



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to subcriterion 1b).

Brief Measure Information

NQF #: 0617

Corresponding Measures:

De.2. Measure Title: High Risk for Pneumococcal Disease - Pneumococcal Vaccination

Co.1.1. Measure Steward: ActiveHealth Management

De.3. Brief Description of Measure: The percentage of patients aged 2 through 64 with a high risk condition, or aged 65 years and older who either received a pneumococcal vaccine (reported separately) or had a contraindication to pneumococcal vaccine (reported separately).

1b.1. Developer Rationale: Use of pneumococcal vaccination in the target population is known to reduce the risk of invasive pneumococcal disease. This measure will improve the compliance for routine vaccination of target population, and reduce the risk of invasive pneumococcal disease, thereby reducing associated morbidity and mortality.

S.4. Numerator Statement: Two separate numerators:

1. Patients who received a pneumococcal vaccine
2. Patients who have a contraindication to pneumococcal vaccine

S.7. Denominator Statement: Patients aged 2 through 64 years with a high risk condition (e.g., diabetes, heart failure, COPD, end-stage kidney disease, nephrotic syndrome, chronic kidney disease, chronic dialysis, asplenia, malignancy, solid organ transplant, on immunosuppressive medications, HIV) or patients aged 65 years and older.

S.10. Denominator Exclusions: (Words written in all capitals are element names. Please refer to the code set for full description)

Specific Exclusions:

1. Exclusions associated with Validation Rules (see below)
 - a. Diabetes adult validation is confirmed (see below)
 - b. Pediatric type 1 diabetes validation is confirmed (see below)
 - c. Pediatric type 2 diabetes validation is confirmed (see below)
 - d. Dialysis Chronic Validation is confirmed (see below)
 - e. CHF Any Stage validation is confirmed (see below)
 - f. COPD validation is confirmed (see below)
2. Allergy or anaphylactic reaction to the pneumococcal vaccine

General exclusions:

1. Patients who are terminally ill or in Hospice

De.1. Measure Type: Process

S.23. Data Source: Claims, Electronic Health Records, Other

S.26. Level of Analysis: Health Plan, Other, Population : Regional and State

IF Endorsement Maintenance – Original Endorsement Date: Dec 04, 2009 **Most Recent Endorsement Date:** May 02, 2012

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all subcriteria to pass this criterion and be evaluated against the remaining criteria.**

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form
[0617_Evidence_MSF5.0_Data-635278487376782800.doc](#)

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., the benefits or improvements in quality envisioned by use of this measure)

Use of pneumococcal vaccination in the target population is known to reduce the risk of invasive pneumococcal disease. This measure will improve the compliance for routine vaccination of target population, and reduce the risk of invasive pneumococcal disease, thereby reducing associated morbidity and mortality.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. (This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.

Data from the National Health Interview Survey shows a significant performance gap in the immunization of high risk individuals with the pneumococcal vaccine. Pneumococcal vaccination coverage among high-risk adults age 19-64 years was 17.5% (95% CI 16.4% – 18.6%). Pneumococcal vaccination coverage among adults 65 years and older was at 60.6% (95% CI 59.2% – 62.1%).

Available at: <http://www.cdc.gov/vaccines/stats-surv/nhis/2009-nhis.htm>. Last accessed 2011.

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

The report describes vaccination coverage levels for adults age 19 years and older using the 2009 National Health Interview Survey (NHIS) data. The sample size for high risk individuals, age 19 – 64 years was 8,070. The sample size for individuals age 65 years and over was 5,275.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. (This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.

Significant disparities in pneumococcal vaccination levels were noted based on individuals' ethnicity. For high risk individuals, age 19-64 years, the pneumococcal vaccination levels for whites was 18.3% (95% CI 17.0% – 19.7%); whereas for Hispanics, it was 12.1% (95% CI 9.7% – 15%).

