NATIONAL QUALITY FORUM
Driving measurable health improvements together

Primary Care and Chronic Illness Fall 2020 Cycle: CDP Report

DRAFT REPORT FOR COMMENT
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Contents

Executive Summary

The National Quality Forum (NQF) has a body of endorsed measures related to the provision of primary care and the management of chronic disease, which is overseen by the Primary Care and Chronic Illness (PCCI) Standing Committee. This Standing Committee is convened with the recognition that the most common contact point for many people within the United States (U.S.) healthcare system is their primary care provider. As such, primary care has a central role in improving the health of people and populations. Primary care practitioners work with each patient to manage the health of that individual. In the primary care setting, diagnosis and treatment focuses on the health of the entire patient and not a single disease. The review and evaluation of measures affecting primary care and dealing with chronic illness has long been a priority of NQF, with endorsement for such measures going back to NQF's inception. At present, there are 48 NQF-endorsed primary care and chronic illness measures. The background and description of NQF's most recent Primary Care and Chronic Illness Standing Committee meeting as well as previous meetings are available on NQF's project webpage. This Standing Committee oversees the measurement portfolio used to advance accountability and quality in the delivery of primary care services.

For this project, the Standing Committee evaluated four newly submitted measures and three measures undergoing maintenance review against NQF's standard evaluation criteria. The Standing Committee recommended six measures for endorsement did not reach consensus on the remaining measure.

The recommended measures are:

- **NQF #0058** Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB) (National Committee for Quality Assurance)
- **NQF #0069** Appropriate Treatment for Upper Respiratory Infection (National Committee for Quality Assurance (NCQA))
- **NQF #3166** Antibiotic Prophylaxis Among Children with Sickle Cell Anemia (University of Michigan)
- **NQF #3568** Person-Centered Primary Care Measure PRO-PM (American Board of Family Medicine/Virginia Commonwealth University)
- **NQF #3595** Hydroxyurea Use Among Children with Sickle Cell Anemia (University of Michigan)
- **NQF #3599** Pediatric Asthma Emergency Department Use (Albert Einstein College of Medicine/University of California San Francisco)

The Standing Committee did not reach consensus on the following measures:

- **NQF #3532** Discouraging the routine use of occupational and/or supervised physical therapy after carpal tunnel release (American Academy of Orthopaedic Surgeons)

Brief summaries of the measures currently under review are included in the body of the report; detailed summaries of the Standing Committee's discussion and ratings of the criteria for each measure are in Appendix A.

Introduction

Primary care providers serve as the most common contact point for many people within the U.S. healthcare system. As such, primary care has a central role in improving the health of people and populations. The incidence, impact, and cost of chronic disease is increasing in the U.S. For instance, although there is no exact count of the number of Americans living with sickle cell anemia, the Centers for Disease Control and Prevention (CDC) estimates that it affects around 100,000 people.[1] The annual economic burden of asthma has been estimated at be more than $80 billion annually for the more than 15.4 million people in the U.S. who are treated.[2]

Over the last 15 years, NQF has endorsed dozens of measures addressing improvements in primary care and chronic illnesses. These measures are used in many national- and state-level public reporting and accountability programs, as well as for quality improvement. With the formation of the Primary Care and Chronic Illness Standing Committee in 2017, NQF was able to consolidate and streamline the measure maintenance and endorsement process for a broad set of measures related to primary care and chronic illness. High quality performance measurement that captures the complexity of primary care and chronic illnesses is essential to improve diagnosis, treatment, and management of conditions. NQF reviews 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. Chronic illnesses are long-lasting or persistent health conditions or diseases that patients and providers must manage on an ongoing basis. For the fall 2020 cycle, the Standing Committee reviewed measures related to respiratory health, sickle cell anemia, overuse, and patient-reported outcomes.

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), which includes 48 measures: 41 process measures, two outcome measures, four intermediate outcome measures, 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	12	0	0	0
Endocrine	8	0	2	1
Infectious Disease	8	2	1	0
Musculoskeletal	7	0	0	0
Pulmonary	5	0	0	0
Cardiovascular: Coronary Artery Disease	1	0	1	0
Total	**41**	**2**	**4**	**1**

Other measures related to primary care and chronic illness have been assigned to other portfolios. These include functional status measures (Patient Experience and Function), opioid use measures (Patient Safety and Behavioral Health and Substance Abuse), diabetes-related admission rate measures (Prevention and Population Health), and a variety of condition- or population-specific measures (Cardiovascular, Pediatric, Geriatrics and Palliative Care, etc.).

Primary Care and Chronic Illness Measure Evaluation

On February 16, 2021, the Primary Care and Chronic Illness Standing Committee evaluated four new measures and three measures undergoing maintenance review against NQF's standard measure evaluation criteria.

Table 2. Primary Care and Chronic Illness Measure Evaluation Summary

	Maintenance	New	Total
Measures under review	3	4	7
Measures recommended for endorsement	3	3	6
Measures where consensus is not yet reached	0	1	1

Comments Received Prior to Standing Committee Evaluation

NQF solicits comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF accepts 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 23, 2020, and will close on April 30, 2021. As of January 26, 2021, two comments were submitted and shared with the Standing Committee prior to the measure evaluation meeting(s) (Appendix F).

Summary of Measure Evaluation

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

#0058 Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB) (National Committee for Quality Assurance): Recommended

Description: The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing event; **Measure Type**: Process; **Level of Analysis**: Health Plan; **Setting of Care**: Emergency Department and Services, Outpatient Services; **Data Source**: Claims

This health plan level measure was originally endorsed in 2009 and maintained endorsement in 2013. The Standing Committee indicated that there is strong evidence based on a 2014 clinical practice guideline for the diagnosis, management, and prevention of bronchiolitis from the American Academy of Pediatrics, a 2016 clinical practice guideline for Acute Bronchitis from the American Academy of Family Physicians, and a

2017 Cochrane Review for antibiotics for acute bronchitis in support of this measure. The Committee indicated that the performance gap was sufficient enough to warrant measurement. During the reliability discussion, the Standing Committee noted that the numerator of this measure has been updated since the last review and requested clarity on whether a patient could be dispensed antibiotics more than once per episode. The developer informed the Standing Committee that a second medication dispensing event would not factor into the same episode for this measure. The Standing Committee agreed the measure specifications were appropriate and the measure was reliable and valid. The measure also passed on feasibility and use and usability. The Standing Committee recommended the measure for continued endorsement. No public comments were received on this measure.

#0069 Appropriate Treatment for Upper Respiratory Infection (National Committee for Quality Assurance): Recommended

Description: The Appropriate Treatment for Upper Respiratory Infection (URI) measure assesses whether members 3 months of age and older with a diagnosis of upper respiratory infection were not dispensed an antibiotic prescription. The measure includes patients enrolled in commercial, Medicaid, and Medicare health plans; **Measure Type**: Process; **Level of Analysis**: Health Plan; **Setting of Care**: Emergency Department and Services, Outpatient Services; **Data Source**: Claims

This health plan level measure was originally endorsed in 2009 and maintained endorsement in 2013. The Standing Committee agreed that there is strong evidence in support of this measure based on two Cochrane systematic reviews and one clinical practice guideline. In the discussion of performance gap, the Standing Committee noted some fluctuation in year-over-year performance but noted that this was most likely due to changes in the measure specifications. Despite the fluctuation, the data still demonstrated a substantive range in performance between plans for both commercial and Medicaid Plans. While the Standing Committee expressed concerns that there was no disparities information provided, it agreed that a performance gap remains and passed the measure for this criterion. The Standing Committee also agreed the measure specifications were appropriate, and the measure was reliable and valid. The Standing Committee did not express any concerns about feasibility or use. The Standing Committee highlighted that the fluctuation in year-over-year performance data made it difficult to determine if performance was improving but agreed that the measure was usable. The Standing Committee recommended the measure for continued endorsement. No public comments were received on this measure.

#3166 Antibiotic Prophylaxis Among Children with Sickle Cell Anemia (QMETRIC – University of Michigan): Recommended

Description: The percentage of children ages 3 months to 5 years old with sickle cell anemia (SCA) who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year; **Measure Type**: Process; **Level of Analysis**: Health Plan; **Setting of Care**: Other; **Data Source**: Claims

This health plan level measure was originally endorsed in 2017. The developer attested that there had been no change in the evidence since its last endorsement, and the Standing Committee agreed to accept the evidence rating from the previous review and indicated that there is a performance gap sufficient to warrant measurement. The Standing Committee agreed the measure specifications were appropriate, and the measure was reliable and valid. The Standing Committee did not express any concerns about feasibility or usability. The Standing Committee noted that this measure will be used in the Michigan Medicaid program and suggested that

the developer considering developing a toolkit that can be used by health plan collaboratives to use the measure. The Standing Committee also requested clarity regarding the inclusion of this measure in national measure sets, such as the child core set and steps the developer was taking to promote use of this measure. The developer noted that this measure has been recommended for the child core measure set for four years but has not been included in the set yet, but the developer will continue to advocate for its inclusion. The Standing Committee recommended the measure for continued endorsement. No public comments were received on this measure.

#3568 Person-Centered Primary Care Measure PRO-PM (Virginia Commonwealth University, The Larry A. Green Center): Recommended

Description: The Person-Centered Primary Care Measure instrument is an 11-item patient reported assessment of primary care. Patients complete the PCPCM instrument once a year. These instruments are used to calculate a performance score for the participating entity. That entity could be an individual clinician or a practice. The 11 items of the PCPCM assess primary care aspects rarely captured yet thought responsible for primary care effects on population health, equity, quality, and sustainable expenditures. These include: accessibility, comprehensiveness, integration, coordination, relationship, advocacy, family and community context, goal-oriented care, and disease, illness, and prevention management; **Measure Type**: Outcome: PRO-PM; **Level of Analysis**: Clinician: Group/Practice, Clinician: Individual; **Setting of Care**: Outpatient Services; **Data Source**: Instrument-Based Data

This clinician-level measure was newly submitted for endorsement. The Standing Committee discussed the meaningfulness of the 11 items on the instrument, noting that the 11 items on the instrument had varying levels of meaningfulness to patients, and whether there were any healthcare actions providers could take to improve their performance. The developer highlighted that while the meaningfulness varied amongst the items; 99 percent of patients thought the overall instrument would be helpful and there were a number of actions providers could take to improve performance for each of the items. The Standing Committee agreed that there was evidence to support this measure. The Standing Committee agreed that the measure demonstrated variation in provider performance and appreciated that the developer tested in diverse settings and populations. This measure was reviewed by the NQF Scientific Methods Panel (SMP), which noted no major concerns about the reliability or validity of the measure The Standing Committee expressed concerns about the scaling method and the use of proxies in the measure but, ultimately, voted to uphold the SMP rating of moderate for reliability. The Standing Committee also noted some concerns about missing data, the ability of the measure to identify meaningful differences in performance, and the inclusion of social risk factors. After receiving clarity on these items, the Standing Committee upheld the SMP rating of moderate for validity. The Standing Committee highlighted some implementation and potential burden concerns around patient-reported measures but agreed that the measure was feasible and usable. The Standing Committee recommended the measure for NQF endorsement. Two public comments were received on this measure (Appendix F). One commenter indicated support for the measure, citing strong face validity, broad testing, and relevance to improvement activities. The other commenter did not express support for this measure citing lack of empirical analysis.

#3595 Hydroxyurea Use Among Children with Sickle Cell Anemia (University of Michigan): Recommended

Description: The percentage of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year; **Measure Type**: Process; **Level of Analysis**: Health Plan; **Setting of Care**: Other; **Data Source**: Claims

This health plan measure was newly submitted for endorsement. The Standing Committee agreed that there was evidence to support this measure based on cited Randomized Controlled Trials (RCT) and observational studies, a Clinical Practice Guideline recommendation from the National Heart, Lung, and Blood Institute, and a logic model submitted by the developer, which linked daily receipt of hydroxyurea to substantial reduction of the incidence of pain crises and acute chest syndrome among children with SCA. The Standing Committee also agreed that a performance gap existed. The Standing Committee questioned whether this measure was too limited with requirement of using hydroxyurea. The developer highlighted that hydroxyurea was the only medication currently available that reduced pain crises and was supported by evidence. The Standing Committee also expressed concerns about false positives resulting from auto refilling, lower medication adherence due to copays in certain populations, and the impact of patient refusal on the measure. The Standing Committee reflected that the rates were very similar among commercial and Medicaid patients as well as in different states. The Committee determined the measure was reliable and valid. The Standing Committee discussed the rationale behind not pairing diagnosis and pharmacy claims data and agreed that the measure was feasible. The Standing Committee noted this measure is planned for use in the Michigan Medicaid program and appeared to be usable. The Standing Committee recommended the measure for NQF endorsement. No public comments were received on this measure.

#3599 Pediatric Asthma Emergency Department Use (University of California San Francisco): Recommended

Description: This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years; **Measure Type**: Outcome; **Level of Analysis**: Health Plan; **Setting of Care**: Outpatient Services; **Data Source**: Claims

This health plan measure was newly submitted for endorsement. The developer provided empirical evidence that assessed the relationship between improved performance on specific asthma care processes, achieved through a state-wide quality improvement collaborative in Vermont, and decreased asthma emergency department (ED) visits. The Standing Committee agreed the evidence supported the measures and a performance gap existed. The Standing Committee expressed concerns over the use of 100 child-years instead of a standard format and the age range of three to 21 years. After hearing the developer's rationale and reviewing feedback from the SMP, the Standing Committee voted to uphold the SMP vote of moderate for reliability. During SMP review, the SMP noted concerns about the risk adjustment model and the inclusion of asthma as a secondary diagnosis. After discussing the rationale for selecting certain Healthcare Effectiveness Data and Information Set (HEDIS) measures to conduct measure score testing and the risk adjustment model, the Standing Committee determined the measure was valid. The Standing Committee expressed concerns over the limited use of the measure but agreed the measure met the feasibility and use and usability requirements as a new measure. The Standing Committee recommended the measure for NQF endorsement. No comments were received on this measure.

#3532 Discouraging the routine use of occupational and/or supervised physical therapy after carpal tunnel release. (American Academy of Orthopaedic Surgeons): Consensus Not Reached

Description: Percentage of patients 18+ with carpal tunnel syndrome who received surgical carpal tunnel release, and who should not routinely be prescribed postoperative physical and/or occupational therapy within 6 weeks after release; **Measure Type**: Process; **Level of Analysis**: Facility, Clinician: Individual; **Setting of Care**: Inpatient/Hospital, Outpatient Services; **Data Source**: Claims

This clinician-level measure was newly submitted for endorsement. The Standing Committee agreed the evidence supported that routine physical therapy beyond home exercise does not support better outcomes for patients, but noted that in some incidences, it might be beneficial. The Standing Committee expressed concern that performance data was only from Veterans Affairs (VA) facilities and would like to see broader data but agreed that enough variation existed to justify the measure. The Standing Committee reiterated concerns about capturing appropriate referrals and the unintended consequences of aiming for a 100 precent compliance target during the reliability, validity, and usability discussion. While the measure passed on all criterion, the Standing Committee was not able to come to consensus on overall suitability. The Standing Committee will discuss and revote on the measure during the post-comment web meeting on May 28, 2021. No comments were received on this measure.

Measures Withdrawn From Consideration

One measure, which was previously endorsed by NQF, has been withdrawn during the endorsement evaluation process. Endorsement for this measure will be removed.

Table 3. Measures Withdrawn From Consideration

Measure	Reason for withdrawal
NQF #3153: Continuity of Primary Care for Children with Medical Complexity	The developer is no longer able to support measure.

References

1 Centers for Disease Control and Prevention (CDC). *National Diabetes Statistics Report, 2017*. Atlanta, GA: Centers for Disease Control and Prevention; 2017. https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf. Last accessed July 2019.

2 American Diabetes Association. Economic costs of diabetes in the U.S. in 2017. *Diabetes Care*. 2018;41(5):917-928.

3 Birnbaum H, Pike C, Kaufman R, et al. Societal cost of rheumatoid arthritis patients in the US. *Current Medical Research and Opinion*. 2010;26(1):77-90.

4 Prevent Blindness. Glaucoma Costs Reach $5.8 Billion Annually. Prevent Blindness. https://www.preventblindness.org/glaucoma-costs-reach-5-point-8-billion-annually. Last accessed July 2019.

5 Razavi H, ElKhoury AC, Elbasha E, et al. Chronic hepatitis C virus (HCV) disease burden and cost in the United States. *Hepatology*. 2013;57(6):2164-2170.

6 Network for Excellence in Health Innovation (NEHI). *Improving Patient Medication Adherence: A $290 Billion Opportunity*. Boston, MA: NEHI; 2011. https://www.nehi.net/bendthecurve/sup/documents/Medication_Adherence_Brief.pdf. Last accessed July 2019.

7 CDC. Data & Statistics on Sickle Cell Disease | CDC. Centers for Disease Control and Prevention. https://www.cdc.gov/ncbddd/sicklecell/data.html. Published December 16, 2020. Last accessed March 2021.

Appendix A: Details of Measure Evaluation

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

Note: Vote totals may differ between measure criteria and between measures as Standing Committee members often have to join calls late or leave calls early. NQF ensures that quorum is maintained for all live voting. All voting outcomes are calculated using the number of Standing Committee members present for that vote as the denominator. Quorum for the Primary Care and Chronic Illness Standing Committee is 16 out of 23 members.

Measures Recommended

#0058 Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
Submission | Specifications
Description: The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing event. **Numerator Statement**: The number of dispensed antibiotic medications following an episode of acute bronchitis/bronchiolitis. The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the proportion of episodes during which an antibiotic was not dispensed (a higher rate is better). **Denominator Statement**: Episodes for members age 3 months and older with a diagnosis of acute bronchitis or bronchiolitis during the intake period. **Exclusions**: As listed in the denominator details, the final denominator population does not include episodes with a history of select comorbid conditions, history of antibiotic use, or presence of a competing diagnosis **Adjustment/Stratification**: No risk adjustment or risk stratification **Level of Analysis:** Health Plan **Setting of Care:** Emergency Department and Services, Outpatient Services **Type of Measure**: Process **Data Source**: Claims **Measure Steward**: National Committee for Quality Assurance
STANDING COMMITTEE MEETING February 16, 2021 **1. Importance to Measure and Report: <u>The measure meets the Importance criteria.</u>** (1a. Evidence, 1b. Performance Gap) 1a. **Total Votes-19; H-8; M-11; L-0; I-0**; 1b. Performance Gap: **Total Votes-18; H-10; M-8; L-0; I-0** <u>Rationale</u>: • The Standing Committee agreed the measure was supported by evidence based a 2014 clinical practice guideline for the diagnosis, management, and prevention of bronchiolitis from the American Academy of Pediatrics, a 2016 clinical practice guideline for Acute Bronchitis from the American Academy of Family Physicians, and a 2017 Cochrane Review for antibiotics for acute bronchitis and passed the measure on evidence. • In the discussion of both performance gap and disparities, the Standing Committee did not express any concerns. The Standing Committee passed this measure on performance gap.
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: **Total Votes-19; H-12; M-7; L-0; I-0**; 2b. Validity: **Total Votes-19; H-11; M-8; L-0; I-0** <u>Rationale</u>: • The Standing Committee noted that the numerator of this measure has been updated since the last review to broaden the age range and include the Medicare line of business as well changing the measure

#0058 Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
to an episode-based measure. Committee members requested clarity on whether a patient could be dispensed antibiotics more than once per episode. The developer informed the Standing Committee that a second medication dispensing event would not factor into the same episode for this measure. • Measure score level reliability testing was conducted using a beta-binominal model to assess the signal-to-noise ratio with 2019 HEDIS data. Using this method, the mean commercial reliability score was 0.963 and the mean Medicaid reliability score was 0.982. • The Standing Committee agreed the measure specifications were appropriate and reliability was within acceptable limits. • Validity testing was performed at the measure score level through construct validity testing. The developer conducted Pearson correlation for construct validity using HEDIS health plan data for two measures: o The developer predicted a positive correlation with *Appropriate Treatment for Upper Respiratory Infection* and found a correlation coefficient of 0.68 in both Medicaid and commercial plans (where $p < 0.001$). o The developer predicted a negative correlation with *Antibiotic Utilization* and found a correlation coefficient of -0.60 Medicaid plans and a correlation coefficient of -0.64 commercial plans (where $p < 0.001$). ▪ The Standing Committee agreed that the validity results demonstrated that the measure is valid and passed the measure on this criterion.
3. Feasibility: Total Votes-18; H-14; 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 Standing Committee noted that data for this measure are routinely generated in the care delivery process and elements are defined in electronic data.
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: **Total Votes-20; Pass-20; No Pass-0** *4b. Usability:* **Total Votes-20; H-10; M-9; L-1; I-0** Rationale: • The Standing Committee noted the measure is in use in several programs (NCQA Quality Compass; NCQA Health Plan Rating/Report Cards; NCQA Health Plan Accreditation; Integrated Healthcare Association; CDC Measuring Outpatient Antibiotic Prescribing; CDC Core Elements of Outpatient Antibiotic Stewardship) and had a mechanism to receive and provide feedback. • The Standing Committee noted that it was difficult to determine if performance had improved since the measure denominator age range had changed from 2018 to 2019. While improvement in performance becomes more important for a maintenance measure, the lack of data seemed appropriate due to the specification change. • The Standing Committee did not anticipate any untended consequences. • The Standing Committee passed the measure on use and usability.
5. Related and Competing Measures • This measure is related to the following measure: o #0069 Appropriate Treatment for Upper Respiratory Infection • A harmonization discussion will occur during the post-comment call.
6. Standing Committee Recommendation for Endorsement: **Total Votes-20; Y-20**; **N-0**
7. Public and Member Comment

#0058 Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
• No comments were received in advance of the meeting.
8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
9. Appeals

#0069 Appropriate Treatment for Upper Respiratory Infection
Submission | Specifications
Description: The Appropriate Treatment for Upper Respiratory Infection (URI) measure assesses whether members 3 months of age and older with a diagnosis of upper respiratory infection were not dispensed an antibiotic prescription. The measure includes patients enrolled in commercial, Medicaid, and Medicare health plans. **Numerator Statement**: The numerator of the measure includes the number of dispensed prescriptions for an antibiotic medication on or 3 days after the Episode Date. **Denominator Statement**: Episodes for members 3 months of age and older as of July 1 of the year prior to the measurement year who had an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter with a diagnosis of upper respiratory infection (URI) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year). **Exclusions**: Exclude visits that result in an inpatient stay. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date. **Adjustment/Stratification**: No risk adjustment or risk stratification **Level of Analysis:** Health Plan **Setting of Care:** Emergency Department and Services, Outpatient Services **Type of Measure**: Process **Data Source**: Claims **Measure Steward**: National Committee for Quality Assurance
STANDING COMMITTEE MEETING February 16, 2021 **1. Importance to Measure and Report: <u>The measure meets the Importance criteria.</u>** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: **Total Votes-20**; **H-12; M-8; L-0; I-0**; 1b. Performance Gap: **Total Votes-21; H-11; M-10; L-0; I-0** <u>Rationale</u>: • The Standing Committee agreed the measure was supported by evidence based on two Cochrane systematic reviews and one clinical practice guideline and passed the measure on evidence. • In the discussion of performance gap, the Standing Committee noted some fluctuation in year-over-year performance but noted that this was most likely due to changes in the measure specifications. The Standing Committee expressed no other concerns and passed the measure on performance gap.
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-17; M-3; L-0; I-0**; 2b. Validity: **H-15; M-6; L-0; I-0** <u>Rationale</u>:

#0069 Appropriate Treatment for Upper Respiratory Infection

- The Standing Committee noted that the numerator of this measure has been updated since the last review to broaden the age range and changed the measure to an episode-based measure.
- Measure score level reliability testing was conducted using a beta-binominal model to assess the signal-to-noise ratio with 2019 HEDIS data. Using this method, the mean commercial reliability score was 0.983, and the mean Medicaid reliability score was 0.92.
- The Standing Committee agreed the measure specifications were appropriate and reliability was within acceptable limits.
- Validity testing was performed at the measure score level through construct validity testing. The developer conducted Pearson correlation for construct validity using HEDIS health plan data for two measures:
    - The developer predicted a positive correlation with *Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis* and found a correlation coefficient of 0.68 in both Medicaid and commercial plans (where $p < 0.001$).
    - The developer predicted a positive Correlation with *Use of Imaging Studies for Low Back Pain* and found a correlation coefficient of 0.41 Medicaid plans and a correlation coefficient of 0.622 commercial plans (where $p < 0.001$).
    - The developer predicted a negative correlation with *Antibiotic Utilization* and found a correlation coefficient of -0.73 Medicaid plans and a correlation coefficient of -0.74 commercial plans (where $p < 0.001$).
- The Standing Committee agreed that the validity results demonstrated that the measure is valid and passed the measure on this criterion.

3. Feasibility: Total Votes-21; H-20; M-1; 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 Standing Committee noted that data for this measure are routinely generated in the care delivery process and elements are defined in electronic data.

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: **Total Votes-21; Pass-21; No Pass-0** *4b. Usability:* **Total Votes-19; H-6; M-12; L-1; I-0**

Rationale:

- The Standing Committee noted the measure is in use in several programs (NCQA Health Plan Rating/Report Cards; NCQA State of Health Care Quality; Qualified Health Plan (QHP) Quality Rating System (QRS); CDC Measuring Outpatient Antibiotic Prescribing; Quality Payment Program; NCQA Health Plan Accreditation; NCQA Quality Compass) and had a mechanism to receive and provide feedback.
- The Standing Committee noted that it was difficult to determine if performance had improved since the measure denominator age range had changed from 2018 to 2019. While improvement in performance becomes more important for a maintenance measure, the lack of data seemed appropriate due to the specification change.
- The Standing Committee did not anticipate any untended consequences.
- The Standing Committee passed the measure on use and usability.

5. Related and Competing Measures

- This measure is related to the following measure:
    - #0058 Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
- A harmonization discussion will occur during the post-comment call.

