NATIONAL QUALITY FORUM

Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the submitting standards web page.

NQF #: 0047 **NQF Project:** Pulmonary Project

(for Endorsement Maintenance Review)
Original Endorsement Date: Aug 10, 2009 **Most Recent Endorsement Date:** Aug 10, 2009 **Last Updated Date:** Apr 26, 2012

BRIEF MEASURE INFORMATION

De.1 **Measure Title:** Asthma: Pharmacologic Therapy for Persistent Asthma

Co.1.1 **Measure Steward:** American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI)

De.2 **Brief Description of Measure:** Percentage of patients aged 5 through 50 years with a diagnosis of persistent asthma who were prescribed long-term control medication. Three rates are reported for this measure:

1. Patients prescribed inhaled corticosteroids (ICS) as their long term control medication
2. Patients prescribed other alternative long term control medications (non-ICS)
3. Total patients prescribed long-term control medication

2a1.1 **Numerator Statement:** Patients who were prescribed long-term control medication

Numerator Definitions:
Long Term Control Medication Includes:
Patients prescribed inhaled corticosteroids (the preferred long-term control medication at any step of asthma pharmacological therapy)
OR
Patients prescribed alternative long-term control medications (inhaled steroid combinations, anti-asthmatic combinations, antibody inhibitor, leukotriene modifiers, mast cell stabilizers, methylxanthines)

Prescribed – May include prescription given to the patient for inhaled corticosteroid OR an acceptable alternative long-term control medication at one or more visits in the 12-month period OR patient already taking inhaled corticosteroid OR an acceptable alternative long-term control medication as documented in current medication list.

2a1.4 **Denominator Statement:** All patients aged 5 through 50 years with a diagnosis of persistent asthma

2a1.8 **Denominator Exclusions:** Documentation of patient reason(s) for not prescribing either an inhaled corticosteroid (ICS) or an alternative long-term control medication

1.1 **Measure Type:** Process
2a1. 25-26 **Data Source:** Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry, Paper Medical Records
2a1.33 **Level of Analysis:** Clinician : Group/Practice, Clinician : Individual, Clinician : Team

1.2-1.4 **Is this measure paired with another measure?** No

De.3 **If included in a composite, please identify the composite measure** (*title and NQF number if endorsed*)**:**

STAFF NOTES (*issues or questions regarding any criteria*)

Comments on Conditions for Consideration:

Is the measure untested? Yes☐ No☐ If untested, explain how it meets criteria for consideration for time-limited endorsement:

1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (*check De.5*)**:**
5. Similar/related endorsed or submitted measures (*check 5.1*)**:**
Other Criteria:

Staff Reviewer Name(s):

1. IMPACT, OPPORTUITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT

Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See guidance on evidence.
Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.
(evaluation criteria)

1a. High Impact: H☐ M☐ L☐ I ☐
(*The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.*)

De.4 **Subject/Topic Areas** (*Check all the areas that apply*)**:** Pulmonary/Critical Care, Pulmonary/Critical Care : Asthma
De.5 **Cross Cutting Areas** (*Check all the areas that apply*)**:**

1a.1 **Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, A leading cause of morbidity/mortality, High resource use

1a.2 **If "Other," please describe:**

1a.3 **Summary of Evidence of High Impact** (*Provide epidemiologic or resource use data*)**:**
An estimated 300 million people worldwide suffer from asthma, and it is estimated that by 2025, the prevalence will grow by more than 100 million (WHO, 2007).
Asthma-related direct and indirect monetary costs were estimated to be $19.7 billion in the United States in 2007 (American Lung Association, 2007).
People with asthma collectively had 217,000 emergency room visits and 10.5 million physician office visits in 2008 (Pitts, 2008).
Physician visits for asthma accounted for 14% of total expenditures and included 6.5 million ambulatory care visits at a cost of $193 million (NIH: NHLBI).
Prescription drugs represented the largest single direct medical expenditure related to asthma, costing over $6 billion (WHO, 2007).

1a.4 **Citations for Evidence of High Impact cited in 1a.3:** American Lung Association (2007). Trends in Asthma Morbidity and Mortality. Epidemiology & Statistics Unit, Research and Program Services. November 2007.

National Institutes of Health: National Heart, Lung and Blood Institute. National Asthma Education and Prevention Program Task Force on the Cost Effectiveness, Quality of Care, and Financing of Asthma Care. Bethesda, MD: U.S. Department of Health and Human Services, No. 55-807.

Pitts SR, Niska RW, Xu J, Burt CW (2008). "National Hospital Ambulatory Medical Care Survey: 2006 emergency department summary." National health statistics reports; no 7. Hyattsville, MD: National Center for Health Statistics.

World Health Organization. Global surveillance, prevention and control of chronic respiratory diseases: a comprehensive approach, 2007

1b. Opportunity for Improvement: H☐ M☐ L☐ I ☐
(*There is a demonstrated performance gap - variability or overall less than optimal performance*)

1b.1 **Briefly explain the benefits (improvements in quality) envisioned by use of this measure:**
This measure promotes the use of long-term control medications for the treatment of persistent asthma. Effective long-term control

medications reduce the underlying inflammation characteristic of asthma. The resulting clinical benefits include reduction in severity of symptoms; improvement in asthma control and quality of life; diminished airway hyper-responsiveness; prevention of exacerbations; reduction in courses of systemic corticosteroids, ED care, hospitalizations, and deaths due to asthma.