For individuals age 65 years and over, the vaccination rates for whites were 64.9% (95%CI 63.2% - 66.6%), for blacks it was 44.8% (95% CI 40.0 – 49.6), and for Hispanics it was 40.1% (34.9% - 45.6%)

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.

The report describes vaccination coverage levels for adults age 19 years and older using the 2009 National Health Interview Survey (NHIS) data. The sample size for high risk individuals, age 19 – 64 years was 8,070. The sample size for individuals age 65 years and over was 5,275.

1c. High Priority (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

1c.1. Demonstrated high priority aspect of healthcare

Affects large numbers, A leading cause of morbidity/mortality, Severity of illness

1c.2. If Other:

1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare.

List citations in 1c.4.

Invasive disease from *Streptococcus pneumoniae* (pneumococcus) is a major cause of illness and death in the United States, with an estimated 43,500 cases and 5,000 deaths among persons of all ages in 2009. Overall case-fatality for pneumococcal bacteremia is ~ 20% but can be higher in patients at higher risk, e.g., 60% in elderly patients.

1c.4. Citations for data demonstrating high priority provided in 1a.3

CDC. Active Bacterial Core Surveillance (ABCS) Report: Emerging Infections Program Network. *Streptococcus pneumoniae*, provisional-2009. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at <http://www.cdc.gov/abcs/reports-findings/survreports/spneu09.pdf>. Last accessed 7/14/2011.

Updated recommendations for prevention of invasive pneumococcal disease among adults using the 23-valent pneumococcal polysaccharide vaccine (PPSV23). Centers for Disease Control and Prevention (CDC); Advisory Committee on Immunization Practices. MMWR Morb Mortal Wkly Rep. 2010 Sep 3;59(34):1102-6.

Centers for Disease Control and Prevention. Chapter 11, Pneumococcal Disease. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. Atkinson W, Wolfe S, Hamborsky J, eds. 12th ed. Washington DC: Public Health Foundation, 2011. Available at <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/pneumo.pdf>. Last accessed 7/14/2011.

1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):

De.6. Non-Condition Specific (check all the areas that apply):

Primary Prevention

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

<http://www.activehealth.net/nqf-measures.php>

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

[This is not an eMeasure Attachment:](#)

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

[Attachment Attachment: NQF_0617_CODE_SET_2013_FINAL.xlsx](#)

S.3. For endorsement maintenance, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome)

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

Two separate numerators:

1. Patients who received a pneumococcal vaccine
2. Patients who have a contraindication to pneumococcal vaccine

S.5. Time Period for Data (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)

1. Anytime in the past

2. Anytime in the past

S.6. 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, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

Two separate numerators:

NUMERATOR 1:

High Risk for Pneumococcal Disease - Pneumococcal Vaccination

The following is correct:

- 1.If Shared Common Rule Pneumococcal 23 Valent Vaccine Surrogates is confirmed (see below)

SHARED COMMON RULE PNEUMOCOCCAL 23 VALENT VACCINE SURROGATES

One of the following is correct:

- a. Presence of at least 1 refill VACCINE-PNEUMOCOCCAL-23 VALENT from claims or HIE anytime in the past
- b. Presence of at least 1 VACCINE-PNEUMOCOCCAL 23 VALENT procedure from claims or HIE anytime in the past
- c. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- VACCINE PPV-23 anytime in the past
- d. Presence of provider or patient feedback indicating that the patient has already received the pneumococcal vaccine

NUMERATOR 2:

High Risk for Pneumococcal Disease - Pneumococcal Vaccine Contraindications

The following is correct:

- 1.If Shared Common Rule Pneumococcal Vaccine Contraindications is confirmed (see below)

SHARED COMMON RULE PNEUMOCOCCAL VACCINE CONTRAINDICATIONS

One of the following:

1. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- VACCINE PNEUMO ALLERGIC anytime in the past

2. Patient or provider feedback indicating allergy, intolerance or contraindication to pneumococcal vaccine anytime in the past.