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

#0069 Appropriate Treatment for Upper Respiratory Infection
7. Public and Member Comment • No comments were received in advance of the meeting.
8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
9. Appeals

#3166 Antibiotic Prophylaxis Among Children with Sickle Cell Anemia
Submission | Specifications
Description: The percentage of children ages 3 months to 5 years old with sickle cell anemia (SCA) who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year. **Numerator Statement**: The numerator is the number of children ages 3 months to 5 years old with SCA who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year. **Denominator Statement**: The denominator is the number of children ages 3 months to 5 years with sickle cell anemia (SCA) within the measurement year. **Exclusions**: There are no denominator exclusions. **Adjustment/Stratification**: No risk adjustment or risk stratification **Level of Analysis:** Health Plan **Setting of Care:** Other **Type of Measure**: Process **Data Source**: Claims **Measure Steward**: QMETRIC - University of Michigan
STANDING COMMITTEE MEETING February 16, 2021 **1. Importance to Measure and Report: The measure meets the Importance criteria.** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: **Unanimous decision by the Standing Committee to carry over vote from previous review;** 1b. Performance Gap: **Total Votes-17; H-12; M-5; L-0; I-0** Rationale: • The developer noted that there were no changes to evidence since the previous review. • During the previous review in 2017, the measure developer provided two key sources of evidence. The first was a systematic evidence review and clinical practice guidelines published by the *National Heart, Lung, and Blood Institute: Evidence-Based Management of Sickle Cell Disease* in 2014. • The Standing Committee unanimously decided to carry over the evidence vote from the previous review. • The Standing Committee considered performance gap data, including measure scores as specified across six states from 2005-2010, ranging from 15.6 percent (Florida) to 27.9 percent (Texas). • The developer cited a study assessing compliance with penicillin prophylaxis for sickle cell disease showing that adherence was significantly greater in patients with private versus public insurance (17/28 [61 percent] vs. 33/90 [37 percent], respectively). Variation within insurance types is not captured. • The developer noted that disparities by insurance or socioeconomic status were not identified in the Medicaid data but highlighted that approximately 90 percent of children with sickle cell anemia have been enrolled in Medicaid at some point in time. • The Standing Committee did not raise any concerns and passed the measure on performance gap.
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: **Total Votes-20; M-20; L-0; I-0**; 2b. Validity: **Total Votes-19; H-13; M-6; L-0; I-0** Rationale:

#3166 Antibiotic Prophylaxis Among Children with Sickle Cell Anemia
• A separate method of reliability testing was not provided by the developer since empirical validity testing was conducted with Medicaid Analytic eXtract (MAX) data for six state Medicaid programs provided by the Centers for Medicare & Medicaid Services (CMS) (2005-2012). • Based on the results, the Standing Committee agreed the measure was reliable. • Regarding validity, the developer conducted data element testing using both ICD-9-CM and ICD-10-CM diagnosis codes. • Results from both ICD-9-CM and ICD-10-CM diagnosis codes indicate that children with sickle cell anemia can be identified with a high level of accuracy in administrative data. • Face validity convened by the Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (QMETRIC) concluded that this measure has a very high degree of face validity through a detailed review of concepts and metrics considered to be essential to effective Sickle Cell Disease (SCD) management and treatment. • The Standing Committee did not have any concerns about the validity of this measure.
3. Feasibility: Total Votes-19; H-10; M-9; 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 Standing Committee noted that data for this measure are routinely generated in the care delivery process and elements are defined in electronic data.
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: **Total Votes-19; Pass-19; No Pass-0** *4b. Usability:* **Total Votes-19; H-4; M-14; L-1; I-0** Rationale: • The Standing Committee noted that this measure will be used in the Michigan Medicaid program. • The Standing Committee suggested that in the future, the developer could include a toolkit that can be used by health plan collaboratives to use the measure. • The Standing Committee requested clarity regarding the inclusion of this measure in national measure sets, such as the child core set, and regarding what it is doing to try to promote use of this measure to show improvement in other programs. • The developer noted that this measure has been recommended for the child core measure set for four years but has not been included in the set yet, but the developer will continue to advocate for its inclusion.
5. Related and Competing Measures • This measure is related to the following measure: o #2797 Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia • A harmonization discussion will occur during the post-comment call.
6. Standing Committee Recommendation for Endorsement: **Total Votes-19; Y-19**; **N-0**
7. Public and Member Comment • No comments were received in advance of the meeting.
8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
9. Appeals

#3568 Person-Centered Primary Care Measure PRO-PM

Submission | Specifications

Description: The Person-Centered Primary Care Measure instrument is an 11-item patient reported assessment of primary care. Patients complete the PCPCM instrument once a year. These instruments are used to calculate a performance score for the participating entity. That entity could be an individual clinician or a practice. The 11 items of the PCPCM assess primary care aspects rarely captured yet thought responsible for primary care effects on population health, equity, quality, and sustainable expenditures. These include: accessibility, comprehensiveness, integration, coordination, relationship, advocacy, family and community context, goal-oriented care, and disease, illness, and prevention management.

The target population of the PCPCM Performance Measure (PRO-PM) is all patients, active in a practice.

Patients are defined as active if they have had a documented interaction with the practice within 12 months of the patient's birth month. In the PCPCM PRO, patients are presented with 11 structured items. After each item, patients are asked to state their level of endorsement. The same scale is used for all 11 items: Definitely, Mostly, Somewhat, Not At All. Active patients receive the PCPCM PRO through mail, email, or patient portal, during the month of their birth (e.g., patients born in January will receive a request to complete the PCPCM PRO in January).

The PCPCM PRO-PM is calculated as a continuous variable on a 0 to 100 point scale, in which a higher value equates to better quality.

The time frame used to evaluate quality with the PCPCM PRO-PM is one year.

Receiving patient responses in the month of their birth allows a practice to receive monthly feedback in between quality reporting periods.

Scoring for the PCPCM PRO-PM is completed through a simple 4 step process using the PCPCM PRO to assess the broad scope of primary care from a patient's perspective.

Step One: Exclude incomplete patient responses.

Any PCPCM PRO instrument for which a patient failed to answer at least 8 of the 11 items is excluded from calculations.

Step Two: Calculate PCPCM PRO item specific mean scores.

Patients choose one of four response options for each item in the PCPCM PRO instrument. In scoring the PCPCM PRO, the first step requires determining an item mean score for each of the 11 items. Since the instrument scale is word based – Definitely, Mostly, Somewhat, Not At All – each response option must be assigned a value. Values are assigned as follows: Definitely = 4, Mostly = 3, Somewhat = 2, Not At All = 1.

Calculating the mean score for each item then requires looking across all PCPCM PRO instruments received for the entity being assessed during the analysis period. For example, if the entity is a clinician, then all completed (see Step One) PCPCM PRO instruments collected for that clinician are included in the calculation. If the entity is a practice, then all PCPCM PRO instruments collected for that practice are included in the analysis.

An entity's score for each PCPCM PRO item is calculated as a mean, i.e., the summary of all responses across PCPCM PRO instruments received for the entity, divided by the number of instruments received. This process leads to 11 item specific PCPCM PRO scores. Means should be reported to two decimal points.

Step Three: Calculate the PCPCM PRO total score.

The PCPCM PRO total score for the entity is calculated by determining the mean of the 11 scored PRO items. This is done by adding the mean scores of all 11 PRO items and then dividing by 11. PRO means should be reported to two decimal points.

Step Four: Converting PCPCM PRO total scores and to PCPCM PRO-PM performance score.

In order to use the PCPCM PRO as a performance measure for reporting, the 4 point PCPCM PRO scale must be converted to a 0-100 performance scale. To do this, the PCPCM PRO total score for an entity, as calculated in Step Three, is divided by 4 and then multiplied by 100.

Thus, a PCPCM PRO total score of 2.78 (based on a scale of 1-4) becomes a PCPCM PRO-PM performance score of 69.5 (on a scale of 0-100).

#3568 Person-Centered Primary Care Measure PRO-PM
The monthly data collection allows for assessed entities to receive regular feedback during the course of the year. However, PCPCM PRO-PM performance scores are calculated based on quality reporting program requirements or a 12-month time frame. There is no stratification required with the PCPCM. **Numerator Statement**: The PCPCM PRO-PM allows all patients to report their assessment of the quality of primary care received through responses to PCPCM PRO instrument. The target population is all active patients in a practice during the performance reporting period. A patient is defined as active if the patient has had a documented interaction with the practice within 12 months of the patient's birth month. The PCPCM PRO is the same for all patients, regardless of age. Because the PCPCM PRO applies to all patients and is not particular to a clinical encounter, it is administered once a year to each patient during their birth month. The target population is defined the same, regardless of unit of analysis (clinician or practice). The numerator is the sum of all PCPCM PRO scores for active patients. **Denominator Statement**: The target population for the denominator is the same as for the numerator. The denominator is the total number of complete PCPCM PRO instruments received in the reporting period. A completed PRO instrument is defined as a PRO instrument for which the patient has responded to at least 8 of 11 items. **Exclusions**: None. **Adjustment/Stratification**: No risk adjustment or risk stratification **Level of Analysis:** Clinician : Group/Practice, Clinician : Individual **Setting of Care:** Outpatient Services **Type of Measure**: Outcome: PRO-PM **Data Source**: Instrument-Based Data **Measure Steward**: American Board of Family Medicine
STANDING COMMITTEE MEETING February 16, 2021 **1. Importance to Measure and Report: <u>The measure meets the Importance criteria.</u>** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: **Total Votes-21; Pass-21; No Pass-0**; 1b. Performance Gap: **Total Votes-20; H-4; M-16; L-0; I-0** <u>Rationale</u>: • The Standing Committee noted that the 11 items on the instrument had varying levels of meaningfulness to patients, with some of the items having only 60% agreement among patients that they are meaningful. The developer responded that 99% of patients thought the overall instrument would be helpful for providers to improve their care. • The Standing Committee also questioned whether there were any healthcare actions providers could take to improve their performance. The developer provided a number of actions to improve performance for each of the items. • The Standing Committee agreed that there was evidence to support this measure. • The Standing Committee noted that the submission exhibited variation in provider performance. • The Standing Committee highlighted that development of and testing of the measure included a diverse population and that performance did not appear to differ across urban and rural settings and among minority patients. • The Standing Committee passed the measure on evidence and performance gap.
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 Does the Standing Committee accept the Scientific Methods Panel's Moderate rating for Reliability? **Total Votes-20; Yes-19; No-1** Does the Standing Committee accept the Scientific Methods Panel's Moderate rating for Validity?

#3568 Person-Centered Primary Care Measure PRO-PM

Total Votes-20; Yes-19; No-1

- This measure was deemed as complex and was evaluated by the NQF Scientific Methods Panel.
- The NQF Scientific Methods Panel's ratings for Reliability: **H-2; M-3; L-1; I-2**
- The NQF Scientific Methods Panel's ratings for Validity: **H-0; M-6; L-0; I-2**
- The Standing Committee voted to accept the NQF Scientific Methods Panel's Moderate rating of reliability and validity.

Rationale:

- The developer noted concerns associated with common method bias—a form of bias that happens when variations in responses are caused by the instrument rather than the actual predispositions of the respondents that the instrument attempts to uncover. The developer suggested that the measure hangs on a single factor, which has been noted to minimize the risks associated with common method bias.
- Data element level reliability testing was conducted using exploratory factor analysis, Rasch item fit statistics, and Cronbach's alpha testing, and score level reliability testing was conducted using intra-class correlation coefficient (ICC) analysis between providers.
- The Standing Committee expressed concerns about scaling being done on a continuous rather than an ordinal basis and the use of proxies in the measure, especially with the use of caregivers or guardians of pediatric patients, to which the developer noted that the results were similar between proxies.
- The Standing Committee voted to uphold the NQF SMP's rating of moderate for reliability.
- The Standing Committee expressed some concerns related to missing data, noting that incomplete surveys with fewer than eight of the items completed are discarded but were not noted to be an exclusion. The developer noted that incomplete instruments did not necessarily justify an exclusion and that the missingness may be systematic. Additionally, the developer noted that 99.8% of the surveys were completed, implying that missingness was not a major problem.
- The Standing Committee also noted that the SMP had expressed concerns about the use of a F-test of homogeneity for determining meaningful differences between providers.
- The Standing Committee questioned whether the developer would be considering social risk factors in the future, to which the developer responded that the social deprivation index is currently being evaluated for use within the measure.
- After receiving clarity on these items, the Standing Committee upheld the NQF SMP's rating of moderate for validity.

3. Feasibility: Total Votes-20; H-2; M-18; 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:

- Data elements used are collected directly from patients. Patients are invited to fill out the PCPCM PRO instrument electronically. In almost all cases, patients are sent an email with an embedded link either to an electronic survey platform, or to an electronic PRO module as part of the PRIME registry. The most likely format will be electronic sources; however, paper-based instruments can be used.
- The Standing Committee highlighted some general implementation issues around patient-reported measures, such as patient comfort with collection mechanisms and survey fatigue, but agreed the measure was feasible.

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: **Total Votes-20; Pass-20; No Pass-0** *4b. Usability:* **Total Votes-21; H-2; M-19; L-0; I-0**

Rationale:

#3568 Person-Centered Primary Care Measure PRO-PM
• The Standing Committee noted that the measure is part of the PRIME Qualified Clinical Data Registry (QCDR) and was approved by the Measure Application Partnership with conditional support for rulemaking into the Merit-based Incentive Payment System. • In the implementation of the PCPCM PRO-PM to date, performance scores and feedback are provided electronically to practices and clinicians. PCPCM PRO-PM scores are calculated at the point of data collection and then shared with the measured entity. • The measure has not been implemented and therefore does not have year-over-year performance data for review. • The Standing Committee passed the measure on use and usability.
5. Related and Competing Measures • No related or competing measures were noted.
6. Standing Committee Recommendation for Endorsement: **Total Votes-21; Y-21**; **N-0**
7. Public and Member Comment • Two public comments were received for this measure, which can be found in Appendix F.
8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
9. Appeals

#3595 Hydroxyurea Use Among Children with Sickle Cell Anemia
Submission | Specifications
Description: The percentage of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year. **Numerator Statement**: The number of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year. **Denominator Statement**: The number of children ages 1 to 18 years with sickle cell anemia (SCA) within the measurement year. **Exclusions**: NA **Adjustment/Stratification**: No risk adjustment or risk stratification **Level of Analysis:** Health Plan **Setting of Care:** Other **Type of Measure**: Process **Data Source**: Claims **Measure Steward**: University of Michigan
STANDING COMMITTEE MEETING February 16, 2021 **1. Importance to Measure and Report: <u>The measure meets the Importance criteria.</u>** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: **Total Votes-19; H-13; M-6; L-0; I-0**; 1b. Performance Gap: **Total Votes-20; H-15; M-5; L-0; I-0** <u>Rationale</u>: • The Standing Committee considered the cited RCT and observational studies, Clinical Practice Guideline recommendation from the National Heart, Lung, and Blood Institute, and a logic model submitted by the developer, which linked daily receipt of hydroxyurea to substantial reduction of the incidence of pain crises and acute chest syndrome among children with SCA.

#3595 Hydroxyurea Use Among Children with Sickle Cell Anemia
• The Standing Committee expressed concern on the measure disincentivizing the use of newer medications that might be more expensive but have fewer side effects. The developer noted that two newer medications on the market did not have sufficient evidence to support its use over hydroxyurea. • The Standing Committee considered the performance gap data, which showed the rates of hydroxyurea dispensed for at least 300 days within the measurement year for children with sickle cell anemia in the Michigan Medicaid program (2010-2018). • Regarding disparities, the developer noted that due to the disproportionate burden among minorities, sickle cell anemia is often considered to be an indicator of a health disparity. • The Standing Committee passed the measure on evidence and performance gap.
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: **Total Votes-20; M-20; L-0; I-0**; 2b. Validity: **Total Votes-20; H-19; M-1; L-0; I-0** <u>Rationale</u>: • A separate method of reliability testing was not provided by the developer since empirical validity testing was conducted. • The Standing Committee noted that data element validity was used to support reliability and had no concerns. • For validity, the developer conducted data element testing using both ICD-9-CM and ICD-10-CM diagnosis codes. • Results from both ICD-9-CM and ICD-10-CM diagnosis codes indicate that children with sickle cell anemia can be identified with a high level of accuracy in administrative data. • The Standing Committee raised a concern about patients on auto refill receiving the medication but not taking them. The developer acknowledged that auto refill could falsely inflate the numerator; however, inflation is unlikely to influence the measure. The developer mentioned that they have considered developing prescription measures; however, they are less likely to be implemented in Medicaid programs or individual health plans. • The Standing Committee questioned the developer on how contraindications are handled by this measure. The developer noted that although rare, patient refusal is an issue and depended largely on the patient-provider relationship. • Responding to the Standing Committee's question about the generalizability of the measure, the developer noted that similarly low rates were observed in New York Medicaid. • Based on the testing results and the developer's responses, the Committee agreed the measure was valid.
3. Feasibility: Total Votes-20; H-13; M-7; 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>: • The Standing Committee noted that all data elements required for the measure are routinely generated and used during care delivery, and all data elements used in the measure are in defined fields in electronic claims. • The Standing Committee questioned whether diagnosis and pharmacy claims data were paired. The developer stated that they identified patients by diagnosis of sickle cell anemia and looked at their prescriptions over time, rather than looking at pharmacy claims due to missing diagnosis codes in the pharmacy claims data.
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: **Total Votes-20; Pass-20; No Pass-0** *4b. Usability:* **Total Votes-20; H-11; M-9; L-0; I-0** <u>Rationale</u>:

#3595 Hydroxyurea Use Among Children with Sickle Cell Anemia
• The Standing Committee noted that there was high usability in the Michigan Medicaid program and asked the developer if any other Medicaid programs expressed interested in the measure. • The developer stated that the measure was being piloted in Michigan but was delayed due to COVID-19. • The Committee noted a large opportunity for improvement during the use discussion and had no concerns.
5. Related and Competing Measures • This measure is related to the following measures: o #2797 Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia o #3166 Antibiotic Prophylaxis Among Children with Sickle Cell Anemia • A harmonization discussion will occur during the post-comment call.
6. Standing Committee Recommendation for Endorsement: **Total Votes-19; Y-19**; **N-0**
7. Public and Member Comment • No comments were received in advance of the meeting.
8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
9. Appeals

#3599 Pediatric Asthma Emergency Department Use
Submission | Specifications
Description: This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years. The rate construction of the measure makes it a more actionable measure compared to a more traditional quality measure percentage construct (e.g., percentage of patients with at least one asthma-related ED visit). The rate construction means that a plan can improve on performance either through improvement efforts targeting all patients with asthma, or through efforts targeted at high-utilizers, since all visits are counted in the numerator. For a percentage measure, efforts to address high-utilizers will be less influential on performance and potentially have no effect at all even if a high utilizer goes from 8 visits a year to 1, since in order to improve performance, a high-utilizer has to get down to zero visits. This measure was developed under the Pediatric Quality Measurement Program, funded by the Centers for Medicare and Medicaid Services and administered by the Agency for Healthcare Research and Quality. https://www.ahrq.gov/pqmp/about/what-is-pqmp.html **Numerator Statement**: Number of asthma-related ED visits **Denominator Statement**: 100 Child Years for children with identifiable asthma **Exclusions**: Children with specified concurrent or pre-existing diagnosis and children who have not been consecutively enrolled in the reporting plan for at least three months, including the month being assessed. **Adjustment/Stratification**: Statistical risk model **Level of Analysis:** Health Plan **Setting of Care:** Outpatient Services **Type of Measure**: Outcome **Data Source**: Claims **Measure Steward**: Albert Einstein College of Medicine
STANDING COMMITTEE MEETING February 16, 2021 **1. Importance to Measure and Report: <u>The measure meets the Importance criteria.</u>** (1a. Evidence, 1b. Performance Gap)

#3599 Pediatric Asthma Emergency Department Use

1a. Evidence: **Total Votes-19; Pass-15; No Pass-4;** 1b. Performance Gap: **Total Votes-18; H-5; M-12; L-1; I-0**

Rationale:

- The Standing Committee noted that the developer assessed evidence by measuring the relationship between improved performance on specific asthma care processes, achieved through a state-wide quality improvement collaborative in Vermont, and decreased asthma ED visits.
- The Standing Committee asked for clarification regarding the mention of the Vermont Collaborative. The developer noted that the evidence was based on a controlled trial, not a randomized control trial.
- The developer provided data for two states: California and Massachusetts. The Standing Committee noted that the results suggest relatively high mean rate of ED use among children with identifiable asthma and moderate variability in plan performance both between states as well as between plans within states. Presented data also showed some disparities when considering race and ethnicity.
- The Standing Committee agreed the evidence supported the measures and a performance gap existed.

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

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

Does the Standing Committee accept the Scientific Methods Panel's Moderate rating for Reliability?

Total Votes-19; Yes-19; No-0

Validity: **Total Votes-19; H-2; M-12; L-5; I-0**

- This measure was deemed as complex and was evaluated by the NQF Scientific Methods Panel.
- The NQF Scientific Methods Panel's ratings for Reliability: **H-2; M-5; L-0; I-1**
- The NQF Scientific Methods Panel's ratings for Validity: **H-0; M-3; L-2; I-1**
- The Standing Committee voted to accept the NQF Scientific Methods Panel's Moderate rating of reliability and voted on validity.

Rationale:

- The Standing Committee raised concerns over the construction of the measure to include 100 child-years instead of a standard format. The developer indicated that rationale for the measure construction was because the numerator captures more than if a patient has at least one pediatric asthma visit during the measurement year.
- The Standing Committee also raised concerns about the age range of 3 to 21 years. The developer noted that there are different triggers for asthma exacerbations based on age.
- Reliability testing was conducted at the score level using a split-sample analysis and ICC calculations for score level reliability testing in health plans in Massachusetts and California.
- After hearing the developer's rationale and reviewing the SMP feedback, the Standing Committee voted to uphold the SMP vote of moderate for reliability.
- Since the SMP did not reach consensus on validity for this measure, the Standing Committee discussed and voted on validity for this measure.
- Score level validity testing was conducted through construct validity by using predicted performance for the plan-level random effect in the risk adjustment models and then transformed that into a Z-score, and predictive validity as a secondary analysis at the clinic level in Vermont, assessing a quality innovation (QI) learning collaborative reduction in ED utilization through a difference in difference analysis.
- The SMP members raised concerns about the risk adjustment model noting concerns about the results and factors that were included.
- The SMP also noted that secondary asthma presentation was identified as a potential confounder for the measure. The developer noted that inclusion of the second diagnosis of asthma is important to the measure in order to capture all relevant incidences of asthma but did not have concerns about missing the diagnosis if listed lower than secondary since research has shown that pediatric patients do not tend to have a lot of diagnoses, and so, asthma appearing lower down in a long list of diagnoses is unlikely.
- The Standing Committee noted that there was overall good validity but asked the developer to provide rationale for the HEDIS measures that were chosen for validity testing. The developer indicated that the measure was compared against the HEDIS measure based on the recommendation of the SMP during the

#3599 Pediatric Asthma Emergency Department Use
previous submission. The developer explained that HEDIS measures that were chosen that were related and were expected to be correlated with this measure, and then HEDIS measures that were not related were expected to not have a correlation. The developer noted a sensitivity analysis was performed on the second diagnosis looking at the relationship between mental health and asthma medication to make sure the findings still held. • The Standing Committee passed the measure on validity.
3. Feasibility: Total Votes-18; H-13; M-5; 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 Standing Committee noted that all data elements required for the measure are routinely generated and used during care delivery, and all data elements used in the measure are in defined fields in electronic claims.
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: **Total Votes-20; Pass-18; No Pass-2** *4b. Usability:* **Total Votes-18; H-1; M-17; L-0; I-0** Rationale: • The measure is not currently in use but is planned for use in the Agency for Healthcare Research and Quality (AHRQ) Pediatric Quality Measurement Program. • The Standing Committee expressed concerns over the limited use of the measure and that the measure was only tested in two states. It also raised concerns that the states where the measures were tested lacked racial diversity. The developer noted that social determinants of health were considered during measure development through the risk adjustment model and that the populations in the states used to test the measure are diverse. • The Standing Committee noted that seeing data for multiple years may alleviate concerns around usability and did not foresee any unintended consequences of implementing the measure. • The Standing Committee passed the measure on use and usability.
5. Related and Competing Measures • This measure is related to the following measures: o #0728 Asthma Admission Rate (PDI 14) o #1381 Asthma Emergency Department Visits • A harmonization discussion will occur during the post-comment call.
6. Standing Committee Recommendation for Endorsement: **Total Votes-19; Y-18**; **N-1**
7. Public and Member Comment • No comments were received in advance of the meeting.
8. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
9. Appeals

Measures Where Consensus Is Not Yet Reached

#3532 Discouraging the routine use of occupational and/or supervised physical therapy after carpal tunnel release.
Submission | Specifications

#3532 Discouraging the routine use of occupational and/or supervised physical therapy after carpal tunnel release.

Description: Percentage of patients 18+ with carpal tunnel syndrome who received surgical carpal tunnel release, and who should not routinely be prescribed postoperative physical and/or occupational therapy within 6 weeks after release.

Numerator Statement: Number of patients with carpal tunnel syndrome, who underwent carpal tunnel release, and who did not receive postoperative hand, physical therapy (low, moderate, or high complexity) and/or occupational therapy (low, moderate, or high complexity) within 6 weeks (42 days) of the carpal tunnel release.

Denominator Statement: Patients 18 years or older, with a diagnosis of carpal tunnel syndrome, undergoing carpal tunnel syndrome release.

Exclusions: N/A

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility, Clinician : Individual

Setting of Care: Inpatient/Hospital, Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: American Academy of Orthopaedic Surgeons

STANDING COMMITTEE MEETING February 16, 2021

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

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

1a. Evidence: **Total Votes-21; M-20; L-1; I-0**; 1b. Performance Gap: **Total Votes-21; H-3; M-12; L-5; I-1**

<u>Rationale</u>:

- The Standing Committee agreed the evidence supported that routine physical therapy beyond home exercise does not support better outcomes for patients but noted that the evidence did not necessarily indicate that the physical therapy would be harmful. There are some patients where prescribed physical therapy is appropriate. The Standing Committee requested clarity on the target for this measure and if it allowed a buffer for appropriate referrals. The developer suggested that while there is not a precise target, results are expected to be close to 100 percent.
- The Standing Committee expressed concern that performance data was only from VA facilities, noting that the VA is a closed system which is less likely to exhibit wide variation than an open system, and would like to see broader data but agreed that enough variation existed to justify the measure.
- The Standing Committee passed the measure on evidence and performance gap.

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: **Total Votes-21; H-3; M-16; L-2; I-0**; 2b. Validity: **Total Votes-20; M-13; L-6; I-1**

<u>Rationale</u>:

- Reliability testing was conducted at the measure score level using a signal-to-noise analysis.
- The Standing Committee found the submission to contain acceptable testing and results; although, one Standing Committee member voiced the opinion that the specifications are imprecise because they do not include a method for capturing appropriate referral to physical and occupational therapy.
- Validity testing was conducted at the measure score level using face validity, which the Standing Committee found acceptable.
- When considering exclusions around appropriate referral, the Standing Committee highlighted the difficulty in describing all of the appropriate referrals that would potentially be exclusions for the measure. One Standing Committee member expressed concern that the Standing Committee is overthinking the concerns associated with appropriate referral, noting that surgeons who are following good practice routinely avoid the use of physical therapy.
- The Standing Committee ultimately passed the measure on reliability and validity, with validity passing with a narrow margin.

