospice.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 02/11/2020

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-4; M-17; L-1; I-0**; 1b. Performance Gap: **H-10; M-12; L-0; I-0**

<u>Rationale</u>:

- The developer provided a logic model that linking dispensing long-term asthma controller medication to patients with persistent asthma will lead to improved management of asthma symptoms as well as reduction in frequency and severity of asthma exacerbations.
- The developer cited updated evidence by the Global Initiative for Asthma, Global Strategy for Asthma Management and Prevention, 2019.
- The Committee noted that there is potential of new guidelines coming out in the future that emphasize that newer approaches using combinations of long-acting beta agonists with corticosteroids are serving as both immediate and long-term relief. The developer noted that the measure would be relooked at if new guidelines are released in the future.
- The developer provided performance data from 2016-2018 to suggest performance gap and variation exists at the health plan level (commercial and Medicaid).
- The developer is unable to collect performance data at the health plan level stratified by race, ethnicity, or language. However, literature was cited that Black children were found to be more likely to have very poorly controlled asthma, as well as use long-term systemic corticosteroids.

2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-2; M-20; L-0; I-0**; 2b. Validity: **H-1; M-18; L-3; I-0**

Rationale:

- Reliability testing was done at the performance score level on 389 commercial plans and 248 Medicaid plans. The signal-to-noise ratio yielded mean reliability scores of 0.83 (commercial plans) and 0.95 (Medicaid).
- The developer conducted performance measure score validity testing through what was termed construct validity analysis examining whether the age strata within this measure were correlated with one another using the Pearson correlation test. The developer hypothesized that organizations that perform well in one age stratum should perform well on all strata. Their hypothesis was confirmed with results of their analysis.
- The developer also assessed validity of a Kaiser Permanente Southern California health plan by assessing whether the asthma medication ratio measure is a clinically meaningful predictor of improved asthma outcomes. Their hypothesis was confirmed with results of the validity analysis.
- The Committee discussed the validity with exclusions of patients 65 and older, as well as concerns for instances when multiple inhalers are dispensed as artificial fills; for example, with younger beneficiaries sometimes having multiple rescue inhalers that are not always used but are required for multiple locations such as schools, camps, and split households. However, the Committee agreed there were too few of these instances to pose a true threat to validity.

3. Feasibility: H-16; M-6; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:

- The measure has all data elements in defined fields in electronic claims.
- The Committee had no concerns with feasibility of the measure.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-18; No Pass-4** 4b. Usability: **H-0; M-16; L-6; I-0**

Rationale:

- The measure is currently used in public reporting and accountability programs.
- The performance rates increased slightly, by roughly 2 percentage points, from 2016 to 2018, across both commercial plans and Medicaid (totals). Per developer, this increase may be correlated with a decrease in the number of plans reporting the measure over the same time period.
- The Committee expressed concern that health plan performance on the measure hasn't improved. There was a concern that the health plans may not be able to make meaningful change in provider behavior and patient behavior. The Committee also noted some clinicians and patients may continue to have fears associated with use of steroids. Nonetheless, the Committee noted improvement, especially in the bottom quartiles based on year-over-year plan performance.
- The developer did not report any unintended consequences.

5. Related and Competing Measures

- This measure is related to the following measure:
    - 0047 Asthma: Pharmacologic Therapy for Persistent Asthma

6. Standing Committee Recommendation for Endorsement: **Y-18**; **N-4**

Rationale

- The Standing Committee recommended the measure for continued endorsement.

7. Public and Member Comment

No comments received.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

9. Appeals

2856 Pharmacotherapy Management of COPD Exacerbation

Submission | Specifications

Description: This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or emergency department visit on or between January 1 and November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported:

1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event.

2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.

Numerator Statement: Numerator #1 (Systemic corticosteroids): The number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date.

Numerator #2 (Bronchodilators): The number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date.

*The Episode Date is the date of service for any acute inpatient discharge or emergency department claim/encounter during the 11-month intake period with a principal diagnosis of COPD.

Denominator Statement: All patients age 40 years or older as of January 1 of the measurement year with a COPD exacerbation as indicated by an acute inpatient discharge or ED encounter with a principal diagnosis of COPD.

Exclusions: This measure excludes patients who use hospice services, and patients with nonacute inpatient stays.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 02/11/2020

1. Importance to Measure and Report: <u>The measure meets the Importance criteria</u>

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-2; M-20; L-0; I-0**; 1b. Performance Gap: **H-5; M-17; L-0; I-0**

<u>Rationale</u>:

- The Committee noted that this measure is a process measure that assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.
- The developer provided a logic model that articulates the connection between acute COPD exacerbation, use of corticosteroids and inhaled SABAs, and improved health outcomes.
- Evidence from the 2015 submission was updated from the 2015 GOLD Guidelines for COPD to the 2020 GOLD Guidelines for COPD. Evidence from the 2015 submission was updated from the 2013 ICSI Guidelines. ICSI guidelines have been retired, and ICSI has endorsed the VA/DoD Guideline for COPD from 2014.
- The 2020 GOLD standards note that systemic corticosteroids *can* be used, but that long-acting bronchodilators would be a preferred choice, potentially being dispensed at discharge. This may be the reason that performance data has leveled off starting in 2018.
- The Committee again noted the disparity gap in the literature and expressed the concern that claims data do not reflect this critical information, but a wide and persistent performance gap exists in each plan category. The Committee called attention to the developer's referencing several studies that describe disparities present in the quality of care for COPD as well as disease burden.
- The Committee also noted that there is increasing alignment among European practices with using eosinophil counts as therapeutic indicators for systemic corticosteroid treatment for COPD.

2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **H-2; M-19; L-1; I-0**; 2b. Validity: **H-0; M-22; L-0; I-0**

<u>Rationale</u>:

- The Committee viewed the reliability testing as appropriate with sufficient results.
  - Commercial: the overall reliability result for bronchodilators and systemic corticosteroids was 0.66/0.65; however, ranged 0.41 – 0.89/0.43 – 0.88 in the 10^{th}-90^{th} percentiles.
  - Medicare: the overall reliability result for bronchodilators and systemic corticosteroids was 0.86/0.81; however, ranged from 0.62-0.98/0.53 – 0.97 in the 10^{th}-90^{th} percentiles.
  - Medicaid: the overall reliability result for bronchodilators and systemic corticosteroids was 0.94/0.94, with consistently high range of 0.81-0.99/0.84-0.99 in the 10^{th}-90^{th} percentiles.
- Validity concerns expressed were related to confounding factors from having inhaled corticosteroid medications provided at the hospital bedside but not reflected in the drug claims.
- The developer provided updated validity testing from the 254 Commercial health plans, 390 Medicare plans, and 201 Medicaid health plans that submitted data on this measure to HEDIS in 2017. The developer conducted performance measure score validity testing via health-plan-level Pearson correlation analysis between the measure's two components, as well as statin therapy measures.
  - Pearson correlation coefficients between dispensing systemic corticosteroids and bronchodilators was 0.45, 0.52, and 0.82 for Medicare, Commercial, and Medicaid plans, respectively.
  - Performance on Pearson correlation coefficients between these two indicators and statin therapy measures ranged from 0.25-0.68.
  - This suggests mostly moderate correlations, which was the result hypothesized by the developer, and suggests some comparability in the quality constructs of the measure indicators.
  - The developer previously did face validity by three expert panels in the 2016 submission of the measure.
- The developer noted that their measures are beginning to combine EHR, HIE, claims and registry data, but that this measure does not draw on those broader data sources.

3. Feasibility: H-6; M-16; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

<u>Rationale</u>:

- No concerns from the Committee were discussed.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-22; No Pass-0** 4b. Usability: **H-0; M-19; L-2; I-0**

<u>Rationale</u>:

- No concerns were discussed by the Committee.

5. Related and Competing Measures

- No related or competing measures noted.

6. Standing Committee Recommendation for Endorsement: **Y-21**; **N-0**

<u>Rationale</u>

- The Standing Committee recommended the measure for continued endorsement.

7. Public and Member Comment

No comments received.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

9. Appeals

Appendix B: Primary Care and Chronic Illness Portfolio—Use in Federal Programs[a]

NQF #	Title	Federal Programs: Finalized or Implemented
0037	Osteoporosis Testing in Older Women (OTO)	No federal program usage specified for this measure.
0045	Communication with the physician or other clinician managing on-going care post fracture for men and women aged 50 years and older	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0046	Screening for Osteoporosis for Women 65-85 Years of Age	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0047	Asthma: Pharmacologic Therapy for Persistent Asthma	No federal program usage specified for this measure.
0053	Osteoporosis Management in Women Who Had a Fracture	No federal program usage specified for this measure.
0054	Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis (ART)	Medicare Part C Star Rating (Implemented)
0055	Comprehensive Diabetes Care: Eye Exam (retinal) performed	Medicare Part C Star Rating (Implemented) Merit-Based Incentive Payment System (MIPS) Program (Implemented) Marketplace Quality Rating System (QRS) (Implemented)
0056	Diabetes: Foot Exam	No federal program usage specified for this measure.
0057	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing	Medicaid (Implemented)
0058	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis (AAB)	Merit-Based Incentive Payment System (MIPS) Program (Implemented) Marketplace Quality Rating System (QRS) (Implemented)
0059	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)	Medicare Shared Savings Program (Implemented) Merit-Based Incentive Payment System (MIPS) Program (Implemented) Medicaid (Implemented)
0061	Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)	No federal program usage specified for this measure.
0062	Comprehensive Diabetes Care: Medical Attention for Nephropathy	Merit-Based Incentive Payment System (MIPS) Program (Implemented) Marketplace Quality Rating System (QRS) (Implemented) Medicare Part C Star Rating (Implemented)

[a] Per CMS Measures Inventory Tool as of 03/03/2020

NQF #	Title	Federal Programs: Finalized or Implemented
0086	Primary Open-Angle Glaucoma (POAG): Optic Nerve Evaluation	Merit-Based Incentive Payment System (MIPS) Program (Implemented) Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented)
0087	Age-Related Macular Degeneration: Dilated Macular Examination	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0088	Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy	No federal program usage specified for this measure.
0089	Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care	Merit-Based Incentive Payment System (MIPS) Program (Implemented) Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented)
0089	Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care	Merit-Based Incentive Payment System (MIPS) Program (Implemented) Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented)
0091	COPD: Spirometry Evaluation	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0405	HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) Prophylaxis	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0409	HIV/AIDS: Sexually Transmitted Diseases – Screening for Chlamydia, Gonorrhea, and Syphilis	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0416	Diabetic Foot & Ankle Care, Ulcer Prevention – Evaluation of Footwear	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0417	Diabetic Foot & Ankle Care, Peripheral Neuropathy – Neurological Evaluation	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0519	Diabetic Foot Care and Patient Education Implemented	Home Health Compare (Implemented) Home Health Quality Reporting (Implemented)
0541	Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category	Marketplace Quality Rating System (QRS) (Implemented)
0563	Primary Open-Angle Glaucoma: Reduction of Intraocular Pressure by 15% or Documentation of a Plan of Care	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0566	Age-Related Macular Degeneration (AMD): Counseling on Antioxidant Supplement	No federal program usage specified for this measure.
0575	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)	Marketplace Quality Rating System (QRS) (Implemented)
0577	Use of Spirometry Testing in the Assessment and Diagnosis of COPD	No federal program usage specified for this measure.

NQF #	Title	Federal Programs: Finalized or Implemented
0653	Acute Otitis Externa: Topical Therapy	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0654	Acute Otitis Externa: Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0655	Otitis Media with Effusion: Antihistamines or decongestants – Avoidance of inappropriate use	No federal program usage specified for this measure.
0657	Otitis Media with Effusion: Systemic antimicrobials – Avoidance of inappropriate use	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0729	Optimal Diabetes Care	Physician Compare (Implemented)
1800	Asthma Medication Ratio	Medicaid (Implemented)
2079	HIV medical visit frequency	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
2080	Gap in HIV medical visits	No federal program usage specified for this measure.
2082	HIV viral load suppression	Medicaid (Implemented)
2083	Prescription of HIV Antiretroviral Therapy	No federal program usage specified for this measure.
2416	Laboratory Investigation for Secondary Causes of Fracture	No federal program usage specified for this measure.
2417	Risk Assessment/Treatment After Fracture	No federal program usage specified for this measure.
2467	Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus	No federal program usage specified for this measure.
2468	Adherence to Oral Diabetes Agents for Individuals with Diabetes Mellitus	No federal program usage specified for this measure.
2522	Rheumatoid Arthritis: Tuberculosis Screening (Recommended for eMeasure Trial Approval)	No federal program usage specified for this measure.
2523	Rheumatoid Arthritis: Assessment of Disease Activity	No federal program usage specified for this measure.
2525	Rheumatoid Arthritis: Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy (Recommended for eMeasure Trial Approval)	No federal program usage specified for this measure.
2856	Pharmacotherapy Management of COPD Exacerbation	No federal program usage specified for this measure.
3086	Population Level HIV Viral Load Suppression	No federal program usage specified for this measure.