See attached for code sets

S.7. Denominator Statement *(Brief, narrative description of the target population being measured)*

Patients aged 2 through 64 years with a high risk condition (e.g., diabetes, heart failure, COPD, end-stage kidney disease, nephrotic syndrome, chronic kidney disease, chronic dialysis, asplenia, malignancy, solid organ transplant, on immunosuppressive medications, HIV) or patients aged 65 years and older.

S.8. Target Population Category *(Check all the populations for which the measure is specified and tested if any):*

Elderly, Populations at Risk

S.9. Denominator Details *(All information required to identify and calculate the target population/denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*

(Words written in all capitals are element names. Please refer to the code set for full description)

DENOMINATOR:

One of the following:

1. Patient aged 65 years and older

2. All of the following:

a. Patient aged 2 through 64 years

b. One of following:

i. Diabetes adult validation is confirmed (see below)

ii. Pediatric type 2 diabetes validation is confirmed (see below)

iii. Pediatric type 1 diabetes validation is confirmed (see below)

iv. Presence of at least 2 NEPHROTIC SYNDROME diagnosis from claims in the past 12 months

v. Presence of at least 1 NEPHROTIC SYNDROME diagnosis from HIE in the past 12 months

vi. Presence of at least 2 CANCER Diagnosis from claims in the past 12 months

vii. Presence of at least 1 CANCER Diagnosis from HIE in the past 12 months

viii. Presence of at least 1 Refill IMMUNOSUPPRESSIVE from claims or HIE in the past 6 months

ix. Presence of at least 1 TRANSPLANT SOLID ORGAN (CPT) procedure from claims or HIE anytime in the past

x. Presence of at least 1 TRANSPLANT SOLID ORGAN (ICD9) diagnosis from claims or HIE anytime in the past

xi. CKD Stage 5 validation is confirmed (see below)

xii. Dialysis Chronic Validation is confirmed (see below)

xiii. CHF Any Stage validation is confirmed (see below)

xiv. COPD validation is confirmed (see below)

xv. Human Immunodeficiency Virus (HIV) validation is confirmed (see below)

xvi. All of the following:

A. Presence of at least 1 SPLENECTOMY INDICATIONS diagnosis from claims or HIE anytime in the past

B. Presence of at least 1 SPLENECTOMY procedure from claims or HIE anytime in the past

DIABETES ADULT VALIDATION:

All of the following:

1. Patient aged 18 years and older

2. One of the following:

a. Presence of at least 1 DIABETES MELLITUS diagnosis from HIE anytime in the past

b. All of the following:

c. One of the following:

i. Presence of at least 1 DIABETES MELLITUS diagnosis from claims in the past 5 years

ii. Presence of at least 1 DIABETES MELLITUS diagnosis from HIE in the past 5 years

d. One of the following:

A. Presence of at least 1 refill DM MEDS AND SUPPLIES from HIE in the past 12 months

- B. Presence of at least 2 refill DM MEDS AND SUPPLIES from claims in the past 12 months
- C. Presence of at least 2 DM MEDS AND SUPPLIES (HCPCS) procedure from claims in the past 12 months
- D. Presence of at least 1 DM MEDS AND SUPPLIES (HCPCS) procedure from HIE in the past 12 months
- C. Presence of at least 1 INSULIN THERAPY (HCPCS) procedure from claims or HIE in the past 12 months
- D. Presence of at least 1 HBA1C VALUE > 6.5 from claims or HIE in the past 12 months
- b. Presence of at least 4 DIABETES MELLITUS diagnosis from claims with >3 months between claims in the past 12 months
- c. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- DIABETES in the past 24 months

DIABETES VALIDATION EXCLUSION

One of the following:

- 1. Presence of At Least 2 DIABETES STEROID-INDUCED diagnosis from claims in the past 12 Months
- 2. Presence of At Least 1 DIABETES STEROID-INDUCED diagnosis from HIE in the past 12 months
- 3. All of the following:
 - 4. If patient age and gender female
- a. One of the following:
 - i. Presence of at least 2 GESTATIONAL DM/POLYCYSTIC OVARIES diagnosis from claims in the past 12 months
 - ii. Presence of at least 1 GESTATIONAL DM/POLYCYSTIC OVARIES diagnosis from HIE in the past 12 months