#3532 Discouraging the routine use of occupational and/or supervised physical therapy after carpal tunnel release.
3. Feasibility: Total Votes-20; H-13; M-7; 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 Standing Committee noted that all data elements required for the measure are coded by someone other than the person obtaining original information and all data elements used in the measure are in defined fields in electronic claims.
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: **Total Votes-21; Pass-19; No Pass-2** *4b. Usability:* **Total Votes-21; H-0; M-13; L-7; I-1** Rationale: • While the measure is not currently in use, the developer plans to submit this measure to the Centers for Medicare and Medicaid services for consideration for inclusion in Merit-Based Incentive Payment System. • The Standing Committee reiterated concerns about unintended consequences due to appropriate referrals not being accounted for in the measure. • The Standing Committee passed the measure on use and usability, with usability passing with a narrow margin.
5. Related and Competing Measures • No related or competing measures were noted.
6. Standing Committee Recommendation for Endorsement: **Total Votes-20; Y-10**; **N-10** Rationale • The Standing Committee reiterated concerns about capturing appropriate referrals and the unintended consequences of aiming for a 100% compliance target. While the measure passed on all criterion, the Standing Committee was not able to come to consensus on overall suitability. The Standing Committee will discuss and revote on the measure during the post-comment call on May 28, 2021.
7. Public and Member Comment • No comments were received in advance of the meeting.
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

NQF #	Title	Federal Programs: Implemented or Finalized as of March 8, 2021
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	None
0053	Osteoporosis Management in Women Who Had a Fracture	MIPS Program (Implemented), Medicare Part C Star Rating (Implemented)
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), MIPS Program (Implemented), Marketplace Quality Rating System (QRS) (Implemented)
0056	Comprehensive Diabetes Care: Foot Exam	None
0057	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing	None
0058	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis (AAB)	MIPS Program (Implemented), Marketplace QRS (Implemented)
0059	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)	Medicare Part C Star Rating (Implemented), Medicaid (Implemented), Medicare Shared Savings Program (Implemented), MIPS Program (Implemented)
0061	Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)	None
0062	Comprehensive Diabetes Care: Medical Attention for Nephropathy	Medicare Part C Star Rating (Implemented), MIPS Program (Implemented), Marketplace QRS (Implemented)
0086	Primary Open-Angle Glaucoma (POAG): Optic Nerve Evaluation	None
0087	Age-Related Macular Degeneration: Dilated Macular Examination	MIPS Program (Finalized)
0088	Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy	None

NQF #	Title	Federal Programs: Implemented or Finalized as of March 8, 2021
0089	Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care	MIPS Program (Implemented)
0091	COPD: Spirometry Evaluation	None
0405	HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) Prophylaxis	None
0409	HIV/AIDS: Sexually Transmitted Diseases – Screening for Chlamydia, Gonorrhea, and Syphilis	MIPS Program (Implemented)
0416	Diabetic Foot & Ankle Care, Ulcer Prevention – Evaluation of Footwear	MIPS Program (Implemented)
0417	Diabetic Foot & Ankle Care, Peripheral Neuropathy – Neurological Evaluation	MIPS Program (Implemented)
0541	Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category	Marketplace QRS (Implemented)
0563	Primary Open-Angle Glaucoma: Reduction of Intraocular Pressure by 15% or Documentation of a Plan of Care	None
0566	Age-Related Macular Degeneration (AMD): Counseling on Antioxidant Supplement	None
0575	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)	Marketplace QRS (Implemented)
0577	Use of Spirometry Testing in the Assessment and Diagnosis of COPD	None
0653	Acute Otitis Externa: Topical Therapy	None
0654	Acute Otitis Externa: Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use	MIPS Program (Implemented)
0655	Otitis Media with Effusion: Antihistamines or decongestants – Avoidance of inappropriate use	None
0657	Otitis Media with Effusion: Systemic antimicrobials – Avoidance of inappropriate use	MIPS Program (Implemented)
0729	Optimal Diabetes Care	None
1800	Asthma Medication Ratio	Medicaid (Implemented), Marketplace QRS (Implemented)
2079	HIV medical visit frequency	MIPS Program (Implemented)

NQF #	Title	Federal Programs: Implemented or Finalized as of March 8, 2021
2080	Gap in HIV medical visits	None
2082	HIV viral load suppression	Medicaid (Implemented), MIPS Program (Implemented)
2083	Prescription of HIV Antiretroviral Therapy	None
2522e	Rheumatoid Arthritis: Tuberculosis Screening	None
2523e	Rheumatoid Arthritis: Assessment of Disease Activity	None
2524e	Rheumatoid Arthritis: Functional Status Assessment	None
2525e	Rheumatoid Arthritis: Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy	None
2549e	Gout: Serum Urate Target	None
2550e	Gout: ULT Therapy (Recommended for eMeasure Trial Approval)	None
2811e	Acute Otitis Media - Appropriate First-Line Antibiotics	None
2856	Pharmacotherapy Management of COPD Exacerbation	None
3086	Population Level HIV Viral Load Suppression	None
3209e	HIV medical visit frequency	None
3210e	HIV viral load suppression	None
3211e	Prescription of HIV Antiretroviral Therapy	None

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

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Appendix D: Measure Specifications

0058 Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

STEWARD

National Committee for Quality Assurance

DESCRIPTION

The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing 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 the Interactive Data Submission System (IDSS) portal.

LEVEL

Health Plan

SETTING

Emergency Department and Services, Outpatient Services

NUMERATOR STATEMENT

The number of dispensed antibiotic medications following an episode of acute bronchitis/bronchiolitis. The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the proportion of episodes during which an antibiotic was not dispensed (a higher rate is better).

NUMERATOR DETAILS

Dispensed prescription for an antibiotic medication (listed in Table AAB Antibiotic Medications) on or three days after the episode date.

Table AAB Antibiotic Medications

Aminoglycosides: Amikacin; Gentamicin; Streptomycin; Tobramycin

Aminopenicillins: Amoxicillin; Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate; Ampicillin-sulbactam; Piperacillin-tazobactam; Ticarcillin-clavulanate

First-generation cephalosporins: Cefadroxil; Cefazolin; Cephalexin

Fourth-generation cephalosporins: Cefepime

Ketolides: Telithromycin

Lincomycin derivatives: Clindamycin; Lincomycin

Macrolides: Azithromycin; Clarithromycin; Erythromycin; Erythromycin ethylsuccinate; Erythromycin lactobionate; Erythromycin stearate

Miscellaneous antibiotics: Aztreonam; Chloramphenicol; Dalfopristin-quinupristin; Daptomycin; Erythromycin-sulfisoxazole; Linezolid; Metronidazole; Vancomycin

Natural penicillins: Penicillin G benzathine-procaine; Penicillin G potassium; Penicillin G procaine; Penicillin G sodium; Penicillin V potassium; Penicillin G benzathine

Penicillinase resistant penicillins: Dicloxacillin; Nafcillin; Oxacillin

Quinolones: Ciprofloxacin; Gemifloxacin; Levofloxacin; Moxifloxacin; Norfloxacin; Ofloxacin;

Rifamycin derivatives: Rifampin

Second generation cephalosporin: Cefaclor; Cefotetan; Cefoxitin; Cefprozil; Cefuroxime

Sulfonamides: Sulfadiazine;; Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline; Minocycline; Tetracycline

Third generation cephalosporins: Cefdinir; Cefditoren; Cefixime; Cefotaxime; Cefpodoxime; Ceftazidime; Ceftibuten; Ceftriaxone

Urinary anti-infectives: Fosfomycin; Nitrofurantoin; Nitrofurantoin macrocrystals-monohydrate; Trimethoprim; Nitrofurantoin macrocrystals

DENOMINATOR STATEMENT

Episodes for members age 3 months and older with a diagnosis of acute bronchitis or bronchiolitis during the intake period.

DENOMINATOR DETAILS

Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set).

Do not include visits that result in an inpatient stay (Inpatient Stay Value Set).

See the corresponding Excel document for the value sets referenced above.

EXCLUSIONS

As listed in the denominator details, the final denominator population does not include episodes with a history of select comorbid conditions, history of antibiotic use, or presence of a competing diagnosis

EXCLUSION DETAILS

The measure excludes episodes with the following comorbid conditions during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

- HIV Value Set.
- Malignant Neoplasms Value Set.
- Emphysema Value Set.
- COPD Value Set.
- Cystic Fibrosis Value Set.
- Comorbid Conditions Value Set.

The measure excludes episode with a new or refill prescription for an antibiotic medication (Table AAB-D) was filled 30 days prior to the Episode Date or was active on the Episode Date.

The measure excludes episodes with the following competing diagnoses during the period 30 days prior to the Episode Date through 7 days after the Episode Date (inclusive) the patient had a claim/encounter with any competing diagnosis. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.

- Competing Diagnosis Value Set.

See the corresponding Excel document for the value sets referenced above.

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

HEDIS data are stratified by plan type (i.e. commercial, Medicaid). For this measure, a total rate is reported, along with three age stratifications (3 months–17 years; 18–64 years; 65 years and older).

TYPE SCORE

Other (specify): The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of episodes for which antibiotics were not prescribed. better quality = higher score

ALGORITHM

Step 1: Identify all members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set).

Step 2: Determine all acute bronchitis/bronchiolitis Episode Dates. For each member identified in step 1, determine all outpatient, telephone, observation or ED visits, e-visits and virtual check-ins with a diagnosis of acute bronchitis/bronchiolitis.

Do not include visits that result in an inpatient stay (Inpatient Stay Value Set).

Step 3: Test for Negative Comorbid Condition History. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

- HIV Value Set.
- HIV Type 2 Value Set.
- Malignant Neoplasms Value Set.
- Other Malignant Neoplasm of Skin Value Set.
- Emphysema Value Set.
- COPD Value Set.
- Comorbid Conditions Value Set.
- Disorders of the Immune System Value Set.

Step 4: Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (AAB Antibiotic Medications List) was filled 30 days prior to the Episode Date or was active on the Episode Date.

Step 5: Test for Negative Competing Diagnosis. Exclude Episode Dates where the member had a claim/encounter with a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.
- Competing Diagnosis Value Set.

Step 6: Calculate continuous enrollment. The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Step 7: Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period.

Note: The denominator for this measure is based on episodes, not on members. All eligible episodes that were not excluded or deduplicated remain in the denominator.

Step 8: Calculate the numerator. Determine the number of events in the eligible population with a dispensed antibiotic medication on or three days after the episode date.

Step 9: Calculate a rate (number of antibiotics/eligible population).

Step 10: Subtract the rate calculated in step 9 from one to invert the measure result to represent appropriate treatment for acute bronchitis/bronchiolitis (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881

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0069 Appropriate Treatment for Upper Respiratory Infection

STEWARD

National Committee for Quality Assurance

DESCRIPTION

The Appropriate Treatment for Upper Respiratory Infection (URI) measure assesses whether members 3 months of age and older with a diagnosis of upper respiratory infection were not dispensed an antibiotic prescription. The measure includes patients enrolled in commercial, Medicaid, and Medicare health plans.

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

Emergency Department and Services, Outpatient Services

NUMERATOR STATEMENT

The numerator of the measure includes the number of dispensed prescriptions for an antibiotic medication on or 3 days after the Episode Date.

NUMERATOR DETAILS

Dispensed antibiotic medications (Table CWP Antibiotic Medications) on or within 3 days after an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter for upper respiratory infection (URI) during the intake period. The measure is reported as an inverted rate (1-numerator/denominator); a higher rate is better.

CWP Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G potassium, Penicillin G bezathine, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

DENOMINATOR STATEMENT

Episodes for members 3 months of age and older as of July 1 of the year prior to the measurement year who had an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter with a diagnosis of upper respiratory infection (URI) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).

DENOMINATOR DETAILS

Follow the steps below to identify the eligible population:

Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set) an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of URI (URI Value Set).

The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period.

CWP-C: Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

EXCLUSIONS

Exclude visits that result in an inpatient stay.

Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date.

Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date.

Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.

EXCLUSION DETAILS

Exclude visits that results in an inpatient stay (Inpatient Stay Value Set)

Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

-HIV Value Set.

-HIV Type 2 Value Set.

-Malignant Neoplasms Value Set.

-Other Malignant Neoplasm of Skin Value Set

-Emphysema Value Set.

-COPD Value Set.

-Comorbid Conditions Value Set.

-Disorders of the Immune System Value Set

Exclude for Negative Medication History: No pharmacy claims for either new or refill prescriptions for an antibiotic drug listed below in the 30 days prior to Episode Date, or was active on Episode Data :

CWP-C: Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

Exclude Episodes where there is a claim/encounter for a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.

- Competing Diagnosis Value Set.

(See corresponding Excel document for the value sets referenced above)

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

Measure is stratified by age:

3 months – 17 years

18 - 64 years

65 years and older

TYPE SCORE

Other The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of patients for whom antibiotics were not prescribed. better quality = higher score

ALGORITHM

Episode Date is defined as the date of service for any outpatient, telephone, observation or ED visit, e-visit or virtual check-in during the Intake Period with a diagnosis of URI.

Step 1 Determine the eligible population. To do so, identify all patients who had an outpatient, telephone, e-visit or virtual check-in or ED visit with a diagnosis of URI during the Intake Period.

Step 2 Determine all URI Episode Dates during the intake period. For each patient identified in step 1, determine all outpatient, telephone, observation or ED claims/encounters or e-visits and virtual check-ins with a URI diagnosis.

Step 3 Test for Negative Comorbid Condition History. Exclude Episode Dates when the patient had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date.

Step 4 Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date.

Step 5 Test for Negative Competing Diagnosis. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.

Step 6 Calculate continuous enrollment. The patient must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Step 7 Deduplicate eligible episodes. If a patient has more than one eligible episode on a 31-day period, include only the first eligible episode. (provides denominator)

Step 8 Calculate numerator - number of dispensed prescriptions for an antibiotic medication from the Antibiotic Medication list on or 3 days after the episode date

Step 9 Calculate rate numerator/denominator

Step 10 Subtract the rate calculated in Step 9 from 1 to invert the measure result to represent appropriate treatment for upper respiratory infection (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881

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3166 Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

STEWARD

QMETRIC - University of Michigan

DESCRIPTION

The percentage of children ages 3 months to 5 years old with sickle cell anemia (SCA) who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.

TYPE

Process

DATA SOURCE

Claims NA

LEVEL

Health Plan

SETTING

Other Any setting represented with prescription medication claims data

NUMERATOR STATEMENT

The numerator is the number of children ages 3 months to 5 years old with SCA who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.

NUMERATOR DETAILS

Cases from target population with target process (appropriate antibiotic prophylaxis dispensed for at least 300 days within the calendar year): Antibiotic prophylaxis is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply of antibiotics dispensed within the measurement year (see National Drug Codes (NDC) Table 1).

NOTE: Although NHLBI guidelines specifically recommend penicillin for antibiotic prophylaxis, some children may have or be suspected to have penicillin sensitivity. The American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics suggests an alternative for children who are allergic to penicillin: "Erythromycin prophylaxis may be used as an alternative for children with suspected or proven penicillin allergy" (Citation: American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics (Pediatrics 2002; 109(3):526-535; Reaffirmed in 2016). Providers may also choose to prescribe amoxicillin. Therefore, we have included a broader definition of antibiotic prophylaxis than penicillin in this measure (penicillin, erythromycin, amoxicillin). This is intended to avoid underestimation of the proportion of children with SCA who are protected against pneumococcal infection.

DENOMINATOR STATEMENT

The denominator is the number of children ages 3 months to 5 years with sickle cell anemia (SCA) within the measurement year.

DENOMINATOR DETAILS

For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

Note: Children with SCA are included starting at 3 months of age to account for any lag in identification and confirmation of the sickle cell disease status of the child.

EXCLUSIONS

There are no denominator exclusions.

EXCLUSION DETAILS

NA

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

NA

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate: (numerator/denominator). 140919| 147064

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3568 Person-Centered Primary Care Measure PRO-PM

STEWARD

American Board of Family Medicine

DESCRIPTION

The Person-Centered Primary Care Measure instrument is an 11-item patient reported assessment of primary care. Patients complete the PCPCM instrument once a year. These instruments are used to calculate a performance score for the participating entity. That entity could be an individual clinician or a practice. The 11 items of the PCPCM assess primary care aspects rarely captured yet thought responsible for primary care effects on population health, equity, quality, and sustainable expenditures. These include: accessibility, comprehensiveness, integration, coordination, relationship, advocacy, family and community context, goal-oriented care, and disease, illness, and prevention management.

The target population of the PCPCM Performance Measure (PRO-PM) is all patients, active in a practice.

Patients are defined as active if they have had a documented interaction with the practice within 12 months of the patient's birth month. In the PCPCM PRO, patients are presented with 11 structured items. After each item, patients are asked to state their level of endorsement. The same scale is used for all 11 items: Definitely, Mostly, Somewhat, Not At All. Active patients receive the PCPCM PRO through mail, email, or patient portal, during the month of their birth (e.g., patients born in January will receive a request to complete the PCPCM PRO in January).

The PCPCM PRO-PM is calculated as a continuous variable on a 0 to 100 point scale, in which a higher value equates to better quality.

The time frame used to evaluate quality with the PCPCM PRO-PM is one year.

Receiving patient responses in the month of their birth allows a practice to receive monthly feedback in between quality reporting periods.

Scoring for the PCPCM PRO-PM is completed through a simple 4 step process using the PCPCM PRO to assess the broad scope of primary care from a patient's perspective.

Step One: Exclude incomplete patient responses.

Any PCPCM PRO instrument for which a patient failed to answer at least 8 of the 11 items is excluded from calculations.

Step Two: Calculate PCPCM PRO item specific mean scores.

Patients choose one of four response options for each item in the PCPCM PRO instrument. In scoring the PCPCM PRO, the first step requires determining an item mean score for each of the 11 items. Since the instrument scale is word based – Definitely, Mostly, Somewhat, Not At All – each response option must be assigned a value. Values are assigned as follows: Definitely = 4, Mostly = 3, Somewhat = 2, Not At All = 1.

Calculating the mean score for each item then requires looking across all PCPCM PRO instruments received for the entity being assessed during the analysis period. For example, if the entity is a clinician, then all completed (see Step One) PCPCM PRO instruments collected for that clinician are included in the calculation. If the entity is a practice, then all PCPCM PRO instruments collected for that practice are included in the analysis.

An entity's score for each PCPCM PRO item is calculated as a mean, i.e., the summary of all responses across PCPCM PRO instruments received for the entity, divided by the number of instruments received. This process leads to 11 item specific PCPCM PRO scores. Means should be reported to two decimal points.

Step Three: Calculate the PCPCM PRO total score.

The PCPCM PRO total score for the entity is calculated by determining the mean of the 11 scored PRO items. This is done by adding the mean scores of all 11 PRO items and then dividing by 11. PRO means should be reported to two decimal points.

Step Four: Converting PCPCM PRO total scores and to PCPCM PRO-PM performance score.

In order to use the PCPCM PRO as a performance measure for reporting, the 4 point PCPCM PRO scale must be converted to a 0-100 performance scale. To do this, the PCPCM PRO total score for an entity, as calculated in Step Three, is divided by 4 and then multiplied by 100.

Thus, a PCPCM PRO total score of 2.78 (based on a scale of 1-4) becomes a PCPCM PRO-PM performance score of 69.5 (on a scale of 0-100).

The monthly data collection allows for assessed entities to receive regular feedback during the course of the year. However, PCPCM PRO-PM performance scores are calculated based on quality reporting program requirements or a 12-month time frame.

There is no stratification required with the PCPCM.

TYPE

Outcome: PRO-PM

DATA SOURCE

Instrument-Based Data The PCPCM PRO-PM performance data are collected using the PCPCM PRO instrument. The PCPCM PRO is an 11-item patient reported instrument. The measure has been tested and validated using the following methods for administration:

- Paper-based delivery, point of care. The paper instrument can be mailed to active patients (defined as having a documented encounter with the practices within 12 months prior to the patient's birth month). Data entry will then be required. Data may be entered into a simple Excel-type document for data management and scoring. Point of care instrument use should not be used for performance measure purposes as these responses will skew positive.
- Asynchronous delivery, electronic administration and submission. Patients active in a practice (defined as having a documented encounter with the practices within 12 months prior to the patient's birth month) can receive the PCPCM PRO via email, patient portal, or email invitation with a unique link, during the month of their birth. Triggering an invitation to complete the PCPCM PRO immediately following a clinical encounter should not be used for performance measure purposes as these responses will skew positive.

The PCPCM PRO instrument is available and validated in the following languages: simple Chinese, Czech, Danish, Dutch, English (British), English (American), Estonian, Finnish, French (European), German, German (Swiss), Greek, Hebrew, Hungarian, Icelandic, Italian, Japanese, Korean, Latvian, Lithuanian, Luxembourgian, Norwegian, Polish, Portuguese (European), Slovakian, Slovenian, Spanish (European), Spanish (Latin American), Swedish, and Turkish. The manuscript supporting the validation of the PCPCM PRO in these languages has been accepted by the Annals of Family Medicine but is not yet been published.

Table 1: The Person-Centered Primary Care Measure (PCPCM) Patient Reported Outcome (PRO) Instrument

HOW WOULD YOU ASSESS YOUR PRIMARY CARE EXPERIENCE?

The practice makes it easy for me to get care.

Definitely Mostly Somewhat Not at all

This practice is able to provide most of my care.

Definitely Mostly Somewhat Not at all

In caring for me, my doctor considers all of the factors that affect my health. Definitely Mostly Somewhat Not at all

My practice coordinates the care I get from multiple places.

Definitely Mostly Somewhat Not at all

My doctor or practice knows me as a person.

Definitely Mostly Somewhat Not at all

My doctor and I have been through a lot together.

Definitely Mostly Somewhat Not at all

My doctor or practice stands up for me.

Definitely Mostly Somewhat Not at all

The care I get takes into account knowledge of my family.

Definitely Mostly Somewhat Not at all

The care I get in this practice is informed by knowledge of my community. Definitely Mostly Somewhat Not at all

Over time, this practice helps me to meet my goals.

Definitely Mostly Somewhat Not at all

Over time, my practice helps me to stay healthy.

Definitely Mostly Somewhat Not at all

LEVEL

Clinician : Group/Practice, Clinician : Individual

SETTING

Outpatient Services

NUMERATOR STATEMENT

The PCPCM PRO-PM allows all patients to report their assessment of the quality of primary care received through responses to PCPCM PRO instrument.

The target population is all active patients in a practice during the performance reporting period. A patient is defined as active if the patient has had a documented interaction with the practice within 12 months of the patient's birth month. The PCPCM PRO is the same for all patients, regardless of age. Because the PCPCM PRO applies to all patients and is not particular to a clinical encounter, it is administered once a year to each patient during their birth month.

The target population is defined the same, regardless of unit of analysis (clinician or practice).

The numerator is the sum of all PCPCM PRO scores for active patients.

NUMERATOR DETAILS

All patients receive the PCPCM PRO instrument once a year during their birth month. In any given reporting period, any returned PCPCM PRO instruments that do not have at least 8 of the 11 PCPCM PRO items completed are not included in calculations.

Before calculating the PCPCM PRO total scores, it is necessary to calculate the PCPCM PRO item scores. For PCPCM PRO item scores, the numerator is the sum of all received patient responses eligible for calculation. The value for patient responses is based on the scale of 4 (Definitely) to 1 (Not At All), as described above.

The time frame for PCPCM PRO-PM scores is 12 months.

This process is same, regardless of unit of analysis (clinician or practice).

DENOMINATOR STATEMENT

The target population for the denominator is the same as for the numerator.

The denominator is the total number of complete PCPCM PRO instruments received in the reporting period. A completed PRO instrument is defined as a PRO instrument for which the patient has responded to at least 8 of 11 items.

DENOMINATOR DETAILS

The target population is all active patients in a practice during the performance reporting period. A patient is defined as active if the patient has had a documented interaction with the practice within 12 months of their birth month. The PCPCM PRO is the same for all patients, regardless of age. Because the PCPCM PRO applies to all patients and is not particular to a clinical encounter, it is administered once a year to each patient during their birth month.

The target population is defined the same, regardless of unit of analysis (clinician or practice).

EXCLUSIONS

None.

EXCLUSION DETAILS

N/A

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

No stratification of measure results is required.

TYPE SCORE

Continuous variable, e.g. average better quality = higher score

ALGORITHM

Scoring for the PCPCM PRO-PM is completed through a simple 4 step process using the PCPCM PRO to assess the broad scope of primary care from a patient's perspective.

Step One: Exclude incomplete patient responses.

Any PCPCM PRO instrument for which a patient failed to answer at least 8 of the 11 items is excluded from calculations.

Step Two: Calculate PCPCM PRO item specific mean scores.

Patients choose one of four response options for each item in the PCPCM PRO instrument. In scoring the PCPCM PRO, the first step requires determining an item mean score for each of the 11 items. Since the instrument scale is word based – Definitely, Mostly, Somewhat, Not At All – each response option must

be assigned a value. Values are assigned as follows: Definitely = 4, Mostly = 3, Somewhat = 2, Not At All = 1.

Calculating the mean score for each item then requires looking across all PCPCM PRO instruments received for the entity being assessed during the analysis period. For example, if the entity is a clinician, then all completed (see Step One) PCPCM PRO instruments collected for that clinician are included in the calculation. If the entity is a practice, then all PCPCM PRO instruments collected for that practice are included in the analysis.

An entity's score for each PCPCM PRO item is calculated as a mean, i.e., the summary of all responses across PCPCM PRO instruments received for the entity, divided by the number of instruments received. This process leads to 11 item specific PCPCM PRO scores. Means should be reported to two decimal points.

Step Three: Calculate the PCPCM PRO total score.

The PCPCM PRO total score for the entity is calculated by determining the mean of the 11 scored PRO items. This is done by adding the mean scores of all 11 PRO items and then dividing by 11. PRO means should be reported to two decimal points.

Step Four: Converting PCPCM PRO total scores and to PCPCM PRO-PM performance score.

In order to use the PCPCM PRO as a performance measure for reporting, the 4 point PCPCM PRO scale must be converted to a 0-100 performance scale. To do this, the PCPCM PRO total score for an entity, as calculated in Step Three, is divided by 4 and then multiplied by 100.

Thus, a PCPCM PRO total score of 2.78 (based on a scale of 1-4) becomes a PCPCM PRO-PM performance score of 69.5 (on a scale of 0-100).

The monthly data collection allows for assessed entities to receive regular feedback during the course of the year. However, PCPCM PRO-PM performance scores are calculated based on quality reporting program requirements or a 12-month time frame.

There is no stratification required with the PCPCM. 144156| 151674| 150289

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3595 Hydroxyurea Use Among Children with Sickle Cell Anemia

STEWARD

University of Michigan

DESCRIPTION

The percentage of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.

TYPE

Process

DATA SOURCE

Claims

LEVEL

Health Plan

SETTING

Other Any setting represented with prescription medication claims data

NUMERATOR STATEMENT

The number of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.

NUMERATOR DETAILS

Cases from target population with target process (hydroxyurea dispensed for at least 300 days within the calendar year): Dispensed hydroxyurea is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply within the measurement year (see National Drug Codes (NDC) Table 1).

DENOMINATOR STATEMENT

The number of children ages 1 to 18 years with sickle cell anemia (SCA) within the measurement year.

DENOMINATOR DETAILS

For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

EXCLUSIONS

NA

EXCLUSION DETAILS

NA

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

NA

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate: (numerator/denominator). 152557

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3599 Pediatric Asthma Emergency Department Use

STEWARD

Albert Einstein College of Medicine

DESCRIPTION

This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years.