NQF #	Title	Federal Programs: Finalized or Implemented
0089e	Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care	Merit-Based Incentive Payment System (MIPS) Program (Implemented) Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented)
2362e	Glycemic Control - Hyperglycemia	No federal program usage specified for this measure.
2363e	Glycemic Control - Hypoglycemia	No federal program usage specified for this measure.
2524e	Rheumatoid Arthritis: Functional Status Assessment	No federal program usage specified for this measure.
2549e	Gout: Serum Urate Target (Recommended for eMeasure Trial Approval)	No federal program usage specified for this measure.
2550e	Gout: ULT Therapy (Recommended for eMeasure Trial Approval)	No federal program usage specified for this measure.
2811e	Acute Otitis Media - Appropriate First-Line Antibiotics	No federal program usage specified for this measure.
3209e	HIV medical visit frequency	No federal program usage specified for this measure.
3210e	HIV viral load suppression	No federal program usage specified for this measure.
3211e	Prescription of HIV Antiretroviral Therapy	No federal program usage specified for this measure.

Appendix C: Primary Care and Chronic Illness Standing Committee and NQF Staff

STANDING COMMITTEE

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Appendix D: Measure Specifications

	0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD
Steward	National Committee for Quality Assurance
Description	This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.
Type	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system.
Level	Health Plan
Setting	Outpatient Services
Numerator Statement	The number of patients with at least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date.
Numerator Details	Identify the number of patients with at least one claim/encounter for spirometry (Spirometry Value Set) during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date. The Index Episode Start Date is the earliest date of service for an eligible visit (outpatient, ED or acute inpatient) during the 6 months prior to the beginning of the measurement year through 6 months after the beginning of the measurement year with any diagnosis of COPD. - For an outpatient, observation or ED visit, the Index Episode Start Date is the date of service. - For an acute inpatient encounter identified only by a professional claim (where the discharge date cannot be determined), the Index Episode Start Date is the date of service. -For an acute inpatient discharge, the Index Episode Start Date is the date of discharge. -For an acute inpatient discharge with a direct transfer, the Index Episode Start Date is the discharge date of the original admission. See corresponding Excel file for value set referenced above.
Denominator Statement	All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.
Denominator Details	The eligible population for the denominator is defined by following the series of steps below: Step 1: Determine the Index Episode Start Date. Identify all patients who had any of the following during the intake period (the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year): 1) An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD value set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges:

	a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. If the patient had more than one eligible visit, include only the first visit. Step 2: Test for negative diagnosis history. Exclude patients who had any of the following during the 730-day period prior to the Index Episode Start Date. 1) An outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set),and online assessment (Online Assessments Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an acute inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnoses of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. For an acute inpatient discharge Index Episode Start Date, use the Index Episode Start Date of admission to determine the 730-day period. For direct transfers, use the admission date of the original admission to determine the 730 days prior to the Index Episode Start Date. See corresponding Excel file for value sets referenced above.
Exclusions	This measure excludes patients who use hospice services, and those with nonacute inpatient stays.
Exclusion details	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.
Risk Adjustment	No risk adjustment or risk stratification
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	The measure calculation is detailed in the steps listed below: Step 1: Determine the eligible population. A. Determine the Index Episode Start Date. Identify all patients who had an outpatient visit, observation visit, ED visit, or acute inpatient encounter/discharge with a diagnosis of COPD, emphysema, or chronic bronchitis. If the patient had more than one eligible visit, include only the first visit. B. Test for negative diagnosis history. Step 2: Determine the numerator. Identify the number of patients who had at least one claim/encounter for spirometry. Step 3: Calculate the rate: Numerator/Denominator 123834| 140881

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	1800 Asthma Medication Ratio
Steward	National Committee for Quality Assurance
Description	The percentage of patients 5–64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.
Type	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system.
Level	Health Plan
Setting	Outpatient Services
Numerator Statement	The number of patients with persistent asthma who have a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.
Numerator Details	Follow the steps below to identify numerator compliance. Step 1: For each patient, count the units of asthma controller medications (see ASTHMA CONTROLLER MEDICATIONS LIST) dispensed during the measurement year. When identifying medication units for the numerator, count each individual medication, defined as an amount lasting 30 days or less, as one medication unit. One medication unit equals one inhaler canister, one injection, one infusion, or a 30-day or less supply of an oral

	medication. For example, two inhaler canisters of the same medication dispensed on the same day count as two medication units and only one dispensing event. Use the package size and units columns in the medications list to determine the number of canisters or injections. Divide the dispensed amount by the package size to determine the number of canisters or injections dispensed. For example, if the package size for an inhaled medication is 10g and pharmacy data indicates the dispensed amount is 30 g, this indicates 3 inhaler canisters were dispensed. Step 2: For each patient, count the units of asthma reliever medications (see ASTHMA RELIEVER MEDICATIONS LIST) dispensed during the measurement year. Step 3: For each patient, sum the units calculated in step 1 and step 2 to determine units of total asthma medications. Step 4: For each patient, calculate the ratio of controller medications to total asthma medications using the following formula: Units of Controller Medications (Step 1)/ Units of Total Asthma Medications (Step 3) Step 5: Sum the total number of patients who have a ratio of 0.50 or greater in step 4. ASTHMA CONTROLLER MEDICATIONS LIST: -Antiasthmatic combinations: dyphylline-guaifenesin -Antibody inhibitors: omalizumab -Anti-interleukin-5: benralizumab; mepolizumab; reslizumab -Inhaled steroid combinations: budesonide-formoterol; fluticasone-salmeterol; fluticasone-vilanterol; formoterol-mometasone -Inhaled corticosteroids: beclomethasone; budesonide; ciclesonide; flunisolide; fluticasone; mometasone -Leukotriene modifiers: montelukast; zafirlukast; zileuton -Methylxanthines: Theophylline. ASTHMA RELIEVER MEDICATIONS LIST: -Short-acting, inhaled beta-2 Agonists: albuterol; levalbuterol.
Denominator Statement	All patients 5–64 years of age as of December 31 of the measurement year who have persistent asthma by meeting at least one of the following criteria during both the measurement year and the year prior to the measurement year: • At least one emergency department visit with asthma as the principal diagnosis • At least one acute inpatient encounter or discharge with asthma as the principal diagnosis • At least four outpatient visits, observation visits, telephone visits, or online assessments on different dates of service, with any diagnosis of asthma AND at least two asthma medication dispensing events for any controller or reliever medication. Visit type need not be the same for the four visits. • At least four asthma medication dispensing events for any controller medication or reliever medication
Denominator Details	The eligible population for the denominator is defined by following the series of steps below: Step 1: Identify patients as having persistent asthma who met at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years. • At least one ED visit (ED Value Set) with asthma as the principal diagnosis (Asthma Value Set). • At least one acute inpatient encounter (Acute Inpatient Value Set) with asthma as the principal diagnosis (Asthma Value Set) without telehealth (Telehealth Modifier Value Set; Telehealth POS Value Set). • At least one acute inpatient discharge with a principal diagnosis of asthma (Asthma Value Set). To identify an acute inpatient discharge: 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. • At least four outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), telephone visits (Telephone Visits Value Set) or online assessments (Online Assessments Value Set) on different dates of service, with any diagnosis of asthma (Asthma Value Set) AND at least two asthma medication dispensing events for any controller medication (Asthma Controller Medications List) or reliever medication (Asthma Reliever Medications List). Visit type need not be the same for the four visits. Use all the medication lists in the tables below to identify asthma controller and reliever medications. Only three of the four visits may be an outpatient telehealth visit, a telephone visit or an online assessment. Identify outpatient telehealth visits by the presence of a telehealth modifier (Telehealth Modifier Value Set) or the presence of a telehealth POS code (Telehealth POS Value Set) associated with the outpatient visit. • At least four asthma medication dispensing events for any controller medication (Asthma Controller Medications List) or reliever medication (Asthma Reliever Medications List). Step 2: A patient identified as having persistent asthma because of at least four asthma medication dispensing events, where leukotriene modifiers or antibody inhibitors were the sole asthma medication dispensed in that year, must also have at least one diagnosis of asthma (Asthma Value Set), in any setting, in the same year as the leukotriene modifier or antibody inhibitor (i.e., measurement year or year prior to the measurement year). See attached value set Excel document for the following value sets and medications lists: - ED Value Set - Asthma Value Set - Acute Inpatient Value Set - Outpatient Value Set - Observation Value Set - Asthma Controller Medications List - Asthma Reliever Medications List - Telehealth Modifier Value Set - Telehealth POS Value Set - Inpatient Stay Value Set - Nonacute Inpatient Stay Value Set - Telephone Visits Value Set - Online Assessments Value Set
Exclusions	1) Exclude patients who had any of the following diagnoses any time during the patient's history through the end of the measurement year (i.e., December 31): -COPD -Emphysema -Obstructive Chronic Bronchitis -Chronic Respiratory Conditions Due To Fumes/Vapors -Cystic Fibrosis -Acute Respiratory Failure 2) Exclude any patients who had no asthma medications (controller or reliever) dispensed during the measurement year. 3) Exclude patients in hospice.
Exclusion details	1) Exclude patients who had any diagnosis of Emphysema (Emphysema Value Set; Other Emphysema Value Set), COPD (COPD Value Set), Obstructive Chronic Bronchitis (Obstructive Chronic Bronchitis Value Set), Chronic Respiratory Conditions Due To Fumes/Vapors (Chronic Respiratory Conditions Due to Fumes/Vapors Value Set), Cystic Fibrosis (Cystic Fibrosis Value Set) or Acute Respiratory Failure (Acute Respiratory Failure Value Set) any

	time during the patient's history through the end of the measurement year (i.e., December 31). 2) Exclude any patients who had no asthma medications (controller or reliever) (Asthma Controller Medications List; Asthma Reliever Medications List) dispensed during the measurement year. 3) Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set), or supplemental data for this required exclusion. See attached value set Excel document for the following value sets and medications list: - Emphysema Value Set – Other Emphysema Value Set – COPD Value Set – Obstructive Chronic Bronchitis Value Set – Chronic Respiratory Conditions Due to Fumes/Vapors Value Set – Cystic Fibrosis Value Set – Acute Respiratory Failure Value Set -Asthma Controller Medications List -Asthma Reliever Medications List -Hospice Encounter Value Set -Hospice Intervention Value Set
Risk Adjustment	No risk adjustment or risk stratification
Stratification	Four age stratifications and a total rate are reported for this measure. Age for each stratum is based on the patient's age as of the end of the Measurement Year (e.g., December 31). 1) 5–11 years 2) 12–18 years 3) 19-50 years 4) 51-64 years 5) Total (5-64 years) The age strata align with both clinical practice guidelines and reporting requirements for child health quality improvement programs. Clinical guidelines specify appropriate age cohorts for measuring use of asthma medications as 5–11 years of age and 12–50 years of age, to account for the differences in medication regimens for children compared to adolescents and adults. Implementation requires further stratification of the age ranges to enable creation of comparable cohorts that align with child health populations.
Type Score	Rate/proportion better quality = higher score
Algorithm	Refer to items S.5 (Numerator details), S.7 (Denominator details), S.9 (Denominator exclusions details) and S.2b (Data Dictionary). This measure determines the percentage of patients 5 – 64 years of age with persistent asthma who had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year. The measure calculation is detailed in the steps listed below: Step 1: Determine the eligible population Step 2: Remove patients who meet Denominator Exclusions to get the Denominator Step 3: Determine the numerator. For each patient: a) count the units of controller medications dispensed during the measurement year. b) count the units of reliever medications dispensed during the measurement year. c) calculate the ratio of controller medications to total asthma medications using the following formula:

	Units of Controller Medications (Step 3a)/ Units of Total Asthma Medications (Step 3a + Step 3b) Step 4: Calculate the measure rate: the number of patients who have a ratio of 0.50 or greater (Step 3c) /number of patients in the Denominator (Step 2) . 123834| 140881
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	2856 Pharmacotherapy Management of COPD Exacerbation
Steward	National Committee for Quality Assurance
Description	This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED visit on or between January 1-November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported: 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event. 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.
Type	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system.
Level	Health Plan
Setting	Outpatient Services

Numerator Statement	Numerator #1 (Systemic corticosteroids): The number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator #2 (Bronchodilators): The number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date. *The Episode Date is the date of service for any acute inpatient discharge or ED claim/encounter during the 11-month intake period with a principal diagnosis of COPD.
Numerator Details	Numerator 1 (Systemic Corticosteroid): Identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count systemic corticosteroids that are active on the relevant date. A prescription is considered active if the "days supply" indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of admission. For an ED visit, the relevant date is the date of service. Systemic Corticosteroid Medications List: Glucocorticoids: cortisone-acetate, dexamethasone, hydrocortisone, methylprednisolone, prednisolone, and prednisone. See attached Value Set Excel document. Numerator 2 (Bronchodilator): Identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count bronchodilators that are active on the relevant date. A prescription is considered active if the "days supply" indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of admission. For an ED visit, the relevant date is the date of service. Bronchodilator Medications List: -Anticholinergic agents: albuterol-ipratropium, aclidinium-bromide, ipratropium, tiotropium, umeclidinium -Beta 2-agonists: albuterol, arformoterol, budesonide-formoterol, fluticasone-salmeterol, fluticasone-vilanterol, formoterol, formoterol-glycopyrrolate, indacaterol, indacaterol-glycopyrrolate, levalbuterol, formoterol-mometasone, metaproterenol, olodaterol hydrochloride, olodaterol-tiotropium, salmeterol, umeclidinium-vilanterol -Anti-asthmatic combinations: dyphylline-guaifenesin See attached Value Set Excel document.
Denominator Statement	All patients age 40 years or older as of January 1 of the measurement year with a COPD exacerbation as indicated by an acute inpatient discharge or ED encounter with a principal diagnosis of COPD.
Denominator Details	The eligible population for this measure is based on acute inpatient discharges and ED visits, not on patients. It is possible for the denominator to include multiple events for the same individual. The eligible population for the denominator is defined by following the series of steps below: Step 1: Identify all patients who had either of the following during the Intake Period (an 11-month period that begins on January 1 of the measurement year and ends on November 30 of the measurement year): 1) An ED visit (ED Value Set) with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include ED visits that result in an inpatient stay.