PEDIATRIC TYPE 1 DIABETES VALIDATION:

All of the following:

- 1. Patient aged 2 through 18 years
- 2. One of the following:
 - a. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- DM TYPE 1 (PEDS) result anytime in the past
 - b. All of the following:
 - i. One of the following:
 - A. Presence of at least 2 DIABETES TYPE 1 diagnosis from claims in the past 5 years
 - B. Presence of at least 1 DIABETES TYPE 1 diagnosis from HIE in the past 5 years
 - ii. One of the following:
 - A. Presence of at least 2 fills DM MEDS AND SUPPLIES from claims in the past 12 months
 - B. Presence of at least 2 DM MEDS AND SUPPLIES (HCPCS) procedure from claims in the past 12 months
 - C. Presence of at least 1 DM MEDS AND SUPPLIES (HCPCS) procedure from HIE in the past 12 months
 - D. Presence of at least 1 fill DM MEDS/INSULIN from claims in the past 6 months
 - E. Presence of at least 1 INSULIN (ICD9) diagnosis from claims or HIE in the past 12 months

PEDIATRIC TYPE 1 DIABETES VALIDATION EXCLUSION

One of the following:

- 1. Presence of at least 1 TRANSPLANT PANCREAS (CPT) procedure from claims or HIE anytime in the past
- 2. Presence of at least 1 GESTATIONAL DM diagnosis from claims or HIE in the past 12 months

PEDIATRIC TYPE 2 DIABETES VALIDATION:

All of the following:

- 1. Patient aged 2 through 18 years
- 2. One of the following:
 - a. All of the following:
 - i. One of the following:
 - A. Presence of at least 2 DIABETES TYPE 2 diagnosis from claims in the past 5 years
 - B. Presence of at least 1 DIABETES TYPE 2 diagnosis from HIE in the past 5 years

ii. One of the following:

- A. Presence of at least 2 fill DM MEDS AND SUPPLIES from claims in the past 12 months
- B. Presence of at least 2 DM MEDS AND SUPPLIES (HCPCS) procedure from claims in past 12 months
- C. Presence of at least 1 DM MEDS AND SUPPLIES (HCPCS) procedure from HIE in past 12 months
- D. Exclusion –
- I. Presence of at least 1 DIABETES TYPE 1 diagnosis from claims or HIE in the past 5 years
- b. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- DM TYPE 2 (PEDS) result anytime in the past

PEDIATRIC TYPE 2 DIABETES VALIDATION EXCLUSION

One of the following:

- 1. Presence of at least 2 DIABETES STEROID-INDUCED diagnosis from claims in the past 12 months
- 2. Presence of at least 1 DIABETES STEROID-INDUCED diagnosis from HIE in the past 12 months
- 3. Presence of at least 1 GESTATIONAL DM/POLYCYSTIC OVARIES diagnosis from claims or HIE in the past 12 months

CKD STAGE 5 VALIDATION

One of the following:

- 1. Presence of at least 1 CKD STAGE 5 diagnosis from HIE in the past 12 months
- 2. Presence of at least 2 CKD STAGE 5 diagnosis from claims with > 3 month separation between claims in the past 12 months
- 3. Presence of at least 1 ESRD/DIALYSIS (ICD-9) diagnosis from HIE anytime in the past
- 4. Presence of at least 2 ESRD/DIALYSIS (ICD-9) diagnosis from claims with >3 month separation between claims in the past 12 months
- 5. All of the following:
 - a. If patient age >= 18 years
 - b. Presence of at least 2 CKD - NOS diagnosis from claims with >3 month separation between claims in the past 12 months
 - c. Presence of At Least 1 Result for Creatinine Clearance Between 0.1 And 14 In the past.
 - 6. Presence of at least 2 DIALYSIS CHRONIC (CPT) procedure from claims anytime in the past
 - 7. Presence of at least 1 DIALYSIS CHRONIC (CPT) procedure from HIE anytime in the past
 - 8. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- DIALYSIS result in the past 12 months