The rate construction of the measure makes it a more actionable measure compared to a more traditional quality measure percentage construct (e.g., percentage of patients with at least one asthma-related ED visit). The rate construction means that a plan can improve on performance either through improvement efforts targeting all patients with asthma, or through efforts targeted at high-utilizers, since all visits are counted in the numerator. For a percentage measure, efforts to address high-utilizers will be less influential on performance and potentially have no effect at all even if a high utilizer goes from 8 visits a year to 1, since in order to improve performance, a high-utilizer has to get down to zero visits.

This measure was developed under the Pediatric Quality Measurement Program, funded by the Centers for Medicare and Medicaid Services and administered by the Agency for Healthcare Research and Quality. https://www.ahrq.gov/pqmp/about/what-is-pqmp.html

TYPE

Outcome

DATA SOURCE

Claims Administrative claims, including state Medicaid claims and state All-payer claims databases.

LEVEL

Health Plan

SETTING

Outpatient Services

NUMERATOR STATEMENT

Number of asthma-related ED visits

NUMERATOR DETAILS

Numerator details: The numerator counts all emergency visits and hospitalizations with a primary or secondary ICD-based diagnosis of asthma in a child who was eligible in the reporting month. The asthma ICD codes are in the Excel workbook in S.2b. Since most hospitalizations for asthma are from the ED and many ED visits that result in hospitalization are not captured in encounter data, a numerator event may be either an ED visit or a hospitalization. In the datafiles created for the measure, the data is in member-month rows. Thus the numerator is the number of visits for that member in each month. See S.14 for more information on measure calculation.

DENOMINATOR STATEMENT

100 Child Years for children with identifiable asthma

DENOMINATOR DETAILS

The denominator represents the person-time experience among eligible children with identifiable asthma (definition below). Assessment of eligibility is determined for each child monthly. The total number of child months in the measurement year experienced is summed and divided by 1200 to achieve the units of 100 child years for the denominator.

EXCLUSIONS

Children with specified concurrent or pre-existing diagnosis and children who have not been consecutively enrolled in the reporting plan for at least three months, including the month being assessed.

EXCLUSION DETAILS

Children with concurrent or pre-existing: Cystic Fibrosis (CF) diagnosis, or Emphysema diagnosis.

Please see attached list of ICD codes (“IMPLEMENT Asthma ED Use ICD and CPT Codes”) for exclusion criteria for CF and emphysema.

Consecutive enrollment is defined as being consecutively enrolled within the same payer. This allows for a change in plan type (e.g. changing to a PPO to an HMO within same payer). Continuous enrollment does not include moving payers even if continuously enrolled (e.g. moving from Kaiser to Blue Cross within the three month window would exclude them from the denominator. This is due to the measure being a health plan-level measure.

RISK ADJUSTMENT

Statistical risk model

STRATIFICATION

This is not a stratified measure.

TYPE SCORE

Rate/proportion better quality = lower score

ALGORITHM

Step 1: Measure person-time eligible for each patient and record by month.

a. For each month in the reporting year, identify all children ages 3 – 21 years who meet the criteria for Identifiable asthma - and do not satisfy one of the exclusion criteria - during the assessment period. The assessment period is defined as the year prior to the reporting year plus all months in the reporting year prior to the reporting month. Identify and maintain a unique patient identifier and all stratification variables.

To illustrate: if the goal is to report for January 2016, first one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 when doing so. Continuous enrollment criterion requires that the child was enrolled in November and December of 2015, as well as January 2016. This total represents the number of person-months (child-months) for January.

Next, for February: one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 AND January 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in December 2015 and January 2016, as well as February 2016. This is the number of person-months (child-months) for February.

Repeat this progression monthly so that for December, one would identify children with Identifiable asthma and analyze all of calendar year 2015 AND January through November 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in October 2016 and November 2016, as well as December 2016. This is the number of person-months (child-months) for December.

b. Sum all months that are eligible from the reporting year. This sum is the denominator in people-months. Divide by 1200. This is denominator in 100 people-years. This is the denominator for the year.

Step 2: Month by month, considering the definitions above, identify the number of discrete numerator events that occur in children eligible in that specific month:

a. Prior hospitalization with asthma as primary or secondary diagnosis

b. Other qualifying events after the fifth birthday (age is age at occurrence):

i. One or more prior ambulatory visits with asthma as the primary diagnosis, OR

ii. Two or more ambulatory visits with asthma as a diagnosis, OR

iii. One ambulatory visit with asthma as a diagnosis AND at least one asthma-related prescription

c. Other qualifying events, any age:

i. Three or more ambulatory visits with diagnosis of asthma, OR

ii. Two or more ambulatory visits with a diagnosis of asthma AND one or more asthma- related prescriptions

Note, these age differences are per NHLBI guidelines (https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma) and were reviewed and developed in collaboration with the Delphi panel of experts convened during the development of this measure.

Step 3. Calculate rate as Numerator / Denominator.

- If a qualified member has no numerator events during a month, the event count value is 0.

See document at https://chipper.ucsf.edu/upload/chipper/documents/Flowsheet_Asthma_1.pdf

for a flow chart for data flow and management steps to calculate the measure.

SAS code is available at https://chipper.ucsf.edu/upload/chipper/documents/asthma_1_sas_code.pdf
127469

3532 Discouraging the routine use of occupational and/or supervised physical therapy after carpal tunnel release.

STEWARD

American Academy of Orthopaedic Surgeons

DESCRIPTION

Percentage of patients 18+ with carpal tunnel syndrome who received surgical carpal tunnel release, and who should not routinely be prescribed postoperative physical and/or occupational therapy within 6 weeks after release.

TYPE

Process

DATA SOURCE

Claims N/A

LEVEL

Facility, Clinician : Individual

SETTING

Inpatient/Hospital, Outpatient Services

NUMERATOR STATEMENT

Number of patients with carpal tunnel syndrome, who underwent carpal tunnel release, and who did not receive postoperative hand, physical therapy (low, moderate, or high complexity) and/or occupational therapy (low, moderate, or high complexity) within 6 weeks (42 days) of the carpal tunnel release.

NUMERATOR DETAILS

Patient encounter for Carpal Tunnel Release (CPT): 64721 or 29848

AND

Diagnosis of Carpal Tunnel Syndrome (ICD-10-CM): G560, G5600, G5601, G5602, G5603

AND

No Patient encounter for postoperative hand, physical therapy (low, moderate, or high complexity) within 6 weeks (42 days) of carpal tunnel release (CPT): 97161, 97162, 97163

OR

No patient encounter for postoperative hand occupational therapy (low, moderate, or high complexity) within 6 weeks (42 days) of carpal tunnel release (CPT): 97165, 97166, 97167.

DENOMINATOR STATEMENT

Patients 18 years or older, with a diagnosis of carpal tunnel syndrome, undergoing carpal tunnel syndrome release.

DENOMINATOR DETAILS

Patient encounter for Carpal Tunnel Release (CPT): 64721 or 29848

AND

Diagnosis of Carpal Tunnel Syndrome (ICD-10-CM): G560, G5600, G5601, G5602, G5603.

Denominator cases must have (1) a CTS diagnosis, and (2) a CTS-R code. The measurement period is 1-year. This is a claims-based measure, and a process/appropriate use measure. Denominator cases that did not undergo supervised physical therapy or occupational therapy (defined by PT/OT evaluation codes), in the 42-day (or 6-week) post-procedural window, will be numerator patients. This is a patient-based, provider-level measure.

EXCLUSIONS

N/A

EXCLUSION DETAILS

N/A

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

N/A

TYPE SCORE

Ratio better quality = lower score

ALGORITHM

1) Identify cases with a carpal tunnel syndrome diagnosis code (ICD-10-CM: G560, G5600, G5601, G5602, G5603).

2) Identify those from above with an associated carpal tunnel syndrome release procedural CPT code: 64721 or 29848.

3) Ensure cases pulled are within the age range of > 17, are labeled as denominator patients, did not leave AMA, were not discharged dead, and were not discharged to hospice. Label the date of the CTS-R procedure, so we can identify cases in the post-procedural window.

4) Specify the 42-day post-procedure window. Ensure CTS-R dates are prior to PT/OT dates.

5) Pull those denominator cases that did not have a PT/OT code in the 42-day post-procedure window. Ensure cases did not have a PT/OT CPT code: 97161, 97162, 97163, 97165, 97166, 97167.

6) Label cases as numerator patients. 146916| 150289

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The American Society for Surgery of the Hand's significant past efforts and contributions to the development and updating of the Measures is acknowledged. AAOS is solely responsible for the review and enhancement ("Maintenance") of the Measures as of publication. AAOS encourages use of the Measures by other health care professionals, where appropriate.

Appendix E1: Related and Competing Measures (tabular format)

Comparison of NQF 0058 and NQF 0069

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
Steward	National Committee for Quality Assurance	National Committee for Quality Assurance
Description	The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing event.	The Appropriate Treatment for Upper Respiratory Infection (URI) measure assesses whether members 3 months of age and older with a diagnosis of upper respiratory infection were not dispensed an antibiotic prescription. The measure includes patients enrolled in commercial, Medicaid, and Medicare health plans.
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 the Interactive Data Submission System (IDSS) portal. No data collection instrument provided Attachment 0058_AAB_Fall_2020_Value_Sets.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 0069_URI_Fall_2020_Value_Sets.xlsx
Level	Health Plan	Health Plan
Setting	Emergency Department and Services, Outpatient Services	Emergency Department and Services, Outpatient Services
Numerator Statement	The number of dispensed antibiotic medications following an episode of acute bronchitis/bronchiolitis. The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the proportion of episodes during which an antibiotic was not dispensed (a higher rate is better).	The numerator of the measure includes the number of dispensed prescriptions for an antibiotic medication on or 3 days after the Episode Date.
Numerator Details	Dispensed prescription for an antibiotic medication (listed in Table AAB Antibiotic Medications) on or three days after the episode date. Table AAB Antibiotic Medications Aminoglycosides: Amikacin; Gentamicin; Streptomycin; Tobramycin Aminopenicillins: Amoxicillin; Ampicillin	Dispensed antibiotic medications (Table CWP Antibiotic Medications) on or within 3 days after an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter for upper respiratory infection (URI) during the intake period. The measure is reported as an inverted rate (1-numerator/denominator); a higher rate is better. CWP Antibiotic Medications Aminopenicillins: Amoxicillin, Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin Folate antagonist: Trimethoprim Lincomycin derivatives: Clindamycin

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
	Beta-lactamase inhibitors: Amoxicillin-clavulanate; Ampicillin-sulbactam; Piperacillin-tazobactam; Ticarcillin-clavulanate First-generation cephalosporins: Cefadroxil; Cefazolin; Cephalexin Fourth-generation cephalosporins: Cefepime Ketolides: Telithromycin Lincomycin derivatives: Clindamycin; Lincomycin Macrolides: Azithromycin; Clarithromycin; Erythromycin; Erythromycin ethylsuccinate; Erythromycin lactobionate; Erythromycin stearate Miscellaneous antibiotics: Aztreonam; Chloramphenicol; Dalfopristin-quinupristin; Daptomycin; Erythromycin-sulfisoxazole; Linezolid; Metronidazole; Vancomycin Natural penicillins: Penicillin G benzathine-procaine; Penicillin G potassium; Penicillin G procaine; Penicillin G sodium; Penicillin V potassium; Penicillin G benzathine Penicillinase resistant penicillins: Dicloxacillin; Nafcillin; Oxacillin Quinolones: Ciprofloxacin; Gemifloxacin; Levofloxacin; Moxifloxacin; Norfloxacin; Ofloxacin; Rifamycin derivatives: Rifampin Second generation cephalosporin: Cefaclor; Cefotetan; Cefoxitin; Cefprozil; Cefuroxime Sulfonamides: Sulfadiazine;; Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline; Minocycline; Tetracycline	Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate Natural penicillins: Penicillin G potassium, Penicillin G bezathine, Penicillin G sodium, Penicillin V potassium Penicillinase-resistant penicillins: Dicloxacillin Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime Sulfonamides: Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline, Minocycline, Tetracycline Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
	Third generation cephalosporins: Cefdinir; Cefditoren; Cefixime; Cefotaxime; Cefpodoxime; Ceftazidime; Ceftibuten; Ceftriaxone Urinary anti-infectives: Fosfomycin; Nitrofurantoin; Nitrofurantoin macrocrystals-monohydrate; Trimethoprim; Nitrofurantoin macrocrystals	
Denominator Statement	Episodes for members age 3 months and older with a diagnosis of acute bronchitis or bronchiolitis during the intake period.	Episodes for members 3 months of age and older as of July 1 of the year prior to the measurement year who had an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter with a diagnosis of upper respiratory infection (URI) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).
Denominator Details	Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set). Do not include visits that result in an inpatient stay (Inpatient Stay Value Set). See the corresponding Excel document for the value sets referenced above.	Follow the steps below to identify the eligible population: Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set) an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of URI (URI Value Set). The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days). Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period. CWP-C: Antibiotic Medications Aminopenicillins: Amoxicillin, Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin Folate antagonist: Trimethoprim Lincomycin derivatives: Clindamycin

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
		Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium Penicillinase-resistant penicillins: Dicloxacillin Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime Sulfonamides: Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline, Minocycline, Tetracycline Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone
Exclusions	As listed in the denominator details, the final denominator population does not include episodes with a history of select comorbid conditions, history of antibiotic use, or presence of a competing diagnosis	Exclude visits that result in an inpatient stay. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.
Exclusion Details	The measure excludes episodes with the following comorbid conditions during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition: - HIV Value Set. - Malignant Neoplasms Value Set. - Emphysema Value Set. - COPD Value Set. - Cystic Fibrosis Value Set. - Comorbid Conditions Value Set. The measure excludes episode with a new or refill prescription for an antibiotic medication (Table AAB-D) was filled 30 days prior to the Episode Date or was active on the Episode Date. The measure excludes episodes with the following competing diagnoses during the period 30 days prior to the Episode Date through 7 days after the Episode Date (inclusive) the patient	Exclude visits that results in an inpatient stay (Inpatient Stay Value Set) Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition: -HIV Value Set. -HIV Type 2 Value Set. -Malignant Neoplasms Value Set. -Other Malignant Neoplasm of Skin Value Set -Emphysema Value Set. -COPD Value Set. -Comorbid Conditions Value Set. -Disorders of the Immune System Value Set Exclude for Negative Medication History: No pharmacy claims for either new or refill prescriptions for an antibiotic drug listed below in

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
	had a claim/encounter with any competing diagnosis. A code from either of the following meets criteria for a competing diagnosis: - Pharyngitis Value Set. - Competing Diagnosis Value Set. See the corresponding Excel document for the value sets referenced above.	the 30 days prior to Episode Date, or was active on Episode Data : CWP-C: Antibiotic Medications Aminopenicillins: Amoxicillin, Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin Folate antagonist: Trimethoprim Lincomycin derivatives: Clindamycin Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium Penicillinase-resistant penicillins: Dicloxacillin Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime Sulfonamides: Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline, Minocycline, Tetracycline Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone Exclude Episodes where there is a claim/encounter for a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis: - Pharyngitis Value Set. - Competing Diagnosis Value Set. (See corresponding Excel document for the value sets referenced above)
Risk Adjustment	No risk adjustment or risk stratification 123834| 140881 123834| 140881	No risk adjustment or risk stratification 123834| 140881 123834| 140881
Stratification	HEDIS data are stratified by plan type (i.e. commercial, Medicaid). For this measure, a total rate is reported, along with three age stratifications (3 months–17 years; 18–64 years; 65 years and older).	Measure is stratified by age: 3 months – 17 years 18 - 64 years 65 years and older
Type Score	Other (specify): The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of episodes for which antibiotics were not prescribed. better quality = higher score	Other The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of patients for whom antibiotics were not prescribed. better quality = higher score

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
Algorithm	Step 1: Identify all members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set). Step 2: Determine all acute bronchitis/bronchiolitis Episode Dates. For each member identified in step 1, determine all outpatient, telephone, observation or ED visits, e-visits and virtual check-ins with a diagnosis of acute bronchitis/bronchiolitis. Do not include visits that result in an inpatient stay (Inpatient Stay Value Set). Step 3: Test for Negative Comorbid Condition History. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition: • HIV Value Set. • HIV Type 2 Value Set. • Malignant Neoplasms Value Set. • Other Malignant Neoplasm of Skin Value Set. • Emphysema Value Set. • COPD Value Set. • Comorbid Conditions Value Set. • Disorders of the Immune System Value Set. Step 4: Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (AAB Antibiotic Medications List) was filled 30 days prior to the Episode Date or was active on the Episode Date. Step 5: Test for Negative Competing Diagnosis. Exclude Episode Dates where the member had a claim/encounter with a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis: • Pharyngitis Value Set. • Competing Diagnosis Value Set.	Episode Date is defined as the date of service for any outpatient, telephone, observation or ED visit, e-visit or virtual check-in during the Intake Period with a diagnosis of URI. Step 1 Determine the eligible population. To do so, identify all patients who had an outpatient, telephone, e-visit or virtual check-in or ED visit with a diagnosis of URI during the Intake Period. Step 2 Determine all URI Episode Dates during the intake period. For each patient identified in step 1, determine all outpatient, telephone, observation or ED claims/encounters or e-visits and virtual check-ins with a URI diagnosis. Step 3 Test for Negative Comorbid Condition History. Exclude Episode Dates when the patient had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. Step 4 Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date. Step 5 Test for Negative Competing Diagnosis. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date. Step 6 Calculate continuous enrollment. The patient must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days). Step 7 Deduplicate eligible episodes. If a patient has more than one eligible episode on a 31-day period, include only the first eligible episode. (provides denominator) Step 8 Calculate numerator - number of dispensed prescriptions for an antibiotic medication from the Antibiotic Medication list on or 3 days after the episode date Step 9 Calculate rate numerator/denominator Step 10 Subtract the rate calculated in Step 9 from 1 to invert the measure result to represent appropriate treatment for upper respiratory infection (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
	Step 6: Calculate continuous enrollment. The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days). Step 7: Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period. Note: The denominator for this measure is based on episodes, not on members. All eligible episodes that were not excluded or deduplicated remain in the denominator. Step 8: Calculate the numerator. Determine the number of events in the eligible population with a dispensed antibiotic medication on or three days after the episode date. Step 9: Calculate a rate (number of antibiotics/eligible population). Step 10: Subtract the rate calculated in step 9 from one to invert the measure result to represent appropriate treatment for acute bronchitis/bronchiolitis (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881	episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881
Submission items	5.1 Identified measures: 0069 : Appropriate Treatment for Upper Respiratory Infection 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: N/A 5b.1 If competing, why superior or rationale for additive value: N/A	5.1 Identified measures: 0058 : Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB) 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Both measure specifications focus on inappropriate antibiotic prescribing. The current measures considers antibiotic prescribing in the case of upper respiratory infections, while NQF #0058 considers prescribing in the case of acute bronchitis or

	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)	0069: Appropriate Treatment for Upper Respiratory Infection
		bronchiolitis. The diagnosis may impact clinician decision for antibiotic prescribing. 5b.1 If competing, why superior or rationale for additive value: N/A

Comparison of NQF 0069 and NQF 0058

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
Steward	National Committee for Quality Assurance	National Committee for Quality Assurance
Description	The Appropriate Treatment for Upper Respiratory Infection (URI) measure assesses whether members 3 months of age and older with a diagnosis of upper respiratory infection were not dispensed an antibiotic prescription. The measure includes patients enrolled in commercial, Medicaid, and Medicare health plans.	The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing 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 0069_URI_Fall_2020_Value_Sets.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 the Interactive Data Submission System (IDSS) portal. No data collection instrument provided Attachment 0058_AAB_Fall_2020_Value_Sets.xlsx
Level	Health Plan	Health Plan
Setting	Emergency Department and Services, Outpatient Services	Emergency Department and Services, Outpatient Services
Numerator Statement	The numerator of the measure includes the number of dispensed prescriptions for an antibiotic medication on or 3 days after the Episode Date.	The number of dispensed antibiotic medications following an episode of acute bronchitis/bronchiolitis. The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the proportion of episodes during which an antibiotic was not dispensed (a higher rate is better).
Numerator Details	Dispensed antibiotic medications (Table CWP Antibiotic Medications) on or within 3 days after an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter for upper respiratory infection (URI) during the intake period. The measure is reported as an	Dispensed prescription for an antibiotic medication (listed in Table AAB Antibiotic Medications) on or three days after the episode date. Table AAB Antibiotic Medications

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
	inverted rate (1-numerator/denominator); a higher rate is better. CWP Antibiotic Medications Aminopenicillins: Amoxicillin, Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin Folate antagonist: Trimethoprim Lincomycin derivatives: Clindamycin Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate Natural penicillins: Penicillin G potassium, Penicillin G bezathine, Penicillin G sodium, Penicillin V potassium Penicillinase-resistant penicillins: Dicloxacillin Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime Sulfonamides: Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline, Minocycline, Tetracycline Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone	Aminoglycosides: Amikacin; Gentamicin; Streptomycin; Tobramycin Aminopenicillins: Amoxicillin; Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate; Ampicillin-sulbactam; Piperacillin-tazobactam; Ticarcillin-clavulanate First-generation cephalosporins: Cefadroxil; Cefazolin; Cephalexin Fourth-generation cephalosporins: Cefepime Ketolides: Telithromycin Lincomycin derivatives: Clindamycin; Lincomycin Macrolides: Azithromycin; Clarithromycin; Erythromycin; Erythromycin ethylsuccinate; Erythromycin lactobionate; Erythromycin stearate Miscellaneous antibiotics: Aztreonam; Chloramphenicol; Dalfopristin-quinupristin; Daptomycin; Erythromycin-sulfisoxazole; Linezolid; Metronidazole; Vancomycin Natural penicillins: Penicillin G benzathine-procaine; Penicillin G potassium; Penicillin G procaine; Penicillin G sodium; Penicillin V potassium; Penicillin G benzathine Penicillinase resistant penicillins: Dicloxacillin; Nafcillin; Oxacillin Quinolones: Ciprofloxacin; Gemifloxacin; Levofloxacin; Moxifloxacin; Norfloxacin; Ofloxacin; Rifamycin derivatives: Rifampin Second generation cephalosporin: Cefaclor; Cefotetan; Cefoxitin; Cefprozil; Cefuroxime Sulfonamides: Sulfadiazine;; Sulfamethoxazole-trimethoprim

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
		Tetracyclines: Doxycycline; Minocycline; Tetracycline Third generation cephalosporins: Cefdinir; Cefditoren; Cefixime; Cefotaxime; Cefpodoxime; Ceftazidime; Ceftibuten; Ceftriaxone Urinary anti-infectives: Fosfomycin; Nitrofurantoin; Nitrofurantoin macrocrystals-monohydrate; Trimethoprim; Nitrofurantoin macrocrystals
Denominator Statement	Episodes for members 3 months of age and older as of July 1 of the year prior to the measurement year who had an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter with a diagnosis of upper respiratory infection (URI) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).	Episodes for members age 3 months and older with a diagnosis of acute bronchitis or bronchiolitis during the intake period.
Denominator Details	Follow the steps below to identify the eligible population: Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set) an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of URI (URI Value Set). The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days). Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period. CWP-C: Antibiotic Medications Aminopenicillins: Amoxicillin, Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin	Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set). Do not include visits that result in an inpatient stay (Inpatient Stay Value Set). See the corresponding Excel document for the value sets referenced above.

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
	Folate antagonist: Trimethoprim Lincomycin derivatives: Clindamycin Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium Penicillinase-resistant penicillins: Dicloxacillin Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime Sulfonamides: Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline, Minocycline, Tetracycline Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone	
Exclusions	Exclude visits that result in an inpatient stay. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.	As listed in the denominator details, the final denominator population does not include episodes with a history of select comorbid conditions, history of antibiotic use, or presence of a competing diagnosis
Exclusion Details	Exclude visits that results in an inpatient stay (Inpatient Stay Value Set) Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition: -HIV Value Set. -HIV Type 2 Value Set. -Malignant Neoplasms Value Set. -Other Malignant Neoplasm of Skin Value Set -Emphysema Value Set. -COPD Value Set. -Comorbid Conditions Value Set.	The measure excludes episodes with the following comorbid conditions during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition: - HIV Value Set. - Malignant Neoplasms Value Set. - Emphysema Value Set. - COPD Value Set. - Cystic Fibrosis Value Set. - Comorbid Conditions Value Set. The measure excludes episode with a new or refill prescription for an antibiotic medication (Table AAB-D) was filled 30 days prior to the Episode Date or was active on the Episode Date.