1b.2 Summary of Data Demonstrating Performance Gap *(Variation or overall less than optimal performance across providers)*: **[*For Maintenance* –** *Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.*]**
A study published in 2006 found that from 1998-2000:
•43% of patients who reported using a beta2-agonist inhaler more than three times a day on a daily basis were prescribed a longer acting bronchodilator and/or and anti-inflammatory agent.
•60% of patients who required chronic treatment with systemic corticosteroids during any 12 month period were prescribed inhaled corticosteroids during that same time period.
(Technical Appendix to McGlynn EA 2006)

Another study evaluated quality of care for children in the United States. From 1998-2000:
•43% of patients who reported using a beta2-agonist inhaler more than three times a day on a daily basis were prescribed a longer acting bronchodilator and/or and anti-inflammatory agent.
•8% of patients requiring chronic treatment with oral corticosteroids had a trial of inhaled corticosteroids first
•80% of patients who required frequent bursts of prednisone who were not already on inhaled corticosteroids or cromolyn were started on them
(Mangione-Smith R 2007)

CMS Physician Quality Reporting Initiative/System:
This measure was used in the CMS Physician Quality Reporting Initiative/System (PQRI/S) in the 2007 through 2011 claims option; 2009 through 2011 registry option; and the 2011 asthma measure group and group practice reporting II options.

There is a gap in care as shown by this 2008 data; 46.29% of patients reported on did not meet the measure.(1)

10th percentile: 0.0%
25th percentile: 0.0%
50th percentile: 100.00%
75th percentile: 100.00%
90th percentile: 100.00%

Exception rate: 17.80%

1b.3 Citations for Data on Performance Gap: [*For Maintenance* – *Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*]**
Mangione-Smith R, D. A., Setodji CM, et al. (2007). "The quality of ambulatory care delivered to children in the United States: Supplementary Appendix." N Engl J Med 357: 1515-1523.

Technical Appendix to McGlynn EA, A. S., Adams JL, et al. (2006). "Who is at greatest risk for receiving poor quality health care?" N Engl J Med 354: 1147-1156.

(1)Confidential CMS PQRI 2008 Performance Information by Measure. Jan-Sept TAP file.

1b.4 Summary of Data on Disparities by Population Group: [*For Maintenance* –*Descriptive statistics for performance results for this measure by population group*]**
A 2009 retrospective, population-based cohort study of 9,131 adult Medicaid patients with COPD, asthma, or both conditions sought to explain the higher mortality and morbidity seen among African-American patients with these conditions than for their white counterparts. After controlling for age, gender, cohort allocation, and comorbidities, the study found that African-American adults with COPD, asthma, or coexisting COPD and asthma used fewer medical services and accounted for lower medical costs than white adults. The researchers concluded that lower health services utilization and medical costs among African-American patients with COPD and asthma may provide a possible explanation for the racial disparities in outcomes of patients with these conditions.

(Shaya, 2009)

A 2011 cohort study with 126,019 participants sought to identify ethnic differences for risk of hospitalization for asthma and COPD. Compared with whites, relative risks with 95% confidence intervals for asthma among other groups were: blacks, 1.7; Hispanics, 0.9; and Asians, 1.6. Among Asians, increased risk was concentrated in Filipino men and women and South Asian men. (Tran, 2011)

1b.5 Citations for Data on Disparities Cited in 1b.4: [*For Maintenance* – *Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*]

Shaya FT, Maneval MS, Gbarayor CM, et. al. Burden of COPD, asthma, and concomitant COPD and asthma among adults: Racial disparities in a Medicaid population. CHEST 2009; 136:405–411.

Tran HN, Siu S, Iribarren C, et. al. Ethnicity and risk of hospitalization for asthma and chronic obstructive pulmonary disease. Ann Epidemiol. 2011 Aug;21(8):615-22.

1c. Evidence (*Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.*)
Is the measure focus a health outcome? Yes☐ No☐ **If not a health outcome, rate the body of evidence.**

Quantity: H☐ M☐ L☐ I☐ Quality: H☐ M☐ L☐ I☐ Consistency: H☐ M☐ L☐ I☐

Quantity	Quality	Consistency	Does the measure pass subcriterion1c?
M-H	M-H	M-H	Yes☐
L	M-H	M	Yes☐ IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No☐
M-H	L	M-H	Yes☐ IF potential benefits to patients clearly outweigh potential harms: otherwise No☐
L-M-H	L-M-H	L	No ☐

Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service	Does the measure pass subcriterion1c? Yes☐ IF rationale supports relationship

1c.1 Structure-Process-Outcome Relationship *(Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process- health outcome; intermediate clinical outcome-health outcome)*:
The focus of this measure is the prescription of long-term control medications for patients with persistent asthma (process). Use of these medications is associated with improved health outcomes, eg reduction in severity of symptoms; improvement in asthma control and quality of life; prevention of exacerbations; reduction in ED care, hospitalizations, and deaths due to asthma.

1c.2-3 Type of Evidence *(Check all that apply)*:
Clinical Practice Guideline

1c.4 Directness of Evidence to the Specified Measure *(State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population)*:
The referenced guideline recommendations and underlying body of evidence pertain to the effectiveness of long-term control medications for achieving and maintaining control of persistent asthma, and are thus directly relevant to this measure.

1c.5 Quantity of Studies in the Body of Evidence *(Total number of studies, not articles)*: The NHLBI/NAEPP guideline update references a total of 1,654 articles selected for use in updating the guideline. Evidence tables quantifying the studies reviewed for developing the guideline recommendations related to pharmacologic therapy may be found on the NHLBI web site: http://www.nhlbi.nih.gov/guidelines/asthma/evid_tbls.htm

1c.6 Quality of Body of Evidence (*Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b)*

directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events)**:** As indicated by the "Category A" ranking of the evidence for this measure, the body of evidence consists of a substantial number of well-designed RCTs and a rich body of data that provide a consistent pattern of findings in the population for which the recommendation is made. The "A" evidence ranking thus also suggests a high degree of confidence in the benefits of the recommendation to patients.

1c.7 Consistency of Results across Studies *(Summarize the consistency of the magnitude and direction of the effect):* Per the evidence grading scale for the NHLBI/NAEPP guideline, the "A" evidence ranking signifies a consistent pattern of findings across the studies used to formulate the recommendation; a "B" ranking would have been assigned had the findings been "somewhat inconsistent." The NHLBI/NAEPP guideline does not provide any more explicit information related to the consistency of the studies underlying the guideline recommendations.