CKD STAGE 5 VALIDATION EXCLUSION

- 1. Presence of at least 1 TRANSPLANT RENAL (CPT) procedure from claims or HIE in the past 12 months the past
- DIALYSIS CHRONIC VALIDATION:

One of the following:

- 1. Presence of at least 2 DIALYSIS (ICD) diagnosis from claims with >3 months separation between claims in the past 12 months
- 2. Presence of at least 1 DIALYSIS (ICD) diagnosis from HIE in the past 12 months
- 3. Presence of at least 2 DIALYSIS CHRONIC (CPT) procedure from claims with >3 months separation between claims in the past 12 months
- 4. Presence of at least 1 DIALYSIS CHRONIC (CPT) procedure from HIE in the past 12 months
- 5. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- DIALYSIS result in the past 12 months

DIALYSIS CHRONIC VALIDATION EXCLUSION

- 1. Presence of at least 1 TRANSPLANT RENAL (CPT) Procedure from claims or HIE in the past 12 months

CHF ANY STAGE VALIDATION:

All of the following:

- 1. Patient aged 18 years and older

2. One of the following:

- a. Presence of at least 1 CHF (CONGESTIVE HEART FAILURE) diagnosis from HIE anytime in the past
- b. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- EJECTION FRACTION VALUE result < 40 anytime in the past
- c. Presence of at least 1 CHF - EF <40 procedure from claims or HIE in the past 12 months
- d. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- CHF Result from claims anytime in the past
- e. Presence of at least 4 CHF (CONGESTIVE HEART FAILURE) diagnosis with > 6 months separation between claims in the past 24 months
- f. All of the following:
 - i. One of the following:
 - A. Presence of at least 2 CHF (CONGESTIVE HEART FAILURE) diagnosis from claims anytime in the past
 - B. Presence of at least 1 CHF (CONGESTIVE HEART FAILURE) diagnosis from HIE anytime in the past
 - ii. One of following:
 - A. Presence of at least 1 fill CARVEDILOL/LONG ACTING METOPROLOL of 60 day supply from claims or HIE in the past 12 months
 - B. Presence of at least 1 fill BIDIL 60 day supply from claims or HIE in the past 12 months
 - C. Presence of at least 1 fill SPIRONOLACTONE/EPLERENONE 60 day supply from claims or HIE in the past 12 months
 - D. All of the following:
 - I. Presence of at least 1 fill ANTIHYPE/ARB-ACEI 60 day supply from claims or HIE in the past 12 months
 - II. Presence of at least 1 fill DIURETICS/LOOP DIURETICS 60 day supply from claims or HIE in the past 12 months
 - E. All of the following:
 - I. Presence of at least 1 fill HYDRALAZINE 60 day supply from claims or HIE in the past 12 months
 - II. Presence of at least 1 fill NITRATES-LONG ACTING 60 day supply from claims or HIE in the past 12 months
 - F. All of the following:
 - I. Presence of at least 1 fill DIGOXIN 60 day supply from claims or HIE in the past 12 months
 - II. Exclusion – One of thee following:
 - A] Presence of at least 2 MU ATRIAL FIBRILLATION diagnosis from claims in the past 12 months
 - B] Presence of at least 1 MU ATRIAL FIBRILLATION diagnosis from HIE in the past 12 months

CHF ANY STAGE VALIDATION EXCLUSION

One of the following:

- 1. Presence of at least 1 VALVE SURGERY procedure from claims or HIE in the past 6 months
- 2. Presence of at least 1 VALVE REPLACEMENT diagnosis from claims or HIE in the past 6 months
- 3. Presence of at least 2 TRANSPLANT HEART (ICD9) diagnosis from claims anytime in the past
- 4. Presence of at least 1 TRANSPLANT HEART (ICD9) diagnosis from HIE anytime in the past
- 5. Presence of at least 1 TRANSPLANT HEART (CPT) procedure from claims or HIE anytime in the past