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
	-Disorders of the Immune System Value Set Exclude for Negative Medication History: No pharmacy claims for either new or refill prescriptions for an antibiotic drug listed below in the 30 days prior to Episode Date, or was active on Episode Data : CWP-C: Antibiotic Medications Aminopenicillins: Amoxicillin, Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin Folate antagonist: Trimethoprim Lincomycin derivatives: Clindamycin Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium Penicillinase-resistant penicillins: Dicloxacillin Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime Sulfonamides: Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline, Minocycline, Tetracycline Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone Exclude Episodes where there is a claim/encounter for a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis: - Pharyngitis Value Set. - Competing Diagnosis Value Set. (See corresponding Excel document for the value sets referenced above)	The measure excludes episodes with the following competing diagnoses during the period 30 days prior to the Episode Date through 7 days after the Episode Date (inclusive) the patient had a claim/encounter with any competing diagnosis. A code from either of the following meets criteria for a competing diagnosis: - Pharyngitis Value Set. - Competing Diagnosis Value Set. See the corresponding Excel document for the value sets referenced above.
Risk Adjustment	No risk adjustment or risk stratification 123834| 140881 123834| 140881	No risk adjustment or risk stratification 123834| 140881 123834| 140881
Stratification	Measure is stratified by age: 3 months – 17 years 18 - 64 years	HEDIS data are stratified by plan type (i.e. commercial, Medicaid). For this measure, a total rate is reported, along with three age stratifications

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
	65 years and older	(3 months–17 years; 18–64 years; 65 years and older).
Type Score	Other The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of patients for whom antibiotics were not prescribed. better quality = higher score	Other (specify): The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of episodes for which antibiotics were not prescribed. better quality = higher score
Algorithm	Episode Date is defined as the date of service for any outpatient, telephone, observation or ED visit, e-visit or virtual check-in during the Intake Period with a diagnosis of URI. Step 1 Determine the eligible population. To do so, identify all patients who had an outpatient, telephone, e-visit or virtual check-in or ED visit with a diagnosis of URI during the Intake Period. Step 2 Determine all URI Episode Dates during the intake period. For each patient identified in step 1, determine all outpatient, telephone, observation or ED claims/encounters or e-visits and virtual check-ins with a URI diagnosis. Step 3 Test for Negative Comorbid Condition History. Exclude Episode Dates when the patient had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. Step 4 Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date. Step 5 Test for Negative Competing Diagnosis. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date. Step 6 Calculate continuous enrollment. The patient must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days). Step 7 Deduplicate eligible episodes. If a patient has more than one eligible episode on a 31-day period, include only the first eligible episode. (provides denominator) Step 8 Calculate numerator - number of dispensed prescriptions for an antibiotic medication from the Antibiotic Medication list on or 3 days after the episode date Step 9 Calculate rate numerator/denominator	Step 1: Identify all members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set). Step 2: Determine all acute bronchitis/bronchiolitis Episode Dates. For each member identified in step 1, determine all outpatient, telephone, observation or ED visits, e-visits and virtual check-ins with a diagnosis of acute bronchitis/bronchiolitis. Do not include visits that result in an inpatient stay (Inpatient Stay Value Set). Step 3: Test for Negative Comorbid Condition History. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition: • HIV Value Set. • HIV Type 2 Value Set. • Malignant Neoplasms Value Set. • Other Malignant Neoplasm of Skin Value Set. • Emphysema Value Set. • COPD Value Set. • Comorbid Conditions Value Set. • Disorders of the Immune System Value Set. Step 4: Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (AAB Antibiotic Medications List) was filled 30 days prior to the Episode Date or was active on the Episode Date. Step 5: Test for Negative Competing Diagnosis. Exclude Episode Dates where the member had a claim/encounter with a competing diagnosis on or 3 days after the Episode Date. A code from either

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
	Step 10 Subtract the rate calculated in Step 9 from 1 to invert the measure result to represent appropriate treatment for upper respiratory infection (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881	of the following meets criteria for a competing diagnosis: • Pharyngitis Value Set. • Competing Diagnosis Value Set. Step 6: Calculate continuous enrollment. The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days). Step 7: Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period. Note: The denominator for this measure is based on episodes, not on members. All eligible episodes that were not excluded or deduplicated remain in the denominator. Step 8: Calculate the numerator. Determine the number of events in the eligible population with a dispensed antibiotic medication on or three days after the episode date. Step 9: Calculate a rate (number of antibiotics/eligible population). Step 10: Subtract the rate calculated in step 9 from one to invert the measure result to represent appropriate treatment for acute bronchitis/bronchiolitis (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881
Submission items	5.1 Identified measures: 0058 : Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB) 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Both measure specifications focus on inappropriate antibiotic prescribing. The current measures considers antibiotic prescribing in the case of upper	5.1 Identified measures: 0069 : Appropriate Treatment for Upper Respiratory Infection 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: N/A 5b.1 If competing, why superior or rationale for additive value: N/A

	0069: Appropriate Treatment for Upper Respiratory Infection	0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)
	respiratory infections, while NQF #0058 considers prescribing in the case of acute bronchitis or bronchiolitis. The diagnosis may impact clinician decision for antibiotic prescribing. 5b.1 If competing, why superior or rationale for additive value: N/A	

Comparison of NQF 3166 and NQF 2797

	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia	2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
Steward	QMETRIC - University of Michigan	Q-METRIC – University of Michigan
Description	The percentage of children ages 3 months to 5 years old with sickle cell anemia (SCA) who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.	The percentage of children ages 2 through 15 years old with sickle cell anemia (Hemoglobin SS) who received at least one transcranial Doppler (TCD) screening within a year.
Type	Process	Process
Data Source	Claims NA No data collection instrument provided Attachment SCA_Antibiotic_Measure_Appendix_Tables_20180501.xlsx	Claims N/A No data collection instrument provided Attachment Q-METRIC_SCD_Code_Table_ICD9_ICD10-636488727296413357.xlsx
Level	Health Plan	Health Plan
Setting	Other Any setting represented with prescription medication claims data	Other Any setting represented with claims data
Numerator Statement	The numerator is the number of children ages 3 months to 5 years old with SCA who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.	The numerator is the number of children ages 2 through 15 years old with sickle cell anemia who received at least one TCD screening within the measurement year.
Numerator Details	Cases from target population with target process (appropriate antibiotic prophylaxis dispensed for at least 300 days within the calendar year): Antibiotic prophylaxis is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply of antibiotics dispensed within the measurement year (see National Drug Codes (NDC) Table 1). NOTE: Although NHLBI guidelines specifically recommend penicillin for antibiotic prophylaxis, some children may have or be suspected to have penicillin sensitivity. The American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics suggests an alternative for children who are allergic to	Cases from target population with target process (Receipt of TCD screening): Receipt of TCD screening is identified as the presence of at least one CPT code for any of five acceptable ultrasonography tests within the measurement year among children in the target population. Acceptable CPT codes are: 93886 (complete study), 93888 (limited study), 93890 (vasoreactivity study), 93892 (emboli detection without intravenous microbubble injection), and 93893 (emboli detection with intravenous microbubble injection).

	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia	2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
	penicillin: "Erythromycin prophylaxis may be used as an alternative for children with suspected or proven penicillin allergy" (Citation: American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics (Pediatrics 2002; 109(3):526-535; Reaffirmed in 2016). Providers may also choose to prescribe amoxicillin. Therefore, we have included a broader definition of antibiotic prophylaxis than penicillin in this measure (penicillin, erythromycin, amoxicillin). This is intended to avoid underestimation of the proportion of children with SCA who are protected against pneumococcal infection.	
Denominator Statement	The denominator is the number of children ages 3 months to 5 years with sickle cell anemia (SCA) within the measurement year.	The denominator is the number of children ages 2 through 15 years with sickle cell anemia within the measurement year.
Denominator Details	For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year. For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year. Note: Children with SCA are included starting at 3 months of age to account for any lag in identification and confirmation of the sickle cell disease status of the child.	Children with sickle cell anemia are identified through the presence of at least three separate healthcare encounters related to sickle cell anemia (defined as hemoglobin [Hb]SS) within the measurement year. Sickle cell anemia-related healthcare encounters are identified through ICD codes. The ICD-9-CM codes to identify HbSS-related healthcare encounters are as follows: 282.61 (Hb-SS disease w/o crisis) and 282.62 (Hb-SS disease with crisis). The ICD-10-CM codes for HbSS-related healthcare encounters are as follows: D57.00 (Hb-SS disease with crisis, unspecified); D57.01 (Hb-SS disease with acute chest syndrome); and D57.02 (Hb-SS disease with splenic sequestration). Children ages 2 through 15 years are included within the target population (i.e., must not have a 2nd or 16th birthday within the measurement year). It is important to note that accurate calculation of this measure requires that the target population be selected from among children who have all of their health services for the measurement year included in the administrative claims data set. For children who have dual enrollment in other health plans, their claims may not be complete since some of their health services may have been paid for by another health plan. Inclusion of children with other health insurance

	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia	2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
		would potentially cause this measure to be understated. As a consequence, this measure requires that children must not only be continuously enrolled within the health plan from which claims are available, the enrollment files must also be assessed to determine whether other forms of health insurance existed during the measurement year. Children with evidence of other insurance during the measurement year (i.e., coordination of benefits) are excluded from the target population.
Exclusions	There are no denominator exclusions.	There are no denominator exclusions.
Exclusion Details	NA	N/A
Risk Adjustment	No risk adjustment or risk stratification 140919| 147064 140919| 147064	No risk adjustment or risk stratification 140919| 147064 140919| 147064
Stratification	NA	N/A
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year. 2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year. 3. Calculate the rate: (numerator/denominator). 140919| 147064	1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and diagnosis requirements within the measurement year. 2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year. 3. Calculate the rate (numerator / denominator). 140919| 147064
Submission items	5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended by NHLBI for ages 0 until 5; TCD screening	5.1 Identified measures: 5a.1 Are specs completely harmonized? 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value:

	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia	2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
	from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure. 5b.1 If competing, why superior or rationale for additive value:	

Comparison of NQF 3595 and NQF 2797

	3595: Hydroxyurea Use Among Children with Sickle Cell Anemia	2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
Steward	University of Michigan	Q-METRIC – University of Michigan
Description	The percentage of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.	The percentage of children ages 2 through 15 years old with sickle cell anemia (Hemoglobin SS) who received at least one transcranial Doppler (TCD) screening within a year.
Type	Process	Process
Data Source	Claims No data collection instrument provided Attachment Hydroxyuea_Measure_Appendix_Tables_2020-05-20.xlsx	Claims N/A No data collection instrument provided Attachment Q-METRIC_SCD_Code_Table_ICD9_ICD10-636488727296413357.xlsx
Level	Health Plan	Health Plan
Setting	Other Any setting represented with prescription medication claims data	Other Any setting represented with claims data
Numerator Statement	The number of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.	The numerator is the number of children ages 2 through 15 years old with sickle cell anemia who received at least one TCD screening within the measurement year.
Numerator Details	Cases from target population with target process (hydroxyurea dispensed for at least 300 days within the calendar year): Dispensed hydroxyurea is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply within the measurement year (see National Drug Codes (NDC) Table 1).	Cases from target population with target process (Receipt of TCD screening): Receipt of TCD screening is identified as the presence of at least one CPT code for any of five acceptable ultrasonography tests within the measurement year among children in the target population. Acceptable CPT codes are: 93886 (complete study), 93888 (limited study), 93890 (vasoreactivity study), 93892 (emboli detection without intravenous microbubble injection), and 93893 (emboli detection with intravenous microbubble injection).
Denominator Statement	The number of children ages 1 to 18 years with sickle cell anemia (SCA) within the measurement year.	The denominator is the number of children ages 2 through 15 years with sickle cell anemia within the measurement year.

	3595: Hydroxyurea Use Among Children with Sickle Cell Anemia	2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
Denominator Details	For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year. For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.	Children with sickle cell anemia are identified through the presence of at least three separate healthcare encounters related to sickle cell anemia (defined as hemoglobin [Hb]SS) within the measurement year. Sickle cell anemia-related healthcare encounters are identified through ICD codes. The ICD-9-CM codes to identify HbSS-related healthcare encounters are as follows: 282.61 (Hb-SS disease w/o crisis) and 282.62 (Hb-SS disease with crisis). The ICD-10-CM codes for HbSS-related healthcare encounters are as follows: D57.00 (Hb-SS disease with crisis, unspecified); D57.01 (Hb-SS disease with acute chest syndrome); and D57.02 (Hb-SS disease with splenic sequestration). Children ages 2 through 15 years are included within the target population (i.e., must not have a 2nd or 16th birthday within the measurement year). It is important to note that accurate calculation of this measure requires that the target population be selected from among children who have all of their health services for the measurement year included in the administrative claims data set. For children who have dual enrollment in other health plans, their claims may not be complete since some of their health services may have been paid for by another health plan. Inclusion of children with other health insurance would potentially cause this measure to be understated. As a consequence, this measure requires that children must not only be continuously enrolled within the health plan from which claims are available, the enrollment files must also be assessed to determine whether other forms of health insurance existed during the measurement year. Children with evidence of other insurance during the measurement year (i.e., coordination of benefits) are excluded from the target population.
Exclusions	NA	There are no denominator exclusions.
Exclusion Details	NA	N/A
Risk Adjustment	No risk adjustment or risk stratification 152557 152557	No risk adjustment or risk stratification 140919| 147064 140919| 147064
Stratification	NA	N/A
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age,	1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and

	3595: Hydroxyurea Use Among Children with Sickle Cell Anemia	2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
	continuous enrollment, and benefit requirements within the measurement year. 2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year. 3. Calculate the rate: (numerator/denominator). 152557	diagnosis requirements within the measurement year. 2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year. 3. Calculate the rate (numerator / denominator). 140919| 147064
Submission items	5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia 3166 : Antibiotic Prophylaxis Among Children with Sickle Cell Anemia 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended by NHLBI for ages 0 until 5; TCD screening from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure. 5b.1 If competing, why superior or rationale for additive value:	5.1 Identified measures: 5a.1 Are specs completely harmonized? 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF 3595 and NQF 3166

	3595: Hydroxyurea Use Among Children with Sickle Cell Anemia	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia
Steward	University of Michigan	QMETRIC - University of Michigan
Description	The percentage of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.	The percentage of children ages 3 months to 5 years old with sickle cell anemia (SCA) who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.
Type	Process	Process
Data Source	Claims No data collection instrument provided Attachment Hydroxyuea_Measure_Appendix_Tables_2020-05-20.xlsx	Claims NA No data collection instrument provided Attachment SCA_Antibiotic_Measure_Appendix_Tables_20180501.xlsx
Level	Health Plan	Health Plan

	3595: Hydroxyurea Use Among Children with Sickle Cell Anemia	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia
Setting	Other Any setting represented with prescription medication claims data	Other Any setting represented with prescription medication claims data
Numerator Statement	The number of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.	The numerator is the number of children ages 3 months to 5 years old with SCA who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.
Numerator Details	Cases from target population with target process (hydroxyurea dispensed for at least 300 days within the calendar year): Dispensed hydroxyurea is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply within the measurement year (see National Drug Codes (NDC) Table 1).	Cases from target population with target process (appropriate antibiotic prophylaxis dispensed for at least 300 days within the calendar year): Antibiotic prophylaxis is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply of antibiotics dispensed within the measurement year (see National Drug Codes (NDC) Table 1). NOTE: Although NHLBI guidelines specifically recommend penicillin for antibiotic prophylaxis, some children may have or be suspected to have penicillin sensitivity. The American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics suggests an alternative for children who are allergic to penicillin: "Erythromycin prophylaxis may be used as an alternative for children with suspected or proven penicillin allergy" (Citation: American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics (Pediatrics 2002; 109(3):526-535; Reaffirmed in 2016). Providers may also choose to prescribe amoxicillin. Therefore, we have included a broader definition of antibiotic prophylaxis than penicillin in this measure (penicillin, erythromycin, amoxicillin). This is intended to avoid underestimation of the proportion of children with SCA who are protected against pneumococcal infection.
Denominator Statement	The number of children ages 1 to 18 years with sickle cell anemia (SCA) within the measurement year.	The denominator is the number of children ages 3 months to 5 years with sickle cell anemia (SCA) within the measurement year.
Denominator Details	For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.	For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

	3595: Hydroxyurea Use Among Children with Sickle Cell Anemia	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia
	For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.	For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year. Note: Children with SCA are included starting at 3 months of age to account for any lag in identification and confirmation of the sickle cell disease status of the child.
Exclusions	NA	There are no denominator exclusions.
Exclusion Details	NA	NA
Risk Adjustment	No risk adjustment or risk stratification 152557 152557	No risk adjustment or risk stratification 140919| 147064 140919| 147064
Stratification	NA	NA
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year. 2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year. 3. Calculate the rate: (numerator/denominator). 152557	1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year. 2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year. 3. Calculate the rate: (numerator/denominator). 140919| 147064
Submission items	5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia 3166 : Antibiotic Prophylaxis Among Children with Sickle Cell Anemia 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended	5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended by NHLBI for ages 0 until 5; TCD screening from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying

	3595: Hydroxyurea Use Among Children with Sickle Cell Anemia	3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia
	by NHLBI for ages 0 until 5; TCD screening from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure. 5b.1 If competing, why superior or rationale for additive value:	different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure. 5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF 3599 and NQF 0728

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
Steward	Albert Einstein College of Medicine	Agency for Healthcare Research and Quality
Description	This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years. The rate construction of the measure makes it a more actionable measure compared to a more traditional quality measure percentage construct (e.g., percentage of patients with at least one asthma-related ED visit). The rate construction means that a plan can improve on performance either through improvement efforts targeting all patients with asthma, or through efforts targeted at high-utilizers, since all visits are counted in the numerator. For a percentage measure, efforts to address high-utilizers will be less influential on performance and potentially have no effect at all even if a high utilizer goes from 8 visits a year to 1, since in order to improve performance, a high-utilizer has to get down to zero visits. This measure was developed under the Pediatric Quality Measurement Program, funded by the Centers for Medicare and Medicaid Services and administered by the Agency for Healthcare Research and Quality. https://www.ahrq.gov/pqmp/about/what-is-pqmp.html	Admissions with a principal diagnosis of asthma per 100,000 population, ages 2 through 17 years. Excludes cases with a diagnosis code for cystic fibrosis and anomalies of the respiratory system, obstetric admissions, and transfers from other institutions. [NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population.]
Type	Outcome	Outcome
Data Source	Claims Administrative claims, including state Medicaid claims and state All-payer claims databases. No data collection instrument provided Attachment IMPLEMENT_Asthma_ED_Use_ICD_and_CPT_Codes-637413960397551146.xlsx	Claims All analyses were completed using data from the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID), 2007-2011.HCUP is a family of health care databases and related software tools and products developed through a Federal-State-Industry partnership

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
		and sponsored by the Agency for Healthcare Research and Quality (AHRQ). HCUP databases bring together the data collection efforts of State data organizations, hospital associations, private data organizations, and the Federal government to create a national information resource of encounter-level health care data. The HCUP SID contain the universe of the inpatient discharge abstracts in participating States, translated into a uniform format to facilitate multi-State comparisons and analyses. Together, the SID encompass about 97 percent of all U.S. community hospital discharges (in 2011, 46 states participated for a total of more than 38.5 million hospital discharges with approximately 5 million pediatric (including births) hospital discharges). As defined by the American Hospital Association, community hospitals are all non-Federal, short-term, general or other specialty hospitals, excluding hospital units of institutions. Veterans hospitals and other Federal facilities are excluded. General and speciality children's hospitals are included in the hospital universe. Taken from the Uniform Bill-04 (UB-04), the SID data elements include ICD-9-CM coded principal and secondary diagnoses and procedures, additional detailed clinical and service information based on revenue codes, admission and discharge status, patient demographics, expected

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
		payment source (Medicare, Medicaid, private insurance as well as the uninsured), total charges and length of stay (www.hcup-us.ahrq.gov) HCUP State Inpatient Databases (SID). Healthcare Cost and Utilization Project (HCUP). 2007-2011. Agency for Healthcare Research and Quality, Rockville, MD. www.ahrq.gov/sidoverview.jsp (AHRQ QI Software Version 4.5, www.qualityindicators.ahrq.gov) Available at measure-specific web page URL identified in S.1 Attachment PDI_14_Asthma_Admission_Rate-636101306609537540.xlsx
Level	Health Plan	Population : Community, County or City, Population : Regional and State
Setting	Outpatient Services	Hospital
Numerator Statement	Number of asthma-related ED visits	Discharges, for patients ages 2 through 17 years, with a principal ICD-10-CM diagnosis code for asthma.
Numerator Details	Numerator details: The numerator counts all emergency visits and hospitalizations with a primary or secondary ICD-based diagnosis of asthma in a child who was eligible in the reporting month. The asthma ICD codes are in the Excel workbook in S.2b. Since most hospitalizations for asthma are from the ED and many ED visits that result in hospitalization are not captured in encounter data, a numerator event may be either an ED visit or a hospitalization. In the datafiles created for the measure, the data is in member-month rows. Thus the numerator is the number of visits for that member in each month. See S.14 for more information on measure calculation.	Asthma diagnosis codes: (ACSASTD) ICD-10-CM Description J4521 Mild intermittent asthma with (acute) exacerbation J4522 Mild intermittent asthma with status asthmaticus J4531 Mild persistent asthma with (acute) exacerbation J4532 Mild persistent asthma with status asthmaticus J4541 Moderate persistent asthma with (acute) exacerbation

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
		J4542 Moderate persistent asthma with status asthmaticus J4551 Severe persistent asthma with (acute) exacerbation J4552 Severe persistent asthma with status asthmaticus J45901 Unspecified asthma with (acute) exacerbation J45902 Unspecified asthma with status asthmaticus J45990 Exercise induced bronchospasm J45991 Cough variant asthma J45998 Other asthma NUMERATOR EXCLUSIONS Exclude cases: • with any-listed ICD-10-CM diagnosis codes for cystic fibrosis and anomalies of the respiratory system • transfer from a hospital (different facility) • transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF) • transfer from another health care facility • MDC 14 (pregnancy, childbirth, and puerperium) • with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing) Appendix J – Admission Codes for Transfers Cystic fibrosis and anomalies of the respiratory system diagnosis codes: (RESPAN) ICD-10-CM Description

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
		E840 Cystic fibrosis with pulmonary manifestations E8411 Meconium ileus in cystic fibrosis E8419 Cystic fibrosis with other intestinal manifestations E848 Cystic fibrosis with other manifestations E849 Cystic fibrosis, unspecified J8483 Surfactant mutations of the lung J84841 Neuroendocrine cell hyperplasia of infancy J84842 Pulmonary interstitial glycogenosis J84843 Alveolar capillary dysplasia with vein misalignment J84848 Other interstitial lung diseases of childhood P270 Wilson-Mikity syndrome P271 Bronchopulmonary dysplasia originating in the perinatal period P278 Other chronic respiratory diseases originating in the perinatal period P279 Unspecified chronic respiratory disease originating in the perinatal period Q254 Other congenital malformations of aorta Q311 Congenital subglottic stenosis Q312 Laryngeal hypoplasia Q313 Laryngocele Q315 Congenital laryngomalacia Q318 Other congenital malformations of larynx Q319 Congenital malformation of larynx, unspecified

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
		Q320 Congenital tracheomalacia Q321 Other congenital malformations of trachea Q322 Congenital bronchomalacia Q323 Congenital stenosis of bronchus Q324 Other congenital malformations of bronchus Q330 Congenital cystic lung Q331 Accessory lobe of lung Q332 Sequestration of lung Q333 Agenesis of lung Q334 Congenital bronchiectasis Q335 Ectopic tissue in lung Q336 Congenital hypoplasia and dysplasia of lung Q338 Other congenital malformations of lung Q339 Congenital malformation of lung, unspecified Q340 Anomaly of pleura Q341 Congenital cyst of mediastinum Q348 Other specified congenital malformations of respiratory system Q349 Congenital malformation of respiratory system, unspecified Q390 Atresia of esophagus without fistula Q391 Atresia of esophagus with tracheo-esophageal fistula Q392 Congenital tracheo-esophageal fistula without atresia Q393 Congenital stenosis and stricture of esophagus

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
		Q394 Esophageal web Q893 Situs inversus
Denominator Statement	100 Child Years for children with identifiable asthma	Population ages 2 through 17 years in metropolitan area1 or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred. 1. The term "metropolitan area" (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). In addition, "area" could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area, or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.
Denominator Details	The denominator represents the person-time experience among eligible children with identifiable asthma (definition below). Assessment of eligibility is determined for each child monthly. The total number of child months in the measurement year experienced is summed and divided by 1200 to achieve the units of 100 child years for the denominator.	Not Applicable
Exclusions	Children with specified concurrent or pre-existing diagnosis and children who have not been consecutively enrolled in the reporting plan for at least three months, including the month being assessed.	Not applicable
Exclusion Details	Children with concurrent or pre-existing: Cystic Fibrosis (CF) diagnosis, or Emphysema diagnosis. Please see attached list of ICD codes ("IMPLEMENT Asthma ED Use ICD and CPT Codes") for exclusion criteria for CF and emphysema. Consecutive enrollment is defined as being consecutively enrolled within the same payer. This allows for a change in plan type (e.g. changing to a PPO to an HMO within same payer). Continuous enrollment does not include moving payers even if continuously enrolled (e.g. moving from Kaiser to Blue Cross within the three month	Not applicable

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
	window would exclude them from the denominator. This is due to the measure being a health plan-level measure.	
Risk Adjustment	Statistical risk model 127469 127469	No risk adjustment or risk stratification 130177| 132112| 138848| 138827 130177| 132112| 138848| 138827
Stratification	This is not a stratified measure.	Not applicable
Type Score	Rate/proportion better quality = lower score	Rate/proportion better quality = lower score
Algorithm	Step 1: Measure person-time eligible for each patient and record by month. a. For each month in the reporting year, identify all children ages 3 – 21 years who meet the criteria for Identifiable asthma - and do not satisfy one of the exclusion criteria - during the assessment period. The assessment period is defined as the year prior to the reporting year plus all months in the reporting year prior to the reporting month. Identify and maintain a unique patient identifier and all stratification variables. To illustrate: if the goal is to report for January 2016, first one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 when doing so. Continuous enrollment criterion requires that the child was enrolled in November and December of 2015, as well as January 2016. This total represents the number of person-months (child-months) for January. Next, for February: one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 AND January 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in December 2015 and January 2016, as well as February 2016. This is the number of person-months (child-months) for February. Repeat this progression monthly so that for December, one would identify children with Identifiable asthma and analyze all of calendar year 2015 AND January through November 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in October 2016 and November 2016, as well as December 2016. This is the number of person-months (child-months) for December. b. Sum all months that are eligible from the reporting year. This sum is the denominator in people-months. Divide by 1200. This is denominator in 100 people-years. This is the denominator for the year. Step 2: Month by month, considering the definitions above, identify the number of discrete numerator events that occur in children eligible in that specific month: a. Prior hospitalization with asthma as primary or secondary diagnosis b. Other qualifying events after the fifth birthday (age is age at occurrence):	The observed rate is the number of discharges flagged with the outcome of interest divided by the number of persons in the population at risk. The predicted rate is estimated for each person based on a logistic regression model. The expected rate is the average predicted rate for the unit of interest (i.e. the county of residence). The risk-adjusted rate is calculated using the indirect method as observed rate divided by expected rate multiplied by the reference population rate. The performance score is a weighted average of the risk-adjusted rate and the reference population rate, where the weight is the signal-to-noise ratio. Currently no risk adjustment is available for v6.0 ICD10 specifications (see response S.14). 130177| 132112| 138848| 138827

	3599: Pediatric Asthma Emergency Department Use	0728: Asthma Admission Rate (PDI 14)
	i. One or more prior ambulatory visits with asthma as the primary diagnosis, OR ii. Two or more ambulatory visits with asthma as a diagnosis, OR iii. One ambulatory visit with asthma as a diagnosis AND at least one asthma-related prescription c. Other qualifying events, any age: i. Three or more ambulatory visits with diagnosis of asthma, OR ii. Two or more ambulatory visits with a diagnosis of asthma AND one or more asthma- related prescriptions Note, these age differences are per NHLBI guidelines (https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma) and were reviewed and developed in collaboration with the Delphi panel of experts convened during the development of this measure. Step 3. Calculate rate as Numerator / Denominator. - If a qualified member has no numerator events during a month, the event count value is 0. See document at https://chipper.ucsf.edu/upload/chipper/documents/Flowsheet_Asthma_1.pdf for a flow chart for data flow and management steps to calculate the measure. SAS code is available at https://chipper.ucsf.edu/upload/chipper/documents/asthma_1_sas_code.pdf 127469	
Submission items	5.1 Identified measures: 0728 : Asthma Admission Rate (PDI 14) 1381 : Asthma Emergency Department Visits 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Regarding measure 0728: Full technical specifications are not available as this measure is being reviewed for maintenance of endorsement. However, the measure we propose focuses on a different types of utilization, ED use, rather than asthma hospitalizations. Measure 0728 is also intended for population level analysis at the regional or state level, which differs from the use case for the proposed measure, which is health plan use, generally in collaboration with primary care practices. 5b.1 If competing, why superior or rationale for additive value: NA	5.1 Identified measures: 5a.1 Are specs completely harmonized? 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value: Not applicable

Comparison of NQF 3599 and NQF 1381

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
Steward	Alabama Medicaid Agency	Albert Einstein College of Medicine
Description	Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period.	This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years. The rate construction of the measure makes it a more actionable measure compared to a more traditional quality measure percentage construct (e.g., percentage of patients with at least one asthma-related ED visit). The rate construction means that a plan can improve on performance either through improvement efforts targeting all patients with asthma, or through efforts targeted at high-utilizers, since all visits are counted in the numerator. For a percentage measure, efforts to address high-utilizers will be less influential on performance and potentially have no effect at all even if a high utilizer goes from 8 visits a year to 1, since in order to improve performance, a high-utilizer has to get down to zero visits. This measure was developed under the Pediatric Quality Measurement Program, funded by the Centers for Medicare and Medicaid Services and administered by the Agency for Healthcare Research and Quality. https://www.ahrq.gov/pqmp/about/what-is-pqmp.html
Type	Outcome	Outcome
Data Source	Claims (Only) It is Business Objects software with the Client side version known as DeskTop Intelligence or DI. It uses SQL structured business language and rules to allow for the development of queries of the administrative claims database. It is provided through our MMIS contract with HP Enterprises. URL URL	Claims Administrative claims, including state Medicaid claims and state All-payer claims databases. No data collection instrument provided Attachment IMPLEMENT_Asthma_ED_Use_ICD_and_CPT_Codes-637413960397551146.xlsx
Level	Population : Community, County or City, Health Plan	Health Plan
Setting	Hospital	Outpatient Services
Numerator Statement	Measuring percentage of people with Asthma that have an emergency room visit during a 12 month measurement period.	Number of asthma-related ED visits
Numerator Details	Emergency Department Visits Numerator is patients with = 1 asthma related ED visits as identified via ED visit codes (procedure codes 99281-99285) AND also has an asthma diagnosis code ICD-9-CM codes 493.00, 493.01,	Numerator details: The numerator counts all emergency visits and hospitalizations with a primary or secondary ICD-based diagnosis of asthma in a child who was eligible in the reporting month. The asthma ICD codes are in

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
	493.02, 493.10,493.11, 493.12, 493.81, 493.82, 493.90, 493.91, and 493.92 as the primary diagnosis on the emergency room claim during the measurement period). Use table of denominator recipient IDs to pull all recipients that have received claims described above.	the Excel workbook in S.2b. Since most hospitalizations for asthma are from the ED and many ED visits that result in hospitalization are not captured in encounter data, a numerator event may be either an ED visit or a hospitalization. In the datafiles created for the measure, the data is in member-month rows. Thus the numerator is the number of visits for that member in each month. See S.14 for more information on measure calculation.
Denominator Statement	Denominator is all patients age two through age 20, diagnosed with asthma during the measurement period. The denominator will include recipients with claims with ICD-9-CM codes 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.81, 493.82, 493.90, 493.91,and 493.92 (excludes 493.20, 493.21 and 493.22)asprimary and secondary diagnoses with the dates of service"Begin Date through End Date" equal any consecutive 12 month period with paid dates from "Begin Date through End Date which includes 3 month tail". This is the measurement period. Total period of our pilot initiative was 24 months. We used Baseline Measurement period of March 1, 2006 through February 28, 2007 with paid dates through May 31, 2007 to provide a 3 month claims tail. A "Measurement period is any 12 consecutive months".	100 Child Years for children with identifiable asthma
Denominator Details	SQL for Asthma Denominator (SELECT DSS.T_CA_ICN.ID_MEDICAID, trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12), DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || '-' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY, DSS.T_CA_RECIP_KEY.CDE_RACE || '-' || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || '-' || DSS.T_CA_RECIP_KEY.DSC_SEX FROM DSS.T_CA_ICN, DSS.T_RE_BASE_DN, DSS.T_CA_RECIP_KEY, DSS.T_CA_AID_GROUP WHERE (DSS.T_CA_ICN.RECIP_KEY=DSS.T_CA_RECIP_KEY.RECIP_KEY)	The denominator represents the person-time experience among eligible children with identifiable asthma (definition below). Assessment of eligibility is determined for each child monthly. The total number of child months in the measurement year experienced is summed and divided by 1200 to achieve the units of 100 child years for the denominator.