1c.8 Net Benefit *(Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms)***:**
Again, the "A" evidence ranking and strong recommendation in the NHLBI/NAEPP guideline suggests a high degree of confidence in the benefits of long-term control medications for patients with persistent asthma. The NHLBI/NAEPP guideline does not otherwise provide any explicit information related to the benefit/harm ratio for this recommendation.

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? Yes

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: THIRD EXPERT PANEL ON THE DIAGNOSIS AND MANAGEMENT OF ASTHMA (NHLBI/NAEPP)

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Stanley J. Szefler, M.D.
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Development of the resource document and the guidelines report was funded by the NHLBI, NIH. Expert Panel members completed financial disclosure forms, and the Expert Panel members disclosed relevant financial interests to each other prior to their discussions. Expert Panel members participated as volunteers and were compensated only for travel expenses related to the Expert Panel meetings. Financial disclosure information covering the 3-year period during which the guidelines were developed is provided for each Panel member below.

Dr. Busse has served on the Speakers' Bureaus of GlaxoSmithKline, Merck, Novartis, and Pfizer; and on the Advisory Boards of

Altana, Centocor, Dynavax, Genentech/Novartis, GlaxoSmithKline, Isis, Merck, Pfizer, Schering, and Wyeth. He has received funding/grant support for research projects from Astellas, AstraZeneca, Centocor, Dynavax, GlaxoSmithKline, Novartis, and Wyeth. Dr. Busse also has research support from the NIH.

Dr. Boushey has served as a consultant for Altana, Protein Design Lab, and Sumitomo. He has received honoraria from (Boehringer-Ingelheim, Genentech, Merck, Novartis, and Sanofi-Aventis, and funding/grant support for research projects from the NIH.

Dr. Camargo has served on the Speakers' Bureaus of AstraZeneca, GlaxoSmithKline, Merck, and Schering-Plough; and as a consultant for AstraZeneca, Critical Therapeutics, Dey Laboratories, GlaxoSmithKline, MedImmune, Merck, Norvartis, Praxair, Respironics, Schering-Plough, Sepracor, and TEVA. He has received funding/grant support for research projects from a variety of Government agencies and not-for-profit foundations, as well as
AstraZeneca, Dey Laboratories, GlaxoSmithKline, MedImmune, Merck, Novartis, and
Respironics.

Dr. Evans has received funding/grant support for research projects from the NHLBI. Dr. Foggs has served on the Speakers' Bureaus of GlaxoSmithKline, Merck, Pfizer, Sepracor, and UCB Pharma; on the Advisory Boards of Alcon, Altana, AstraZeneca, Critical Therapeutics, Genentech, GlaxoSmithKline, and IVAX; and as consultant for Merck and Sepracor. He has received funding/grant support for research projects from GlaxoSmithKline.

Dr. Janson has served on the Advisory Board of Altana, and as a consultant for Merck. She has received funding/grant support for research projects from the NHLBI.

Dr. Kelly has served on the Speakers' Bureaus of AstraZeneca and GlaxoSmithKline; and on the Advisory Boards of AstraZeneca, MAP Pharmaceuticals, Merck, Novartis, and Sepracor.

Dr. Lemanske has served on the Speakers' Bureaus of GlaxoSmithKline and Merck, and as a consultant for AstraZeneca, Aventis, GlaxoSmithKline, Merck, and Novartis. He has received honoraria from Altana, and funding/grant support for research projects from the NHLBI and NIAID.

Dr. Martinez has served on the Advisory Board of Merck and as a consultant for Genentech, GlaxaSmithKline, and Pfizer. He has received honoraria from Merck.

Dr. Meyer has no relevant financial interests.

Dr. Nelson has served on the Speakers' Bureaus of AstraZeneca, GlaxoSmithKline, Pfizer, and Schering-Plough; and as a consultant for Abbott Laboratories, Air Pharma, Altana Pharma US, Astellas, AstraZeneca, Curalogic, Dey Laboratories, Dynavax Technologies, Genentech/Novartis, GlaxoSmithKline, Inflazyme Pharmaceuticals, MediciNova, Protein Design Laboratories, Sanofi-Aventis, Schering-Plough, and Wyeth Pharmaceuticals. He has received funding/grant support for research projects from Altana, Astellas, AstraZeneca, Behringer, Critical Therapeutics, Dey Laboratories, Epigenesis, Genentech, GlaxoSmithKline, Hoffman LaRoche, IVAX, Medicinova, Novartis, Sanofi-Aventis, Schering-Plough, Sepracor, TEVA, and Wyeth.

Dr. Platts-Mills has served on the Advisory Committee of Indoor Biotechnologies. He has received funding/grant support for a research project from Pharmacia Diagnostics.

Dr. Schatz has served on the Speakers' Bureaus of AstraZeneca, Genentech, GlaxoSmithKline, and Merck; and as a consultant for GlaxoSmithKline on an unbranded asthma initiative. He has received honoraria from AstraZeneca, Genentech, GlaxoSmithKline and Merck. He has received funding/grant support for research projects from GlaxoSmithKline and Merck and Sanofi-Adventis.

Dr. Shapiro† served on the Speakers' Bureaus of AstraZeneca, Genentech, GlaxoSmithKline, IVAX Laboratories, Key Pharmaceuticals, Merck, Pfizer Pharmaceuticals, Schering Corporation, UCB Pharma, and 3M; and as a consultant for Altana, AstraZeneca, Dey Laboratories, Genentech/Novartis, GlaxoSmithKline, ICOS, IVAX Laboratories, Merck, Sanofi-Aventis, and Sepracor. She received funding/grant support for research projects from Abbott, AstraZeneca,
Boehringer Ingelheim, Bristol-Myers-Squibb, Dey Laboratories, Fujisawa Pharmaceuticals, Genentech, GlaxoSmithKline, Immunex,

Key, Lederle, Lilly Research, MedPointe Pharmaceuticals, Medtronic Emergency Response Systems, Merck, Novartis, Pfizer, Pharmaxis, Purdue Frederick, Sanofi-Aventis, Schering, Sepracor, 3M Pharmaceuticals, UCB Pharma, and Upjohn Laboratories.