	2) An acute inpatient discharge with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay Step 2: Identify all COPD Episodes. For each patient 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 (ED visits that result in an inpatient stay are excluded in Step 1). Multiple ED visits on the same date are counted as one COPD episode. Step 3: 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 data from the last admission. A direct transfer is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. Use the following method to identify admission 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. See corresponding Excel file for value sets referenced above.
Exclusions	This measure excludes patients who use hospice services, and patients with nonacute inpatient stays.
Exclusion details	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.
Risk Adjustment	No risk adjustment or risk stratification
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	Note: The denominator for this measure is based on acute inpatient discharges and ED visits, not patients. Step 1: Determine the eligible population: identify patients who meet the age criteria, with an ED visit or inpatient visit with a principal diagnosis of COPD, emphysema or chronic bronchitis Step 2: Identify all COPD Episodes: for each patient identified in Step 1, identify all acute inpatient discharges and ED Visits. Multiple ED visits on the same date are counted as one COPD episode. Step 3: Test for direct transfers. Step 4: Determine the numerator: Numerator 1 (Systemic Corticosteroid): identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator 2 (Bronchodilator): identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date. Step 5: Calculate two rates. A. Numerator 1/Denominator

	B. Numerator 2/Denominator 123834
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Appendix E: Related and Competing Measures

Comparison of NQF #0577 and NQF #0091

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
Steward	National Committee for Quality Assurance	American Thoracic Society
Description	This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.	Percentage of patients aged 18 years and older with a diagnosis of COPD who had spirometry results documented
Type	Process	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system. No data collection instrument provided Attachment 0577_SPR_Value_Sets_Fall_2019.xlsx	Claims, Registry Data Not Applicable No data dictionary
Level	Health Plan	Clinician : Group/Practice
Setting	Outpatient Services	Outpatient Services
Numerator Statement	The number of patients with at least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date.	Patients with documented spirometry results in the medical record (FEV1 and FEV1/FVC)
Numerator Details	Identify the number of patients with at least one claim/encounter for spirometry (Spirometry Value Set) during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date. The Index Episode Start Date is the earliest date of service for an eligible visit (outpatient, ED or acute inpatient) during the 6 months prior to the beginning of the measurement year through 6 months after the	Numerator Quality-Data Coding Options for Reporting Satisfactorily Numerator Instructions: Look for most recent documentation of spirometry evaluation results in the medical record; do not limit the search to the reporting period. To submit the numerator option for spirometry results documented and reviewed, report the following: Performance Met: CPT II 3023F: Spirometry results documented and reviewed OR

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
	beginning of the measurement year with any diagnosis of COPD. - For an outpatient, observation or ED visit, the Index Episode Start Date is the date of service. - For an acute inpatient encounter identified only by a professional claim (where the discharge date cannot be determined), the Index Episode Start Date is the date of service. -For an acute inpatient discharge, the Index Episode Start Date is the date of discharge. -For an acute inpatient discharge with a direct transfer, the Index Episode Start Date is the discharge date of the original admission. See corresponding Excel file for value set referenced above.	Spirometry Results not Documented for Medical, Patient, or System Reasons Append a modifier (1P, 2P or 3P) to CPT Category II code 3023F to report documented circumstances that appropriately exclude patients from the denominator. Medical Performance Exclusion: 3023F with 1P: Documentation of medical reason(s) for not documenting and reviewing spirometry results OR Patient Performance Exclusion: 3023F with 2P: Documentation of patient reason(s) for not documenting and reviewing spirometry results OR System Performance Exclusion: 3023F with 3P: Documentation of system reason(s) for not documenting and reviewing spirometry results OR Spirometry Results not Documented, Reason not Otherwise Specified Append a reporting modifier (8P) to CPT Category II code 3023F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified. Performance Not Met: 3023F with 8P: Spirometry results not documented and reviewed, reason not otherwise specified
Denominator Statement	All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.	All patients aged 18 years and older with a diagnosis of COPD
Denominator Details	The eligible population for the denominator is defined by following the series of steps below: Step 1: Determine the Index Episode Start Date. Identify all patients who had any of the following during the	All Patients aged >= 18 years on date of encounter AND Diagnosis for COPD ICD-9-CM [for use before 9/30/2014]:

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
	intake period (the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year): 1) An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD value set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. If the patient had more than one eligible visit, include only the first visit. Step 2: Test for negative diagnosis history. Exclude patients who had any of the following during the 730-day period prior to the Index Episode Start Date. 1) An outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set),and online assessment (Online Assessments Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic	491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 493.20, 493.21, 493.22, 496 ICD-10-CM [for use after 10/1/2014]: J41.0, J41.1, J41.8, J42, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9 (Please see listing below for ICD-9/ICD-10 code definitions) AND Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215 _____ ICD-9/ICD-10 code definitions ICD-9-CM [for use before 9/30/2014]: 491.0 – Simple chronic bronchitis 491.1 – Mucopurulent chronic bronchitis 491.20 – Obstructive chronic bronchitis without exacerbation 491.21 – Obstructive chronic bronchitis with (acute) exacerbation 491.22 – Obstructive chronic bronchitis with acute bronchitis 491.8 – Other chronic bronchitis 491.9 – Unspecified chronic bronchitis 492.0 – Emphysematous bleb 492.8 – Other emphysema 493.20 – Chronic obstructive asthma, unspecified 493.21 – Chronic obstructive asthma with status asthmaticus 493.22 – Chronic obstructive asthma with (acute) exacerbation 496 – Chronic airway obstruction, not elsewhere classified ICD-10-CM [for use after 10/1/2014]: J41.0 – Simple chronic bronchitis J41.1 – Mucopurulent chronic bronchitis J41.8 – Mixed simple and mucopurulent chronic bronchitis J42 – Unspecified chronic bronchitis J43.0 – Unilateral pulmonary emphysema [MacLeod's syndrome] J43.1 – Panlobular emphysema

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
	bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an acute inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnoses of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. For an acute inpatient discharge Index Episode Start Date, use the Index Episode Start Date of admission to determine the 730-day period. For direct transfers, use the admission date of the original admission to determine the 730 days prior to the Index Episode Start Date. See corresponding Excel file for value sets referenced above.	J43.2 – Centrilobular emphysema J43.8 – Other emphysema J43.9 – Emphysema, unspecified J44.0 – Chronic obstructive pulmonary disease with acute lower respiratory infection J44.1 – Chronic obstructive pulmonary disease with (acute) exacerbation J44.9 – Chronic obstructive pulmonary disease, unspecified
Exclusions	This measure excludes patients who use hospice services, and those with nonacute inpatient stays.	Documentation of medical reason(s) for not documenting and reviewing spirometry results Documentation of patient reason(s) for not documenting and reviewing spirometry results Documentation of system reason(s) for not documenting and reviewing spirometry results
Exclusion Details	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which	ATS continues to use the PCPI exception methodology that uses three categories of exception reasons for which a patient may be removed from the denominator of an individual measure: medical, patient and system reasons.

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
	may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.	Exceptions are used to remove patients from the denominator of a performance measure when a patient does not receive a therapy or service AND that therapy or service would not be appropriate due to specific reasons; otherwise, the patient would meet the denominator criteria. Exceptions are not absolute, and the application of exceptions is based on clinical judgment, individual patient characteristics, or patient preferences. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For this measure, exceptions include medical reason(s), patient reason(s) or system reason(s) for not documenting spirometry results. Although this methodology does not require the external reporting of more detailed exception data, the ATS recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The ATS also conducts systematic review and analysis of exceptions data to identify practice patterns and opportunities for quality improvement. For Claims: Documentation of medical, patient, or system reason(s) for not documenting and reviewing spirometry results. Append a modifier (1P, 2P or 3P) to CPT Category II code 3023F to report documented circumstances that appropriately exclude patients from the denominator. 3023F with 1P: Documentation of medical reason(s) for not documenting and reviewing spirometry results 3023F with 2P: Documentation of patient reason(s) for not documenting and reviewing spirometry results 3023F with 3P: Documentation of system reason(s) for not documenting and reviewing spirometry results

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification
Stratification	N/A	We encourage the results of this measure to be stratified by race, ethnicity, primary language, and administrative sex.
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	The measure calculation is detailed in the steps listed below: Step 1: Determine the eligible population. A. Determine the Index Episode Start Date. Identify all patients who had an outpatient visit, observation visit, ED visit, or acute inpatient encounter/discharge with a diagnosis of COPD, emphysema, or chronic bronchitis. If the patient had more than one eligible visit, include only the first visit. B. Test for negative diagnosis history. Step 2: Determine the numerator. Identify the number of patients who had at least one claim/encounter for spirometry. Step 3: Calculate the rate: Numerator/Denominator	1. Start with Denominator 2. Check Patient Age: a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing. b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis. 3. Check Patient Diagnosis: a. If Diagnosis of COPD as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing. b. If Diagnosis of COPD as Listed in the Denominator equals Yes, proceed to check Encounter Performed. 4. Check Encounter Performed: a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing. b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population. 5. Denominator Population: a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation. 6. Start Numerator 7. Check Spirometry Results Documented and Reviewed: a. If Spirometry Results Documented and Reviewed equals Yes, include in Reporting Met and Performance Met.

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
		b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 patients in Sample Calculation. c. If Spirometry Results Documented and Reviewed equals No, proceed to Documentation of Medical Reason(s) for Not Documenting and Reviewing Spirometry Results. 8. 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 Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b1 equals 1 patient in the Sample Calculation. c. If Documentation of Medical Reason(s) for Not Documenting and Reviewing Spirometry Results equals No, proceed to Documentation of Patient Reason(s) for Not Documenting and Reviewing Spirometry Results. 9. Check Documentation of Patient Reason(s) for Not Documenting and Reviewing Spirometry Results: a. If Documentation of Patient Reason(s) for Not Documenting and Reviewing Spirometry Results equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b2 equals 0 patients in the Sample Calculation. c. If Documentation of Patient Reason(s) for Not Documenting and Reviewing Spirometry Results equals No, proceed to Documentation of System Reason(s) for Not Documenting and Reviewing Spirometry Results. 10. Check Documentation of System Reason(s) for Not Documenting and Reviewing Spirometry

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
		Results: a. If Documentation of System Reason(s) for Not Documenting and Reviewing Spirometry Results equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b3 equals 0 patients in the Sample Calculation. c. If Documentation of System Reason(s) for Not Documenting and Reviewing Spirometry Results equals No, proceed to Spirometry Results Not Documented and Reviewed, Reason Not Specified. 11. Check Spirometry Results Not Documented and Reviewed, Reason Not Specified: a. If Spirometry Results Not Documented and Reviewed, Reason Not Specified equals Yes, include in Reporting Met and Performance Not Met. b. Reporting Met and Performance Not Met letter is represented in the Reporting Met in the Sample Calculation listed at the end of document. Letter c equals 2 patients in the Sample Calculation. c. If Spirometry Results Not Documented and Reviewed, Reason Not Specified equals No, include in Reporting Not Met. 12. Check Reporting Not Met a. If Reporting Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the reporting numerator in sample calculation. Please see Measure Flow in Appendix A.1 for 'Sample Calculation' referenced above.
Submission items	5.1 Identified measures: 0091 : COPD: Spirometry Evaluation 0102 : COPD: inhaled bronchodilator therapy 2856 : Pharmacotherapy Management of COPD Exacerbation	5.1 Identified measures: 0577 : Use of Spirometry Testing in the Assessment and Diagnosis of COPD 5a.1 Are specs completely harmonized? No

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
	5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Our current measure, NQF 0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD, assesses the percentage of patients ages 40 and older with a new diagnosis of COPD or newly active COPD who received appropriate spirometry testing to confirm the diagnosis. It is a health-plan level measure that uses administrative claims and electronic clinical data from the ambulatory care setting. The following is a description of the differences and the impact on interpretability and data collection burden between our proposed measure and each related measure listed in 5.1a: 0091: COPD: Spirometry Evaluation NQF 0091 assesses the percentage of patients age 18 years and older with a diagnosis of COPD who had spirometry results documented. It is a physician-level measure that uses administrative claims or medical record data. There is some added burden of data collection because the data for each measure is collected from different data sources by different entities. Additionally, the focus of the measures is different. NQF 0091 focuses on whether patients with a COPD diagnosis (not specifically a new diagnosis) had spirometry testing performed at least once during the measurement year, while NQF 0577 specifies that patients with a new/newly active COPD diagnosis receive spirometry testing to confirm diagnosis. NQF 0102: COPD: Inhaled Bronchodilator Therapy and NQF 2856: Pharmacotherapy Management for COPD Exacerbation Measures NQF 0102 assesses the percentage of patients age 18 years and older with a diagnosis of COPD and who have an FEV1/FVC < 60% and who have symptoms who were prescribed an inhaled bronchodilator. NQF 0102 is a physician-level measure.	5a.2 If not completely harmonized, identify difference, rationale, impact: These measures have distinct differences in their denominators and numerators. First, our measure is broader in denominator population, being for all patients age 18 years and older with a diagnosis of COPD, while 0577 is for patients age 40 years and older with a new diagnosis of COPD. Our measure is more consistent with COPD guidelines, which do not state an age to start using a spirometry evaluation; rather, spirometry should be used to assess all adults with COPD, not just adults with a new diagnosis of COPD. Second, our measure's numerator is more flexible than 0577, allowing a spirometry evaluation anytime during the measurement period, rather than 0577's requirement that spirometry be performed within 6 months of a new diagnosis of COPD. Our measure numerator is also specific to spirometry results, requiring both the FEV1/FVC values. 5b.1 If competing, why superior or rationale for additive value: N/A