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
	AND (DSS.T_RE_BASE_DN.SAK_RECIP(+)=DSS.T_CA_ICN.SAK_RECIP) AND (DSS.T_CA_AID_GROUP.SAK_AID_GROUP=DSS.T_CA_ICN.SAK_AID_GROUP) AND ((DSS.T_CA_ICN.CDE_DIAG_PRIM IN ('49300', '49301', '49302', '49310', '49311', '49312', '49381', '49382', '49390', '49391', '49392') OR DSS.T_CA_ICN.CDE_DIAG_2 IN ('49300', '49301', '49302', '49310', '49311', '49312', '49381', '49382', '49390', '49391', '49392')) AND DSS.T_CA_ICN.DTE_FIRST_SVC BETWEEN '03-01-2006 00:00:00' AND '02-28-2007 00:00:00' AND DSS.T_CA_ICN.DTE_PTN BETWEEN '03-01-2006 00:00:00' AND '05-31-2007 00:00:00' AND trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12) != 0 AND DSS.T_CA_ICN.CDE_DTL_STATUS != 'D' AND DSS.T_CA_AID_GROUP.CDE_GROUP_D NOT IN ('D98', 'D99', 'D1 ', 'D2 ', 'D3 ', 'D4 ', 'D5 ', 'D6 ', 'D7 ', 'D8 ', 'D9 ') AND DSS.T_CA_ICN.CDE_CLM_TYPE IN ('I', 'A', 'C', 'M', 'O', 'B')) GROUP BY DSS.T_CA_ICN.ID_MEDICAID, trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12), DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY, DSS.T_CA_RECIP_KEY.CDE_RACE || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || ' - ' || DSS.T_CA_RECIP_KEY.DSC_SEX HAVING (count(DISTINCT DSS.T_CA_ICN.NUM_ICN) >= 1) UNION SELECT DSS.T_CA_ICN.ID_MEDICAID, trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12), DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY,	

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
	DSS.T_CA_RECIP_KEY.CDE_RACE || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || ' - ' || DSS.T_CA_RECIP_KEY.DSC_SEX FROM DSS.T_CA_ICN, DSS.T_RE_BASE_DN, DSS.T_CA_RECIP_KEY, DSS.T_CA_DRUG, DSS.T_CA_AID_GROUP WHERE (DSS.T_CA_ICN.RECIP_KEY=DSS.T_CA_RECIP_KEY.RECIP_KEY) AND (DSS.T_CA_DRUG.SAK_CLAIM(+)=DSS.T_CA_ICN.SAK_CLAIM and DSS.T_CA_DRUG.DTE_PTN(+)=DSS.T_CA_ICN.DTE_PTN) AND (DSS.T_RE_BASE_DN.SAK_RECIP(+)=DSS.T_CA_ICN.SAK_RECIP) AND (DSS.T_CA_AID_GROUP.SAK_AID_GROUP=DSS.T_CA_ICN.SAK_AID_GROUP) AND (DSS.T_CA_DRUG.NUM_DRUG_GCN_SEQ IN (05037, 04963, 04964, 04966, 04967, 04968, 05032, 05033, 05034, 05039, 05040, 16033, 22230, 28090, 41848, 41849, 48698, 48699, 49871, 51197, 51198, 54687, 57879, 58890) AND DSS.T_CA_ICN.DTE_FIRST_SVC BETWEEN '03-01-2006 00:00:00' AND '02-28-2007 00:00:00' AND DSS.T_CA_ICN.DTE_PTN BETWEEN '03-01-2006 00:00:00' AND '05-31-2007 00:00:00' AND trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12) != 0 AND DSS.T_CA_ICN.CDE_DTL_STATUS != 'D' AND DSS.T_CA_AID_GROUP.CDE_GROUP_D NOT IN ('D98', 'D99', 'D1 ', 'D2 ', 'D3 ', 'D4 ', 'D5 ', 'D6 ', 'D7 ', 'D8 ', 'D9 ') AND DSS.T_CA_ICN.CDE_CLM_TYPE IN ('P', 'Q')) GROUP BY DSS.T_CA_ICN.ID_MEDICAID,	

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
	trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12), DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY, DSS.T_CA_RECIP_KEY.CDE_RACE || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RACE, DSS.T_CA_RECIP_KEY.CDE_SEX || ' - ' || DSS.T_CA_RECIP_KEY.DSC_SEX HAVING (count(DISTINCT DSS.T_CA_ICN.NUM_ICN) >= 2)) Make a table of the recipient IDs retrieved from Asthma Denominator query.	
Exclusions	Excludes children less than age two or greater than age twenty.	Children with specified concurrent or pre-existing diagnosis and children who have not been consecutively enrolled in the reporting plan for at least three months, including the month being assessed.
Exclusion Details	Anyone under age two. Actually Query language states "Recipient Age FDOS - Calculated Between Age 2 and 20"	Children with concurrent or pre-existing: Cystic Fibrosis (CF) diagnosis, or Emphysema diagnosis. Please see attached list of ICD codes ("IMPLEMENT Asthma ED Use ICD and CPT Codes") for exclusion criteria for CF and emphysema. Consecutive enrollment is defined as being consecutively enrolled within the same payer. This allows for a change in plan type (e.g. changing to a PPO to an HMO within same payer). Continuous enrollment does not include moving payers even if continuously enrolled (e.g. moving from Kaiser to Blue Cross within the three month window would exclude them from the denominator. This is due to the measure being a health plan-level measure.
Risk Adjustment	No risk adjustment or risk stratification 117817| 128893| 114481 117817| 128893| 114481	Statistical risk model 127469 127469
Stratification	Recipient Gender & Description Recipient Race Code & Description Recipient County & Description	This is not a stratified measure.
Type Score	better quality = lower score	Rate/proportion better quality = lower score
Algorithm	N/A-Measure results were simply reviewed in relationship to the established target goal. 117817| 128893| 114481	Step 1: Measure person-time eligible for each patient and record by month.

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
		a. For each month in the reporting year, identify all children ages 3 – 21 years who meet the criteria for Identifiable asthma - and do not satisfy one of the exclusion criteria - during the assessment period. The assessment period is defined as the year prior to the reporting year plus all months in the reporting year prior to the reporting month. Identify and maintain a unique patient identifier and all stratification variables. To illustrate: if the goal is to report for January 2016, first one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 when doing so. Continuous enrollment criterion requires that the child was enrolled in November and December of 2015, as well as January 2016. This total represents the number of person-months (child-months) for January. Next, for February: one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 AND January 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in December 2015 and January 2016, as well as February 2016. This is the number of person-months (child-months) for February. Repeat this progression monthly so that for December, one would identify children with Identifiable asthma and analyze all of calendar year 2015 AND January through November 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in October 2016 and November 2016, as well as December 2016. This is the number of person-months (child-months) for December. b. Sum all months that are eligible from the reporting year. This sum is the denominator in people-months. Divide by 1200. This is denominator in 100 people-years. This is the denominator for the year. Step 2: Month by month, considering the definitions above, identify the number of discrete numerator events that occur in children eligible in that specific month: a. Prior hospitalization with asthma as primary or secondary diagnosis b. Other qualifying events after the fifth birthday (age is age at occurrence):

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
		i. One or more prior ambulatory visits with asthma as the primary diagnosis, OR ii. Two or more ambulatory visits with asthma as a diagnosis, OR iii. One ambulatory visit with asthma as a diagnosis AND at least one asthma-related prescription c. Other qualifying events, any age: i. Three or more ambulatory visits with diagnosis of asthma, OR ii. Two or more ambulatory visits with a diagnosis of asthma AND one or more asthma-related prescriptions Note, these age differences are per NHLBI guidelines (https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma) and were reviewed and developed in collaboration with the Delphi panel of experts convened during the development of this measure. Step 3. Calculate rate as Numerator / Denominator. - If a qualified member has no numerator events during a month, the event count value is 0. See document at https://chipper.ucsf.edu/upload/chipper/documents/Flowsheet_Asthma_1.pdf for a flow chart for data flow and management steps to calculate the measure. SAS code is available at https://chipper.ucsf.edu/upload/chipper/documents/asthma_1_sas_code.pdf 127469
Submission items	5.1 Identified measures: 5a.1 Are specs completely harmonized? 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value: n/a Related Measures: Unaware of any. Checked NQF endorsed list and could not find one related to Asthma and Emergency Room Visits.	5.1 Identified measures: 0728 : Asthma Admission Rate (PDI 14) 1381 : Asthma Emergency Department Visits 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: Regarding measure 0728: Full technical specifications are not available as this measure is being reviewed for maintenance of endorsement. However, the measure we propose focuses on a different types of utilization, ED use, rather than asthma hospitalizations. Measure 0728 is also intended for population level analysis at the regional or

	1381: Asthma Emergency Department Visits	3599: Pediatric Asthma Emergency Department Use
		state level, which differs from the use case for the proposed measure, which is health plan use, generally in collaboration with primary care practices. 5b.1 If competing, why superior or rationale for additive value: NA

Appendix E2: Related and Competing Measures (narrative format)

Comparison of NQF 0058 and NQF 0069

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

0069: Appropriate Treatment for Upper Respiratory Infection

Steward

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

National Committee for Quality Assurance

0069: Appropriate Treatment for Upper Respiratory Infection

National Committee for Quality Assurance

Description

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing event.

0069: Appropriate Treatment for Upper Respiratory Infection

The Appropriate Treatment for Upper Respiratory Infection (URI) measure assesses whether members 3 months of age and older with a diagnosis of upper respiratory infection were not dispensed an antibiotic prescription. The measure includes patients enrolled in commercial, Medicaid, and Medicare health plans.

Type

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Process

0069: Appropriate Treatment for Upper Respiratory Infection

Process

Data Source

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

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 the Interactive Data Submission System (IDSS) portal.

No data collection instrument provided Attachment 0058_AAB_Fall_2020_Value_Sets.xlsx

0069: Appropriate Treatment for Upper Respiratory Infection

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 0069_URI_Fall_2020_Value_Sets.xlsx

Level

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Health Plan

0069: Appropriate Treatment for Upper Respiratory Infection

Health Plan

Setting

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Emergency Department and Services, Outpatient Services

0069: Appropriate Treatment for Upper Respiratory Infection

Emergency Department and Services, Outpatient Services

Numerator Statement

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

The number of dispensed antibiotic medications following an episode of acute bronchitis/bronchiolitis. The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the proportion of episodes during which an antibiotic was not dispensed (a higher rate is better).

0069: Appropriate Treatment for Upper Respiratory Infection

The numerator of the measure includes the number of dispensed prescriptions for an antibiotic medication on or 3 days after the Episode Date.

Numerator Details

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Dispensed prescription for an antibiotic medication (listed in Table AAB Antibiotic Medications) on or three days after the episode date.

Table AAB Antibiotic Medications

Aminoglycosides: Amikacin; Gentamicin; Streptomycin; Tobramycin

Aminopenicillins: Amoxicillin; Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate; Ampicillin-sulbactam; Piperacillin-tazobactam; Ticarcillin-clavulanate

First-generation cephalosporins: Cefadroxil; Cefazolin; Cephalexin

Fourth-generation cephalosporins: Cefepime

Ketolides: Telithromycin

Lincomycin derivatives: Clindamycin; Lincomycin

Macrolides: Azithromycin; Clarithromycin; Erythromycin; Erythromycin ethylsuccinate; Erythromycin lactobionate; Erythromycin stearate

Miscellaneous antibiotics: Aztreonam; Chloramphenicol; Dalfopristin-quinupristin; Daptomycin; Erythromycin-sulfisoxazole; Linezolid; Metronidazole; Vancomycin

Natural penicillins: Penicillin G benzathine-procaine; Penicillin G potassium; Penicillin G procaine; Penicillin G sodium; Penicillin V potassium; Penicillin G benzathine

Penicillinase resistant penicillins: Dicloxacillin; Nafcillin; Oxacillin

Quinolones: Ciprofloxacin; Gemifloxacin; Levofloxacin; Moxifloxacin; Norfloxacin; Ofloxacin;

Rifamycin derivatives: Rifampin

Second generation cephalosporin: Cefaclor; Cefotetan; Cefoxitin; Cefprozil; Cefuroxime

Sulfonamides: Sulfadiazine;; Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline; Minocycline; Tetracycline

Third generation cephalosporins: Cefdinir; Cefditoren; Cefixime; Cefotaxime; Cefpodoxime; Ceftazidime; Ceftibuten; Ceftriaxone

Urinary anti-infectives: Fosfomycin; Nitrofurantoin; Nitrofurantoin macrocrystals-monohydrate; Trimethoprim; Nitrofurantoin macrocrystals

0069: Appropriate Treatment for Upper Respiratory Infection

Dispensed antibiotic medications (Table CWP Antibiotic Medications) on or within 3 days after an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter for upper respiratory infection (URI) during the intake period. The measure is reported as an inverted rate (1-numerator/denominator); a higher rate is better.

CWP Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G potassium, Penicillin G bezathine, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

Denominator Statement

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Episodes for members age 3 months and older with a diagnosis of acute bronchitis or bronchiolitis during the intake period.

0069: Appropriate Treatment for Upper Respiratory Infection

Episodes for members 3 months of age and older as of July 1 of the year prior to the measurement year who had an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter with a diagnosis of upper respiratory infection (URI) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).

Denominator Details

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set).

Do not include visits that result in an inpatient stay (Inpatient Stay Value Set).

See the corresponding Excel document for the value sets referenced above.

0069: Appropriate Treatment for Upper Respiratory Infection

Follow the steps below to identify the eligible population:

Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set) an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of URI (URI Value Set).

The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period.

CWP-C: Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

Exclusions

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

As listed in the denominator details, the final denominator population does not include episodes with a history of select comorbid conditions, history of antibiotic use, or presence of a competing diagnosis

0069: Appropriate Treatment for Upper Respiratory Infection

Exclude visits that result in an inpatient stay.

Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date.

Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date.

Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.

Exclusion Details

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

The measure excludes episodes with the following comorbid conditions during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

- HIV Value Set.

- Malignant Neoplasms Value Set.

- Emphysema Value Set.

- COPD Value Set.

- Cystic Fibrosis Value Set.

- Comorbid Conditions Value Set.

The measure excludes episode with a new or refill prescription for an antibiotic medication (Table AAB-D) was filled 30 days prior to the Episode Date or was active on the Episode Date.

The measure excludes episodes with the following competing diagnoses during the period 30 days prior to the Episode Date through 7 days after the Episode Date (inclusive) the patient had a claim/encounter with any competing diagnosis. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.

- Competing Diagnosis Value Set.

See the corresponding Excel document for the value sets referenced above.

0069: Appropriate Treatment for Upper Respiratory Infection

Exclude visits that results in an inpatient stay (Inpatient Stay Value Set)

Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

-HIV Value Set.

-HIV Type 2 Value Set.

-Malignant Neoplasms Value Set.

-Other Malignant Neoplasm of Skin Value Set

-Emphysema Value Set.

-COPD Value Set.

-Comorbid Conditions Value Set.

-Disorders of the Immune System Value Set

Exclude for Negative Medication History: No pharmacy claims for either new or refill prescriptions for an antibiotic drug listed below in the 30 days prior to Episode Date, or was active on Episode Data :

CWP-C: Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

Exclude Episodes where there is a claim/encounter for a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.

- Competing Diagnosis Value Set.

(See corresponding Excel document for the value sets referenced above)

Risk Adjustment

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

No risk adjustment or risk stratification

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0069: Appropriate Treatment for Upper Respiratory Infection

No risk adjustment or risk stratification

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Stratification

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

HEDIS data are stratified by plan type (i.e. commercial, Medicaid). For this measure, a total rate is reported, along with three age stratifications (3 months–17 years; 18–64 years; 65 years and older).

0069: Appropriate Treatment for Upper Respiratory Infection

Measure is stratified by age:

3 months – 17 years

18 - 64 years

65 years and older

Type Score

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Other (specify): The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of episodes for which antibiotics were not prescribed. better quality = higher score

0069: Appropriate Treatment for Upper Respiratory Infection

Other The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of patients for whom antibiotics were not prescribed. better quality = higher score

Algorithm

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Step 1: Identify all members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set).

Step 2: Determine all acute bronchitis/bronchiolitis Episode Dates. For each member identified in step 1, determine all outpatient, telephone, observation or ED visits, e-visits and virtual check-ins with a diagnosis of acute bronchitis/bronchiolitis.

Do not include visits that result in an inpatient stay (Inpatient Stay Value Set).

Step 3: Test for Negative Comorbid Condition History. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

- HIV Value Set.
- HIV Type 2 Value Set.
- Malignant Neoplasms Value Set.
- Other Malignant Neoplasm of Skin Value Set.
- Emphysema Value Set.
- COPD Value Set.
- Comorbid Conditions Value Set.
- Disorders of the Immune System Value Set.

Step 4: Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (AAB Antibiotic Medications List) was filled 30 days prior to the Episode Date or was active on the Episode Date.

Step 5: Test for Negative Competing Diagnosis. Exclude Episode Dates where the member had a claim/encounter with a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.
- Competing Diagnosis Value Set.

Step 6: Calculate continuous enrollment. The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Step 7: Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period.

Note: The denominator for this measure is based on episodes, not on members. All eligible episodes that were not excluded or deduplicated remain in the denominator.

Step 8: Calculate the numerator. Determine the number of events in the eligible population with a dispensed antibiotic medication on or three days after the episode date.

Step 9: Calculate a rate (number of antibiotics/eligible population).

Step 10: Subtract the rate calculated in step 9 from one to invert the measure result to represent appropriate treatment for acute bronchitis/bronchiolitis (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881

0069: Appropriate Treatment for Upper Respiratory Infection

Episode Date is defined as the date of service for any outpatient, telephone, observation or ED visit, e-visit or virtual check-in during the Intake Period with a diagnosis of URI.

Step 1 Determine the eligible population. To do so, identify all patients who had an outpatient, telephone, e-visit or virtual check-in or ED visit with a diagnosis of URI during the Intake Period.

Step 2 Determine all URI Episode Dates during the intake period. For each patient identified in step 1, determine all outpatient, telephone, observation or ED claims/encounters or e-visits and virtual check-ins with a URI diagnosis.

Step 3 Test for Negative Comorbid Condition History. Exclude Episode Dates when the patient had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date.

Step 4 Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date.

Step 5 Test for Negative Competing Diagnosis. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.

Step 6 Calculate continuous enrollment. The patient must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Step 7 Deduplicate eligible episodes. If a patient has more than one eligible episode on a 31-day period, include only the first eligible episode. (provides denominator)

Step 8 Calculate numerator - number of dispensed prescriptions for an antibiotic medication from the Antibiotic Medication list on or 3 days after the episode date

Step 9 Calculate rate numerator/denominator

Step 10 Subtract the rate calculated in Step 9 from 1 to invert the measure result to represent appropriate treatment for upper respiratory infection (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881

Submission items

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

5.1 Identified measures: 0069 : Appropriate Treatment for Upper Respiratory Infection

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: N/A

5b.1 If competing, why superior or rationale for additive value: N/A

0069: Appropriate Treatment for Upper Respiratory Infection

5.1 Identified measures: 0058 : Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Both measure specifications focus on inappropriate antibiotic prescribing. The current measures considers antibiotic prescribing in the case of upper respiratory infections, while NQF #0058 considers prescribing in the case of acute bronchitis or bronchiolitis. The diagnosis may impact clinician decision for antibiotic prescribing.

5b.1 If competing, why superior or rationale for additive value: N/A

Comparison of NQF 0069 and NQF 0058

0069: Appropriate Treatment for Upper Respiratory Infection

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Steward

0069: Appropriate Treatment for Upper Respiratory Infection

National Committee for Quality Assurance

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

National Committee for Quality Assurance

Description

0069: Appropriate Treatment for Upper Respiratory Infection

The Appropriate Treatment for Upper Respiratory Infection (URI) measure assesses whether members 3 months of age and older with a diagnosis of upper respiratory infection were not dispensed an antibiotic prescription. The measure includes patients enrolled in commercial, Medicaid, and Medicare health plans.

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing event.

Type

0069: Appropriate Treatment for Upper Respiratory Infection

Process

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Process

Data Source

0069: Appropriate Treatment for Upper Respiratory Infection

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 0069_URI_Fall_2020_Value_Sets.xlsx

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

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 the Interactive Data Submission System (IDSS) portal.

No data collection instrument provided Attachment 0058_AAB_Fall_2020_Value_Sets.xlsx

Level

0069: Appropriate Treatment for Upper Respiratory Infection

Health Plan

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Health Plan

Setting

0069: Appropriate Treatment for Upper Respiratory Infection

Emergency Department and Services, Outpatient Services

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Emergency Department and Services, Outpatient Services

Numerator Statement

0069: Appropriate Treatment for Upper Respiratory Infection

The numerator of the measure includes the number of dispensed prescriptions for an antibiotic medication on or 3 days after the Episode Date.

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

The number of dispensed antibiotic medications following an episode of acute bronchitis/bronchiolitis. The measure is reported as an inverted rate (i.e., 1 –

numerator/denominator) to reflect the proportion of episodes during which an antibiotic was not dispensed (a higher rate is better).

Numerator Details

0069: Appropriate Treatment for Upper Respiratory Infection

Dispensed antibiotic medications (Table CWP Antibiotic Medications) on or within 3 days after an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter for upper respiratory infection (URI) during the intake period. The measure is reported as an inverted rate (1-numerator/denominator); a higher rate is better.

CWP Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G potassium, Penicillin G bezathine, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Dispensed prescription for an antibiotic medication (listed in Table AAB Antibiotic Medications) on or three days after the episode date.

Table AAB Antibiotic Medications

Aminoglycosides: Amikacin; Gentamicin; Streptomycin; Tobramycin

Aminopenicillins: Amoxicillin; Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate; Ampicillin-sulbactam; Piperacillin-tazobactam; Ticarcillin-clavulanate

First-generation cephalosporins: Cefadroxil; Cefazolin; Cephalexin

Fourth-generation cephalosporins: Cefepime

Ketolides: Telithromycin

Lincomycin derivatives: Clindamycin; Lincomycin

Macrolides: Azithromycin; Clarithromycin; Erythromycin; Erythromycin ethylsuccinate; Erythromycin lactobionate; Erythromycin stearate

Miscellaneous antibiotics: Aztreonam; Chloramphenicol; Dalfopristin-quinupristin; Daptomycin; Erythromycin-sulfisoxazole; Linezolid; Metronidazole; Vancomycin

Natural penicillins: Penicillin G benzathine-procaine; Penicillin G potassium; Penicillin G procaine; Penicillin G sodium; Penicillin V potassium; Penicillin G benzathine

Penicillinase resistant penicillins: Dicloxacillin; Nafcillin; Oxacillin

Quinolones: Ciprofloxacin; Gemifloxacin; Levofloxacin; Moxifloxacin; Norfloxacin; Ofloxacin;

Rifamycin derivatives: Rifampin

Second generation cephalosporin: Cefaclor; Cefotetan; Cefoxitin; Cefprozil; Cefuroxime

Sulfonamides: Sulfadiazine;; Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline; Minocycline; Tetracycline

Third generation cephalosporins: Cefdinir; Cefditoren; Cefixime; Cefotaxime; Cefpodoxime; Ceftazidime; Ceftibuten; Ceftriaxone

Urinary anti-infectives: Fosfomycin; Nitrofurantoin; Nitrofurantoin macrocrystals-monohydrate; Trimethoprim; Nitrofurantoin macrocrystals

Denominator Statement

0069: Appropriate Treatment for Upper Respiratory Infection

Episodes for members 3 months of age and older as of July 1 of the year prior to the measurement year who had an outpatient, telephone, e-visit or virtual check-in, an observation visit or ED encounter with a diagnosis of upper respiratory infection (URI) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Episodes for members age 3 months and older with a diagnosis of acute bronchitis or bronchiolitis during the intake period.