Dr. Stoloff has served on the Speakers' Bureaus of Alcon, Altana, AstraZeneca, Genentech, GlaxoSmithKline, Novartis, Pfizer, Sanofi-Aventis, and Schering; and as a consultant for Alcon, Altana, AstraZeneca, Dey, Genentech, GlaxoSmithKline, Merck, Novartis, Pfizer, Sanofi-Aventis, and Schering.

Dr. Szefler has served on the Advisory Boards of Altana, AstraZeneca, Genentech, GlaxoSmithKline, Merck, Novartis, and Sanofi-Aventis; and as a consultant for Altana, AstraZeneca, Genentech, GlaxoSmithKline, Merck, Novartis, and Sanofi-Aventis. He has received funding/grant support for a research project from Ross.

Dr. Weiss has served on the Advisory Board of Genentech, and as a consultant for Genentech and GlaxoSmithKline. He has received funding/grant support for research projects from GlaxoSmithKline.

Dr. Yawn has served on the Advisory Boards of Altana, AstraZeneca, Merck, Sanofi-Aventis, and Schering-Plough. She has received honoraria from Pfizer and Schering-Plough, and funding/grant support for research projects from the Agency for Healthcare Research and Quality, the CDC, the NHLBI, Merck, and Schering-Plough.

1c.11 System Used for Grading the Body of Evidence: Other

1c.12 If other, identify and describe the grading scale with definitions: Evidence Category A: Randomized controlled trials (RCTs), rich body of data.
Evidence is from end points of well-designed RCTs that provide a consistent pattern of findings in the population for which the recommendation is made. Category A requires substantial numbers of studies involving substantial numbers of participants.

Evidence Category B: RCTs, limited body of data. Evidence is from end points of intervention studies that include only a limited number of patients, post hoc or subgroup analysis of RCTs, or meta-analysis of RCTs. In general, category B pertains when few randomized trials exist; they are small in size, they were undertaken in a population that differs from the target population of the recommendation, or the results are somewhat inconsistent.

Evidence Category C: Nonrandomized trials and observational studies. Evidence is from outcomes of uncontrolled or nonrandomized trials or from observational studies.

Evidence Category D: Panel consensus judgment. This category is used only in cases where the provision of some guidance was deemed valuable, but the clinical literature addressing the subject was insufficient to justify placement in one of the other categories.
The Panel consensus is based on clinical experience or knowledge that does not meet the criteria for categories A through C.

1c.13 Grade Assigned to the Body of Evidence: Category A

1c.14 Summary of Controversy/Contradictory Evidence: The guideline identifies no contradictory evidence related to this recommendation.

1c.15 Citations for Evidence other than Guidelines*(Guidelines addressed below)*:
None

1c.16 Quote verbatim, <u>the specific guideline recommendation</u> *(Including guideline # and/or page #)*:
The Expert Panel recommends that long-term control medications be taken daily on a long-term basis to achieve and maintain control of persistent asthma. The most effective long-term-control medications are those that attenuate the underlying inflammation characteristic of asthma. (NHLBI/NAEPP, pg. 216)

The Expert Panel concludes that ICSs are the most potent and consistently effective long-term control medication for asthma. (NHLBI/NAEPP, pg. 216)

The Expert Panel concludes that ICSs are the most effective long-term therapy available for patients who have persistent asthma and, in general, ICSs are well tolerated and safe at the recommended dosages. (NHLBI/NAEPP, pg. 220)

1c.17 **Clinical Practice Guideline Citation:** National Heart, Blood and Lung Institute (NHLBI), National Asthma Education and Prevention Program (NAEPP), National Institutes of Health. August 2007. Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma. Full Report 2007. NIH Publication No. 07-4051.

1c.18 **National Guideline Clearinghouse or other URL:** http://www.guideline.gov/browse/by-organization.aspx?orgid=400

1c.19 **Grading of Strength of Guideline Recommendation.** Has the recommendation been graded? Yes

1c.20 **If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:** (see 1c.10)

1c.21 **System Used for Grading the Strength of Guideline Recommendation:** Other

1c.22 **If other, identify and describe the grading scale with definitions:** In addition to specifying the level of evidence supporting a recommendation, the Expert Panel agreed to indicate the strength of the recommendation. When a certain clinical practice "is recommended," this indicates a strong recommendation by the panel. When a certain clinical practice "should, or may, be considered," this indicates that the recommendation is less strong.

(NHLBI/NAEPP, pg. 7)

1c.23 **Grade Assigned to the Recommendation:** Strong

1c.24 **Rationale for Using this Guideline Over Others:** It is the PCPI policy to use guidelines, which are evidence-based, applicable to physicians and other health-care providers, and developed by a national specialty organization or government agency. In addition, the PCPI has now expanded what is acceptable as the evidence base for measures to include documented quality improvement (QI) initiatives or implementation projects that have demonstrated improvement in quality of care.

Based on the NQF descriptions for rating the evidence, what was the <u>developer's assessment</u> of the quantity, quality, and consistency of the body of evidence?
1c.25 Quantity: High 1c.26 Quality: High1c.27 Consistency**:** High
1c.28 Attach evidence submission form**:**
1c.29 Attach appendix for supplemental materials**:**

Was the threshold criterion, *Importance to Measure and Report*, met?
(*1a & 1b must be rated moderate or high and 1c yes*) **Yes☐ No☐**
Provide rationale based on specific subcriteria:

For a new measure if the Committee votes NO, then STOP.
For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, <u>as specified</u>, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **(<u>evaluation criteria</u>)**
Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See <u>guidance on measure testing</u>.