COPD VALIDATION:

All of the following:

- 1. Patient aged 35 years or older
- 2. One of the following:
 - a. Presence of at least 1 PM COPD diagnosis from HIE anytime in the past
 - b. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- COPD result anytime in the past
 - c. One of the following
 - i. Presence of at least 2 PM COPD diagnosis from claims in the past 5 years
 - ii. One of the following:
 - A. Presence of at least 2 fills INHALED ANTICHOLINERGIC AND BETA-AGONIST COMBO from claims or HIE in the past 12 months
 - B. Presence of at least 2 fills BRONCHODILATOR (LONG ACTING) from claims or HIE in the past 12 months
 - C. Presence of at least 1 COPD CPT procedure from claims or HIE in the past 12 months
 - D. Presence of at least 2 fills THEOPHYLLINE from claims or HIE in the past 12 months

E. Presence of at least 2 HOME O2 THERAPY (HCPCS) procedure from claims or HIE in the past 12 months

F. Presence of at least 1 HOME O2 THERAPY (HCPCS) procedure from HIE in the past 12 months

G.. Presence of at least 2 fills ROFLUMILAST from claims or HIE in the past 12 months

H. All of the following:

I. One of the following:

1) Presence of at least 2 fills B-AGONIST (SHORT ACTING-INHALED) from claims in the past 12 months

2) Presence of at least 1 fills B-AGONIST (SHORT ACTING-INHALED) from HIE in the past 12 months

II. One of the following:

1) Presence of at least 2 fills INHALED ANTICHOLINERGIC DRUGS from claims or HIE in the past 12 months

2) Presence of at least 2 fills INHALED ANTICHOLINERGIC DRUGS from HIE in the past 12 months

COPD VALIDATION EXCLUSION

One of the following:

1. Presence of at least 2 TRANSPLANT LUNG (ICD-9) diagnosis from claims anytime in the past

2. Presence of at least 1 TRANSPLANT LUNG (ICD-9) diagnosis from HIE anytime in the past

3. Presence of at least 1 TRANSPLANT LUNG (CPT) procedure from claims or HIE anytime in the past

HIV VALIDATION:

One of the following:

1. Presence of at least 1 HEDIS HIV diagnosis from HIE anytime in the past

2. Presence of at Least 4 HEDIS HIV diagnosis from claims with > 3 months separation between claims in the past 24 months

3. Presence of patient data via online PHR or telephonic nurse assessment confirming at least 1 PDD- HIV result anytime in the past

4. All of the following:

a. Presence of at least 2 HEDIS HIV diagnosis from claims in the past 24 months

b. One of the following:

i. Presence of at least 2 fill ANTIRETROVIRAL AGENTS/ALL from claims in the past 12 months

ii. Presence of at least 1fill ANTIRETROVIRAL AGENTS/ALL from HIE in the past 12 months

iii. Presence of at least 1 VIRAL LOAD procedure from claims or HIE In the past 12 Months

iv. Presence of at least 1 CD4 procedure from claims or HIE In the past 12 Months

iv. Presence of at least 1 VIRAL LOAD MONITORING labs result value from claims or HIE in the past 12 Months

v. Presence of at least 1 CD4 COUNT MONITORING labs result value from claims or HIE in the past 12 Months

S.10. Denominator Exclusions (Brief narrative description of exclusions from the target population)

(Words written in all capitals are element names. Please refer to the code set for full description)

Specific Exclusions:

1. Exclusions associated with Validation Rules (see below)

a. Diabetes adult validation is confirmed (see below)

b. Pediatric type 1 diabetes validation is confirmed (see below)

c. Pediatric type 2 diabetes validation is confirmed (see below)

d. Dialysis Chronic Validation is confirmed (see below)

e. CHF Any Stage validation is confirmed (see below)

f. COPD validation is confirmed (see below)