Denominator Details

0069: Appropriate Treatment for Upper Respiratory Infection

Follow the steps below to identify the eligible population:

Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set) an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of URI (URI Value Set).

The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period.

CWP-C: Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set).

Do not include visits that result in an inpatient stay (Inpatient Stay Value Set).

See the corresponding Excel document for the value sets referenced above.

Exclusions

0069: Appropriate Treatment for Upper Respiratory Infection

Exclude visits that result in an inpatient stay.

Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date.

Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date.

Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

As listed in the denominator details, the final denominator population does not include episodes with a history of select comorbid conditions, history of antibiotic use, or presence of a competing diagnosis

Exclusion Details

0069: Appropriate Treatment for Upper Respiratory Infection

Exclude visits that results in an inpatient stay (Inpatient Stay Value Set)

Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

-HIV Value Set.

-HIV Type 2 Value Set.

-Malignant Neoplasms Value Set.

-Other Malignant Neoplasm of Skin Value Set

-Emphysema Value Set.

-COPD Value Set.

-Comorbid Conditions Value Set.

-Disorders of the Immune System Value Set

Exclude for Negative Medication History: No pharmacy claims for either new or refill prescriptions for an antibiotic drug listed below in the 30 days prior to Episode Date, or was active on Episode Data :

CWP-C: Antibiotic Medications

Aminopenicillins: Amoxicillin, Ampicillin

Beta-lactamase inhibitors: Amoxicillin-clavulanate

First generation cephalosporins: Cefadroxil, Cefazolin, Cephalexin

Folate antagonist: Trimethoprim

Lincomycin derivatives: Clindamycin

Macrolides: Azithromycin, Clarithromycin, Erythromycin, Erythromycin ethylsuccinate, Erythromycin lactobionate, Erythromycin stearate

Natural penicillins: Penicillin G bezathine, Penicillin G potassium, Penicillin G sodium, Penicillin V potassium

Penicillinase-resistant penicillins: Dicloxacillin

Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin

Second generation cephalosporins: Cefaclor, Cefprozil, Cefuroxime

Sulfonamides: Sulfamethoxazole-trimethoprim

Tetracyclines: Doxycycline, Minocycline, Tetracycline

Third generation cephalosporins: Cefdinir, Cefixime, Cefpodoxime, Ceftibuten, Cefditoren, Ceftriaxone

Exclude Episodes where there is a claim/encounter for a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.

- Competing Diagnosis Value Set.

(See corresponding Excel document for the value sets referenced above)

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

The measure excludes episodes with the following comorbid conditions during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

- HIV Value Set.

- Malignant Neoplasms Value Set.

- Emphysema Value Set.

- COPD Value Set.

- Cystic Fibrosis Value Set.

- Comorbid Conditions Value Set.

The measure excludes episode with a new or refill prescription for an antibiotic medication (Table AAB-D) was filled 30 days prior to the Episode Date or was active on the Episode Date.

The measure excludes episodes with the following competing diagnoses during the period 30 days prior to the Episode Date through 7 days after the Episode Date (inclusive) the patient had a claim/encounter with any competing diagnosis. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.

- Competing Diagnosis Value Set.

See the corresponding Excel document for the value sets referenced above.

Risk Adjustment

0069: Appropriate Treatment for Upper Respiratory Infection

No risk adjustment or risk stratification

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0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

No risk adjustment or risk stratification

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Stratification

0069: Appropriate Treatment for Upper Respiratory Infection

Measure is stratified by age:

3 months – 17 years

18 - 64 years

65 years and older

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

HEDIS data are stratified by plan type (i.e. commercial, Medicaid). For this measure, a total rate is reported, along with three age stratifications (3 months–17 years; 18–64 years; 65 years and older).

Type Score

0069: Appropriate Treatment for Upper Respiratory Infection

Other The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of patients for whom antibiotics were not prescribed. better quality = higher score

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Other (specify): The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of episodes for which antibiotics were not prescribed. better quality = higher score

Algorithm

0069: Appropriate Treatment for Upper Respiratory Infection

Episode Date is defined as the date of service for any outpatient, telephone, observation or ED visit, e-visit or virtual check-in during the Intake Period with a diagnosis of URI.

Step 1 Determine the eligible population. To do so, identify all patients who had an outpatient, telephone, e-visit or virtual check-in or ED visit with a diagnosis of URI during the Intake Period.

Step 2 Determine all URI Episode Dates during the intake period. For each patient identified in step 1, determine all outpatient, telephone, observation or ED claims/encounters or e-visits and virtual check-ins with a URI diagnosis.

Step 3 Test for Negative Comorbid Condition History. Exclude Episode Dates when the patient had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date.

Step 4 Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication was filled 30 days prior to the Episode Date or was active on the Episode Date.

Step 5 Test for Negative Competing Diagnosis. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis on or three days after the Episode Date.

Step 6 Calculate continuous enrollment. The patient must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Step 7 Deduplicate eligible episodes. If a patient has more than one eligible episode on a 31-day period, include only the first eligible episode. (provides denominator)

Step 8 Calculate numerator - number of dispensed prescriptions for an antibiotic medication from the Antibiotic Medication list on or 3 days after the episode date

Step 9 Calculate rate numerator/denominator

Step 10 Subtract the rate calculated in Step 9 from 1 to invert the measure result to represent appropriate treatment for upper respiratory infection (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

Step 1: Identify all members who had an outpatient visit (Outpatient Value Set), a telephone visit (Telephone Visits Value Set), an e-visit or virtual check-in (Online Assessments Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) during the Intake Period, with a diagnosis of acute bronchitis/bronchiolitis (Acute Bronchitis Value Set).

Step 2: Determine all acute bronchitis/bronchiolitis Episode Dates. For each member identified in step 1, determine all outpatient, telephone, observation or ED visits, e-visits and virtual check-ins with a diagnosis of acute bronchitis/bronchiolitis.

Do not include visits that result in an inpatient stay (Inpatient Stay Value Set).

Step 3: Test for Negative Comorbid Condition History. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition:

- HIV Value Set.
- HIV Type 2 Value Set.

- Malignant Neoplasms Value Set.
- Other Malignant Neoplasm of Skin Value Set.
- Emphysema Value Set.
- COPD Value Set.
- Comorbid Conditions Value Set.
- Disorders of the Immune System Value Set.

Step 4: Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (AAB Antibiotic Medications List) was filled 30 days prior to the Episode Date or was active on the Episode Date.

Step 5: Test for Negative Competing Diagnosis. Exclude Episode Dates where the member had a claim/encounter with a competing diagnosis on or 3 days after the Episode Date. A code from either of the following meets criteria for a competing diagnosis:

- Pharyngitis Value Set.
- Competing Diagnosis Value Set.

Step 6: Calculate continuous enrollment. The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).

Step 7: Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period.

Note: The denominator for this measure is based on episodes, not on members. All eligible episodes that were not excluded or deduplicated remain in the denominator.

Step 8: Calculate the numerator. Determine the number of events in the eligible population with a dispensed antibiotic medication on or three days after the episode date.

Step 9: Calculate a rate (number of antibiotics/eligible population).

Step 10: Subtract the rate calculated in step 9 from one to invert the measure result to represent appropriate treatment for acute bronchitis/bronchiolitis (i.e., antibiotic not prescribed). The measure is reported as an inverted rate (i.e., 1 – numerator/denominator) to reflect the number of episodes not associated with a dispensed antibiotic (higher is better). 123834| 140881

Submission items

0069: Appropriate Treatment for Upper Respiratory Infection

5.1 Identified measures: 0058 : Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Both measure specifications focus on inappropriate antibiotic prescribing. The current measures considers antibiotic prescribing in the case of upper respiratory infections, while NQF #0058 considers prescribing in the case of acute bronchitis or bronchiolitis. The diagnosis may impact clinician decision for antibiotic prescribing.

5b.1 If competing, why superior or rationale for additive value: N/A

0058: Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)

5.1 Identified measures: 0069 : Appropriate Treatment for Upper Respiratory Infection

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: N/A

5b.1 If competing, why superior or rationale for additive value: N/A

Comparison of NQF 3166 and NQF 2797

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Steward

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

QMETRIC - University of Michigan

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Q-METRIC – University of Michigan

Description

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

The percentage of children ages 3 months to 5 years old with sickle cell anemia (SCA) who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

The percentage of children ages 2 through 15 years old with sickle cell anemia (Hemoglobin SS) who received at least one transcranial Doppler (TCD) screening within a year.

Type

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Process

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Process

Data Source

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Claims NA

No data collection instrument provided Attachment SCA_Antibiotic_Measure_Appendix_Tables_20180501.xlsx

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Claims N/A

No data collection instrument provided Attachment Q-METRIC_SCD_Code_Table_ICD9_ICD10-636488727296413357.xlsx

Level

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Health Plan

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Health Plan

Setting

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Other Any setting represented with prescription medication claims data

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Other Any setting represented with claims data

Numerator Statement

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

The numerator is the number of children ages 3 months to 5 years old with SCA who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

The numerator is the number of children ages 2 through 15 years old with sickle cell anemia who received at least one TCD screening within the measurement year.

Numerator Details

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Cases from target population with target process (appropriate antibiotic prophylaxis dispensed for at least 300 days within the calendar year): Antibiotic prophylaxis is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply of antibiotics dispensed within the measurement year (see National Drug Codes (NDC) Table 1).

NOTE: Although NHLBI guidelines specifically recommend penicillin for antibiotic prophylaxis, some children may have or be suspected to have penicillin sensitivity. The American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics suggests an alternative for children who are allergic to penicillin: "Erythromycin prophylaxis may be used as an alternative for children with suspected or proven penicillin allergy" (Citation: American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics (Pediatrics 2002; 109(3):526-535; Reaffirmed in 2016). Providers may also choose to prescribe amoxicillin. Therefore, we have included a broader definition of antibiotic prophylaxis than penicillin in this measure (penicillin, erythromycin, amoxicillin). This is intended to avoid underestimation of the proportion of children with SCA who are protected against pneumococcal infection.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Cases from target population with target process (Receipt of TCD screening): Receipt of TCD screening is identified as the presence of at least one CPT code for any of five acceptable ultrasonography tests within the measurement year among children in the target population. Acceptable CPT codes are: 93886 (complete study), 93888 (limited study), 93890 (vasoreactivity study), 93892 (emboli detection without intravenous microbubble injection), and 93893 (emboli detection with intravenous microbubble injection).

Denominator Statement

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

The denominator is the number of children ages 3 months to 5 years with sickle cell anemia (SCA) within the measurement year.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

The denominator is the number of children ages 2 through 15 years with sickle cell anemia within the measurement year.

Denominator Details

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

Note: Children with SCA are included starting at 3 months of age to account for any lag in identification and confirmation of the sickle cell disease status of the child.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Children with sickle cell anemia are identified through the presence of at least three separate healthcare encounters related to sickle cell anemia (defined as hemoglobin [Hb]SS) within the measurement year. Sickle cell anemia-related healthcare encounters are identified through ICD codes. The ICD-9-CM codes to identify HbSS-related healthcare encounters are as follows: 282.61 (Hb-SS disease w/o crisis) and 282.62 (Hb-SS disease with crisis). The ICD-10-CM codes for HbSS-related healthcare encounters are as follows: D57.00 (Hb-SS disease with crisis, unspecified); D57.01 (Hb-SS disease with acute chest syndrome); and D57.02 (Hb-SS disease with splenic sequestration). Children ages 2 through 15 years are included within the target population (i.e., must not have a 2nd or 16th birthday within the measurement year).

It is important to note that accurate calculation of this measure requires that the target population be selected from among children who have all of their health services for the measurement year included in the administrative claims data set. For children who have dual enrollment in other health plans, their claims may not be complete since some of their health services may have been paid for by another health plan. Inclusion of children with other health insurance would potentially cause this measure to be understated. As a consequence, this measure requires that children must not only be continuously enrolled within the health plan from which claims are available, the enrollment files must also be assessed to determine whether other forms of health insurance existed during the measurement year. Children with evidence of other insurance during the measurement year (i.e., coordination of benefits) are excluded from the target population.

Exclusions

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

There are no denominator exclusions.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

There are no denominator exclusions.

Exclusion Details

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

NA

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

N/A

Risk Adjustment

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

No risk adjustment or risk stratification

140919| 147064

140919| 147064

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

No risk adjustment or risk stratification

140919| 147064

140919| 147064

Stratification

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

NA

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

N/A

Type Score

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Rate/proportion better quality = higher score

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Rate/proportion better quality = higher score

Algorithm

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate: (numerator/denominator). 140919| 147064

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and diagnosis requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate (numerator / denominator). 140919| 147064

Submission items

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended by NHLBI for ages 0 until 5; TCD screening from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure.

5b.1 If competing, why superior or rationale for additive value:

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF 3595 and NQF 2797

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Steward

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

University of Michigan

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Q-METRIC – University of Michigan

Description

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

The percentage of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

The percentage of children ages 2 through 15 years old with sickle cell anemia (Hemoglobin SS) who received at least one transcranial Doppler (TCD) screening within a year.

Type

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Process

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Process

Data Source

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Claims

No data collection instrument provided Attachment Hydroxyuea_Measure_Appendix_Tables_2020-05-20.xlsx

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Claims N/A

No data collection instrument provided Attachment Q-METRIC_SCD_Code_Table_ICD9_ICD10-636488727296413357.xlsx

Level

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Health Plan

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Health Plan

Setting

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Other Any setting represented with prescription medication claims data

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Other Any setting represented with claims data

Numerator Statement

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

The number of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

The numerator is the number of children ages 2 through 15 years old with sickle cell anemia who received at least one TCD screening within the measurement year.

Numerator Details

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Cases from target population with target process (hydroxyurea dispensed for at least 300 days within the calendar year): Dispensed hydroxyurea is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply within the measurement year (see National Drug Codes (NDC) Table 1).

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Cases from target population with target process (Receipt of TCD screening): Receipt of TCD screening is identified as the presence of at least one CPT code for any of five acceptable ultrasonography tests within the measurement year among children in the target population. Acceptable CPT codes are: 93886 (complete study), 93888 (limited study), 93890 (vasoreactivity study), 93892 (emboli detection without intravenous microbubble injection), and 93893 (emboli detection with intravenous microbubble injection).

Denominator Statement

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

The number of children ages 1 to 18 years with sickle cell anemia (SCA) within the measurement year.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

The denominator is the number of children ages 2 through 15 years with sickle cell anemia within the measurement year.

Denominator Details

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Children with sickle cell anemia are identified through the presence of at least three separate healthcare encounters related to sickle cell anemia (defined as hemoglobin [Hb]SS) within the measurement year. Sickle cell anemia-related healthcare encounters are identified through ICD codes. The ICD-9-CM codes to identify HbSS-related healthcare encounters are as follows: 282.61 (Hb-SS disease w/o crisis) and 282.62 (Hb-SS disease with crisis). The ICD-10-CM codes for HbSS-related healthcare encounters are as follows: D57.00 (Hb-SS disease with crisis, unspecified); D57.01 (Hb-SS disease with acute chest syndrome); and D57.02 (Hb-SS disease with splenic

sequestration). Children ages 2 through 15 years are included within the target population (i.e., must not have a 2nd or 16th birthday within the measurement year).

It is important to note that accurate calculation of this measure requires that the target population be selected from among children who have all of their health services for the measurement year included in the administrative claims data set. For children who have dual enrollment in other health plans, their claims may not be complete since some of their health services may have been paid for by another health plan. Inclusion of children with other health insurance would potentially cause this measure to be understated. As a consequence, this measure requires that children must not only be continuously enrolled within the health plan from which claims are available, the enrollment files must also be assessed to determine whether other forms of health insurance existed during the measurement year. Children with evidence of other insurance during the measurement year (i.e., coordination of benefits) are excluded from the target population.

Exclusions

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

NA

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

There are no denominator exclusions.

Exclusion Details

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

NA

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

N/A

Risk Adjustment

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

No risk adjustment or risk stratification

152557

152557

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

No risk adjustment or risk stratification

140919| 147064

140919| 147064

Stratification

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

NA

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

N/A

Type Score

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Rate/proportion better quality = higher score

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

Rate/proportion better quality = higher score

Algorithm

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate: (numerator/denominator). 152557

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and diagnosis requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate (numerator / denominator). 140919| 147064

Submission items

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

3166 : Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended by NHLBI for ages 0 until 5; TCD screening from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure.

5b.1 If competing, why superior or rationale for additive value:

2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF 3595 and NQF 3166

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Steward

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

University of Michigan

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

QMETRIC - University of Michigan

Description

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

The percentage of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

The percentage of children ages 3 months to 5 years old with sickle cell anemia (SCA) who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.

Type

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Process

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Process

Data Source

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Claims

No data collection instrument provided Attachment Hydroxyuea_Measure_Appendix_Tables_2020-05-20.xlsx

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Claims NA

No data collection instrument provided Attachment SCA_Antibiotic_Measure_Appendix_Tables_20180501.xlsx

Level

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Health Plan

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Health Plan

Setting

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Other Any setting represented with prescription medication claims data

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Other Any setting represented with prescription medication claims data

Numerator Statement

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

The number of children ages 1 to 18 years with sickle cell anemia (SCA) who were dispensed hydroxyurea for at least 300 days within the measurement year.

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

The numerator is the number of children ages 3 months to 5 years old with SCA who were dispensed appropriate antibiotic prophylaxis for at least 300 days within the measurement year.

Numerator Details

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Cases from target population with target process (hydroxyurea dispensed for at least 300 days within the calendar year): Dispensed hydroxyurea is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply within the measurement year (see National Drug Codes (NDC) Table 1).

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Cases from target population with target process (appropriate antibiotic prophylaxis dispensed for at least 300 days within the calendar year): Antibiotic prophylaxis is defined as at least 300 days covered within the measurement year, which is the summed total of the number of days' supply of antibiotics dispensed within the measurement year (see National Drug Codes (NDC) Table 1).

NOTE: Although NHLBI guidelines specifically recommend penicillin for antibiotic prophylaxis, some children may have or be suspected to have penicillin sensitivity. The American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics suggests an alternative for children who are allergic to penicillin: "Erythromycin prophylaxis may be used as an alternative for children with suspected or proven penicillin allergy" (Citation: American Academy of Pediatrics Section on Hematology/Oncology and Committee on Genetics (Pediatrics 2002; 109(3):526-535; Reaffirmed in 2016). Providers may also choose to prescribe amoxicillin. Therefore, we have included a broader definition of antibiotic prophylaxis than penicillin in this measure (penicillin, erythromycin, amoxicillin). This is intended to avoid underestimation of the proportion of children with SCA who are protected against pneumococcal infection.

Denominator Statement

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

The number of children ages 1 to 18 years with sickle cell anemia (SCA) within the measurement year.

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

The denominator is the number of children ages 3 months to 5 years with sickle cell anemia (SCA) within the measurement year.

Denominator Details

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 1 to 18 years are included within the target population (i.e., must not have an 18th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

For calculation of measure using ICD-9: Children with SCA are identified through the presence of at least three separate healthcare encounters related to SCA within the measurement year (ICD-9 codes 282.61, 282.62). Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

For calculation of measure using ICD-10: Children with SCA are identified through the presence of at least one outpatient visit with an ICD-10 diagnosis code of D57.1, D57.00, D57.01 or D57.02. Children ages 3 months to 5 years are included within the target population (i.e., must not have a 5th birthday within the measurement year). Children must be continuously enrolled within the health plan in which claims are available and must have no other form of health insurance for the entire measurement year.

Note: Children with SCA are included starting at 3 months of age to account for any lag in identification and confirmation of the sickle cell disease status of the child.

Exclusions

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

NA

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

There are no denominator exclusions.

Exclusion Details

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

NA

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

NA

Risk Adjustment

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

No risk adjustment or risk stratification

152557

152557

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

No risk adjustment or risk stratification

140919| 147064

140919| 147064

Stratification

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

NA

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

NA

Type Score

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

Rate/proportion better quality = higher score

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

Rate/proportion better quality = higher score

Algorithm

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate: (numerator/denominator). 152557

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

1. Identify the denominator: Determine the eligible population using administrative claims. The eligible population is all individuals who satisfy all specified criteria, including age, continuous enrollment, and benefit requirements within the measurement year.

2. Identify the numerator: Identify numerator events using administrative claims for all individuals in the eligible population (denominator) within the measurement year.

3. Calculate the rate: (numerator/denominator). 140919| 147064

Submission items

3595: Hydroxyurea Use Among Children with Sickle Cell Anemia

5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

3166 : Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended by NHLBI for ages 0 until 5; TCD screening from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure.

5b.1 If competing, why superior or rationale for additive value:

3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia

5.1 Identified measures: 2797 : Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Different age categories are included in the measures. For example, antibiotic prophylaxis is recommended by NHLBI for ages 0 until 5; TCD screening from ages 2 until 16; and hydroxyurea beginning at 9 months of age. Further, the numerators are identifying different events (antibiotics, hydroxyurea, TCD); therefore, the numerator specifications differ across each measure.

5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF 3599 and NQF 0728

3599: Pediatric Asthma Emergency Department Use

0728: Asthma Admission Rate (PDI 14)

Steward

3599: Pediatric Asthma Emergency Department Use

Albert Einstein College of Medicine

0728: Asthma Admission Rate (PDI 14)

Agency for Healthcare Research and Quality

Description

3599: Pediatric Asthma Emergency Department Use

This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years.

The rate construction of the measure makes it a more actionable measure compared to a more traditional quality measure percentage construct (e.g., percentage of patients with at least one asthma-related ED visit). The rate construction means that a plan can improve on performance either through improvement efforts targeting all patients with asthma, or through efforts targeted at high-utilizers, since all visits are counted in the numerator. For a percentage measure, efforts to address high-utilizers will be less influential on performance and potentially have no effect at all even if a high utilizer goes from 8 visits a year to 1, since in order to improve performance, a high-utilizer has to get down to zero visits.

This measure was developed under the Pediatric Quality Measurement Program, funded by the Centers for Medicare and Medicaid Services and administered by the Agency for Healthcare Research and Quality. https://www.ahrq.gov/pqmp/about/what-is-pqmp.html

0728: Asthma Admission Rate (PDI 14)

Admissions with a principal diagnosis of asthma per 100,000 population, ages 2 through 17 years. Excludes cases with a diagnosis code for cystic fibrosis and anomalies of the respiratory system, obstetric admissions, and transfers from other institutions.

[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population.]

Type

3599: Pediatric Asthma Emergency Department Use

Outcome

0728: Asthma Admission Rate (PDI 14)

Outcome

Data Source

3599: Pediatric Asthma Emergency Department Use

Claims Administrative claims, including state Medicaid claims and state All-payer claims databases.

No data collection instrument provided Attachment IMPLEMENT_Asthma_ED_Use_ICD_and_CPT_Codes-637413960397551146.xlsx

0728: Asthma Admission Rate (PDI 14)

Claims All analyses were completed using data from the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID), 2007-2011.HCUP is a family of health care databases and related software tools and products developed through a Federal-State-Industry partnership and sponsored by the Agency for Healthcare Research and Quality (AHRQ). HCUP databases bring together the data collection efforts of State data organizations, hospital associations, private data organizations, and the Federal government to create a national information resource of encounter-level health care data. The HCUP SID contain the universe of the inpatient discharge abstracts in participating States, translated into a uniform format to facilitate multi-State comparisons and analyses. Together, the SID encompass about 97 percent of all U.S. community hospital discharges (in 2011, 46 states participated for a total of more than 38.5 million hospital discharges with approximately 5 million pediatric (including births) hospital discharges). As defined by the American Hospital Association, community hospitals are all non-Federal, short-term, general or other specialty hospitals, excluding hospital units of institutions. Veterans hospitals and other Federal facilities are excluded. General and speciality children's hospitals are included in the hospital universe. Taken from the Uniform Bill-04 (UB-04), the SID data elements include ICD-9-CM coded principal and secondary diagnoses and procedures, additional detailed clinical and service information based on revenue codes, admission and discharge status, patient demographics, expected payment source (Medicare, Medicaid, private insurance as well as the uninsured), total charges and length of stay (www.hcup-us.ahrq.gov)

HCUP State Inpatient Databases (SID). Healthcare Cost and Utilization Project (HCUP). 2007-2011. Agency for Healthcare Research and Quality, Rockville, MD. www.ahrq.gov/sidoverview.jsp (AHRQ QI Software Version 4.5, www.qualityindicators.ahrq.gov)

Available at measure-specific web page URL identified in S.1 Attachment PDI_14_Asthma_Admission_Rate-636101306609537540.xlsx

Level

3599: Pediatric Asthma Emergency Department Use

Health Plan

0728: Asthma Admission Rate (PDI 14)

Population : Community, County or City, Population : Regional and State

Setting

3599: Pediatric Asthma Emergency Department Use

Outpatient Services

0728: Asthma Admission Rate (PDI 14)

Hospital

Numerator Statement

3599: Pediatric Asthma Emergency Department Use

Number of asthma-related ED visits

0728: Asthma Admission Rate (PDI 14)

Discharges, for patients ages 2 through 17 years, with a principal ICD-10-CM diagnosis code for asthma.

Numerator Details

3599: Pediatric Asthma Emergency Department Use

Numerator details: The numerator counts all emergency visits and hospitalizations with a primary or secondary ICD-based diagnosis of asthma in a child who was eligible in the reporting month. The asthma ICD codes are in the Excel workbook in S.2b. Since most hospitalizations for asthma are from the ED and many ED visits that result in hospitalization are not captured in encounter data, a numerator event may be either an ED visit or a hospitalization. In the datafiles created for the measure, the data is in member-month rows. Thus the numerator is the number of visits for that member in each month. See S.14 for more information on measure calculation.

0728: Asthma Admission Rate (PDI 14)

Asthma diagnosis codes: (ACSASTD)

ICD-10-CM	Description
J4521	Mild intermittent asthma with (acute) exacerbation
J4522	Mild intermittent asthma with status asthmaticus
J4531	Mild persistent asthma with (acute) exacerbation
J4532	Mild persistent asthma with status asthmaticus
J4541	Moderate persistent asthma with (acute) exacerbation
J4542	Moderate persistent asthma with status asthmaticus
J4551	Severe persistent asthma with (acute) exacerbation
J4552	Severe persistent asthma with status asthmaticus

J45901 Unspecified asthma with (acute) exacerbation

J45902 Unspecified asthma with status asthmaticus

J45990 Exercise induced bronchospasm

J45991 Cough variant asthma

J45998 Other asthma

NUMERATOR EXCLUSIONS

Exclude cases:

• with any-listed ICD-10-CM diagnosis codes for cystic fibrosis and anomalies of the respiratory system

• transfer from a hospital (different facility)

• transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)

• transfer from another health care facility

• MDC 14 (pregnancy, childbirth, and puerperium)

• with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

Appendix J – Admission Codes for Transfers

Cystic fibrosis and anomalies of the respiratory system diagnosis codes: (RESPAN)

ICD-10-CM	Description
E840	Cystic fibrosis with pulmonary manifestations
E8411	Meconium ileus in cystic fibrosis
E8419	Cystic fibrosis with other intestinal manifestations
E848	Cystic fibrosis with other manifestations
E849	Cystic fibrosis, unspecified
J8483	Surfactant mutations of the lung
J84841	Neuroendocrine cell hyperplasia of infancy
J84842	Pulmonary interstitial glycogenosis
J84843	Alveolar capillary dysplasia with vein misalignment
J84848	Other interstitial lung diseases of childhood
P270	Wilson-Mikity syndrome
P271	Bronchopulmonary dysplasia originating in the perinatal period
P278	Other chronic respiratory diseases originating in the perinatal period
P279	Unspecified chronic respiratory disease originating in the perinatal period
Q254	Other congenital malformations of aorta
Q311	Congenital subglottic stenosis
Q312	Laryngeal hypoplasia
Q313	Laryngocele
Q315	Congenital laryngomalacia
Q318	Other congenital malformations of larynx
Q319	Congenital malformation of larynx, unspecified

Q320 Congenital tracheomalacia
Q321 Other congenital malformations of trachea
Q322 Congenital bronchomalacia
Q323 Congenital stenosis of bronchus
Q324 Other congenital malformations of bronchus
Q330 Congenital cystic lung
Q331 Accessory lobe of lung
Q332 Sequestration of lung
Q333 Agenesis of lung
Q334 Congenital bronchiectasis
Q335 Ectopic tissue in lung
Q336 Congenital hypoplasia and dysplasia of lung
Q338 Other congenital malformations of lung
Q339 Congenital malformation of lung, unspecified
Q340 Anomaly of pleura
Q341 Congenital cyst of mediastinum
Q348 Other specified congenital malformations of respiratory system
Q349 Congenital malformation of respiratory system, unspecified
Q390 Atresia of esophagus without fistula
Q391 Atresia of esophagus with tracheo-esophageal fistula
Q392 Congenital tracheo-esophageal fistula without atresia
Q393 Congenital stenosis and stricture of esophagus
Q394 Esophageal web
Q893 Situs inversus

Denominator Statement

3599: Pediatric Asthma Emergency Department Use

100 Child Years for children with identifiable asthma

0728: Asthma Admission Rate (PDI 14)

Population ages 2 through 17 years in metropolitan area1 or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

1. The term “metropolitan area” (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). In addition, “area” could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area, or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.

Denominator Details

3599: Pediatric Asthma Emergency Department Use

The denominator represents the person-time experience among eligible children with identifiable asthma (definition below). Assessment of eligibility is determined for each child monthly. The total number of child months in the measurement year experienced is summed and divided by 1200 to achieve the units of 100 child years for the denominator.

0728: Asthma Admission Rate (PDI 14)

Not Applicable

Exclusions

3599: Pediatric Asthma Emergency Department Use

Children with specified concurrent or pre-existing diagnosis and children who have not been consecutively enrolled in the reporting plan for at least three months, including the month being assessed.

0728: Asthma Admission Rate (PDI 14)

Not applicable

Exclusion Details

3599: Pediatric Asthma Emergency Department Use

Children with concurrent or pre-existing: Cystic Fibrosis (CF) diagnosis, or Emphysema diagnosis.

Please see attached list of ICD codes ("IMPLEMENT Asthma ED Use ICD and CPT Codes") for exclusion criteria for CF and emphysema.

Consecutive enrollment is defined as being consecutively enrolled within the same payer. This allows for a change in plan type (e.g. changing to a PPO to an HMO within same payer). Continuous enrollment does not include moving payers even if continuously enrolled (e.g. moving from Kaiser to Blue Cross within the three month window would exclude them from the denominator. This is due to the measure being a health plan-level measure.

0728: Asthma Admission Rate (PDI 14)

Not applicable

Risk Adjustment

3599: Pediatric Asthma Emergency Department Use

Statistical risk model

127469

127469

0728: Asthma Admission Rate (PDI 14)

No risk adjustment or risk stratification

130177| 132112| 138848| 138827

130177| 132112| 138848| 138827

Stratification

3599: Pediatric Asthma Emergency Department Use

This is not a stratified measure.

0728: Asthma Admission Rate (PDI 14)

Not applicable

Type Score

3599: Pediatric Asthma Emergency Department Use

Rate/proportion better quality = lower score

0728: Asthma Admission Rate (PDI 14)

Rate/proportion better quality = lower score

Algorithm

3599: Pediatric Asthma Emergency Department Use

Step 1: Measure person-time eligible for each patient and record by month.

a. For each month in the reporting year, identify all children ages 3 – 21 years who meet the criteria for Identifiable asthma - and do not satisfy one of the exclusion criteria - during the assessment period. The assessment period is defined as the year prior to the reporting year plus all months in the reporting year prior to the reporting month. Identify and maintain a unique patient identifier and all stratification variables.

To illustrate: if the goal is to report for January 2016, first one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 when doing so. Continuous enrollment criterion requires that the child was enrolled in November and December of 2015, as well as January 2016. This total represents the number of person-months (child-months) for January.

Next, for February: one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 AND January 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in December 2015 and January 2016, as well as February 2016. This is the number of person-months (child-months) for February.

Repeat this progression monthly so that for December, one would identify children with Identifiable asthma and analyze all of calendar year 2015 AND January through November 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in October 2016 and November 2016, as well as December 2016. This is the number of person-months (child-months) for December.

b. Sum all months that are eligible from the reporting year. This sum is the denominator in people-months. Divide by 1200. This is denominator in 100 people-years. This is the denominator for the year.

Step 2: Month by month, considering the definitions above, identify the number of discrete numerator events that occur in children eligible in that specific month:

a. Prior hospitalization with asthma as primary or secondary diagnosis

b. Other qualifying events after the fifth birthday (age is age at occurrence):

i. One or more prior ambulatory visits with asthma as the primary diagnosis, OR

ii. Two or more ambulatory visits with asthma as a diagnosis, OR

iii. One ambulatory visit with asthma as a diagnosis AND at least one asthma-related prescription

c. Other qualifying events, any age:

i. Three or more ambulatory visits with diagnosis of asthma, OR

ii. Two or more ambulatory visits with a diagnosis of asthma AND one or more asthma- related prescriptions

Note, these age differences are per NHLBI guidelines (https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma) and were reviewed and developed in collaboration with the Delphi panel of experts convened during the development of this measure.

Step 3. Calculate rate as Numerator / Denominator.

- If a qualified member has no numerator events during a month, the event count value is 0.

See document at https://chipper.ucsf.edu/upload/chipper/documents/Flowsheet_Asthma_1.pdf for a flow chart for data flow and management steps to calculate the measure.

SAS code is available at https://chipper.ucsf.edu/upload/chipper/documents/asthma_1_sas_code.pdf 127469

0728: Asthma Admission Rate (PDI 14)

The observed rate is the number of discharges flagged with the outcome of interest divided by the number of persons in the population at risk. The predicted rate is estimated for each person based on a logistic regression model. The expected rate is the average predicted rate for the unit of interest (i.e. the county of residence). The risk-adjusted rate is calculated using the indirect method as observed rate divided by expected rate multiplied by the reference population rate. The performance score is a weighted average of the risk-adjusted rate and the reference population rate, where the weight is the signal-to-noise ratio.

Currently no risk adjustment is available for v6.0 ICD10 specifications (see response S.14). 130177| 132112| 138848| 138827

Submission items

3599: Pediatric Asthma Emergency Department Use

5.1 Identified measures: 0728 : Asthma Admission Rate (PDI 14)

1381 : Asthma Emergency Department Visits

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Regarding measure 0728: Full technical specifications are not available as this measure is being reviewed for maintenance of endorsement. However, the measure we propose focuses on a different types of utilization, ED use, rather than asthma hospitalizations. Measure 0728 is also intended for population level analysis at the regional or state level, which differs from the use case for the proposed measure, which is health plan use, generally in collaboration with primary care practices.

5b.1 If competing, why superior or rationale for additive value: NA

0728: Asthma Admission Rate (PDI 14)

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: Not applicable

Comparison of NQF 3599 and NQF 1381

1381: Asthma Emergency Department Visits
3599: Pediatric Asthma Emergency Department Use

Steward

1381: Asthma Emergency Department Visits

Alabama Medicaid Agency

3599: Pediatric Asthma Emergency Department Use

Albert Einstein College of Medicine

Description

1381: Asthma Emergency Department Visits

Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period.

3599: Pediatric Asthma Emergency Department Use

This measure estimates the rate of emergency department visits for children ages 3 – 21 who are being managed for identifiable asthma, using specified definitions. The measure is reported in visits per 100 child-years.

The rate construction of the measure makes it a more actionable measure compared to a more traditional quality measure percentage construct (e.g., percentage of patients with at least one asthma-related ED visit). The rate construction means that a plan can improve on performance either through improvement efforts targeting all patients with asthma, or through efforts targeted at high-utilizers, since all visits are counted in the numerator. For a percentage measure, efforts to address high-utilizers will be less influential on performance and potentially have no effect at all even if a high utilizer goes from 8 visits a year to 1, since in order to improve performance, a high-utilizer has to get down to zero visits.

This measure was developed under the Pediatric Quality Measurement Program, funded by the Centers for Medicare and Medicaid Services and administered by the Agency for Healthcare Research and Quality. https://www.ahrq.gov/pqmp/about/what-is-pqmp.html

Type

1381: Asthma Emergency Department Visits

Outcome

3599: Pediatric Asthma Emergency Department Use

Outcome

Data Source

1381: Asthma Emergency Department Visits

Claims (Only) It is Business Objects software with the Client side version known as DeskTop Intelligence or DI. It uses SQL structured business language and rules to allow for the development of queries of the administrative claims database. It is provided through our MMIS contract with HP Enterprises.

URL URL

3599: Pediatric Asthma Emergency Department Use

Claims Administrative claims, including state Medicaid claims and state All-payer claims databases.

No data collection instrument provided Attachment IMPLEMENT_Asthma_ED_Use_ICD_and_CPT_Codes-637413960397551146.xlsx

Level

1381: Asthma Emergency Department Visits

Population : Community, County or City, Health Plan

3599: Pediatric Asthma Emergency Department Use

Health Plan

Setting

1381: Asthma Emergency Department Visits

Hospital

3599: Pediatric Asthma Emergency Department Use

Outpatient Services

Numerator Statement

1381: Asthma Emergency Department Visits

Measuring percentage of people with Asthma that have an emergency room visit during a 12 month measurement period.

3599: Pediatric Asthma Emergency Department Use

Number of asthma-related ED visits

Numerator Details

1381: Asthma Emergency Department Visits

Emergency Department Visits

Numerator is patients with = 1 asthma related ED visits as identified via ED visit codes (procedure codes 99281-99285) AND also has an asthma diagnosis code ICD-9-CM codes 493.00, 493.01, 493.02, 493.10,493.11, 493.12, 493.81, 493.82, 493.90, 493.91, and 493.92 as the primary diagnosis on the emergency

room claim during the measurement period).

Use table of denominator recipient IDs to pull all recipients that have received claims described above.

3599: Pediatric Asthma Emergency Department Use

Numerator details: The numerator counts all emergency visits and hospitalizations with a primary or secondary ICD-based diagnosis of asthma in a child who was eligible in the reporting month. The asthma ICD codes are in the Excel workbook in S.2b. Since most hospitalizations for asthma are from the ED and many ED visits that result in hospitalization are not captured in encounter data, a numerator event may be either an ED visit or a hospitalization. In the datafiles created for the measure, the data is in member-month rows. Thus the numerator is the number of visits for that member in each month. See S.14 for more information on measure calculation.

Denominator Statement

1381: Asthma Emergency Department Visits

Denominator is all patients age two through age 20, diagnosed with asthma during the measurement period. The denominator will include recipients with claims with ICD-9-CM codes 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.81, 493.82, 493.90, 493.91,and 493.92 (excludes 493.20, 493.21 and 493.22)asprimary and secondary diagnoses with the dates of service"Begin Date through End Date" equal any consecutive 12 month period with paid dates from "Begin Date through End Date which includes 3 month tail". This is the measurement period. Total period of our pilot initiative was 24 months. We used Baseline Measurement period of March 1, 2006 through February 28, 2007 with paid dates through May 31, 2007 to provide a 3 month claims tail.

A "Measurement period is any 12 consecutive months".

3599: Pediatric Asthma Emergency Department Use

100 Child Years for children with identifiable asthma

Denominator Details

1381: Asthma Emergency Department Visits

SQL for Asthma Denominator

```
(
SELECT
DSS.T_CA_ICN.ID_MEDICAID,
trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12),
DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY,
DSS.T_CA_RECIP_KEY.CDE_RACE || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RACE,
DSS.T_CA_RECIP_KEY.CDE_SEX || ' - ' || DSS.T_CA_RECIP_KEY.DSC_SEX
FROM
DSS.T_CA_ICN,
DSS.T_RE_BASE_DN,
DSS.T_CA_RECIP_KEY,
DSS.T_CA_AID_GROUP
WHERE
( DSS.T_CA_ICN.RECIP_KEY=DSS.T_CA_RECIP_KEY.RECIP_KEY )
AND ( DSS.T_RE_BASE_DN.SAK_RECIP(+)=DSS.T_CA_ICN.SAK_RECIP )
AND ( DSS.T_CA_AID_GROUP.SAK_AID_GROUP=DSS.T_CA_ICN.SAK_AID_GROUP )
AND (
(DSS.T_CA_ICN.CDE_DIAG_PRIM IN ('49300', '49301', '49302', '49310', '49311', '49312', '49381',
'49382', '49390', '49391', '49392')
OR DSS.T_CA_ICN.CDE_DIAG_2 IN ('49300', '49301', '49302', '49310', '49311', '49312', '49381',
'49382', '49390', '49391', '49392'))
AND DSS.T_CA_ICN.DTE_FIRST_SVC BETWEEN '03-01-2006 00:00:00' AND '02-28-2007 00:00:00'
AND DSS.T_CA_ICN.DTE_PTN BETWEEN '03-01-2006 00:00:00' AND '05-31-2007 00:00:00'
```

```
AND trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12)
!= 0
AND DSS.T_CA_ICN.CDE_DTL_STATUS != 'D'
AND DSS.T_CA_AID_GROUP.CDE_GROUP_D NOT IN ('D98', 'D99', 'D1 ', 'D2 ', 'D3 ', 'D4 ', 'D5 ', 'D6 ',
'D7 ', 'D8 ', 'D9 ')
AND DSS.T_CA_ICN.CDE_CLM_TYPE IN ('I', 'A', 'C', 'M', 'O', 'B')
)
GROUP BY
DSS.T_CA_ICN.ID_MEDICAID,
trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12),
DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY,
DSS.T_CA_RECIP_KEY.CDE_RACE || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RACE,
DSS.T_CA_RECIP_KEY.CDE_SEX || ' - ' || DSS.T_CA_RECIP_KEY.DSC_SEX
HAVING
( count(DISTINCT DSS.T_CA_ICN.NUM_ICN) >= 1)
UNION
SELECT
DSS.T_CA_ICN.ID_MEDICAID,
trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12),
DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY,
DSS.T_CA_RECIP_KEY.CDE_RACE || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RACE,
DSS.T_CA_RECIP_KEY.CDE_SEX || ' - ' || DSS.T_CA_RECIP_KEY.DSC_SEX
FROM
DSS.T_CA_ICN,
DSS.T_RE_BASE_DN,
DSS.T_CA_RECIP_KEY,
DSS.T_CA_DRUG,
DSS.T_CA_AID_GROUP
WHERE
( DSS.T_CA_ICN.RECIP_KEY=DSS.T_CA_RECIP_KEY.RECIP_KEY )
AND ( DSS.T_CA_DRUG.SAK_CLAIM(+)=DSS.T_CA_ICN.SAK_CLAIM and
DSS.T_CA_DRUG.DTE_PTN(+)=DSS.T_CA_ICN.DTE_PTN )
AND ( DSS.T_RE_BASE_DN.SAK_RECIP(+)=DSS.T_CA_ICN.SAK_RECIP )
AND ( DSS.T_CA_AID_GROUP.SAK_AID_GROUP=DSS.T_CA_ICN.SAK_AID_GROUP )
AND (
DSS.T_CA_DRUG.NUM_DRUG_GCN_SEQ IN (05037, 04963, 04964, 04966, 04967, 04968, 05032,
05033, 05034, 05039, 05040, 16033, 22230, 28090,
41848, 41849, 48698, 48699, 49871, 51197, 51198, 54687, 57879, 58890)
AND DSS.T_CA_ICN.DTE_FIRST_SVC BETWEEN '03-01-2006 00:00:00' AND '02-28-2007 00:00:00'
AND DSS.T_CA_ICN.DTE_PTN BETWEEN '03-01-2006 00:00:00' AND '05-31-2007 00:00:00'
```

AND trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12) != 0

AND DSS.T_CA_ICN.CDE_DTL_STATUS != 'D'

AND DSS.T_CA_AID_GROUP.CDE_GROUP_D NOT IN ('D98', 'D99', 'D1 ', 'D2 ', 'D3 ', 'D4 ', 'D5 ', 'D6 ', 'D7 ', 'D8 ', 'D9 ')

AND DSS.T_CA_ICN.CDE_CLM_TYPE IN ('P', 'Q')

)

GROUP BY

DSS.T_CA_ICN.ID_MEDICAID,

trunc(months_between(DSS.T_CA_ICN.DTE_FIRST_SVC,DSS.T_RE_BASE_DN.DTE_BIRTH)/12),

DSS.T_CA_RECIP_KEY.CDE_RECIP_COUNTY || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RECIP_COUNTY,

DSS.T_CA_RECIP_KEY.CDE_RACE || ' - ' || DSS.T_CA_RECIP_KEY.DSC_RACE,

DSS.T_CA_RECIP_KEY.CDE_SEX || ' - ' || DSS.T_CA_RECIP_KEY.DSC_SEX

HAVING

(

count(DISTINCT DSS.T_CA_ICN.NUM_ICN) >= 2

)

)

Make a table of the recipient IDs retrieved from Asthma Denominator query.

3599: Pediatric Asthma Emergency Department Use

The denominator represents the person-time experience among eligible children with identifiable asthma (definition below). Assessment of eligibility is determined for each child monthly. The total number of child months in the measurement year experienced is summed and divided by 1200 to achieve the units of 100 child years for the denominator.

Exclusions

1381: Asthma Emergency Department Visits

Excludes children less than age two or greater than age twenty.

3599: Pediatric Asthma Emergency Department Use

Children with specified concurrent or pre-existing diagnosis and children who have not been consecutively enrolled in the reporting plan for at least three months, including the month being assessed.

Exclusion Details

1381: Asthma Emergency Department Visits

Anyone under age two. Actually Query language states "Recipient Age FDOS - Calculated Between Age 2 and 20"

3599: Pediatric Asthma Emergency Department Use

Children with concurrent or pre-existing: Cystic Fibrosis (CF) diagnosis, or Emphysema diagnosis.

Please see attached list of ICD codes (“IMPLEMENT Asthma ED Use ICD and CPT Codes”) for exclusion criteria for CF and emphysema.

Consecutive enrollment is defined as being consecutively enrolled within the same payer. This allows for a change in plan type (e.g. changing to a PPO to an HMO within same payer). Continuous enrollment does not include moving payers even if continuously enrolled (e.g. moving from Kaiser to Blue Cross within the three month window would exclude them from the denominator. This is due to the measure being a health plan-level measure.

Risk Adjustment

1381: Asthma Emergency Department Visits

No risk adjustment or risk stratification

117817| 128893| 114481

117817| 128893| 114481

3599: Pediatric Asthma Emergency Department Use

Statistical risk model

127469

127469

Stratification

1381: Asthma Emergency Department Visits

Recipient Gender & Description

Recipient Race Code & Description

Recipient County & Description

3599: Pediatric Asthma Emergency Department Use

This is not a stratified measure.

Type Score

1381: Asthma Emergency Department Visits

better quality = lower score

3599: Pediatric Asthma Emergency Department Use

Rate/proportion better quality = lower score

Algorithm

1381: Asthma Emergency Department Visits

N/A-Measure results were simply reviewed in relationship to the established target goal. 117817| 128893| 114481

3599: Pediatric Asthma Emergency Department Use

Step 1: Measure person-time eligible for each patient and record by month.

a. For each month in the reporting year, identify all children ages 3 – 21 years who meet the criteria for Identifiable asthma - and do not satisfy one of the exclusion criteria - during the assessment period. The assessment period is defined as the year prior to the reporting year plus all months in the reporting year prior to the reporting month. Identify and maintain a unique patient identifier and all stratification variables.

To illustrate: if the goal is to report for January 2016, first one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 when doing so. Continuous enrollment criterion requires that the child was enrolled in November and December of 2015, as well as January 2016. This total represents the number of person-months (child-months) for January.

Next, for February: one would identify children with Identifiable asthma using the criteria, and analyze all of calendar year 2015 AND January 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in December 2015 and January 2016, as well as February 2016. This is the number of person-months (child-months) for February.

Repeat this progression monthly so that for December, one would identify children with Identifiable asthma and analyze all of calendar year 2015 AND January through November 2016 when doing so. Continuous enrollment criterion requires that the child was enrolled in October 2016 and November 2016, as well as December 2016. This is the number of person-months (child-months) for December.

b. Sum all months that are eligible from the reporting year. This sum is the denominator in people-months. Divide by 1200. This is denominator in 100 people-years. This is the denominator for the year.

Step 2: Month by month, considering the definitions above, identify the number of discrete numerator events that occur in children eligible in that specific month:

a. Prior hospitalization with asthma as primary or secondary diagnosis

b. Other qualifying events after the fifth birthday (age is age at occurrence):

i. One or more prior ambulatory visits with asthma as the primary diagnosis, OR

ii. Two or more ambulatory visits with asthma as a diagnosis, OR

iii. One ambulatory visit with asthma as a diagnosis AND at least one asthma-related prescription

c. Other qualifying events, any age:

i. Three or more ambulatory visits with diagnosis of asthma, OR

ii. Two or more ambulatory visits with a diagnosis of asthma AND one or more asthma- related prescriptions

Note, these age differences are per NHLBI guidelines (https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma) and were reviewed and developed in collaboration with the Delphi panel of experts convened during the development of this measure.

Step 3. Calculate rate as Numerator / Denominator.

- If a qualified member has no numerator events during a month, the event count value is 0.

See document at https://chipper.ucsf.edu/upload/chipper/documents/Flowsheet_Asthma_1.pdf for a flow chart for data flow and management steps to calculate the measure.

SAS code is available at https://chipper.ucsf.edu/upload/chipper/documents/asthma_1_sas_code.pdf 127469

Submission items

1381: Asthma Emergency Department Visits

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: n/a

Related Measures: Unaware of any. Checked NQF endorsed list and could not find one related to Asthma and Emergency Room Visits.

3599: Pediatric Asthma Emergency Department Use

5.1 Identified measures: 0728 : Asthma Admission Rate (PDI 14)

1381 : Asthma Emergency Department Visits

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: Regarding measure 0728: Full technical specifications are not available as this measure is being reviewed for maintenance of endorsement. However, the measure we propose focuses on a different types of utilization, ED use, rather than asthma hospitalizations. Measure 0728 is also intended for population level analysis at the regional or state level, which differs from the use case for the proposed measure, which is health plan use, generally in collaboration with primary care practices.

5b.1 If competing, why superior or rationale for additive value: NA

Appendix F: Pre-Evaluation Comments

Comments received as of February 16, 2021.

Topic	Commenter	Comment
NQF 3568: Person-Centered Primary Care Measure PRO-PM	American Academy of Family Physicians	The American Academy of Family Physicians is highly supportive of endorsement of the person-centered primary care measure (PCPCM). This measure evaluates the key functions of primary care that patients, clinicians, employers, communities, and health systems value most. Primary care measures must move beyond disease-specific criteria to assess the unique features of primary care most responsible for better outcomes and lower costs and value. The measure recognizes the patient as a valuable source of knowledge about many important aspects of care. The heart of primary care does not focus on a diagnosis, yet current measures continue to emphasize diagnosis and procedures. The PCPCM focuses on integrating, personalizing, and prioritizing care. Its eleven items (plus one optional question) form an evaluation of access, continuity, comprehensiveness, coordination, advocacy, family and community context, and goal-oriented care. These fundamental elements are associated with better health, equity, quality, and sustainable health care expenditures and are unique to primary care. The measure is brief, has high face validity, and is understandable by patients and clinicians (e.g., high transparency). It has been tested in many cultures and developers have noted their analysis does not indicate a need for case or risk-adjustment. The measure will help clinicians identify areas of primary care in which their performance is weak to help direct improvement efforts. Over forty improvement activities have been identified that are relevant to the measure.
NQF 3568: Person-Centered Primary Care Measure PRO-PM	Blue Cross BlueShield of Massachusetts	NQF Measure #3568 Person-Centered Primary Care Measure Patient Reported Outcome Performance Measure (PCPCM PRO-PM) requires further development before it should receive NQF endorsement and be considered ready for high-stakes uses such as performance-based payment and public reporting. For this measure, the most critical area in need of development is case-mix adjustment. To our knowledge,

Topic	Commenter	Comment
		the PCPCM has not undergone empirical analysis to assess the need for case-mix adjustment and to develop case-mix adjustment methods. It is plausible that PCPCM scores, which include items that implicitly assume a need for care "from multiple places" and a long enough relationship to "have been through a lot together," vary substantially according to patient age, health status, and tenure with the index practice. The clinician-level ICCs reported for the PCPCM are likely to be misleading when the underlying measure is not valid for interunit comparisons—for example, because case-mix adjustment is needed but has not been developed. In the absence of case-mix adjustment, high ICCs can result from differences in case-mix rather than differences in providers' true performance. To investigate and remediate this threat to validity, we suggest that the measure developers analyze, based on a large PCPCM fielding that reflects a wide array of practices, the relationships between standard CAHPS case-mix adjustment variables (at a minimum) and PCPCM scores—and then develop case-mix adjustment methods and re-estimate the interunit reliabilities of PCPCM PRO-PM scores based on valid (i.e., case-mix adjusted) comparisons. As a secondary concern, practice-level interunit reliabilities should be calculated if this measure is intended to be applicable to practices (i.e., not be restricted to measurement of individual clinicians).

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