S.1 **Measure Web Page** *(In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for <u>this</u> measure can be obtained? Yes

S.2 **If yes, provide web page URL:** www.physicianconsortium.org

2a. RELIABILITY. Precise Specifications and Reliability Testing: H☐ M☐ L☐ I ☐

2a1. Precise Measure Specifications. (*The measure specifications precise and unambiguous.*)

2a1.1 **Numerator Statement** *(Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome)*:
Patients who were prescribed long-term control medication

Numerator Definitions:
Long Term Control Medication Includes:
Patients prescribed inhaled corticosteroids (the preferred long-term control medication at any step of asthma pharmacological therapy)
OR
Patients prescribed alternative long-term control medications (inhaled steroid combinations, anti-asthmatic combinations, antibody inhibitor, leukotriene modifiers, mast cell stabilizers, methylxanthines)

Prescribed – May include prescription given to the patient for inhaled corticosteroid OR an acceptable alternative long-term control medication at one or more visits in the 12-month period OR patient already taking inhaled corticosteroid OR an acceptable alternative long-term control medication as documented in current medication list.

2a1.2 **Numerator Time Window** *(The time period in which the target process, condition, event, or outcome is eligible for inclusion)*:
At least once during the measurement period

2a1.3 **Numerator Details** *(All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*:
For EHR:
See attached eMeasure

For Claims/Administrative Data:
To submit the numerator option for Long-Term Control Medication or Acceptable Alternative Treatment Prescribed, report the following:

CPT II 4140F: Inhaled corticosteroids prescribed
OR
CPT II 4144F: Alternative long-term control medication prescribed

2a1.4 **Denominator Statement** *(Brief, narrative description of the target population being measured)*:
All patients aged 5 through 50 years with a diagnosis of persistent asthma

2a1.5 **Target Population Category** *(Check all the populations for which the measure is specified and tested if any)*: Adult/Elderly Care, Children's Health

2a1.6 **Denominator Time Window** *(The time period in which cases are eligible for inclusion)*:
12 consecutive months

2a1.7 **Denominator Details** (*All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses)*:
For EHR:
See attached eMeasure

For Claims/Administrative Data:
Patients aged 5 through 50 years on date of encounter
AND
Diagnosis for asthma (ICD-9-CM): 493.00, 493.02, 493.10, 493.12, 493.20, 493.22, 493.81, 493.82, 493.90, 493.92

AND
Diagnosis for asthma (ICD-10-CM): J45.20, J45.30, J45.31, J45.40, J45.41, J45.50, J45.21, J44.9, J44.1, J45.901, J45.909, J45.990, J45.991, J45.998, J45.51
AND
Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99241, 99242, 99243, 99244, 99245, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
AND
CPT II 1038F: Persistent asthma (mild, moderate or severe)
Note: If ICD-10 CM is used to identify the denominator, CPT II code for 1038F is not required; ICD-10 CM codes capture "persistent asthma".

2a1.8 Denominator Exclusions *(Brief narrative description of exclusions from the target population)*:
Documentation of patient reason(s) for not prescribing either an inhaled corticosteroid (ICS) or an alternative long-term control medication

2a1.9 Denominator Exclusion Details *(All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses)*:
The PCPI methodology uses three categories of reasons for which a patient may be excluded from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For measure 0047, exceptions may include patient reason(s) for not prescribing either an inhaled corticosteroid (ICS) or an alternative long-term control medication. Where examples of exceptions are included in the measure language, these examples are coded and included in the eSpecifications. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exception. Additional details by data source are as follows:

For EHR:
See attached eMeasure

For Claims/Administrative Data:
Documentation of patient reason(s) for not prescribing either the preferred long-term control medication (inhaled corticosteriod) or an acceptable alternative treatment.
Append modifier 2P to CPT Category II code 4140F to report documented circumstances that appropriately exclude patients from the denominator: 4140F-2P

2a1.10 Stratification Details/Variables *(All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses)*:

2a1.11 Risk Adjustment Type *(Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13)*: No risk adjustment or risk stratification **2a1.12 If "Other," please describe:**

2a1.13 Statistical Risk Model and Variables *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.)*:

2a1.14-16 Detailed Risk Model Available at Web page URL (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

2a1.17-18. Type of Score: Rate/proportion

2a1.19 Interpretation of Score *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)*: Better quality = Higher score

2a1.20 Calculation Algorithm/Measure Logic*(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.)*:
To calculate performance rates:
1)Find the patients who meet the initial patient population (ie, the general group of patients that the performance measure is designed to address).
2)From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical.
3)From the patients within the denominator, find the patients who qualify for the Numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator
4)From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator exception when exceptions have been specified [for this measure: medical reason(s) (eg, patient allergy), patient reason(s) (eg, patient declined), or system reason(s) (eg, vaccine not available)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. --Although the exception cases are removed from the denominator population for the performance calculation, the number of patients with valid exceptions should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

Calculation algorithm is included in data dictionary/code table attachment 2a1.30.

2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:
Attachment
Measure Calculation_0047.pdf

2a1.24 Sampling (Survey) Methodology. If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):
Not applicable. The measure does not require sampling or a survey.

2a1.25 Data Source *(Check all the sources for which the measure is specified and tested*). If other, please describe:
Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry, Paper Medical Records

2a1.26 Data Source/Data Collection Instrument (*Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.*): Not Applicable

2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment:

2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:

2a1.33 Level of Analysis (*Check the levels of analysis for which the measure is specified and tested)*: Clinician : Group/Practice, Clinician : Individual, Clinician : Team

2a1.34-35 Care Setting *(Check all the settings for which the measure is specified and tested)*: Ambulatory Care : Clinician Office/Clinic

2a2. Reliability Testing. (*Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability*.)

2a2.1 Data/Sample *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:
Refer to the validity section for a description of the data sample for our EHR testing project.

2a2.2 Analytic Method *(Describe method of reliability testing & rationale)*:
Refer to the validity section for a description of the analytic methods for our EHR testing project.