2. Allergy or anaphylactic reaction to the pneumococcal vaccine

General exclusions:

1. Patients who are terminally ill or in Hospice

S.11. Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

(Words written in all capitals are element names. Please refer to the code set for full description)

DENOMINATOR EXCLUSIONS ASSOCIATED WITH THE VALIDATION RULES

DIABETES VALIDATION EXCLUSION

One of the following:

1. Presence of At Least 2 DIABETES STEROID-INDUCED diagnosis from claims in the past 12 Months
2. Presence of At Least 1 DIABETES STEROID-INDUCED diagnosis from HIE in the past 12 months
3. All of the following:
 4. If patient age and gender female
 - a. One of the following:
 - i. Presence of at least 2 GESTATIONAL DM/POLYCYSTIC OVARIES diagnosis from claims in the past 12 months
 - ii. Presence of at least 1 GESTATIONAL DM/POLYCYSTIC OVARIES diagnosis from HIE in the past 12 months

PEDIATRIC TYPE 1 DIABETES VALIDATION EXCLUSION

One of the following:

1. Presence of at least 1 TRANSPLANT PANCREAS (CPT) procedure from claims or HIE anytime in the past
2. Presence of at least 1 GESTATIONAL DM CURRENT diagnosis from claims or HIE in the past 12 months

PEDIATRIC TYPE 1 DIABETES VALIDATION EXCLUSION

One of the following:

1. Presence of at least 1 TRANSPLANT PANCREAS (CPT) procedure from claims or HIE anytime in the past
2. Presence of at least 1 GESTATIONAL DM diagnosis from claims or HIE in the past 12 months

CKD STAGE 5 VALIDATION EXCLUSION

1. Presence of at least 1 TRANSPLANT RENAL (CPT) procedure from claims or HIE in the past 12 months the past

DIALYSIS CHRONIC VALIDATION EXCLUSION

1. Presence of at least 1 TRANSPLANT RENAL (CPT) Procedure from claims or HIE in the past 12 months

CHF ANY STAGE VALIDATION EXCLUSION

One of the following:

1. Presence of at least 1 VALVE SURGERY procedure from claims or HIE in the past 6 months
2. Presence of at least 1 VALVE REPLACEMENT diagnosis from claims or HIE in the past 6 months
3. Presence of at least 2 TRANSPLANT HEART (ICD9) diagnosis from claims anytime in the past
4. Presence of at least 1 TRANSPLANT HEART (ICD9) diagnosis from HIE anytime in the past
5. Presence of at least 1 TRANSPLANT HEART (CPT) procedure from claims or HIE anytime in the past

COPD VALIDATION EXCLUSION

One of the following:

1. Presence of at least 2 TRANSPLANT LUNG (ICD-9) diagnosis from claims anytime in the past
2. Presence of at least 1 TRANSPLANT LUNG (ICD-9) diagnosis from HIE anytime in the past
3. Presence of at least 1 TRANSPLANT LUNG (CPT) procedure from claims or HIE anytime in the past

S.12. Stratification Details/Variables (All information required to stratify the measure results including the stratification variables, definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b)

This measure is not stratified.

S.13. Risk Adjustment Type (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

No risk adjustment or risk stratification

If other:

S.14. Identify the statistical risk model method and variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)

No risk adjustment or risk stratification

S.15. Detailed risk model specifications (must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

S.15a. Detailed risk model specifications (if not provided in excel or csv file at S.2b)

S.16. Type of score:

Rate/proportion

If other:

S.17. 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

S.18. 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.)

Calculation algorithm (see measure logic above)

1. Determine denominator population
2. Determine population to be excluded from the denominator
3. Subtract excluded population from the denominator population
4. Determine numerator population
5. Divide numerator by the final denominator calculated in step 3

S.19. Calculation Algorithm/Measure Logic Diagram URL or Attachment (You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

S.20. Sampling (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)

IF a PRO-PM, identify whether (and how) proxy responses are allowed.