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0091: COPD: Spirometry Evaluation
	The NQF 2856 measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED encounter during the measurement year and who were dispensed appropriate medications. Two rates are reported. 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event Both of these measures focus on medication management for stable COPD or following an exacerbation, while NQF 0577 focuses on appropriate spirometry testing to confirm a new COPD diagnosis. There is no impact on interpretability of publicly-reported rates or added burden of data collection because the focus of our measure is different. 5b.1 If competing, why superior or rationale for additive value: N/A	

Comparison of NQF #0577 and NQF #0102

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
Steward	National Committee for Quality Assurance	American Thoracic Society
Description	This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.	Percentage of patients aged 18 years or older, with a diagnosis of COPD (FEV1/FVC < 70%) who have an FEV1 < 60% predicted and have symptoms who were prescribed an inhaled bronchodilator
Type	Process	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure	Claims, Registry Data Not Applicable No data dictionary

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
	directly from health plans via NCQA's online data submission system. No data collection instrument provided Attachment 0577_SPR_Value_Sets_Fall_2019.xlsx	
Level	Health Plan	Clinician : Group/Practice
Setting	Outpatient Services	Outpatient Services
Numerator Statement	The number of patients with at least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date.	Patients who were prescribed an inhaled bronchodilator
Numerator Details	Identify the number of patients with at least one claim/encounter for spirometry (Spirometry Value Set) during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date. The Index Episode Start Date is the earliest date of service for an eligible visit (outpatient, ED or acute inpatient) during the 6 months prior to the beginning of the measurement year through 6 months after the beginning of the measurement year with any diagnosis of COPD. - For an outpatient, observation or ED visit, the Index Episode Start Date is the date of service. - For an acute inpatient encounter identified only by a professional claim (where the discharge date cannot be determined), the Index Episode Start Date is the date of service. -For an acute inpatient discharge, the Index Episode Start Date is the date of discharge. -For an acute inpatient discharge with a direct transfer, the Index Episode Start Date is the discharge date of the original admission. See corresponding Excel file for value set referenced above.	Definition: Prescribed – Includes patients who are currently receiving medication(s) that follow the treatment plan recommended at an encounter during the reporting period, even if the prescription for that medication was ordered prior to the encounter. NUMERATOR NOTE: The correct combination of numerator code(s) must be reported on the claim form in order to properly report this measure. The "correct combination" of codes may require the submission of multiple numerator codes. Numerator Quality-Data Coding Options for Reporting Satisfactorily: Patient Prescribed Inhaled Bronchodilator Therapy (One CPT II code & one quality-data code [4025F & G8924] are required on the claim form to submit this numerator option) Performance Met: CPT II 4025F: Inhaled bronchodilator prescribed (NOTE: pending edited CPT II code) AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (eg, dyspnea, cough/sputum, wheezing) (NOTE: CMS approved edited G-code for 2017 PQRS year) OR

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
		Patient not Documented to have Inhaled Bronchodilator Prescribed for Medical, Patient, or System Reasons (One CPT II code & one quality-data code [4025F-xP & G8924] are required on the claim form to submit this numerator option) Append a modifier (1P, 2P or 3P) to CPT Category II code 4025F to report documented circumstances that appropriately exclude patients from the denominator. Medical Performance Exclusion, Patient Performance Exclusion, or System Performance Exclusion: 4025F with 1P: Documentation of medical reason(s) for not prescribing an inhaled bronchodilator (e.g., contraindication due to comorbidities) 4025F with 2P: Documentation of patient reason(s) for not prescribing an inhaled bronchodilator 4025F with 3P: Documentation of system reason(s) for not prescribing an inhaled bronchodilator (e.g., not covered by insurance) AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (eg, dyspnea, cough/sputum, wheezing) OR If patient is not eligible for this measure because spirometry results demonstrate FEV1/FVC >= 70% or FEV1 >= 60% predicted or patient does not have COPD symptoms, report: Spirometry Results Demonstrate FEV1/FVC >= 70% or FEV1 >= 60% or Patient does not have COPD symptoms (One quality-data code [G8925 or G8926] is required on the claim form to submit this numerator option) Other Performance Exclusion: G8925: Spirometry test results demonstrate FEV1/FVC >= 70% or FEV1 >= 60% predicted or patient does not have COPD symptoms OR

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
		Spirometry Test not Performed or Documented Other Performance Exclusion: G8926: Spirometry test not performed or documented, reason not given OR Patient not Documented to have Long-acting Inhaled Bronchodilator Prescribed, Reason not Otherwise Specified (One CPT II code & one quality-data code [4025F-8P & G8924] are required on the claim form to submit this numerator option) Append a reporting modifier (8P) to CPT Category II code 4025F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified. Performance Not Met: 4025F with 8P: Long-acting inhaled bronchodilator not prescribed, reason not otherwise specified AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (eg, dyspnea, cough/sputum, wheezing)
Denominator Statement	All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.	All patients aged 18 years and older with a diagnosis of COPD, who have FEV1/FVC < 70%, FEV1 <60% predicted and have symptoms (eg, dyspnea, cough/sputum, wheezing)
Denominator Details	The eligible population for the denominator is defined by following the series of steps below: Step 1: Determine the Index Episode Start Date. Identify all patients who had any of the following during the intake period (the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year): 1) An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value	All Patients aged >= 18 years on date of encounter AND Diagnosis for COPD ICD-9-CM [for use before 9/30/2014]: 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 493.20, 493.21, 493.22, 496 ICD-10-CM [for use after 10/1/2014]: J41.0, J41.1, J41.8, J42, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
	Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD value set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. If the patient had more than one eligible visit, include only the first visit. Step 2: Test for negative diagnosis history. Exclude patients who had any of the following during the 730-day period prior to the Index Episode Start Date. 1) An outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set),and online assessment (Online Assessments Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an acute inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD Value Set),	(Please see listing below for ICD-9/ICD-10 code definitions) AND Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215 _____ ICD-9/ICD-10 code definitions ICD-9-CM [for use before 9/30/2014]: 491.0 – Simple chronic bronchitis 491.1 – Mucopurulent chronic bronchitis 491.20 – Obstructive chronic bronchitis without exacerbation 491.21 – Obstructive chronic bronchitis with (acute) exacerbation 491.22 – Obstructive chronic bronchitis with acute bronchitis 491.8 – Other chronic bronchitis 491.9 – Unspecified chronic bronchitis 492.0 – Emphysematous bleb 492.8 – Other emphysema 493.20 – Chronic obstructive asthma, unspecified 493.21 – Chronic obstructive asthma with status asthmaticus 493.22 – Chronic obstructive asthma with (acute) exacerbation 496 – Chronic airway obstruction, not elsewhere classified ICD-10-CM [for use after 10/1/2014]: J41.0 – Simple chronic bronchitis J41.1 – Mucopurulent chronic bronchitis J41.8 – Mixed simple and mucopurulent chronic bronchitis J42 – Unspecified chronic bronchitis J43.0 – Unilateral pulmonary emphysema [MacLeod's syndrome] J43.1 – Panlobular emphysema J43.2 – Centrilobular emphysema J43.8 – Other emphysema J43.9 – Emphysema, unspecified J44.0 – Chronic obstructive pulmonary disease with acute lower respiratory infection

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
	emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnoses of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. For an acute inpatient discharge Index Episode Start Date, use the Index Episode Start Date of admission to determine the 730-day period. For direct transfers, use the admission date of the original admission to determine the 730 days prior to the Index Episode Start Date. See corresponding Excel file for value sets referenced above.	J44.1 – Chronic obstructive pulmonary disease with (acute) exacerbation J44.9 – Chronic obstructive pulmonary disease, unspecified
Exclusions	This measure excludes patients who use hospice services, and those with nonacute inpatient stays.	ATS continues to use the PCPI exception methodology that uses three categories of exception reasons for which a patient may be removed from the denominator of an individual measure: medical, patient and system reasons. Exceptions are used to remove patients from the denominator of a performance measure when a patient does not receive a therapy or service AND that therapy or service would not be appropriate due to specific reasons; otherwise, the patient would meet the denominator criteria. Exceptions are not absolute, and the application of exceptions is based on clinical judgment, individual patient characteristics, or patient preferences. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
		instances that may constitute an exception and are intended to serve as a guide to clinicians. For this measure, exceptions include medical reason(s), patient reason(s) or system reason(s) for not prescribing inhaled bronchodilators. Although this methodology does not require the external reporting of more detailed exception data, the ATS recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness.
Exclusion Details	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.	For Claims: Patient not Documented to have Inhaled Bronchodilator Prescribed for Medical, Patient, or System Reasons (One CPT II code & one quality-data code [4025F-xP & G8924] are required on the claim form to submit this numerator option) Append a modifier (1P, 2P or 3P) to CPT Category II code 4025F to report documented circumstances that appropriately exclude patients from the denominator. Medical Performance Exclusion, Patient Performance Exclusion, or System Performance Exclusion: 4025F with 1P: Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator, e.g., contraindicated due to comorbidities OR 4025F with 2P: Documentation of patient reason(s) for not prescribing inhaled bronchodilator OR 4025F with 3P: Documentation of system reason(s) for not prescribing inhaled bronchodilator, e.g., not covered by insurance AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (e.g., dyspnea, cough/sputum, wheezing) NOTE: CMS approved edited G-code (correcting transcriptio error) for 2017 PQRS year and edited CPT II code is pending

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification
Stratification	N/A	We encourage the results of this measure to be stratified by race, ethnicity, primary language, and administrative sex.
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	The measure calculation is detailed in the steps listed below: Step 1: Determine the eligible population. A. Determine the Index Episode Start Date. Identify all patients who had an outpatient visit, observation visit, ED visit, or acute inpatient encounter/discharge with a diagnosis of COPD, emphysema, or chronic bronchitis. If the patient had more than one eligible visit, include only the first visit. B. Test for negative diagnosis history. Step 2: Determine the numerator. Identify the number of patients who had at least one claim/encounter for spirometry. Step 3: Calculate the rate: Numerator/Denominator	NOTE: This sequence of steps has not been edited to reflect updated CPT II or G-codes. It will be edited once all updated CPT II or G-codes are finalized. 1. Start with Denominator 2. Check Patient Age: a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing. b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis. 3. Check Patient Diagnosis: a. If Diagnosis of COPD as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing. b. If Diagnosis of COPD as Listed in the Denominator equals Yes, proceed to check Encounter Performed. 4. Check Encounter Performed: a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing. b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population. 5. Denominator Population: a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation. 6. Start Numerator

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
		7. Check Patient Prescribed Inhaled Bronchodilator Therapy AND Results of FEV1<60% Predicted and Patient has COPD Symptoms: a. If Patient Prescribed Inhaled Bronchodilator Therapy AND Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Met. b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 patients in Sample Calculation. c. If Patient Prescribed Inhaled Bronchodilator Therapy AND Results of FEV1 <60% Predicted and Patient has COPD symptoms equals No, proceed to check Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator Therapy AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms. 8. Check Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms: a. If Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b1 equals 1 patient in the Sample Calculation. c. If Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals No, proceed to check Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms.

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
		9. Check Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms: a. If Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b2 equals 0 patients in the Sample Calculation. c. If Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals No, proceed to check Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms. 10. Check Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms: a. If Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b3 equals 0 patients in the Sample Calculation. c. If Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals No, proceed to check Spirometry Results FEV1 = 60% Predicted OR Does not have COPD Symptoms. 11. Check Spirometry Results FEV1 = 60% Predicted OR does not have COPD Symptoms:

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
		a. If Spirometry Results FEV1 = 60% Predicted OR Does not have COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b4 equals 0 patients in the Sample Calculation. c. If Spirometry Results FEV1 = 60% Predicted OR Does not have COPD symptoms equals NO, proceed to check Spirometry Test Not Performed to Documented, Reason not Given. 12. Check Spirometry Test Not Performed to Documented, Reason Not Given: a. If Spirometry Test Not Performed to Documented, Reason Not Given equals Yes, include in reporting met and performance exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b5 equals 0 patients in the Sample Calculation. c. If Spirometry Test Not Performed to Documented, Reason Not Given equals No, proceed to check Inhaled Bronchodilator not Prescribed, Reason Not Specified AND results of FEV1 = 60% Predicted and Patient has COPD Symptoms. 13. Check Inhaled Bronchodilator not Prescribed, Reason Not Specified AND Results of FEV1 = 60% Predicted and Patient has COPD Symptoms: a. If Inhaled Bronchodilator not Prescribed, Reason not Otherwise Specified AND results of FEV1 = 60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Not Met. b. Reporting Met and Performance Not Met letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter c equals 2 patients in the Sample Calculation.

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
		c. If Inhaled Bronchodilator not Prescribed, Reason not Otherwise Specified AND results of FEV1 = 60% Predicted and Patient has COPD Symptoms equals No, proceed to check Reporting Not Met. 14. Check Reporting Not Met a. If Reporting Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from reporting numerator in the sample calculation. Please see Measure Flow in Appendix A.1 for 'Sample Calculation' referenced above.
Submission items	5.1 Identified measures: 0091 : COPD: Spirometry Evaluation 0102 : COPD: inhaled bronchodilator therapy 2856 : Pharmacotherapy Management of COPD Exacerbation 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Our current measure, NQF 0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD, assesses the percentage of patients ages 40 and older with a new diagnosis of COPD or newly active COPD who received appropriate spirometry testing to confirm the diagnosis. It is a health-plan level measure that uses administrative claims and electronic clinical data from the ambulatory care setting. The following is a description of the differences and the impact on interpretability and data collection burden between our proposed measure and each related measure listed in 5.1a: 0091: COPD: Spirometry Evaluation NQF 0091 assesses the percentage of patients age 18 years and older with a diagnosis of COPD who had spirometry results documented. It is a physician-level measure that uses administrative claims or medical record data. There	5.1 Identified measures: 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value: N/A COMMENT ON 5a.1 - N/A is not a selection. For this reason, we select yes. There are no competing measures to harmonize.

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0102: COPD: inhaled bronchodilator therapy
	is some added burden of data collection because the data for each measure is collected from different data sources by different entities. Additionally, the focus of the measures is different. NQF 0091 focuses on whether patients with a COPD diagnosis (not specifically a new diagnosis) had spirometry testing performed at least once during the measurement year, while NQF 0577 specifies that patients with a new/newly active COPD diagnosis receive spirometry testing to confirm diagnosis. NQF 0102: COPD: Inhaled Bronchodilator Therapy and NQF 2856: Pharmacotherapy Management for COPD Exacerbation Measures NQF 0102 assesses the percentage of patients age 18 years and older with a diagnosis of COPD and who have an FEV1/FVC < 60% and who have symptoms who were prescribed an inhaled bronchodilator. NQF 0102 is a physician-level measure. The NQF 2856 measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED encounter during the measurement year and who were dispensed appropriate medications. Two rates are reported. 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event Both of these measures focus on medication management for stable COPD or following an exacerbation, while NQF 0577 focuses on appropriate spirometry testing to confirm a new COPD diagnosis. There is no impact on interpretability of publicly-reported rates or added burden of data collection because the focus of our measure is different. 5b.1 If competing, why superior or rationale for additive value: N/A	

Comparison of NQF #0577 and NQF #2856

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	2856: Pharmacotherapy Management of COPD Exacerbation
Steward	National Committee for Quality Assurance	National Committee for Quality Assurance
Description	This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.	This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED visit on or between January 1-November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported: 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event. 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.
Type	Process	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system. No data collection instrument provided Attachment 0577_SPR_Value_Sets_Fall_2019.xlsx	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system. No data collection instrument provided Attachment 2856_PCE_Value_Sets_Fall_2019.xlsx
Level	Health Plan	Health Plan
Setting	Outpatient Services	Outpatient Services
Numerator Statement	The number of patients with at least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date.	Numerator #1 (Systemic corticosteroids): The number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator #2 (Bronchodilators): The number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date.

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	2856: Pharmacotherapy Management of COPD Exacerbation
		*The Episode Date is the date of service for any acute inpatient discharge or ED claim/encounter during the 11-month intake period with a principal diagnosis of COPD.
Numerator Details	Identify the number of patients with at least one claim/encounter for spirometry (Spirometry Value Set) during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date. The Index Episode Start Date is the earliest date of service for an eligible visit (outpatient, ED or acute inpatient) during the 6 months prior to the beginning of the measurement year through 6 months after the beginning of the measurement year with any diagnosis of COPD. - For an outpatient, observation or ED visit, the Index Episode Start Date is the date of service. - For an acute inpatient encounter identified only by a professional claim (where the discharge date cannot be determined), the Index Episode Start Date is the date of service. -For an acute inpatient discharge, the Index Episode Start Date is the date of discharge. -For an acute inpatient discharge with a direct transfer, the Index Episode Start Date is the discharge date of the original admission. See corresponding Excel file for value set referenced above.	Numerator 1 (Systemic Corticosteroid): Identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count systemic corticosteroids that are active on the relevant date. A prescription is considered active if the “days supply” indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of admission. For an ED visit, the relevant date is the date of service. Systemic Corticosteroid Medications List: Glucocorticoids: cortisone-acetate, dexamethasone, hydrocortisone, methylprednisolone, prednisolone, and prednisone. See attached Value Set Excel document. Numerator 2 (Bronchodilator): Identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count bronchodilators that are active on the relevant date. A prescription is considered active if the “days supply” indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of admission. For an ED visit, the relevant date is the date of service. Bronchodilator Medications List: -Anticholinergic agents: albuterol-ipratropium, aclidinium-bromide, ipratropium, tiotropium, umeclidinium

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	2856: Pharmacotherapy Management of COPD Exacerbation
		-Beta 2-agonists: albuterol, arformoterol, budesonide-formoterol, fluticasone-salmeterol, fluticasone-vilanterol, formoterol, formoterol-glycopyrrolate, indacaterol, indacaterol-glycopyrrolate, levalbuterol, formoterol-mometasone, metaproterenol, olodaterol hydrochloride, olodaterol-tiotropium, salmeterol, umeclidinium-vilanterol -Anti-asthmatic combinations: dyphylline-guaifenesin See attached Value Set Excel document.
Denominator Statement	All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.	All patients age 40 years or older as of January 1 of the measurement year with a COPD exacerbation as indicated by an acute inpatient discharge or ED encounter with a principal diagnosis of COPD.
Denominator Details	The eligible population for the denominator is defined by following the series of steps below: Step 1: Determine the Index Episode Start Date. Identify all patients who had any of the following during the intake period (the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year): 1) An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD value set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set)	The eligible population for this measure is based on acute inpatient discharges and ED visits, not on patients. It is possible for the denominator to include multiple events for the same individual. The eligible population for the denominator is defined by following the series of steps below: Step 1: Identify all patients who had either of the following during the Intake Period (an 11-month period that begins on January 1 of the measurement year and ends on November 30 of the measurement year): 1) An ED visit (ED Value Set) with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include ED visits that result in an inpatient stay. 2) An acute inpatient discharge with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	2856: Pharmacotherapy Management of COPD Exacerbation
	on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. If the patient had more than one eligible visit, include only the first visit. Step 2: Test for negative diagnosis history. Exclude patients who had any of the following during the 730-day period prior to the Index Episode Start Date. 1) An outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set),and online assessment (Online Assessments Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an acute inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnoses of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay.	Step 2: Identify all COPD Episodes. For each patient 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 (ED visits that result in an inpatient stay are excluded in Step 1). Multiple ED visits on the same date are counted as one COPD episode. Step 3: 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 data from the last admission. A direct transfer is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. Use the following method to identify admission 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. See corresponding Excel file for value sets referenced above.

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	For an acute inpatient discharge Index Episode Start Date, use the Index Episode Start Date of admission to determine the 730-day period. For direct transfers, use the admission date of the original admission to determine the 730 days prior to the Index Episode Start Date. See corresponding Excel file for value sets referenced above.	
Exclusions	This measure excludes patients who use hospice services, and those with nonacute inpatient stays.	This measure excludes patients who use hospice services, and patients with nonacute inpatient stays.
Exclusion Details	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification
Stratification	N/A	N/A
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	The measure calculation is detailed in the steps listed below: Step 1: Determine the eligible population. A. Determine the Index Episode Start Date. Identify all patients who had an outpatient visit, observation visit,	Note: The denominator for this measure is based on acute inpatient discharges and ED visits, not patients. Step 1: Determine the eligible population: identify patients who meet the age criteria, with an ED visit or inpatient visit with a principal diagnosis of COPD, emphysema or chronic bronchitis

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	ED visit, or acute inpatient encounter/discharge with a diagnosis of COPD, emphysema, or chronic bronchitis. If the patient had more than one eligible visit, include only the first visit. B. Test for negative diagnosis history. Step 2: Determine the numerator. Identify the number of patients who had at least one claim/encounter for spirometry. Step 3: Calculate the rate: Numerator/Denominator	Step 2: Identify all COPD Episodes: for each patient identified in Step 1, identify all acute inpatient discharges and ED Visits. Multiple ED visits on the same date are counted as one COPD episode. Step 3: Test for direct transfers. Step 4: Determine the numerator: Numerator 1 (Systemic Corticosteroid): identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator 2 (Bronchodilator): identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date. Step 5: Calculate two rates. A. Numerator 1/Denominator B. Numerator 2/Denominator
Submission items	5.1 Identified measures: 0091 : COPD: Spirometry Evaluation 0102 : COPD: inhaled bronchodilator therapy 2856 : Pharmacotherapy Management of COPD Exacerbation 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Our current measure, NQF 0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD, assesses the percentage of patients ages 40 and older with a new diagnosis of COPD or newly active COPD who received appropriate spirometry testing to confirm the diagnosis. It is a health-plan level measure that uses administrative claims and electronic clinical data from the ambulatory care setting. The following is a	5.1 Identified measures: 0577 : Use of Spirometry Testing in the Assessment and Diagnosis of COPD 0102 : COPD: inhaled bronchodilator therapy 1825 : COPD - Management of Poorly Controlled COPD 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: For all three related measures, there is no impact on interpretability or added burden of data collection because the focus of this measure is different. For the measures that report use of pharmacotherapy for COPD, the denominator focuses on all adults, whereas this measure focuses on older adults (40 years and over). 0102 (similar numerator, different denominator) 0102's numerator is prescription of an inhaled corticosteroid. The denominator includes certain COPD patients 18 years or older. Unlike this measure, the level of analysis for 0102 is the clinician.

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	2856: Pharmacotherapy Management of COPD Exacerbation
	description of the differences and the impact on interpretability and data collection burden between our proposed measure and each related measure listed in 5.1a: 0091: COPD: Spirometry Evaluation NQF 0091 assesses the percentage of patients age 18 years and older with a diagnosis of COPD who had spirometry results documented. It is a physician-level measure that uses administrative claims or medical record data. There is some added burden of data collection because the data for each measure is collected from different data sources by different entities. Additionally, the focus of the measures is different. NQF 0091 focuses on whether patients with a COPD diagnosis (not specifically a new diagnosis) had spirometry testing performed at least once during the measurement year, while NQF 0577 specifies that patients with a new/newly active COPD diagnosis receive spirometry testing to confirm diagnosis. NQF 0102: COPD: Inhaled Bronchodilator Therapy and NQF 2856: Pharmacotherapy Management for COPD Exacerbation Measures NQF 0102 assesses the percentage of patients age 18 years and older with a diagnosis of COPD and who have an FEV1/FVC < 60% and who have symptoms who were prescribed an inhaled bronchodilator. NQF 0102 is a physician-level measure. The NQF 2856 measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED encounter during the measurement year and who were dispensed appropriate medications. Two rates are reported. 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event Both of these measures focus on medication management for stable COPD or following an exacerbation, while NQF 0577 focuses on appropriate spirometry testing to confirm a new COPD diagnosis.	0577 (different numerator, similar denominator) 0577's numerator is presence of a spirometry test to confirm a new or newly active COPD diagnosis. The denominator is persons 40 years or older with a new or newly active diagnosis of COPD. 1825 (somewhat similar numerator, different denominator) 1825's numerator is patients 18 years or older who are taking a long-acting bronchodilator. The denominator includes all patients 18 years or older with poorly controlled COPD who are taking a short-acting bronchodilator. 5b.1 If competing, why superior or rationale for additive value: N/A

	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD	2856: Pharmacotherapy Management of COPD Exacerbation
	There is no impact on interpretability of publicly-reported rates or added burden of data collection because the focus of our measure is different. 5b.1 If competing, why superior or rationale for additive value: N/A	

Comparison of NQF #1800 and NQF #0047

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
Steward	National Committee for Quality Assurance	The American Academy of Asthma Allergy and Immunology
Description	The percentage of patients 5–64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.	Percentage of patients aged 5 years and older with a diagnosis of persistent asthma who were prescribed long-term control medication Three rates are reported for this measure: 1. Patients prescribed inhaled corticosteroids (ICS) as their long term control medication 2. Patients prescribed other alternative long term control medications (non-ICS) 3. Total patients prescribed long-term control medication
Type	Process	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system. No data collection instrument provided Attachment 1800_AMR_Value_Sets_Fall_2019.xlsx	Claims, Electronic Health Records, Paper Medical Records, Registry Data Not Applicable Attachment 2017_Asthma_Pharma_NQF_0047_ICD-10_code_definitions.xlsx
Level	Health Plan	Clinician : Group/Practice, Clinician : Individual
Setting	Outpatient Services	Outpatient Services

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
Numerator Statement	The number of patients with persistent asthma who have a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.	Patients who were prescribed long-term control medication
Numerator Details	Follow the steps below to identify numerator compliance. Step 1: For each patient, count the units of asthma controller medications (see ASTHMA CONTROLLER MEDICATIONS LIST) dispensed during the measurement year. When identifying medication units for the numerator, count each individual medication, defined as an amount lasting 30 days or less, as one medication unit. One medication unit equals one inhaler canister, one injection, one infusion, or a 30-day or less supply of an oral medication. For example, two inhaler canisters of the same medication dispensed on the same day count as two medication units and only one dispensing event. Use the package size and units columns in the medications list to determine the number of canisters or injections. Divide the dispensed amount by the package size to determine the number of canisters or injections dispensed. For example, if the package size for an inhaled medication is 10g and pharmacy data indicates the dispensed amount is 30 g, this indicates 3 inhaler canisters were dispensed. Step 2: For each patient, count the units of asthma reliever medications (see ASTHMA RELIEVER MEDICATIONS LIST) dispensed during the measurement year.	Patients who were prescribed long-term control medication Definition: Long-Term Control Medication Includes: Patients prescribed inhaled corticosteroids (the preferred long-term control medication at any step of asthma pharmacological therapy) OR Patients prescribed alternative long-term control medications (inhaled steroid combinations, anti-asthmatic combinations, antibody inhibitor, leukotriene modifiers, mast cell stabilizers, methylxanthines) OR an acceptable alternative long-term control medication at one or more visits in the 12-month period OR patient already taking inhaled corticosteroid OR an acceptable alternative long-term control medication as documented in current medication list. Table 1: Preferred Asthma Control Medication - Inhaled Corticosteroids beclomethasone budesonide ciclesonide flunisolide fluticasone mometasone Table 2: Alternative Long-term Control Medications Inhaled steroid combinations: budesonide-formoterol; fluticasone-salmeterol; fluticasone-vilanterol; mometasone-formoterol Asthma biologic agents: mepolizumab; omalizumab Leukotriene modifiers: montelukast; zafirlukast; zileuton For Claims: Report CPT Category II code: Performance Met: Inhaled corticosteroids prescribed (4140F) OR

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	Step 3: For each patient, sum the units calculated in step 1 and step 2 to determine units of total asthma medications. Step 4: For each patient, calculate the ratio of controller medications to total asthma medications using the following formula: Units of Controller Medications (Step 1)/ Units of Total Asthma Medications (Step 3) Step 5: Sum the total number of patients who have a ratio of 0.50 or greater in step 4. ASTHMA CONTROLLER MEDICATIONS LIST: -Antiasthmatic combinations: dyphylline-guaifenesin -Antibody inhibitors: omalizumab -Anti-interleukin-5: benralizumab; mepolizumab; reslizumab -Inhaled steroid combinations: budesonide-formoterol; fluticasone-salmeterol; fluticasone-vilanterol; formoterol-mometasone -Inhaled corticosteroids: beclomethasone; budesonide; ciclesonide; flunisolide; fluticasone; mometasone -Leukotriene modifiers: montelukast; zafirlukast; zileuton -Methylxanthines: Theophylline. ASTHMA RELIEVER MEDICATIONS LIST: -Short-acting, inhaled beta-2 Agonists: albuterol; levalbuterol.	Performance Met: Alternative long-term control medication prescribed (4144F) OR Patient Performance Exclusion: Documentation of patient reason(s) for not prescribing inhaled corticosteroids or alternative long-term control medication (eg, patient declined, other patient reason) (4140F with 2P) OR Performance Not Met: Inhaled corticosteroids or alternative long-term control medication not prescribed, reason not otherwise specified (4140F with 8P)
Denominator Statement	All patients 5–64 years of age as of December 31 of the measurement year who have persistent asthma by meeting at least one of the following criteria during both the measurement year and the year prior to the measurement year: • At least one emergency department visit with asthma as the principal diagnosis	All patients aged 5 years and older with a diagnosis of persistent asthma

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	• At least one acute inpatient encounter or discharge with asthma as the principal diagnosis • At least four outpatient visits, observation visits, telephone visits, or online assessments on different dates of service, with any diagnosis of asthma AND at least two asthma medication dispensing events for any controller or reliever medication. Visit type need not be the same for the four visits. • At least four asthma medication dispensing events for any controller medication or reliever medication	
Denominator Details	The eligible population for the denominator is defined by following the series of steps below: Step 1: Identify patients as having persistent asthma who met at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years. • At least one ED visit (ED Value Set) with asthma as the principal diagnosis (Asthma Value Set). • At least one acute inpatient encounter (Acute Inpatient Value Set) with asthma as the principal diagnosis (Asthma Value Set) without telehealth (Telehealth Modifier Value Set; Telehealth POS Value Set). • At least one acute inpatient discharge with a principal diagnosis of asthma (Asthma Value Set). To identify an acute inpatient discharge: 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. • At least four outpatient visits (Outpatient Value Set), observation visits (Observation Value	All patients aged 5 years and older with a diagnosis of persistent asthma Denominator Instructions: Documentation of persistent asthma must be present. One method of identifying persistent asthma is, at a minimum, daily use of short-acting bronchodilators Denominator Criteria (Eligible Cases): Patients aged = 5 years on date of encounter AND Diagnosis for asthma (ICD-10-CM): J45.30, J45.31, J45.32, J45.40, J45.41, J45.42, J45.50, J45.51, J45.52, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998 AND Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350 AND Persistent Asthma (mild, moderate or severe) (1038F)

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	Set), telephone visits (Telephone Visits Value Set) or online assessments (Online Assessments Value Set) on different dates of service, with any diagnosis of asthma (Asthma Value Set) AND at least two asthma medication dispensing events for any controller medication (Asthma Controller Medications List) or reliever medication (Asthma Reliever Medications List). Visit type need not be the same for the four visits. Use all the medication lists in the tables below to identify asthma controller and reliever medications. Only three of the four visits may be an outpatient telehealth visit, a telephone visit or an online assessment. Identify outpatient telehealth visits by the presence of a telehealth modifier (Telehealth Modifier Value Set) or the presence of a telehealth POS code (Telehealth POS Value Set) associated with the outpatient visit. • At least four asthma medication dispensing events for any controller medication (Asthma Controller Medications List) or reliever medication (Asthma Reliever Medications List). Step 2: A patient identified as having persistent asthma because of at least four asthma medication dispensing events, where leukotriene modifiers or antibody inhibitors were the sole asthma medication dispensed in that year, must also have at least one diagnosis of asthma (Asthma Value Set), in any setting, in the same year as the leukotriene modifier or antibody inhibitor (i.e., measurement year or year prior to the measurement year). See attached value set Excel document for the following value sets and medications lists: - ED Value Set	

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	- Asthma Value Set - Acute Inpatient Value Set - Outpatient Value Set - Observation Value Set - Asthma Controller Medications List - Asthma Reliever Medications List - Telehealth Modifier Value Set - Telehealth POS Value Set - Inpatient Stay Value Set - Nonacute Inpatient Stay Value Set - Telephone Visits Value Set - Online Assessments Value Set	
Exclusions	1) Exclude patients who had any of the following diagnoses any time during the patient's history through the end of the measurement year (i.e., December 31): -COPD -Emphysema -Obstructive Chronic Bronchitis -Chronic Respiratory Conditions Due To Fumes/Vapors -Cystic Fibrosis -Acute Respiratory Failure 2) Exclude any patients who had no asthma medications (controller or reliever) dispensed during the measurement year. 3) Exclude patients in hospice.	Denominator Exceptions: Documentation of patient reason(s) for not prescribing inhaled corticosteroids or alternative long-term control medication (eg, patient declined, other patient reason) The AAAAI follows PCPI exception methodology and PCPI distinguishes between measure exceptions and measure exclusions. Exclusions arise when patients who are included in the initial patient or eligible population for a measure do not meet the denominator criteria specific to the intervention required by the numerator. Exclusions are absolute and apply to all patients and therefore are not part of clinical judgment within a measure. For this measure, exceptions may include patient reason(s) (eg, patient declined). Although this methodology does not require the external reporting of more detailed exception data, the AAAAI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. In further accordance with PCPI exception methodology, the AAAAI advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement.
Exclusion Details	1) Exclude patients who had any diagnosis of Emphysema (Emphysema Value Set; Other	For Claims: Report CPT Category II code with modifier:

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	Emphysema Value Set), COPD (COPD Value Set), Obstructive Chronic Bronchitis (Obstructive Chronic Bronchitis Value Set), Chronic Respiratory Conditions Due To Fumes/Vapors (Chronic Respiratory Conditions Due to Fumes/Vapors Value Set), Cystic Fibrosis (Cystic Fibrosis Value Set) or Acute Respiratory Failure (Acute Respiratory Failure Value Set) any time during the patient's history through the end of the measurement year (i.e., December 31). 2) Exclude any patients who had no asthma medications (controller or reliever) (Asthma Controller Medications List; Asthma Reliever Medications List) dispensed during the measurement year. 3) Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set), or supplemental data for this required exclusion. See attached value set Excel document for the following value sets and medications list: - Emphysema Value Set – Other Emphysema Value Set – COPD Value Set – Obstructive Chronic Bronchitis Value Set – Chronic Respiratory Conditions Due to Fumes/Vapors Value Set – Cystic Fibrosis Value Set – Acute Respiratory Failure Value Set	4140F-2P: Documentation of patient reason(s) for not prescribing inhaled corticosteroids or alternative long-term control medication (eg, patient declined, other patient reason)

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	-Asthma Controller Medications List -Asthma Reliever Medications List -Hospice Encounter Value Set -Hospice Intervention Value Set	
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification
Stratification	Four age stratifications and a total rate are reported for this measure. Age for each stratum is based on the patient's age as of the end of the Measurement Year (e.g., December 31). 1) 5–11 years 2) 12–18 years 3) 19-50 years 4) 51-64 years 5) Total (5-64 years) The age strata align with both clinical practice guidelines and reporting requirements for child health quality improvement programs. Clinical guidelines specify appropriate age cohorts for measuring use of asthma medications as 5–11 years of age and 12–50 years of age, to account for the differences in medication regimens for children compared to adolescents and adults. Implementation requires further stratification of the age ranges to enable creation of comparable cohorts that align with child health populations.	
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	Refer to items S.5 (Numerator details), S.7 (Denominator details), S.9 (Denominator exclusions details) and S.2b (Data Dictionary). This measure determines the percentage of patients 5 – 64 years of age with persistent asthma who had a ratio of controller	To calculate performance rates: 1) Find the patients who meet the initial patient population (ie, the general group of patients that the performance measure is designed to address). 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	medications to total asthma medications of 0.50 or greater during the measurement year. The measure calculation is detailed in the steps listed below: Step 1: Determine the eligible population Step 2: Remove patients who meet Denominator Exclusions to get the Denominator Step 3: Determine the numerator. For each patient: a) count the units of controller medications dispensed during the measurement year. b) count the units of reliever medications dispensed during the measurement year. c) calculate the ratio of controller medications to total asthma medications using the following formula: Units of Controller Medications (Step 3a)/ Units of Total Asthma Medications (Step 3a + Step 3b) Step 4: Calculate the measure rate: the number of patients who have a ratio of 0.50 or greater (Step 3c) /number of patients in the Denominator (Step 2) .	patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical. 3) From the patients within the denominator, find the patients who qualify for the numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator. 4) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator exception when exceptions have been specified. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. –Although exception cases are removed from the denominator population for the performance calculation, the number of patients with valid exceptions should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI. If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.
Submission items	5.1 Identified measures: 0047 : Asthma: Pharmacologic Therapy for Persistent Asthma 0548 : Suboptimal Asthma Control (SAC) and Absence of Controller Therapy (ACT) 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: 0047 assesses whether a patient 5 years or older with persistent asthma was prescribed an ICS or non-ICS long term control medication at least once during the measurement year, while 1800	5.1 Identified measures: 1799 : Medication Management for People with Asthma 1800 : Asthma Medication Ratio 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Measures 0047 is similar to NQF measure 1800 (Asthma Medication Ratio) and measure 1799 (Medication Management for People with Asthma) in regards to the denominator population of patients with persistent asthma. However, the denominators differ with respect to the method by which patients with persistent asthma are identified. For measures 1800 and 1799, persistent asthma is defined from

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	assesses the ratio of controller medications to total asthma medications (controller plus reliever medications). There is no impact on interpretability or added burden of data collection because the focus of each measure is different. Also, both measures use value sets to identify asthma controller medications that do not conflict. 0548 assesses patients aged 5-50 with persistent asthma who were dispensed more than 3 canisters of a SABA during the same 90-day period, as well as patients who meet the above criteria AND did not receive controller therapy during the same 90-day period. 1800 has a slightly different denominator, in that it includes adults through 64 years. Also, 1800 calculates a ratio of control medication to total asthma medication, rather than absolute units dispensed, or whether any medication was dispensed at all. There is no impact on interpretability or added burden of data collection because the focus of each measure is different. MNCM Optimal Asthma Control measures the percentage of pediatric (5-17 years) and adult (18-50 year) patients who had a diagnosis of asthma and whose asthma was optimally controlled during the measurement period as defined by achieving “asthma well-controlled” by the most recent asthma control tool AND having less than two ED visits and/or hospitalizations due to asthma in the last 12 months. 1800 has a slightly different denominator, in that it includes adults through 64 years. It also measures the ratio of control medications to total asthma medications, rather than results of an asthma control tool, ED visits, or hospitalizations. There is no impact on interpretability or added burden of data	administrative data, while for measure 0047, persistent asthma is defined based on clinical information. Additionally, the denominator for measure 0047 been updated to include asthma patients aged 65 and older, an important population that is not reached by measures 1800 and 1799. The numerator for measure 0047 is similar to the numerator in measure 1799, except that inhaled corticosteroids and alternative controllers are reported separately as well as together. The separate reporting rates required by measure 0047 for inhaled corticosteroids and for alternative long-term control medications will be useful for clinicians to assess and manage the use of the preferred vs. alternative long-term control medications for their patients. The numerator of measure 0047 has also been updated to include current and appropriate alternative long-term control medications. While the inhaled corticosteroids in measure 0047 and 1799 are well harmonized, the alternative long-term controllers differ. Measure 1799 includes nedocromil, methylxanthines and cromolyn, all medications that were reviewed by the AAAAI’s measure stewardship committee and removed. 5b.1 If competing, why superior or rationale for additive value:

	1800: Asthma Medication Ratio	0047: Asthma: Pharmacologic Therapy for Persistent Asthma
	collection because the focus of each measure is different. 5b.1 If competing, why superior or rationale for additive value:	

Comparison of NQF #2856 and NQF #0102

	2856: Pharmacotherapy Management of COPD Exacerbation	0102: COPD: inhaled bronchodilator therapy
Steward	National Committee for Quality Assurance	American Thoracic Society
Description	This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED visit on or between January 1-November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported: 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event. 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.	Percentage of patients aged 18 years or older, with a diagnosis of COPD (FEV1/FVC < 70%) who have an FEV1 < 60% predicted and have symptoms who were prescribed an inhaled bronchodilator
Type	Process	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system.	Claims, Registry Data Not Applicable No data dictionary

	2856: Pharmacotherapy Management of COPD Exacerbation	0102: COPD: inhaled bronchodilator therapy
	No data collection instrument provided Attachment 2856_PCE_Value_Sets_Fall_2019.xlsx	
Level	Health Plan	Clinician : Group/Practice
Setting	Outpatient Services	Outpatient Services
Numerator Statement	Numerator #1 (Systemic corticosteroids): The number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator #2 (Bronchodilators): The number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date. *The Episode Date is the date of service for any acute inpatient discharge or ED claim/encounter during the 11-month intake period with a principal diagnosis of COPD.	Patients who were prescribed an inhaled bronchodilator
Numerator Details	Numerator 1 (Systemic Corticosteroid): Identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count systemic corticosteroids that are active on the relevant date. A prescription is considered active if the “days supply” indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of	Definition: Prescribed – Includes patients who are currently receiving medication(s) that follow the treatment plan recommended at an encounter during the reporting period, even if the prescription for that medication was ordered prior to the encounter. NUMERATOR NOTE: The correct combination of numerator code(s) must be reported on the claim form in order to properly report this measure. The “correct combination” of codes may require the submission of multiple numerator codes. Numerator Quality-Data Coding Options for Reporting Satisfactorily: Patient Prescribed Inhaled Bronchodilator Therapy (One CPT II code & one quality-data code [4025F & G8924] are required on the claim form to submit this numerator option) Performance Met:

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	admission. For an ED visit, the relevant date is the date of service. Systemic Corticosteroid Medications List: Glucocorticoids: cortisone-acetate, dexamethasone, hydrocortisone, methylprednisolone, prednisolone, and prednisone. See attached Value Set Excel document. Numerator 2 (Bronchodilator): Identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count bronchodilators that are active on the relevant date. A prescription is considered active if the "days supply" indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of admission. For an ED visit, the relevant date is the date of service. Bronchodilator Medications List: -Anticholinergic agents: albuterol-ipratropium, aclidinium-bromide, ipratropium, tiotropium, umeclidinium -Beta 2-agonists: albuterol, arformoterol, budesonide-formoterol, fluticasone-salmeterol, fluticasone-vilanterol, formoterol, formoterol-glycopyrrolate, indacaterol, indacaterol-glycopyrrolate, levalbuterol, formoterol-mometasone, metaproterenol, olodaterol	CPT II 4025F: Inhaled bronchodilator prescribed (NOTE: pending edited CPT II code) AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (eg, dyspnea, cough/sputum, wheezing) (NOTE: CMS approved edited G-code for 2017 PQRS year) OR Patient not Documented to have Inhaled Bronchodilator Prescribed for Medical, Patient, or System Reasons (One CPT II code & one quality-data code [4025F-xP & G8924] are required on the claim form to submit this numerator option) Append a modifier (1P, 2P or 3P) to CPT Category II code 4025F to report documented circumstances that appropriately exclude patients from the denominator. Medical Performance Exclusion, Patient Performance Exclusion, or System Performance Exclusion: 4025F with 1P: Documentation of medical reason(s) for not prescribing an inhaled bronchodilator (e.g., contraindication due to comorbidities) 4025F with 2P: Documentation of patient reason(s) for not prescribing an inhaled bronchodilator 4025F with 3P: Documentation of system reason(s) for not prescribing an inhaled bronchodilator (e.g., not covered by insurance) AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (eg, dyspnea, cough/sputum, wheezing) OR If patient is not eligible for this measure because spirometry results demonstrate FEV1/FVC >= 70% or FEV1 >= 60% predicted or patient does not have COPD symptoms, report: Spirometry Results Demonstrate FEV1/FVC >= 70% or FEV1 >= 60% or Patient does not have COPD symptoms

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	hydrochloride, olodaterol-tiotropium, salmeterol, umeclidinium-vilanterol -Anti-asthmatic combinations: dyphylline-guaifenesin See attached Value Set Excel document.	(One quality-data code [G8925 or G8926] is required on the claim form to submit this numerator option) Other Performance Exclusion: G8925: Spirometry test results demonstrate FEV1/FVC >= 70% or FEV1 >= 60% predicted or patient does not have COPD symptoms OR Spirometry Test not Performed or Documented Other Performance Exclusion: G8926: Spirometry test not performed or documented, reason not given OR Patient not Documented to have Long-acting Inhaled Bronchodilator Prescribed, Reason not Otherwise Specified (One CPT II code & one quality-data code [4025F-8P & G8924] are required on the claim form to submit this numerator option) Append a reporting modifier (8P) to CPT Category II code 4025F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified. Performance Not Met: 4025F with 8P: Long-acting inhaled bronchodilator not prescribed, reason not otherwise specified AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (eg, dyspnea, cough/sputum, wheezing)
Denominator Statement	All patients age 40 years or older as of January 1 of the measurement year with a COPD exacerbation as indicated by an acute inpatient discharge or ED encounter with a principal diagnosis of COPD.	All patients aged 18 years and older with a diagnosis of COPD, who have FEV1/FVC < 70%, FEV1 <60% predicted and have symptoms (eg, dyspnea, cough/sputum, wheezing)
Denominator Details	The eligible population for this measure is based on acute inpatient discharges and ED visits, not on patients. It is possible for the denominator to include multiple events for the same individual.	All Patients aged >= 18 years on date of encounter AND Diagnosis for COPD ICD-9-CM [for use before 9/30/2014]:

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	The eligible population for the denominator is defined by following the series of steps below: Step 1: Identify all patients who had either of the following during the Intake Period (an 11-month period that begins on January 1 of the measurement year and ends on November 30 of the measurement year): 1) An ED visit (ED Value Set) with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include ED visits that result in an inpatient stay. 2) An acute inpatient discharge with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay Step 2: Identify all COPD Episodes. For each patient 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 (ED visits that result in an inpatient stay are excluded in Step 1). Multiple ED visits on the same date are counted as one COPD episode. Step 3: 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 data from the last admission.	491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 493.20, 493.21, 493.22, 496 ICD-10-CM [for use after 10/1/2014]: J41.0, J41.1, J41.8, J42, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9 (Please see listing below for ICD-9/ICD-10 code definitions) AND Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215 _____ ICD-9/ICD-10 code definitions ICD-9-CM [for use before 9/30/2014]: 491.0 – Simple chronic bronchitis 491.1 – Mucopurulent chronic bronchitis 491.20 – Obstructive chronic bronchitis without exacerbation 491.21 – Obstructive chronic bronchitis with (acute) exacerbation 491.22 – Obstructive chronic bronchitis with acute bronchitis 491.8 – Other chronic bronchitis 491.9 – Unspecified chronic bronchitis 492.0 – Emphysematous bleb 492.8 – Other emphysema 493.20 – Chronic obstructive asthma, unspecified 493.21 – Chronic obstructive asthma with status asthmaticus 493.22 – Chronic obstructive asthma with (acute) exacerbation 496 – Chronic airway obstruction, not elsewhere classified ICD-10-CM [for use after 10/1/2014]: J41.0 – Simple chronic bronchitis J41.1 – Mucopurulent chronic bronchitis J41.8 – Mixed simple and mucopurulent chronic bronchitis J42 – Unspecified chronic bronchitis J43.0 – Unilateral pulmonary emphysema [MacLeod's syndrome] J43.1 – Panlobular emphysema J43.2 – Centrilobular emphysema

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	A direct transfer is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. Use the following method to identify admission 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. See corresponding Excel file for value sets referenced above.	J43.8 – Other emphysema J43.9 – Emphysema, unspecified J44.0 – Chronic obstructive pulmonary disease with acute lower respiratory infection J44.1 – Chronic obstructive pulmonary disease with (acute) exacerbation J44.9 – Chronic obstructive pulmonary disease, unspecified
Exclusions	This measure excludes patients who use hospice services, and patients with nonacute inpatient stays.	ATS continues to use the PCPI exception methodology that uses three categories of exception reasons for which a patient may be removed from the denominator of an individual measure: medical, patient and system reasons. Exceptions are used to remove patients from the denominator of a performance measure when a patient does not receive a therapy or service AND that therapy or service would not be appropriate due to specific reasons; otherwise, the patient would meet the denominator criteria. Exceptions are not absolute, and the application of exceptions is based on clinical judgment, individual patient characteristics, or patient preferences. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For this measure, exceptions include medical reason(s), patient reason(s) or system reason(s) for not prescribing inhaled bronchodilators. Although this methodology does not require the external reporting of more detailed exception data, the ATS recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness.
Exclusion Details	Exclude patients who use hospice services or elect to use a hospice benefit any time during	For Claims:

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	the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.	Patient not Documented to have Inhaled Bronchodilator Prescribed for Medical, Patient, or System Reasons (One CPT II code & one quality-data code [4025F-xP & G8924] are required on the claim form to submit this numerator option) Append a modifier (1P, 2P or 3P) to CPT Category II code 4025F to report documented circumstances that appropriately exclude patients from the denominator. Medical Performance Exclusion, Patient Performance Exclusion, or System Performance Exclusion: 4025F with 1P: Documentation of medical reason(s) for not prescribing a long-acting inhaled bronchodilator, e.g., contraindicated due to comorbidities OR 4025F with 2P: Documentation of patient reason(s) for not prescribing inhaled bronchodilator OR 4025F with 3P: Documentation of system reason(s) for not prescribing inhaled bronchodilator, e.g., not covered by insurance AND G8924: Spirometry test results demonstrate FEV1/FVC < 70%, FEV1 < 60% predicted and patient has COPD symptoms (e.g., dyspnea, cough/sputum, wheezing) NOTE: CMS approved edited G-code (correcting transcriptio error) for 2017 PQRS year and edited CPT II code is pending
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification
Stratification	N/A	We encourage the results of this measure to be stratified by race, ethnicity, primary language, and administrative sex.
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	Note: The denominator for this measure is based on acute inpatient discharges and ED visits, not patients.	NOTE: This sequence of steps has not been edited to reflect updated CPT II or G-codes. It will be edited once all updated CPT II or G-codes are finalized.

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	Step 1: Determine the eligible population: identify patients who meet the age criteria, with an ED visit or inpatient visit with a principal diagnosis of COPD, emphysema or chronic bronchitis Step 2: Identify all COPD Episodes: for each patient identified in Step 1, identify all acute inpatient discharges and ED Visits. Multiple ED visits on the same date are counted as one COPD episode. Step 3: Test for direct transfers. Step 4: Determine the numerator: Numerator 1 (Systemic Corticosteroid): identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator 2 (Bronchodilator): identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date. Step 5: Calculate two rates. A. Numerator 1/Denominator B. Numerator 2/Denominator	1. Start with Denominator 2. Check Patient Age: a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing. b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis. 3. Check Patient Diagnosis: a. If Diagnosis of COPD as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing. b. If Diagnosis of COPD as Listed in the Denominator equals Yes, proceed to check Encounter Performed. 4. Check Encounter Performed: a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing. b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population. 5. Denominator Population: a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation. 6. Start Numerator 7. Check Patient Prescribed Inhaled Bronchodilator Therapy AND Results of FEV1<60% Predicted and Patient has COPD Symptoms: a. If Patient Prescribed Inhaled Bronchodilator Therapy AND Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Met. b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 patients in Sample Calculation.

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		c. If Patient Prescribed Inhaled Bronchodilator Therapy AND Results of FEV1 <60% Predicted and Patient has COPD symptoms equals No, proceed to check Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator Therapy AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms. 8. Check Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms: a. If Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b1 equals 1 patient in the Sample Calculation. c. If Documentation of Medical Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals No, proceed to check Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms. 9. Check Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms: a. If Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b2 equals 0 patients in the Sample Calculation. c. If Documentation of Patient Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted

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		and Patient has COPD Symptoms equals No, proceed to check Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms. 10. Check Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms: a. If Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b3 equals 0 patients in the Sample Calculation. c. If Documentation of System Reason(s) for Not Prescribing Inhaled Bronchodilator AND Spirometry Results of FEV1 <60% Predicted and Patient has COPD Symptoms equals No, proceed to check Spirometry Results FEV1 = 60% Predicted OR Does not have COPD Symptoms. 11. Check Spirometry Results FEV1 = 60% Predicted OR does not have COPD Symptoms: a. If Spirometry Results FEV1 = 60% Predicted OR Does not have COPD Symptoms equals Yes, include in Reporting Met and Performance Exclusion. b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b4 equals 0 patients in the Sample Calculation. c. If Spirometry Results FEV1 = 60% Predicted OR Does not have COPD symptoms equals NO, proceed to check Spirometry Test Not Performed to Documented, Reason not Given. 12. Check Spirometry Test Not Performed to Documented, Reason Not Given: a. If Spirometry Test Not Performed to Documented, Reason Not Given equals Yes, include in reporting met and performance exclusion.

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		b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b5 equals 0 patients in the Sample Calculation. c. If Spirometry Test Not Performed to Documented, Reason Not Given equals No, proceed to check Inhaled Bronchodilator not Prescribed, Reason Not Specified AND results of FEV1 = 60% Predicted and Patient has COPD Symptoms. 13. Check Inhaled Bronchodilator not Prescribed, Reason Not Specified AND Results of FEV1 = 60% Predicted and Patient has COPD Symptoms: a. If Inhaled Bronchodilator not Prescribed, Reason not Otherwise Specified AND results of FEV1 = 60% Predicted and Patient has COPD Symptoms equals Yes, include in Reporting Met and Performance Not Met. b. Reporting Met and Performance Not Met letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter c equals 2 patients in the Sample Calculation. c. If Inhaled Bronchodilator not Prescribed, Reason not Otherwise Specified AND results of FEV1 = 60% Predicted and Patient has COPD Symptoms equals No, proceed to check Reporting Not Met. 14. Check Reporting Not Met a. If Reporting Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from reporting numerator in the sample calculation. Please see Measure Flow in Appendix A.1 for 'Sample Calculation' referenced above.
Submission items	5.1 Identified measures: 0577 : Use of Spirometry Testing in the Assessment and Diagnosis of COPD 0102 : COPD: inhaled bronchodilator therapy 1825 : COPD - Management of Poorly Controlled COPD	5.1 Identified measures: 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value: N/A

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	5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: For all three related measures, there is no impact on interpretability or added burden of data collection because the focus of this measure is different. For the measures that report use of pharmacotherapy for COPD, the denominator focuses on all adults, whereas this measure focuses on older adults (40 years and over). 0102 (similar numerator, different denominator) 0102's numerator is prescription of an inhaled corticosteroid. The denominator includes certain COPD patients 18 years or older. Unlike this measure, the level of analysis for 0102 is the clinician. 0577 (different numerator, similar denominator) 0577's numerator is presence of a spirometry test to confirm a new or newly active COPD diagnosis. The denominator is persons 40 years or older with a new or newly active diagnosis of COPD. 1825 (somewhat similar numerator, different denominator) 1825's numerator is patients 18 years or older who are taking a long-acting bronchodilator. The denominator includes all patients 18 years or older with poorly controlled COPD who are taking a short-acting bronchodilator. 5b.1 If competing, why superior or rationale for additive value: N/A	COMMENT ON 5a.1 - N/A is not a selection. For this reason, we select yes. There are no competing measures to harmonize.

Comparison of NQF #2856 and NQF #0577

	2856: Pharmacotherapy Management of COPD Exacerbation	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD
Steward	National Committee for Quality Assurance	National Committee for Quality Assurance
Description	This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED visit on or between January 1-November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported: 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event. 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.	This measure assesses the percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.
Type	Process	Process
Data Source	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system. No data collection instrument provided Attachment 2856_PCE_Value_Sets_Fall_2019.xlsx	Claims This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from health plans via NCQA's online data submission system. No data collection instrument provided Attachment 0577_SPR_Value_Sets_Fall_2019.xlsx
Level	Health Plan	Health Plan
Setting	Outpatient Services	Outpatient Services
Numerator Statement	Numerator #1 (Systemic corticosteroids): The number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the	The number of patients with at least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date.

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	Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator #2 (Bronchodilators): The number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date. *The Episode Date is the date of service for any acute inpatient discharge or ED claim/encounter during the 11-month intake period with a principal diagnosis of COPD.	
Numerator Details	Numerator 1 (Systemic Corticosteroid): Identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count systemic corticosteroids that are active on the relevant date. A prescription is considered active if the “days supply” indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of admission. For an ED visit, the relevant date is the date of service. Systemic Corticosteroid Medications List: Glucocorticoids: cortisone-acetate, dexamethasone, hydrocortisone, methylprednisolone, prednisolone, and prednisone. See attached Value Set Excel document.	Identify the number of patients with at least one claim/encounter for spirometry (Spirometry Value Set) during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date. The Index Episode Start Date is the earliest date of service for an eligible visit (outpatient, ED or acute inpatient) during the 6 months prior to the beginning of the measurement year through 6 months after the beginning of the measurement year with any diagnosis of COPD. - For an outpatient, observation or ED visit, the Index Episode Start Date is the date of service. - For an acute inpatient encounter identified only by a professional claim (where the discharge date cannot be determined), the Index Episode Start Date is the date of service. -For an acute inpatient discharge, the Index Episode Start Date is the date of discharge. -For an acute inpatient discharge with a direct transfer, the Index Episode Start Date is the discharge date of the original admission. See corresponding Excel file for value set referenced above.

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	Numerator 2 (Bronchodilator): Identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. -The Episode Date is the date of service for any acute inpatient discharge or ED visit during the 11-month intake period with a principal diagnosis of COPD. -Count bronchodilators that are active on the relevant date. A prescription is considered active if the "days supply" indicated on the date the patient filled the prescription is the number of days or more between that date and the relevant date. For an acute inpatient encounter, the relevant date is the date of admission. For an ED visit, the relevant date is the date of service. Bronchodilator Medications List: -Anticholinergic agents: albuterol-ipratropium, aclidinium-bromide, ipratropium, tiotropium, umeclidinium -Beta 2-agonists: albuterol, arformoterol, budesonide-formoterol, fluticasone-salmeterol, fluticasone-vilanterol, formoterol, formoterol-glycopyrrolate, indacaterol, indacaterol-glycopyrrolate, levalbuterol, formoterol-mometasone, metaproterenol, olodaterol hydrochloride, olodaterol-tiotropium, salmeterol, umeclidinium-vilanterol -Anti-asthmatic combinations: dyphylline-guaifenesin See attached Value Set Excel document.	
Denominator Statement	All patients age 40 years or older as of January 1 of the measurement year with a COPD exacerbation as indicated by an acute inpatient	All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.

	2856: Pharmacotherapy Management of COPD Exacerbation	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD
	discharge or ED encounter with a principal diagnosis of COPD.	
Denominator Details	The eligible population for this measure is based on acute inpatient discharges and ED visits, not on patients. It is possible for the denominator to include multiple events for the same individual. The eligible population for the denominator is defined by following the series of steps below: Step 1: Identify all patients who had either of the following during the Intake Period (an 11-month period that begins on January 1 of the measurement year and ends on November 30 of the measurement year): 1) An ED visit (ED Value Set) with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include ED visits that result in an inpatient stay. 2) An acute inpatient discharge with a principal diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay Step 2: Identify all COPD Episodes. For each patient 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 (ED visits that result in an inpatient stay are excluded in	The eligible population for the denominator is defined by following the series of steps below: Step 1: Determine the Index Episode Start Date. Identify all patients who had any of the following during the intake period (the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year): 1) An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an inpatient stay. 2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD value set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. If the patient had more than one eligible visit, include only the first visit. Step 2: Test for negative diagnosis history. Exclude patients who had any of the following during the 730-day period prior to the Index Episode Start Date. 1) An outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set),and online assessment (Online Assessments Value Set), an observation visit (Observation Value Set), or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). Do not include outpatient, ED or observation visits that result in an acute inpatient stay.

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	Step 1). Multiple ED visits on the same date are counted as one COPD episode. Step 3: 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 data from the last admission. A direct transfer is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. Use the following method to identify admission 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. See corresponding Excel file for value sets referenced above.	2) An acute inpatient encounter (Acute Inpatient Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). 3) An acute inpatient discharge with any diagnoses of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set) on the discharge claim. To identify acute inpatient discharges: a. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) b. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set) c. Identify the discharge date for the stay. For an acute inpatient discharge Index Episode Start Date, use the Index Episode Start Date of admission to determine the 730-day period. For direct transfers, use the admission date of the original admission to determine the 730 days prior to the Index Episode Start Date. See corresponding Excel file for value sets referenced above.
Exclusions	This measure excludes patients who use hospice services, and patients with nonacute inpatient stays.	This measure excludes patients who use hospice services, and those with nonacute inpatient stays.
Exclusion Details	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set).	Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record, claims/encounter data (Hospice Encounter Value Set, Hospice Intervention Value Set). Exclude patients with nonacute inpatient stays (Nonacute Inpatient Stay Value Set). See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.

	2856: Pharmacotherapy Management of COPD Exacerbation	0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD
	See attached Hospice Encounter Value Set, Hospice Intervention Value Set, and Nonacute Inpatient Stay Value Set.	
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification
Stratification	N/A	N/A
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	Note: The denominator for this measure is based on acute inpatient discharges and ED visits, not patients. Step 1: Determine the eligible population: identify patients who meet the age criteria, with an ED visit or inpatient visit with a principal diagnosis of COPD, emphysema or chronic bronchitis Step 2: Identify all COPD Episodes: for each patient identified in Step 1, identify all acute inpatient discharges and ED Visits. Multiple ED visits on the same date are counted as one COPD episode. Step 3: Test for direct transfers. Step 4: Determine the numerator: Numerator 1 (Systemic Corticosteroid): identify the number of patients dispensed a prescription for a systemic corticosteroid on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date. Numerator 2 (Bronchodilator): identify the number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date. Step 5: Calculate two rates.	The measure calculation is detailed in the steps listed below: Step 1: Determine the eligible population. A. Determine the Index Episode Start Date. Identify all patients who had an outpatient visit, observation visit, ED visit, or acute inpatient encounter/discharge with a diagnosis of COPD, emphysema, or chronic bronchitis. If the patient had more than one eligible visit, include only the first visit. B. Test for negative diagnosis history. Step 2: Determine the numerator. Identify the number of patients who had at least one claim/encounter for spirometry. Step 3: Calculate the rate: Numerator/Denominator

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	A. Numerator 1/Denominator B. Numerator 2/Denominator	
Submission items	5.1 Identified measures: 0577 : Use of Spirometry Testing in the Assessment and Diagnosis of COPD 0102 : COPD: inhaled bronchodilator therapy 1825 : COPD - Management of Poorly Controlled COPD 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: For all three related measures, there is no impact on interpretability or added burden of data collection because the focus of this measure is different. For the measures that report use of pharmacotherapy for COPD, the denominator focuses on all adults, whereas this measure focuses on older adults (40 years and over). 0102 (similar numerator, different denominator) 0102's numerator is prescription of an inhaled corticosteroid. The denominator includes certain COPD patients 18 years or older. Unlike this measure, the level of analysis for 0102 is the clinician. 0577 (different numerator, similar denominator) 0577's numerator is presence of a spirometry test to confirm a new or newly active COPD diagnosis. The denominator is persons 40 years or older with a new or newly active diagnosis of COPD. 1825 (somewhat similar numerator, different denominator) 1825's numerator is patients 18 years or older who are taking a long-acting bronchodilator. The denominator includes all patients 18 years or	5.1 Identified measures: 0091 : COPD: Spirometry Evaluation 0102 : COPD: inhaled bronchodilator therapy 2856 : Pharmacotherapy Management of COPD Exacerbation 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Our current measure, NQF 0577: Use of Spirometry Testing in the Assessment and Diagnosis of COPD, assesses the percentage of patients ages 40 and older with a new diagnosis of COPD or newly active COPD who received appropriate spirometry testing to confirm the diagnosis. It is a health-plan level measure that uses administrative claims and electronic clinical data from the ambulatory care setting. The following is a description of the differences and the impact on interpretability and data collection burden between our proposed measure and each related measure listed in 5.1a: 0091: COPD: Spirometry Evaluation NQF 0091 assesses the percentage of patients age 18 years and older with a diagnosis of COPD who had spirometry results documented. It is a physician-level measure that uses administrative claims or medical record data. There is some added burden of data collection because the data for each measure is collected from different data sources by different entities. Additionally, the focus of the measures is different. NQF 0091 focuses on whether patients with a COPD diagnosis (not specifically a new diagnosis) had spirometry testing performed at least once during the measurement year, while NQF 0577 specifies that patients with a new/newly active COPD diagnosis receive spirometry testing to confirm diagnosis. NQF 0102: COPD: Inhaled Bronchodilator Therapy and NQF 2856: Pharmacotherapy Management for COPD Exacerbation Measures NQF 0102 assesses the percentage of patients age 18 years and older with a diagnosis of COPD and who have an FEV1/FVC < 60% and who have symptoms who were prescribed an inhaled bronchodilator. NQF 0102 is a physician-level measure. The NQF 2856 measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an

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	older with poorly controlled COPD who are taking a short-acting bronchodilator. 5b.1 If competing, why superior or rationale for additive value: N/A	acute inpatient discharge or ED encounter during the measurement year and who were dispensed appropriate medications. Two rates are reported. 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event Both of these measures focus on medication management for stable COPD or following an exacerbation, while NQF 0577 focuses on appropriate spirometry testing to confirm a new COPD diagnosis. There is no impact on interpretability of publicly-reported rates or added burden of data collection because the focus of our measure is different. 5b.1 If competing, why superior or rationale for additive value: N/A

Appendix F: Pre-Evaluation Comments

No NQF member comments were received during the pre-commenting period.

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