2a2.3 Testing Results *(Reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:
Refer to the validity section for the testing results for our EHR testing project.

2b. VALIDITY. Validity, Testing, including all Threats to Validity: H☐ M☐ L☐ I ☐

2b1.1 Describe how the measure specifications *(measure focus, target population, and exclusions)* **are consistent with the evidence cited in support of the measure focus (***criterion 1c)* **and identify any differences from the evidence:**
The referenced guideline recommendations and underlying body of evidence pertain to the effectiveness of long-term control medications for achieving and maintaining control of persistent asthma, and are thus directly relevant to this measure.

2b2. Validity Testing. (*Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)*

2b2.1 Data/Sample *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:
EHR Measure Validity
The measure was calculated using data collected using two different methods of collection:
- Automated EHR report
- Visual inspection of the medical record by professional data abstractors to capture the data elements to manually construct the performance

The data source was electronic health records in the ambulatory care setting.
The data sample came from 1 site representing an academic medical center located in an urban area.
The sample consisted of 86 patient encounters.
Data collected from patients seen between 01/01/2011-12/31/2011.
Visual inspection of the medical record was performed between 02/06/2012 and 02/10/2012.

Face Validity
The expert panel consists of 14 members of a Joint Task Force on Quality and Performance Measures convened by the American Academy of Allergy, Asthma & Immunology (AAAAI) and the American College of Allergy, Asthma & Immunology (ACAAI), and facilitated by staff of the AAAAI. Members of this Joint Task Force are all certified by the American Board of Allergy and Immunology. Practice settings of panel members vary significantly and include very small practices, independent large group practices, a large group of affiliated specialty practices, and large academic medical centers.

Michael Schatz, MD MS, FAAAAI (AAAAI Co-Chair), San Diego, CA
Michael Blaiss, MD FAAAAI (ACAAI Co-Chair), Memphis, TN
David Brown, MD, Skyland, NC
Mark Corbett, MD FAAAAI, Louisville, KY
George Green, MD FAAAAI, Abington, PA

David Lang, MD FAAAAI, Cleveland, OH
Eli Meltzer, MD FAAAAI, San Diego, CA
Robert Nathan, MD FAAAAI, Colorado Springs, CO
John Oppenheimer, MD FAAAAI, Cedar Knolls, NJ
Gary Rachelefsky, MD FAAAAI, Los Angeles, CA
Raymond Slavin, MD FAAAAI, St. Louis, MO
Stephen Tilles, MD FAAAAI, Seattle, WA
Dana Wallace, MD FAAAAI, Fort Lauderdale, FL
Robert Wood, MD FAAAAI, Baltimore, MD

2b2.2 **Analytic Method** *(Describe method of validity testing and rationale; if face validity, describe systematic assessment)*:
EHR Measure Validity
Data from a performance report for the measure automatically-generated from the EHR (designed to collect the necessary data elements to identify eligible cases and calculate the performance score) were compared to data elements found and scores calculated manually on visual inspection of the medical record by trained abstractors.

Data analysis included:
• Percent agreement at the denominator and numerator(exception - for those measures with exception)
• Kappa statistic to ensure that agreement rates are not a phenomenon of chance

Face Validity
Face validity of the measure score as an indicator of quality was systematically assessed as follows.
After the measure was fully specified, the expert panel (workgroup membership) was asked to rate their agreement with the following statement:

The scores obtained from the measure as specified will provide an accurate reflection of quality and can be used to distinguish good and poor quality.

Scale 1-5, where 1= Strongly Disagree; 3=Neither Agree nor Disagree; 5= Strongly Agree

2b2.3 **Testing Results** *(Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment)*:
EHR Measure Validity

Reliability: N, % Agreement, Kappa
Numerator: 86, 90.1%, 0.00* (-0.6579-0.6579 CI)
Denominator: 86, 94.2%, 0.00* (-0.8507-0.8507 CI)

*This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification category dominates, kappa can be significantly reduced. (http://www.ajronline.org/cgi/content/full/184/5/1391)

Face Validity
The results of the expert panel rating of the validity statement were as follows: N = 8; Mean rating = 4.875 and 100% of respondents either agree or strongly agree that this measure can accurately distinguish good and poor quality.

Frequency Distribution of Ratings
1 - 0 (Strongly Disagree)
2 - 0
3 - 0 (Neither Agree nor Disagree)
4 - 1
5 - 7 (Strongly Agree)

POTENTIAL THREATS TO VALIDITY. (*All potential threats to validity were appropriately tested with adequate results.*)

2b3. Measure Exclusions. (*Exclusions were supported by the clinical evidence in 1c or appropriately tested with results*

demonstrating the need to specify them.)

2b3.1 Data/Sample for analysis of exclusions *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)***:**
EHR Measure Validity
The data sample came from 1 site representing an academic medical center located in an urban area.
The sample consisted of 86 patient encounters.
Data collected from patients seen between 01/01/2011-12/31/2011.
Visual inspection of the medical record was performed between 02/06/2012 and 02/10/2012.

2b3.2 Analytic Method (*Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference)***:**
Exceptions included a patient reason. Exceptions were analyzed for frequency and variability across providers.

2b3.3 Results *(Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):*
EHR Measure Validity
Although specifications allowed for documented patient exceptions for the Asthma: Pharmacolgic Therapy measure, there were no documented exceptions in this project. All sampled patients were able to be assessed.

2b4. Risk Adjustment Strategy. (*For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.*)

2b4.1 Data/Sample *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)***:**
This measure is not risk adjusted.

2b4.2 Analytic Method (*Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables)***:**
This measure is not risk adjusted.

2b4.3 Testing Results *(Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata)***:**
This measure is not risk adjusted.

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment: As a process measure, no risk adjustment is necessary.

2b5. Identification of Meaningful Differences in Performance. (*The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.*)

2b5.1 Data/Sample *(Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)***:**
CMS Physician Quality Reporting Initiative/System:
337 cases were reported on for the 2008 program, the most recent year for which data is available.

The following information is for the 2009 program, the only year for which such data is available.
Clinical Condition and Measure: #53 Pharmacologic Therapy
Eligible Professionals: 48,882
Professionals Reporting: 443
% Professionals Reporting: 0.91%
# Professionals Reporting >=80% of eligible instances: 329
% Professionals Reporting >=80% of eligible instances: 74.27%

2b5.2 Analytic Method *(Describe methods and rationale to identify statistically significant and practically/meaningfully differences*

in performance):
CMS Physician Quality Reporting Initiative/System:
The inter-quartile range (IQR) was calculated to determine the variability of performance on the measure.

2b5.3 **Results** *(Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*:
Scores on this measure: N = 337; Mean = 53.71%
10th percentile: 0.0%
25th percentile: 0.0%
50th percentile: 100.00%
75th percentile: 100.00%
90th percentile: 100.00%

The inter-quartile range (IQR) provides a measure of the dispersion of performance. The IQR is 100.00 and indicates that 50% of physicians have performance on this measure ranging from 0.0% and 100.00% and 10% of physicians have performance rates less than or equal to 0.0%.(1)

(1)Confidential CMS PQRI 2008 Performance Information by Measure. Jan-Sept TAP file.

2b6. Comparability of Multiple Data Sources/Methods. (*If specified for more than one data source, the various approaches result in comparable scores.*)

2b6.1 **Data/Sample** *(Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included)*:
The measure was calculated using data collected using two different methods of collection:
- Automated EHR report
- Visual inspection of the medical record by professional data abstractors to capture the data elements to manually construct the performance

2b6.2 **Analytic Method** *(Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure)*:
Data from a performance report for the measure automatically-generated from the EHR (designed to collect the necessary data elements to identify eligible cases and calculate the performance score) were compared to data elements found and scores calculated manually on visual inspection of the medical record by trained abstractors.

Data analysis included:
- Percent agreement at the denominator and numerator (exception - for those measures with exception)
- Kappa statistic to ensure that agreement rates are not a phenomenon of chance

2b6.3 **Testing Results** *(Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted)*:
EHR Measure Validity

Reliability: N, % Agreement, Kappa
Numerator: 86, 90.1%, 0.00* (-0.6579-0.6579 CI)
Denominator: 86, 94.2%, 0.00* (-0.8507-0.8507 CI)

*This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification category dominates, kappa can be significantly reduced. (http://www.ajronline.org/cgi/content/full/184/5/1391)

2c. Disparities in Care: H☐ M☐ L☐ I☐ NA☐ (*If applicable, the measure specifications allow identification of disparities.*)

2c.1 **If measure is stratified for disparities, provide stratified results** *(Scores by stratified categories/cohorts)*: We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:

The PCPI advocates that performance measure data should, where possible, be stratified by race, ethnicity, and primary language to assess disparities and initiate subsequent quality improvement activities addressing identified disparities, consistent with recent national efforts to standardize the collection of race and ethnicity data. A 2008 NQF report endorsed 45 practices including stratification by the aforementioned variables.(1) A 2009 IOM report "recommends collection of the existing Office of Management and Budget (OMB) race and Hispanic ethnicity categories as well as more fine-grained categories of ethnicity(referred to as granular ethnicity and based on one's ancestry) and language need (a rating of spoken English language proficiency of less than very well and one's preferred language for health-related encounters)."(2)

References:
(1)National Quality Forum Issue Brief (No.10). Closing the Disparities Gap in Healthcare Quality with Performance Measurement and Public Reporting. Washington, DC: NQF, August 2008.

(2)Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement. March 2010. AHRQ Publication No. 10-0058-EF. Agency for Healthcare Research and Quality, Rockville, MD. Available at: http://www.ahrq.gov/research/iomracereport. Accessed May 25, 2010.

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, *Scientific Acceptability of Measure Properties*, met?
(*Reliability and Validity must be rated moderate or high*) Yes☐ No☐
Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. **(evaluation criteria)**

C.1 Intended Actual/Planned Use *(Check all the planned uses for which the measure is intended)*: Public Reporting, Quality Improvement (Internal to the specific organization)

3.1 Current Use *(Check all that apply; for any that are checked, provide the specific program information in the following questions)*: Payment Program, Quality Improvement (Internal to the specific organization)

3a. Usefulness for Public Reporting: H☐ M☐ L☐ I ☐
(*The measure is meaningful, understandable and useful for public reporting.*)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large *(If used in a public reporting program, provide name of program(s), locations, Web page URL(s)).* If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: **[*For Maintenance* –** *If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.***]**
This measure has been in use in the CMS PQRS system since 2007.

The PCPI believes that the reporting of participation information is a beneficial first step on a trajectory toward the public reporting of performance results, which is appropriate since the measure has been tested and the reliability of the performance data has been validated. Continued NQF endorsement will facilitate our ongoing progress toward this public reporting objective.

3a.2.Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public

reporting. If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results**:** The PCPI believes that the reporting of participation information is a beneficial first step on a trajectory toward the public reporting of performance results, which is appropriate since the measure has been tested and the reliability of the performance data has been validated. Continued NQF endorsement will facilitate our ongoing progress toward this public reporting objective.

3.2 **Use for other Accountability Functions (payment, certification, accreditation).** If used in a public accountability program, provide name of program(s), locations, Web page URL(s)**:** This measure may be used in a Maintenance of Certification program.

3b. Usefulness for Quality Improvement: H☐ M☐ L☐ I ☐
(*The measure is meaningful, understandable and useful for quality improvement.*)

3b.1. **Use in QI.** If used in quality improvement program, provide name of program(s), locations, Web page URL(s):
[*For Maintenance* – *If not used for QI, indicate the reasons and describe progress toward using performance results for improvement***]**.
All PCPI measures are suitable for use in quality improvement initiatives and are made freely available on the PCPI website and through the implementation efforts of medical specialty societies and other PCPI members. The PCPI strongly encourages the use of its measures in QI initiatives and seeks to provide information on such initiatives to PCPI members.

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. If usefulness was demonstrated *(e.g., QI initiative),* describe the data, method and results:
The PCPI believes that the use of PCPI measures in quality improvement initiatives is a beneficial way to gather scientific data with which to improve physician performance. This is appropriate since the measure has been tested and the reliability of the performance data has been validated. NQF endorsement will facilitate our ongoing progress toward this quality improvement objective.

Overall, to what extent was the criterion, *Usability*, met? H☐ M☐ L☐ I ☐
Provide rationale based on specific subcriteria:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. **(evaluation criteria)**

4a. Data Generated as a Byproduct of Care Processes: H☐ M☐ L☐ I ☐

4a.1-2 **How are the data elements needed to compute measure scores generated?** *(Check all that apply).*
Data used in the measure are**:**
generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition

4b. Electronic Sources: H☐ M☐ L☐ I ☐

4b.1 **Are the data elements needed for the measure as specified available electronically** *(Elements that are needed to compute measure scores are in defined, computer-readable fields)***:** ALL data elements in electronic health records (EHRs)

4b.2 **If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources:**

4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H☐ M☐ L☐ I ☐

4c.1 **Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:**
We are not aware of any unintended consequences related to this measurement.

4d. Data Collection Strategy/Implementation: H☐ M☐ L☐ I ☐

A.2 **Please check if either of the following apply** (*regarding proprietary measures*)**:**
4d.1 **Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time**

and cost of data collection, other feasibility/implementation issues *(e.g., fees for use of proprietary measures)*:
This measure was found to be reliable and feasible for implementation.

Overall, to what extent was the criterion, *Feasibility*, met? H☐ M☐ L☐ I ☐
Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes☐ No☐
Rationale:

If the Committee votes No, STOP.
If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.

5. COMPARISON TO RELATED AND COMPETING MEASURES

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.

5.1 **If there are related measures *(either same measure focus or target population)* or competing measures *(both the same measure focus and same target population*), list the NQF # and title of all related and/or competing measures:**
0036 : Use of appropriate medications for people with asthma

5a. Harmonization

5a.1 **If this measure has EITHER the same measure focus OR the same target population as NQF-endorsed measure(s): Are the measure specifications completely harmonized?** No

5a.2 **If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden:**
Measures 0047 and 0036 are well-harmonized with respect to the long-term control medications appropriate for use by patients with persistent asthma. The denominators differ with respect to the method by which patients with persistent asthma are identified. The separate reporting rates required by measure 0047 for inhaled conticosteroids and for alternative long-term control medications will be useful for clinicians to assess and manage the use of the preferred vs. alternative long-term control medications for their patients. Upcoming minor revisions to measure 0047 will achieve harmonization with measure 0036 on age ranges and denominator exclusions.

5b. Competing Measure(s)

5b.1 **If this measure has both the same measure focus and the same target population as NQF-endorsed measure(s): Describe why this measure is superior to competing measures** *(e.g., a more valid or efficient way to measure quality)***; OR provide a rationale for the additive value of endorsing an additional measure.** *(Provide analyses when possible)*:

CONTACT INFORMATION

Co.1 **Measure Steward (Intellectual Property Owner):** American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI), 515 North State Street, Chicago, Illinois, 60654

Co.2 **Point of Contact:** Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, mark.antman@ama-assn.org, 312-464-5056-

Co.3 **Measure Developer if different from Measure Steward:** American Medical Association, 515 N. State Street, Chicago, Illinois, 60654

Co.4 **Point of Contact:** Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement,

mark.antman@ama-assn.org, 312-464-5056-

Co.5 **Submitter:** Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, mark.antman@ama-assn.org, 312-464-5056-, American Medical Association - Physician Consortium for Performance Improvement

Co.6 **Additional organizations that sponsored/participated in measure development:**
National Committee for Quality Assurance (NCQA)

Co.7 **Public Contact:** Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, mark.antman@ama-assn.org, 312-464-5056-, American Medical Association - Physician Consortium for Performance Improvement

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 **Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.**

Ann Fuhlbrigge, MD (Co-Chair) (pulmonology)
William E. Golden, MD, MACP (Co-Chair) (internal medicine)
Michael Cabana, MD (pediatrics)
Carlos Camargo, MD, DrPH (emergency medicine)
Tera Crisalida, PA (physician assistant)
Daniel Dressler, MD, MSc (hospital medicine)
Kurt Elward, MD, MPH (internal medicine)
Len Fromer, MD, FAAFP (family medicine)
Gary N. Gross, MD (allergy)
Michael Hagen, MD (family medicine)
Christine Joseph, PhD (epidemiology)
Allan Lieberthal, MD (pediatrics)
Allan Luskin, MD (allergy)
Harold Nelson, MD (internal medicine)
Sai Nimmagadda, MD (pediatric allergy)
Richard D. O'Connor, MD (allergy)
Mimi Saffer (pediatrics)
Michael Schatz, MD (allergy)

PCPI measures are developed through cross-specialty, multi-disciplinary work groups. All medical specialties and other health care professional disciplines participating in patient care for the clinical condition or topic under study are invited to participate as equal contributors to the measure development process. In addition, the PCPI strives to include on its work groups individuals representing the perspectives of patients, consumers, private health plans, and employers. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

Ad.2 **If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:**

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.3 **Year the measure was first released:** 2003
Ad.4 **Month and Year of most recent revision:** 2011
Ad.5 **What is your frequency for review/update of this measure?** Coding/Specifications updates annually. Review of measures on a three-year cycle, when feasible.
Ad.6 **When is the next scheduled review/update for this measure?** 2012

Ad.8 Disclaimers:

Ad.9 Additional Information/Comments:

Date of Submission (*MM/DD/YY*)**:** 10/18/2011