The measure is not based on a sample or survey.

S.21. Survey/Patient-reported data (If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)

IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.

S.22. Missing data (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

S.23. Data Source (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.24.

Claims, Electronic Health Records, Other

S.24. Data Source or Collection Instrument (*Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.*)

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

Data are collected from a number of electronic sources, e.g., health plans, pharmacy-based management systems, electronic health records, patient health records, etc.

S.25. Data Source or Collection Instrument (*available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1*)

S.26. Level of Analysis (*Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED*)

Health Plan, Other, Population : Regional and State

S.27. Care Setting (*Check ONLY the settings for which the measure is SPECIFIED AND TESTED*)

Other

If other: We do not differentiate between care settings when testing as we accept data from all care settings

S.28. COMPOSITE Performance Measure - Additional Specifications (*Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.*)

2a. Reliability – See attached Measure Testing Submission Form

2b. Validity – See attached Measure Testing Submission Form

0617_MeasureTesting_MSF5.0_Data-635278487376782800.doc

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition, Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields? (*i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields*)

Yes

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.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.

IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.

Generally, we have learned that we have to be flexible to take in data from all possible sources. We have also heard from providers, that they prefer that the rules err on the side of specificity, e.g., lessen the risk of false positives, that is, identifying the wrong patient for the denominator and that they want a mechanism to provide feedback.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Planned	Current Use (for current use provide URL)
Public Reporting	
Quality Improvement (Internal to the specific organization)	

4a.1. For each CURRENT use, checked above, provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

4a.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

4a.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for

implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

4b. Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b.1. Progress on Improvement. (Not required for initial endorsement unless available.)

Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)
- Geographic area and number and percentage of accountable entities and patients included

4b.2. If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4c. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4c.1. Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.

We use a combination of data sources to mitigate the risk of inaccuracies or errors. We recognize that generally, electronic data have inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of the denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the data. In addition, where possible, we corroborate the data, for example if we receive an ICD-9 code for diabetes from claims, we also build include in the rule the requirement for diabetic medications. We have a mechanism in place to solicit feedback from providers via a feedback form, if they detect errors with the measure.

We do not anticipate significant unintended consequences from the implementation of the measure. Our measures are all developed from evidence-based literature or from clinical practice guidelines and are designed to encourage appropriate care of the patient.

5. Comparison to Related or 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.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization

<p>The measure specifications are harmonized with related measures; OR The differences in specifications are justified</p> <p>5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s): Are the measure specifications completely harmonized?</p> <p>5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.</p>
<p>5b. Competing Measures The measure is superior to competing measures (e.g., is a more valid or efficient way to measure); OR Multiple measures are justified.</p> <p>5b.1. If this measure conceptually addresses 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.) See above.</p>

<p>Appendix</p> <p>A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed. Attachment:</p>
<p>Contact Information</p> <p>Co.1 Measure Steward (Intellectual Property Owner): ActiveHealth Management Co.2 Point of Contact: Madhavi, Vemireddy, mvemireddy@activehealth.net, 212-651-8200- Co.3 Measure Developer if different from Measure Steward: Active Health Management Co.4 Point of Contact: Lindee, Chin, lchin@activehealth.net, 212-590-2674-</p>
<p>Additional Information</p> <p>Ad.1 Workgroup/Expert Panel involved in measure development Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development. n/a</p> <p>Measure Developer/Steward Updates and Ongoing Maintenance Ad.2 Year the measure was first released: 2007 Ad.3 Month and Year of most recent revision: 12, 2010 Ad.4 What is your frequency for review/update of this measure? 2 years Ad.5 When is the next scheduled review/update for this measure? 10, 2013</p> <p>Ad.6 Copyright statement: This information, including any attachments hereto, is the sole, exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited. Ad.7 Disclaimers:</p>

Ad.8 Additional Information/Comments: