NATIONAL QUALITY FORUM

National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

A CONSENSUS REPORT

Foreword

The millions of physicians, nurses, technologists, and other professionals who come into daily contact with patients together comprise the backbone of the nation's healthcare system. The health of these workers is constantly at risk because these workers, by the nature of their jobs, face unyielding exposure to communicable disease. Unfortunately, the healthcare system fails to ensure a uniformly safe work environment by taking appropriate steps to immunize every single healthcare worker.

The National Quality Forum (NQF) has long recognized the importance of immunizations for healthcare workers, calling for the vaccination of workers against influenza for their own protection as well as that of patients as early as 2003 in its original *Safe Practices for Better Healthcare* report. In order to ensure that healthcare workers are protected from the diseases they are expected to treat, NQF undertook an effort to achieve voluntary consensus on performance measures for immunizations to prevent seasonal influenza and pneumococcal disease across healthcare settings in the United States. This report, the product of that effort, presents three national voluntary consensus standards that are based on current guidelines. These standards, vetted by numerous healthcare stakeholders, comprise a uniform approach to measurement across settings and populations.

We thank CMS for its support of this project. We also thank the members of the National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations Steering Committee for their oversight of this project, and NQF Members for their commitment to preserving a safe healthcare work environment. These organizations are helping to protect the health and safety of the healthcare system's most precious resource, its workers.

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National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

Table of Contents

(continued)

National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

Executive Summary

The incidence of serious illness and unnecessary hospitalizations resulting from seasonal influenza and pneumococcal disease could be significantly reduced through the use of immunizations across the healthcare system, including clinician practice settings, hospitals, nursing homes, and the home care setting. It is estimated that vaccination coverage remains at less than 50 percent among certain groups for which annual seasonal influenza vaccination is recommended and at less than 50 percent for pneumococcal vaccination in recommended high-risk groups. Achieving universal immunization of all recommended groups requires a greater emphasis on vaccination across healthcare providers and sites of care.

In order to identify the gaps in appropriate immunization at the appropriate junctures, more global, harmonized measures of immunization need to be adopted. In the interests of standardization and minimizing burden for those implementing and using performance measures, harmonization of measure specifications is an important consideration in evaluating and recommending measures for endorsement. The opportunity to increasingly link measurement across healthcare providers and settings will form the foundation for a systems-based perspective on immunization and the reduction or elimination of preventable illnesses.

This project was intended to achieve voluntary consensus on performance measures for immunizations to prevent seasonal influenza and pneumococcal disease across healthcare settings in the United States, with the goal of identifying a global measure or small set of aligned measures that are based on the same performance expectations. The Steering Committee identified standard measure specifications based on current guidelines that were used to recommend a uniform approach to measurement across settings and populations.

Only measures aligned with the standard measure specifications were recommended as voluntary consensus standards. Revisions of previously endorsed measures are not required until the time of maintenance or time-limited endorsement review. Because none of the measure owners for the previously endorsed measures opted to submit modifications at this time, only three new measures were recommended and endorsed.

National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

- **Influenza vaccination of nursing home/skilled nursing facility residents**
- **Influenza vaccination coverage among healthcare personnel (time-limited endorsement)**
- **Pneumococcal vaccination of nursing home/skilled nursing facility residents**

National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

Introduction

The incidence of serious illness and unnecessary hospitalizations resulting from seasonal influenza and pneumococcal disease could be significantly reduced through the use of immunizations across the healthcare system, including clinician practice settings, hospitals, nursing homes, and the home care setting. It is estimated that vaccination coverage remains at less than 50 percent among certain groups for which annual seasonal influenza vaccination is recommended[1] and at less than 50 percent for pneumococcal vaccination coverage in recommended high-risk groups.[2] Achieving universal vaccination of all recommended groups requires a greater emphasis on vaccination across healthcare providers and sites of cares.

In order to identify the gaps in appropriate immunization at the appropriate junctures, more global, harmonized measures of immunization need to be adopted. In the interests of standardization and minimizing burden for those implementing and using performance measures, harmonization of measure specifications is an important consideration in evaluating and recommending measures for endorsement. The opportunity to increasingly link measurement across healthcare providers and settings will form the foundation for a systems-based perspective on immunization and the reduction or elimination of preventable illnesses.

Recommending Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

A Steering Committee (Appendix B) established the approach for recommending consensus standards. The purpose, framework, and scope were identified to facilitate measure review and evaluation.

Purpose

The purpose of this project was to achieve voluntary consensus on performance measures for immunizations to prevent seasonal influenza and pneumococcal disease across healthcare settings in the United States. A set of voluntary consensus standards for influenza and pneumococcal immunizations could be used to:

- facilitate improvement in the proportion of indicated populations that receive influenza and pneumococcal immunizations and, ultimately, in the rates of seasonal influenza and pneumococcal disease and their associated mortality and morbidity;
- advance the reduction and elimination of disparities related to influenza and pneumococcal immunizations;
- facilitate benchmarking and sharing of best practices among providers;
- promote the use of evidence-based information to empower consumers to make decisions about healthcare;
- evaluate healthcare providers on their performance in ensuring that patients receive influenza and pneumococcal immunizations; and
- serve as a mechanism for public reporting, by supplying stakeholders with information that will enable them to better understand the quality of care.

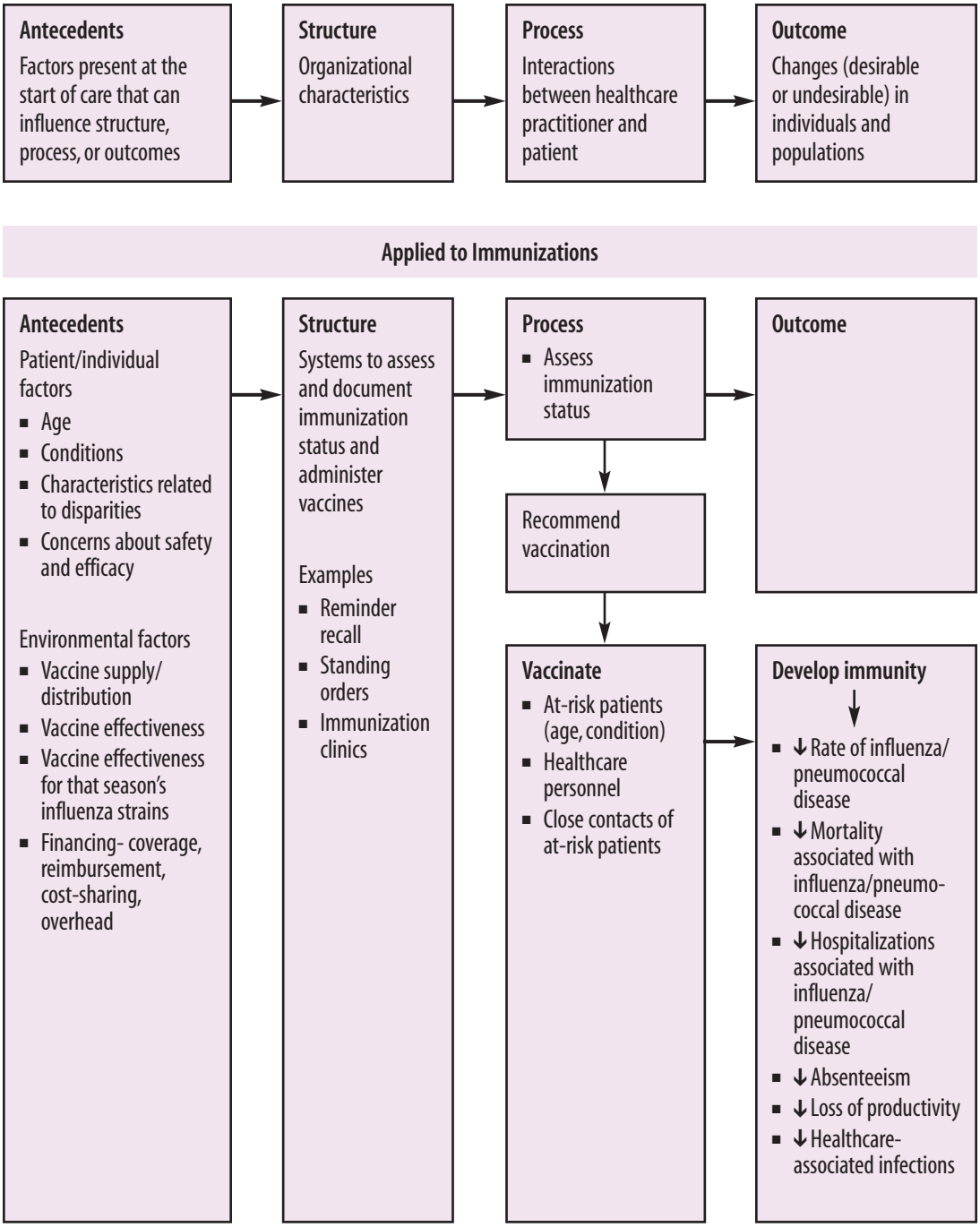
Framework

As a conceptual approach to organizing measures, a framework provides general guidance on categorizing measures for purposes of inclusion or exclusion and on identifying gaps in available quality measures. Figure 1 illustrates the structure-process-outcome framework for influenza and pneumococcal immunizations that was adopted by the Steering Committee.

Scope

The scope of this project was limited to immunizations for influenza and pneumococcal disease. The Steering Committee agreed that children should be included in the measures as reflected in the current guidelines and excluded from consideration measures that only addressed assessing immunization status or recommending vaccination because they were not sufficient indicators of quality. As depicted in Figure 1, vaccination is the process step directly related to immunity and the desired outcomes; assessment and recommendation alone are insufficient and should not be measured separately from vaccination. Additionally, the guidelines and evidence always address assessment and recommendation in conjunction with actual vaccination—not separately.

Figure 1 – Framework for Measuring Influenza and Pneumococcal Immunizations



The scope for this project encompasses measures that:

- apply to influenza and pneumococcal immunizations;
- include the elderly, those with significant comorbid illness and immunocompromised states, and children, as appropriate;
- include healthcare personnel; and
- apply to healthcare settings including, but not limited to, long-term care facilities (e.g., nursing homes, skilled nursing facilities, and assisted living facilities), home health agencies, hospitals, clinics, office practices, and dialysis facilities.

The scope excludes measures that address only "assessing immunization status" and/or "recommending immunization." However, assessing and recommending may be included with administering vaccine in a multipart measure, if each component is computed and reported separately.

Priority

The project's priority was to identify either one global measure that is applicable across healthcare providers and settings or a small set of closely aligned (harmonized) measures. Because in the current environment each care setting has different data sources and measure developers usually specialize in one setting, the Steering Committee recognized that more than one measure would be needed. However, it was recognized that the specifications should be closely aligned with the evidence and guidelines unless the evidence dictated differences for a particular patient population.

Harmonization

The current quality landscape includes many reporting initiatives and measure developers with a proliferation of measures. Duplication and overlap occur, because different quality initiatives focus on different settings and patient populations. Multiple measures with essentially the same focus create confusion in choosing measures for implementation and interpreting results. Differences in measure specifications limit comparability and understanding of results across settings and/or patient populations.

The following example (Box A) illustrates how various approaches to measure specifications can affect interpretability and comparisons. Depending on the approach used, the same data result in different scores and different pictures of immunization practice. With method 1, the two providers have identical scores (82 percent) for the measure. However, the percentage of patients actually vaccinated varies substantially (50 percent versus 70 percent) as seen when the data are broken down by numerator category in method 2. Method 3, which uses denominator exclusions, also minimizes the differences seen with method 2 (73.5 percent versus 79.5 percent), but not to the same extent as method 1. Other variations for computing and reporting measures also are used for immunization. This example merely illustrates how different specifications can affect interpretability and comparability.

In addition to the 12 National Quality Forum (NQF)-endorsed® measures for influenza and pneumococcal immunization that existed at the start of the project,

Box A – Illustration of Measure Results Using Different Methods

Method	Provider 1 100 patients	Provider 2 100 patients
1. Score including assessed but not given due to declining vaccination or medical contraindication in one total numerator	**82%**	**82%**
2. Score using numerator categories of received vaccine, assessed but declined, and assessed but medical contraindication	Received vaccine (50) - **50%** Declined (27) - 27% Contraindications (5) - 5%	Received vaccine (70) - **70%** Declined (10) - 10% Contraindications (2) - 2%
3. Score using denominator exclusions for declining vaccination or medical contraindication	50/100-32=**73.5%**	70/100-12=**79.5%**

15 new measures were submitted, resulting in a total of 27 with 16 measures focused on influenza immunization and 11 on pneumococcal immunization. A table of candidate consensus standards and currently endorsed measures that illustrates the variety of approaches to key measure specifications is provided in Appendix C.

Issues regarding harmonization had been discussed and studied for some time prior to this project; however, progress was not evident in the new measure submissions. In 2006, NQF's Pulmonary Consensus Standards Maintenance Committee reviewed previously endorsed immunization measures and noted that the hospital and nursing home measures were not aligned and suggested that the measure developers work collaboratively to harmonize and align the measures with current Advisory Committee on Immunization Practices (ACIP) guidelines. In January 2007, the Quality Alliance Steering Committee Harmonization Workgroup recommended that the developers of vaccination measures construct common denominator populations and numerator inclusions for all measures by reconciling the various approaches to exclusion.[3] Although measure developers expressed support for harmonization, the measure specifications remained unaligned.

The definition of harmonization used for this project is as follows:

> *Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., influenza immunization of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for patients with diabetes), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and*

data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

Achieving harmonization across measures is challenging for a variety of reasons; however, continuing the usual approach of measure review and evaluation was not likely to result in progress toward measure harmonization. The Steering Committee considered three potential approaches to harmonizing measure specifications. First, it could identify the best measure and use its specifications to identify modifications to other measures. Second, the Steering Committee could identify commonalities across measures and use those for the standard specifications—the lowest common denominator approach. Third, it could identify standard specifications based on the current guidelines and evidence. Because of the large number of measures for the two topics covered by this project and because the first two approaches do not ensure alignment with the guidelines, the Steering Committee adopted the third approach. The Steering Committee recommended only those measures that met the usual evaluation criteria of importance, scientific acceptability, usability, and feasibility and that were aligned with the standard specifications.

Standard Measure Specifications

The standard specifications provide a uniform approach to measurement across settings and populations by specifying who is included in/excluded from the target denominator population, who is included in the numerator population, and time windows for measurement and vaccinations. The Steering Committee used current guidelines from ACIP and others [1,4-12] to direct its decisions on all parameters. During the course of this project, ACIP revised its recommendation for vaccinating children against influenza to include children ages 6 months through 18 years,[12,13] and the Steering Committee incorporated this revision into the standard specifications.

The Steering Committee noted that not all aspects and nuances of a clinical practice guideline can be captured in a measure. Exact replication of the guideline must be balanced with the ability to implement measurement consistently. The standard specifications are not intended to replace current guidelines; rather, they are intended to capture the most important aspects of the guidelines that can feasibly be measured.

Although some previously endorsed and newly submitted measures were in alignment with various aspects of the standard specifications, no measure was in alignment with all components of the standard specifications. Harmonization with standard specifications requires modifications to both previously endorsed and newly submitted measures as reflected in the Steering Committee's recommendations. Those aspects of the standard specifications that generated the most controversy and the Steering Committee's resolution of the controversies are discussed below.

Comprehensive Denominator Population

The Steering Committee decided that, to be consistent with guidelines, the immunization measures should be comprehensive and include all recommended populations to the extent that they are measurable. Ideally, the same measure should be applied to all settings; however, the current differences in data sources across settings necessitates that measure specifications be specific to the data available in each setting (e.g., Minimum Data Set [MDS] in nursing homes, CPT and G-codes in clinician office practices). Nonetheless, it was agreed that because the goal is to vaccinate all recommended patient populations, that is what should be measured. A comprehensive measure (for each unique data source) can be stratified to allow examination of a particular patient group of interest (e.g., diagnosis of chronic obstructive pulmonary disease) or used for a specialist group (e.g., nephrologist) without creating multiple versions of the same measure. A comprehensive measure approach would reduce the number of measures that are required and minimize the potential for misalignment across measures over time.

Target (Denominator) Population

The Steering Committee recognized the difficulty in identifying for measurement purposes some of the conditions recommended in the guidelines (e.g., any condition that can compromise handling respiratory secretions). Therefore, the Steering Committee identified the most prevalent chronic conditions for measurement purposes. Prevalence data and immunization coverage for conditions noted in the guidelines were reviewed when available to assist in specifying the most prevalent conditions as well as those that could be discreetly identified.

Numerator Categories

The Steering Committee identified three distinct numerator categories: 1) patients who received the vaccine, 2) patients who were assessed and offered, but declined, the vaccine, and 3) patients who were assessed and determined to have medical contraindications to receiving the vaccine. The measures under review handled these categories in a variety of ways, such as denominator exclusions or inclusion in one total numerator. As illustrated in Box A, different methods for handling these categories result in different scores and affect comparability and understanding. The Steering Committee selected the numerator category approach (illustrated in Box A, method 2), because it captures the most important step of the immunization process—vaccination—as well as assessment. This approach also acknowledges the issue of patients declining vaccination, allows identification of rates of declination, and is transparent for comparison purposes.

The specification of numerator categories for assessed but declined and assessed but contraindicated (in addition to vaccinated) was the subject of numerous Steering Committee deliberations throughout the process. During the comment period, an alternative approach was suggested that uses denominator exclusions (as illustrated in Box A, method 3), with additional

reporting of the exclusion categories to the provider (and possibly to the public). The Steering Committee discussed the comments and suggestion and reaffirmed its recommendation to specify assessed/declined and assessed/contraindicated as numerator categories and noted the following clarifications:

- The standard specifications for the immunization measures are intended to represent *both* assessment of immunization status *and* vaccination. Assessed but declined and assessed but contraindicated are specified as numerator categories, because they indicate patients whose immunization status was assessed even though they were not vaccinated.
- The standard specifications with numerator categories provide the most information for understanding variations in vaccination rates as well as undertaking quality improvement efforts. For example, substantial variations in the percentages of patients who decline immunization could stimulate improvement in patient education and engagement and in the identification of myths, as examples. True contraindications are considered rare, and substantial variations in the percentages of patients with contraindications might stimulate efforts to more accurately identify true contraindications.
- The use of a numerator category for declinations provides a transparent approach to accommodating and understanding the impact of patient preferences on vaccination.
- The Steering Committee is not recommending an overarching approach to the measurement of exclusions.[i] As noted above, numerator categories are suggested as a way to also capture patients who were screened for immunization status.
- One commenter expressed concern that the standard specifications could not be used with HEDIS data, because information on declinations and contraindications is not collected. However, the score for those who received the vaccine is still comparable, because declinations and contraindications are specified as numerator categories rather than as denominator exclusions.

Time Window for Influenza Immunization

One consideration for standardization and comparability in measurement is a standardized time window for influenza vaccination. According to the guidelines, the time to vaccinate against seasonal influenza is October through March. Earlier vaccinations also are allowed to avoid missing an opportunity to vaccinate. The standard specifications take both of these recommendations into account. There was some debate about the need to include the entire month of March in the window; however, there was not a compelling enough rationale for deviating from the guidelines, which state the following:

> *In any given year, the optimal time to vaccinate patients cannot be determined because influenza seasons vary in their timing and duration, and more than one outbreak might occur in a single community*

[i] NQF's measure evaluation criteria were updated in August 2008 and provide more explicit guidance regarding exclusions.

in a single year. In the United States, localized outbreaks that indicate the start of seasonal influenza activity can occur as early as October. However, in >80% of influenza seasons since 1976, peak influenza activity (which is often close to the midpoint of influenza activity for the season) has not occurred until January or later, and in >60% of seasons, the peak was in February or later. … Vaccination efforts should continue throughout the season, because the duration of the influenza season varies, and influenza might not appear in certain communities until February or March. Providers should offer influenza vaccine routinely, and organized campaigns should continue throughout the influenza season, including after influenza activity has begun in the community (p. 29).[1]

Additionally, the Steering Committee noted that the influenza vaccine contains several strains of the virus that could have outbreaks at different times.

Denominator Exclusion for Influenza Vaccine Supply Delays

An issue of considerable debate involved whether exclusions should be allowed for vaccine distribution problems. This does not refer to a general supply shortage, in which case measurement might be suspended. Rather, the proposed exclusion addresses variations in distribution timing across locations and/or providers (e.g., small providers may receive vaccine later than large entities), which the Steering Committee recognized as an issue of fairness. However, the Steering Committee agreed that the proposed exclusion for influenza "vaccine supply on order but not yet received" would require further specification in submitted measures to ensure consistent implementation. The recommended nursing home measure was only able to accommodate an exclusion for a declared shortage, and no well-specified examples for such an exclusion were identified. After further discussion of the comments received, the Steering Committee decided to remove the exclusion in the standard specifications for the following reasons:

- A systematic and consistent way to operationalize the exclusion was not identified (e.g., what distinguishes a delay in ordering vaccine from a delay in distribution; what period of time is needed for the exclusion, which generally should only be an issue early in the flu season; and what documentation is required?).
- Supply and distribution problems are becoming less frequent. ACIP noted the following in 2007:

  This year, over 110 million doses were produced and more than 100 million have been distributed. …Data on distribution by provider type show that no matter what the time period, private providers receive 40 percent or more of the vaccine distributed. Vaccine does not get distributed to providers last. (p. 28).[14]

The Steering Committee agreed that an exclusion would not be needed in a declared shortage, because all providers would be affected. Additionally, measure results without the exclusion could be used to identify a differential impact of a declared shortage across providers (i.e., not for comparative performance, just for information).

Time Window for Pneumococcal Immunizations

Unlike the influenza vaccine, there is no season specified for administering pneumococcal vaccine; however, it might be more likely to be administered in conjunction with influenza vaccine. The standard specifications indicate a 12-month measurement period. Although the nursing home measure can be constructed with a 12-month period, it was originally constructed with a 6-month period, because the Centers for Medicare & Medicaid Services (CMS) believes that 6 months is more useful to quality improvement and monitoring change. Standardization generally requires uniform time periods, and the central question is whether a measure computed over a 12-month period is comparable to a measure computed over a 6-month period. Although the guidelines do not indicate an appropriate measurement time window, many quality measures are based on a 12-month period, which is not subject to potential seasonal variation and increases sample size.

Another timing issue for the pneumococcal immunization standard specifications involved whether there is a need for a separate measure focused specifically on patients turning age 65. Initially the Steering Committee considered two sets of pneumococcal standard specifications—one for a "prevalence" measure of patients ages 65 and older who ever received the pneumococcal vaccine and one for an "incidence" measure of patients who received the pneumococcal vaccine within 2 years of turning 65. Ultimately, the Steering Committee settled on one set of standard specifications, because the 65 through 67 age group is a subset of the recommended groups and could be measured as a subset using the standard specifications.

Numerator for Pneumococcal Immunizations

The numerator for the pneumococcal immunization standard measure specifications includes patients who "ever" received the PPV23 (pneumococcal polysaccharide) vaccine. The guidelines recommend a second vaccination in some circumstances (e.g., if first vaccination was prior to age 65); however, the Steering Committee believed that incorporating the circumstances for a second vaccination in the measure would increase the complexity of measurement without a commensurate benefit.

The PPV23 vaccine was identified in the specifications, because the conjugate vaccine is used only for children under age 5, and the standard measure specifications denominator includes high-risk populations beginning at age 5. Although the guidelines recommend PPV23 beginning at age 2 for some high-risk children, the Steering Committee recognized that the schedule for vaccination is different and more complicated for children ages 2 through 5, and it would be challenging to measure the "correct" vaccination. In the interest of implementation, the Steering Committee recommended specifications that were most feasible for measurement and reaffirmed its belief that the measures should not be viewed as a substitute for guidelines. If new pneumococcal vaccines are licensed, the measure specifications may need to be updated.

Endorsed Standard Specifications

Standard specifications were developed for influenza immunization, pneumococcal immunization, and healthcare personnel influenza immunization, in Box B, Box C, and Box D, as follows.

Box B—Influenza Immunization Standard Measure Specifications[a]

Numerator[b] – number of persons specified in the denominator who

- received the influenza vaccine[c] (computed and reported separately)
- documented administration by the provider or patient (or responsible party/legal guardian) reported receipt from another provider
- OR were assessed and offered but declined the vaccination (computed and reported separately)
- OR were assessed and determined to have medical contraindication(s) (computed and reported separately) of anaphylactic hypersensitivity to eggs or other component(s) of the vaccine, history of Guillain-Barré syndrome within 6 weeks after a previous influenza vaccination,[15] bone marrow transplant within the past 6 months[6] (<6 months prior to encounters between October 1 and March 31)
- during the time from October 1 (or when the vaccine became available) through March 31

Denominator – number of persons

- in a facility, agency, or practice with an encounter (or in a defined population) between October 1 and March 31
- (OR for health plan measures, enrolled[d] with a plan between October 1 and March 31)
- who is age 50 and older or 6 mo. – 18 yr.[13]
- OR resides in a long-term care facility (including nursing homes and skilled nursing facilities)
- OR is age 19-49 with prevalent high-risk conditions of pregnancy, diabetes, end-stage renal disease (ESRD), congestive heart failure (CHF), asthma, chronic obstructive pulmonary disease (COPD), human immuno-deficiency virus (HIV)[e]

Denominator exclusions

- Hospital patients who died before discharge

[a] Not all aspects and nuances of a clinical practice guideline can be captured in a measure. These specifications are not intended to replace current guidelines; rather they are intended to capture the most important aspects of the guidelines that can feasibly be measured.

[b] The three numerator categories are computed separately and should not be added into one total numerator score.

[c] Trivalent influenza vaccine (TIV) is Food and Drug Administration (FDA) approved for persons ≥6 months, including those with high-risk conditions. Live attenuated influenza vaccine (LAIV) is FDA approved for use only among healthy persons ages 2-49.

[d] Enrolled needs to be defined in any measure based on health plan enrollees.

[e] These conditions should be included in a comprehensive measure, but are not intended to prevent focusing on a specific condition.

Box C—Healthcare Personnel Influenza Immunization Standard Measure Specifications[a]

Numerator[b] – number of persons specified in the denominator who

- received the influenza vaccine (computed and reported separately)
- documented administration by the provider (where healthcare personnel work/volunteer), or healthcare personnel reported receipt from another provider
- OR were assessed and offered but declined the vaccination (computed and reported separately)
- OR were assessed and determined to have medical contraindication(s) (computed and reported separately) of anaphylactic hypersensitivity to eggs or other component(s) of the vaccine, history of Guillain-Barré syndrome within 6 weeks after a previous influenza vaccination,[15] bone marrow transplant within the past 6 months[6] (<6 months prior to encounters between October 1 and March 31)
- during the time from October 1 (or when the vaccine became available) through March 31

Denominator – number of persons

- who meet the definition of healthcare personnel as defined by CDC[8] who are working in a healthcare setting between October 1 and March 31

Denominator exclusions

- None

[a] Not all aspects and nuances of a clinical practice guideline can be captured in a measure. These specifications are not intended to replace current guidelines; rather they are intended to capture the most important aspects of the guidelines that can feasibly be measured.

[b] The three numerator categories are computed separately and should not be added into one total numerator score.

Box D—Pneumococcal Immunization Standard Measure Specifications [a]

Numerator [b] – number of persons specified in the denominator who

- ever received the PPV23 (pneumococcal polysaccharide) [c] vaccine (computed and reported separately)
- documented administration by the provider or patient (or responsible party/legal guardian) reported receipt from another provider
- OR were assessed and offered but declined the vaccination (computed and reported separately)
- OR were assessed and determined to have medical contraindication(s) (computed and reported separately) of anaphylactic hypersensitivity to component(s) of the vaccine, or bone marrow transplant within past 12 months[2,6] (<12 months prior to encounters during the measurement year), or receiving course of chemotherapy or radiation therapy[4,15] (<2 weeks prior to encounters during the measurement year)

Denominator – number of persons

- in a facility, agency, or practice with an encounter (or in a defined population) during the measurement year
- (OR for health plan measures, enrolled [d] with a plan during the measurement year)
- who is age 65 or older
- OR resides in a long-term care facility (including nursing homes and skilled nursing facilities)
- OR age 5-64 with prevalent high-risk conditions of diabetes, nephrotic syndrome, ESRD, CHF, COPD, HIV, asplenia [e]

Denominator exclusions

- Hospital patients who died before discharge

[a] Not all aspects and nuances of a clinical practice guideline can be captured in a measure. These specifications are not intended to replace current guidelines; rather they are intended to capture the most important aspects of the guidelines that can feasibly be measured.

[b] The three numerator categories are computed separately and should not be added into one total numerator score.

[c] PPV23 is the recommended vaccine for the ages specified in the denominator.

[d] Enrolled needs to be defined in any measure based on health plan enrollees.

[e] The specifications for high-risk groups begin at age 5, because the schedule for children ages 2-5 is different and complicated. These conditions should be included in a comprehensive measure, but are not intended to prevent focusing on a specific condition.

Evaluating Candidate Consensus Standards

Newly submitted measures were evaluated using the NQF-endorsed criteria of importance, scientific acceptability, usability, and feasibility (Box E) and were compared to the standard specifications described above. The previously endorsed measures, which had already been evaluated using the NQF criteria, were also compared against the standard specifications.

NQF Evaluation Criteria

Box E—Criteria for Evaluation and Selection

Proposed measures are evaluated for their suitability based on four sets of standardized criteria (e.g., importance, scientific acceptability, usability, and feasibility). Not all acceptable measures will be strong—or equally strong—among each of the four sets of criteria, or strong among each of their related criteria. Rather, a candidate measure is assessed regarding the extent to which it meets any of the desired criteria within each set:

1. **Importance.** This set addresses the extent to which a measure reflects a variation in quality, low levels of overall performance, and the extent to which it captures key aspects of the flow of care.
   a. The measure addresses one or more key leverage points for improving quality.
   b. Considerable variation in the quality of care exists.
   c. Performance in the area (e.g., setting, procedure, condition) is suboptimal, suggesting that barriers to improvement or best practice may exist.
2. **Scientific acceptability.** A measure is scientifically sound if it produces consistent and credible results when implemented.
   a. The measure is well defined and precisely specified. Measures must be specified sufficiently to be distinguishable from other measures, and they must be implemented consistently across institutions. Measure specifications should provide detail about cohort definition, as well as the denominator and numerator for rate-based measures and categories for range-based measures.
   b. The measure is reliable, producing the same results a high proportion of the time when assessed in the same population.
   c. The measure is valid, accurately representing the concept being evaluated.
   d. The measure is precise, adequately discriminating between real differences in provider performance.
   e. The measure is adaptable to patient preferences and a variety of contexts of settings. Adaptability depends on the extent to which the measure and its specifications account for the variety of patient choices, including refusal of treatment and clinical exceptions.
   f. An adequate and specified risk-adjustment strategy exists, where applicable.
   g. Patient outcomes or consistent evidence is available linking the structure and process measures to patient outcomes.

Box E—Criteria for Evaluation and Selection (continued)

3. **Usability.** Usability reflects the extent to which intended audiences (e.g., consumers, purchasers) can understand the results of the measure and are likely to find them useful for decisionmaking.
   a. The measure can be used by the stakeholder to make decisions.
   b. The differences in performance levels are statistically meaningful.
   c. The differences in performance are practically and clinically meaningful.
   d. Risk stratification, risk adjustment, and other forms of recommended analyses can be applied appropriately.
   e. Effective presentation and dissemination strategies exist (e.g., transparency, ability to draw conclusions, information available when needed to make decisions).
   f. Information produced by the measure can/will be used by at least one healthcare stakeholder audience (e.g., public/consumers, purchasers, clinicians and providers, policymakers, accreditors/regulators) to make a decision or take an action.
   g. Information about specific conditions for which the measure is appropriate has been given.
   h. Methods for aggregating the measure with other, related measures (e.g., to create a composite measure) are defined, if those related measures are determined to be more understandable and more useful in decisionmaking. Risks of such aggregation, including misrepresentation, have been evaluated.
4. **Feasibility.** Feasibility is generally based on the way in which data can be obtained within the normal flow of clinical care and the extent to which an implementation plan can be achieved.
   a. The point of data collection is tied to care delivery, when feasible.
   b. The timing and frequency of measure collection are specified.
   c. The benefit of measurement is evaluated against the financial and administrative burden of implementation and maintenance of the measure set.
   d. An auditing strategy is designed and can be implemented.
   e. Confidentiality concerns are addressed.

Recommendations for Harmonized Measures for Influenza and Pneumococcal Immunizations

Because of the emphasis on harmonization, the Steering Committee reviewed previously endorsed measures in addition to the newly submitted measures. Because endorsed measures are reviewed every three years according to NQF's maintenance policy, previously endorsed measures would not be required to be changed until the maintenance or time-limited endorsement review. As a result of the Steering Committee's review, the measures fell into three groups: recommended, recommended with conditions, and not recommended.

Measures Recommended for the Voluntary Consensus Standards

Measures in this category meet the evaluation criteria and are aligned with

the standard specifications. The Steering Committee recommended these measures for the voluntary consensus standards. New untested measures in this category would be recommended for time-limited endorsement. Previously endorsed measures in this category would be recommended for continued endorsement.

Measures Recommended on the Condition of Alignment with Standard Specifications

The measures in this category were recommended on the condition that they become aligned with the standard specifications and, where indicated, combined into a comprehensive measure. New measures must meet this condition in order to advance in the consensus development process to be considered as voluntary consensus standards. Previously endorsed measures in this category could be modified during this project or at the time of their review for maintenance or time-limited endorsement.

None of the measure owners for the previously endorsed measures elected to make modifications to be considered for this project. However, modifications related to previously endorsed measures are not required until the scheduled maintenance or time-limited review. Ultimately, if measures were not modified to align with standard specifications they were not recommended.

Measures Not Recommended

Measures in this category were not recommended for voluntary consensus standards for a variety of reasons, including not meeting the standard evaluation criteria, not being in alignment with the standard specifications, or not being considered "best in class" among similar competing measures. New measure submissions in this category do not advance in the consensus development process. Previously endorsed measures within their three-year maintenance or two-year time-limited endorsement window will remain officially endorsed until scheduled measure review.

National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

Three measures were recommended and endorsed as voluntary consensus standards (Table 1). The detailed measure specifications appear in Appendix A. Only measures aligned with the standard measure specifications were recommended as voluntary consensus standards.

Table 1—National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER
0432[a] Influenza vaccination of nursing home/skilled nursing facility residents	Percent of nursing home/skilled nursing facility residents given the influenza vaccination during the flu season, stratified by short- and long-stay patients.	Centers for Medicare & Medicaid Services
0431 Influenza vaccination coverage among healthcare personnel Time-limited endorsement	Percentage of healthcare personnel who receive the influenza vaccination.	Centers for Disease Control and Prevention
0433 Pneumococcal vaccination of nursing home/skilled nursing facility residents	Percent of nursing home/skilled nursing facility residents whose pneumococcal polysaccharide vaccine (PPV) status is up to date during the 12-month reporting period, stratified by short- and long-stay patients.	Centers for Medicare & Medicaid Services

[a] NQF measure number.

Discussion of Candidate Consensus Standards

Endorsed Measures

Influenza Immunization

0432 Influenza vaccination of nursing home/skilled nursing facility residents (CMS)

The Steering Committee recommended the measure as modified to align with the standard specifications as one comprehensive measure stratified by short- and long-stay residents (originally submitted as two measures, IM-001-07 and IM-002-07). There is no difference in the guidelines for immunization for short- and long-stay patients. The data source for both short- and long-stay patients is the required MDS. Although the MDS is completed at different frequencies for short- and long-stay patients, the measures use a six-month data capture from all MDS assessments within that period. CMS historically reports quality measures separately for short- and long-stay patients; however, the Steering Committee's recommendation for a comprehensive denominator that can be stratifed is not intended to restrict reporting by short- and long-stay patients.

One aspect of the measure specifications did not exactly match the initial standard specifications because of the data that are available in the current version of MDS 2.0. The current instructions for the MDS category of "unable to obtain vaccine" pertains to a declared shortage, which is different than unequal distribution problems addressed in the proposed standard specifications as "vaccine supply on order but not received." Ultimately the exclusion for supply/distribution problems was removed from the standard specifications and from the nursing home measure.

0431 Influenza vaccination among healthcare personnel (CDC)

The measure was revised to align with the standard specifications and was recommended for inclusion in the voluntary consensus standards. It was recommended for time-limited endorsement, because no testing data were submitted.

A prior version of this measure was submitted but not approved during the Healthcare-Associated Infections project. Concerns about the exclusion of workers who refuse vaccination have since been remedied by the alignment of the measure with the standard specifications, in which declinations are clearly identified as a numerator category. The Steering Committee agreed that either administration or report of prior receipt must be documented, but that could be accomplished through a variety of methods, and the measure allows for that flexibility.

Pneumococcal Immunization

0433 **Pneumococcal vaccination of nursing home/skilled nursing facility residents (CMS)**

The Steering Committee recommended the measure as modified to align with the standard specifications as one comprehensive measure stratified by short- and long-stay residents (originally submitted as two measures, IM-003-07 and IM-004-07). There is no difference in the guidelines between immunizations for short-stay and long-stay patients. The data source for both short- and long-stay patients is the required MDS. Although the MDS is completed at different frequencies for short- and long-stay patients, the measure uses a six-month data capture from all MDS assessments within that period. CMS historically reports quality measures separately for short- and long-stay patients; however, the Steering Committee's recommendation for a comprehensive denominator that can be stratifed is not intended to restrict reporting for short- and long-stay patients.

One aspect of the measure does not exactly match the standard specifications due to the data that are available in the current version of MDS 2.0. The CMS pneumococcal measure is based on "up-to-date status" versus "ever received" as specified in the standard specifications. CMS representatives noted that the MDS language cannot be changed until the next update in 2009. The Steering Committee agreed that the CMS approach was aligned with guidelines, but noted that "ever received" is used in the standard specifications because of the complexity of determining "up-to-date status" and the periodic changes in the guidelines. The CMS approach results in a more stringent measure, but the Steering Committee agreed to approve it.

Measures Not Endorsed

The following measures were not recommended for endorsement either because they were judged to be inferior to competing measures.

Although a variety of issues were considered during the evaluation process, the major considerations were alignment with standard specifications and comprehensiveness to reflect the guidelines. New measures that did not meet the conditions set by the Steering Committee were not recommended for member voting and will not be further considered. However, modifications to previously endorsed measures are not required until the scheduled maintenance or time-limited endorsement review. Appendix D contains a table of all of the previously endorsed measures that will require modification at the time of review. In the following discussion, new measure numbers begin with "IM"; endorsed measure numbers are four-digit numbers.

Influenza Immunization

Clinician-Level Influenza Immunization Measure

The Steering Committee recommended that there be only one comprehensive clinician-level measure that can be applied to all recommended patients. Measure specifications should be modified to be consistent with standard specifications for a more comprehensive measure. A comprehensive measure should accommodate groups specified in 0041, IM-010-07, IM-014-07, IM-007-07, and 0227.

- 0041 **Influenza vaccination (American Medical Association-Physician Consortium for Performance Improvement [AMA PCPI])**

  This measure was previously endorsed (most recent NQF action March 9, 2007) and could serve as the base measure for all clinician-level measures if modified to include all recommended groups. A comprehensive measure can still be applied to specific subgroups or stratified by subgroup.

  Committee Recommendation: Modify to continue endorsement.

  Conditions: Create one comprehensive clinician-level measure. Modify measure specifications to align with the standard specifications.

- **IM-010-07[ii] Chronic obstructive pulmonary disease (COPD) influenza immunization administered (AMA PCPI)**

- **IM-014-07 HIV/AIDS-influenza immunization (National Committee for Quality Assurance [NCQA])**

- **IM-007-07 Chronic kidney disease: influenza immunization (AMA PCPI)**

  The above measures are new and untested. These patient groups would be incorporated into the recommended comprehensive clinician-level measure that is aligned with the standard specifications.

  Committee Recommendation: Conditions were not met. Do not recommend.

- 0227 **Influenza immunization (AMA PCPI/Renal Physicians Associations [RPA])**

  This measure was recently granted time-limited endorsement (November 15, 2007), because it was untested. It should be included in one comprehensive clinician-level measure that can be applied to all conditions.

  Committee Recommendation: Modify to continue endorsement.

  Conditions: Create one comprehensive clinician-level measure. Modify measure specifications to align with the standard specifications.

0226 **Influenza vaccination in the ESRD population—facilities (Kidney Care Quality Alliance [KCQA])**

This measure was recently granted time-limited endorsement (November 15, 2007), because it was untested. Although the Steering Committee generally tried to avoid measures that focus on only one recommended target group, dialysis facilities only serve end stage renal disease (ESRD) patients and have a different data source. At this point in time, a separate measure is appropriate (as for nursing home and hospital patients).

Committee Recommendation: Modify to continue endorsement.

Conditions: Modify measure specifications to be consistent with standard specifications.

[ii] Review number.

- IM-005-07 **Community-acquired bacterial pneumonia: assessment of influenza immunization status (AMA PCPI)**
- IM-009-07 **Chronic obstructive pulmonary disease (COPD) recommendation of influenza immunization (AMA PCPI)**
- IM-012-07 **Universal influenza vaccine screening and counseling (CMS)**

  The Steering Committee determined that the above measures, which focus only on assessing and/or recommending immunization alone, are not sufficient indicators of quality. Assessing and recommmending immunizations is not sufficient to achieving immunity—patients must receive the vaccine. Measure IM-012-07 was intended for nonphysician clinicians. However, nonphysician clinicians (e.g., physicial/occupational therapist, social worker, dietician) often practice in organizations covered by setting-specific measures (e.g., hospital, nursing home), and there is no evidence of the effectiveness of recommendations for immunizations from nonphysician clinicians who practice independent of healthcare organizations. A comprehensive clinician-level measure is also applicable for nurse practitioners and physician assistants as well as physicians

  Committee Recommendation: Do not advance for consideration.

0189 **Influenza vaccination for all nursing home residents (CDC) (most recent NQF action March 9, 2007)**

CMS is no longer using this measure; CMS submitted a new measure that was endorsed (0432).

Committee Recommendation: Do not recommend. CDC informed NQF that it agrees to retire this measure.

0149 **Influenza vaccination (The Joint Commission/ CMS)**

This measure was previously endorsed (most recent NQF action March 9, 2007), but it focuses only on hospitalized patients with a diagnosis of pneumonia. All hospitalized patients in recommended groups should receive the vaccine, not just pneumonia patients. Pneumonia is not specifically identified in the guidelines as a target condition; however, patients hospitalized with pneumonia may be more at risk for severe complications of influenza, and many patients with a diagnosis of pneumonia may have one of the target conditions. Numerator and denominator statements must reflect all of the inclusions/exclusions identified in the measure definitions and algorithm. CMS contractors noted that the infrastructure for hospital quality measurement does not support a comprehensive measure. The Steering Committee indicated that a well-specified comprehensive measure also could be applied to specific patient populations such as those identified for CMS quality measurement.

Committee Recommendation: Do not recommend. Recommend creating a comprehensive measure consistent with guidelines and standard specifications.

0039 **Flu shots for adults ages 50-64 (NCQA)**

0040 **Flu shots for older adults (NCQA)**

These measures are currently endorsed (most recent NQF action March 9, 2007). Because measures 0039 and 0040 differ only in the age groups they cover, they could be combined into one stratified measure. However, that measure still would not include all recommended groups. The measure developer clarified that the measures are used at the clinician level (the NQF Ambulatory Care project

only accepted clinician-level measures) and at the plan level. As noted above, the Steering Committee recommended that there be only one comprehensive clinician-level measure that can be applied to all recommended patients. The measures are based on a patient survey, but who is surveyed and when are not indicated in the specifications. Furthermore, the Steering Committee agreed that patient survey is not the best way to measure immunization, especially for public reporting, because of issues related to sampling and response rates. It recommended that measures be based on documented administration or patient report of receipt to a provider, as called for in the standard specifications.

Committee Recommendation: Do not recommend.

Pneumococcal Immunization

Clinician-level Pneumococcal Immunization Measure

The Steering Committee recommended that there be only one comprehensive clinician-level measure that can be applied to all recommended patients. Measure specifications should be modified to be consistent with standard specifications for a more comprehensive measure. A comprehensive measure should accommodate groups specified in 0044, IM-011-07, and IM-013-07.

- 0044 **Pneumonia vaccination (NCQA/CMS)**

  This measure was previously endorsed (most recent NQF action March 9, 2007) and could serve as the base measure for all clinician-level measures if modified to include all recommended groups. A comprehensive measure still can be applied to specific subgroups or stratified by subgroup.

  Committee Recommendation: Modify to continue endorsement.

  Conditions: Create one comprehensive clinician-level measure. Modify measure specifications to align with the standard specifications.

- IM-011-07 **HIV/AIDS-pneumonia vaccination (NCQA)**

- IM-013-07 **Chronic obstructive pulmonary disease (COPD) pneumococcus immunization administered (AMA PCPI)**

  The above measures are new and untested. These patient groups would be incorporated in a comprehensive clinician-level measure that is aligned with the standard specifications.

  Committee Recommendation: Conditions were not met. Do not recommend.

IM-006-07 Community-acquired bacterial pneumonia: assessment of pneumococcus immunization status (AMA PCPI)

The Steering Committee stated that measures of only assessing and/or recommending immunization are not sufficient indicators of quality. Assessing and recommmending immunizations is not sufficient to achieving immunity patients must receive the vaccine.

Committee Recommendation: Do not advance for consideration.

0188 Pneumococcal polysaccharide vaccination of residents age 65 or older (CDC) (most recent NQF action March 9, 2007)

CMS is no longer using this measure; CMS submitted a new measure that was endorsed (0433).

Committee Recommendation: Do not recommend. CDC informed NQF that it agrees to retire this measure.

0150 **Pneumococcal vaccination (The Joint Commission/CMS)**

This measure was previously endorsed (most recent NQF action March 9, 2007), but it focuses only on hospitalized patients with a diagnosis of pneumonia. All hospitalized patients in recommended groups, not just pneumonia patients, should receive the vaccine. Pneumonia is not specifically identified as a target condition; however, patients hospitalized with pneumonia may be more at risk for severe complications of pneumococcal disease, and many patients with a diagnosis of pneumonia may have one of the target conditions. Numerator and denominator statements must reflect all of the inclusions/exclusions identified in the measure definitions and algorithm. CMS contractors noted that the infrastructure for hospital quality measurement does not support a comprehensive measure. The Steering Committee indicated that a well-specified comprehensive measure could also be applied to a specific patient population.

Committee Recommendation: Do not recommend. Recommend creating a comprehensive measure consistent with guidelines and standard specifications.

0042 **Pneumococcal vaccine needed for all adults aged 65 years or older (Resolution Health, Inc.)**

This measure was previously endorsed (most recent NQF action March 9, 2007) and is still in use. The measure developer clarified that the measure is a positive metric (i.e., those who received the vaccine) and is based solely on claims data. Some Steering Committee members asked whether the measure is necessary, because the age group of 65 through 67 is a subset of the standard measure specifications. Initially, the Steering Committee was in favor of having standard specifications for an "incidence" measure that provides information about timely vaccination after patients turn 65. However, it was further clarified that the reason for the two-year look-back period in this measure is related to the availability of claims data. The Steering Committee did not think that claims alone are sufficient for a measure used for public reporting because it would not include receipt outside of the health plan. Although the measure is constructed so that only patients eligible for service during the two-year period are included in the denominator, the Steering Committee decided that the preferred approach is to include documented administration or patient report of receipt to a provider, as called for in the standard specifications.

Committee Recommendation: Do not recommend.

0043 **Pneumonia vaccination status for older adults (NCQA)**

This measure was previously endorsed (most recent NQF action March 9, 2007). The measure developer clarified that the measure is used at the clinician level (the NQF Ambulatory Care project only accepted clinician-level measures) and also at the plan level. As noted above, the Steering Committee recommended that there be only one comprehensive clinician-level measure that can be applied to all conditions. It also noted that patient survey is not the best way to measure immunization, especially for public reporting because of issues related to sampling and response rates. It recommended that measures be based on documented administration or patient report of receipt to a provider, as called for in the standard specifications.

Committee Recommendation: Do not recommend.

Recommendations

The Steering Committee identified the following recommendations for research, measure development, and implementation.

Recommendations Related to Measurement Gaps

- Evaluate the benefit of developing:
  - outcome measures;
  - structure measures for evidence-based systems that improve vaccination rates (e.g., standing orders/protocols);
  - measures that include close contacts of recommended groups; and
  - system measures pertaining to distribution of vaccines.
- Develop measures related to other adult immunizations, (e.g., hepatitis B, herpes zoster).
- Develop composite measures to assess whether all recommended immunizations are up to date for adults and children.

Recommendations Related to Measurement Issues

- Evaluate the comparability of measures across data sources.
- Determine the data elements for electronic health records that would facilitate having one measure applicable for all settings/populations.
- Limit the information needed for healthcare personnel to factors related to immunization to avoid compromising privacy of personnel records.
- Update the standard measure specifications to maintain comparability of measures across settings and populations.
- Study whether distribution of the influenza vaccine is an issue that should be addressed in influenza measures.

Recommendations Related to Reporting/Implementation

- Evaluate the implementation of the immunization standard specifications including the use of the comprehensive measure with various subgroups.
- Determine the best way to report the multiple numerator categories (received vaccine, assessed but declined, assessed but medical contraindications).
- Evaluate the best way to report measures when the denominator is stratified.
- Use the measure results for the numerator categories of declined vaccination and medical contraindications to study potential barriers to immunization (e.g., myths and missed opportunities) and quality improvement strategies.

Recommendations Related to Harmonization Issues

- Define standard specifications that may apply to measures on other topics consistently across all measures including:
  - definitions that affect the denominator population (e.g., "enrolled" in health plan); and
  - coding (e.g., ICD, CPT) for specific patient populations.
- Develop a standard policy on use of exclusions.

Acknowledgment

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References

[1] Fiore AE, Shay DK, Haber P, et al., Prevention and control of influenza. Recommendations of the Advisory Committee on Immunization Practices (ACIP), *MMWR Recomm Rep,* 2007;56(RR-6):1-54.

[2] National Health Interview Survey, *Pneumococcal: Self-Reported Pneumococcal Vaccination Coverage Trends 1989 - 2006,* Centers for Disease Control and Prevention (CDC); 2006. Available at www.cdc.gov/flu/professionals/vaccination/#coverage.

[3] Quality Alliance Steering Committee, *Harmonization Work Group Final Report,* AQA; 2007.

[4] Advisory Committee on Immunization Practices (ACIP), Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP), *MMWR Recomm Rep,* 1997;46(RR-8):1-24.

[5] ACIP, Recommended adult immunization schedule: United States, October 2007-September 2008, *Ann Intern Med,* 2007;147(10):725-729.

[6] CDC, Infectious Disease Society of America, American Society of Blood and Marrow Transplantation, Guidelines for preventing opportunistic infections among hematopoietic stem cell transplant recipients, *MMWR Recomm Rep,* 2000;49(RR-10):1-7.

[7] Kaplan JE, Masur H, Holmes KK, Guidelines for preventing opportunistic infections among HIV-infected persons—2002, Recommendations of the U.S. Public Health Service and the Infectious Diseases Society of America, *MMWR Recomm Rep,* 2002;51(RR-8):1-52.

[8] Pearson ML, Bridges CB, Harper SA, Influenza vaccination of health-care personnel: recommendations of the Healthcare Infection Control Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP), *MMWR Recomm Rep,* 2006;55(RR-2):1-16.

[9] U.S. Preventive Services Task Force, Section three, immunizations and chemoprophylaxis, *Guide to Clinical Preventive Services, Second Edition,* Rockville, MD: Agency for Healthcare Research and Quality; 1996.

[10] Postema AS, Breiman RF, Adult immunization programs in nontraditional settings: quality standards and guidance for program evaluation, *MMWR Recomm Rep,* 2000;49(RR-1):1-13.

[11] Tablan OC, Anderson LJ, Besser R, et al., Guidelines for preventing health-care-associated pneumonia, 2003: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee, *MMWR Recomm Rep,* 2004;53(RR-3):1-36.

[12] Fiore AE, Shay DK, Broder K, et al., Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP), *MMWR Recomm Rep,* 2008;57(RR-7):1-60.

[13] ACIP, *CDC's Advisory Committee Recommends Influenza Vaccination for Children 6 Months Through 18 Years of Age,* Department of Health and Human Services; 2008. Available at www.cdc.gov/media/pressrel/2008/r080227.htm.

[14] ACIP, February 21-22, 2007, Atlanta, Georgia, Record of the Proceedings; 2007. Available at www.cdc.gov/vaccines/recs/acip/downloads/min-feb07.pdf.

[15] Kroger AT, Atkinson WL, Marcuse EK, et al., General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP), *MMWR Recomm Rep,* 2006;55(RR-15):1-48.

Appendix A

Specifications of the National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

The following table presents the detailed specifications for the National Quality Forum (NQF)-endorsed® *National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations.* All information presented has been derived directly from measure sources/developers without modification or alteration (except when the measure developer agreed to such modification during the NQF Consensus Development Process) and is current as of September 2008.

Appendix A—Specifications of the National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

0432[a] INFLUENZA VACCINATION OF NURSING HOME/SKILLED NURSING FACILITY RESIDENTS (CMS)

Description: Percent of nursing home/skilled nursing facility residents given the influenza vaccination during the flu season.

Setting: Nursing homes/skilled nursing facilities. **Level of Analysis:** Facility.

Numerator Statement: The number of residents in the denominator who meet any of the following criteria for the most recently completed influenza season (October 1 through March 31):

(1) received the influenza vaccine within or outside the facility during the flu season (computed separately); or

(2) were offered and declined the vaccination (computed separately); or

(3) were determined to be ineligible due to medical contraindication(s) (computed separately) (i.e., anaphylactic hypersensitivity to eggs or other component(s) of the vaccine, history of Guillain-Barré syndrome within 6 weeks after a previous influenza vaccination, bone marrow transplant within past 6 months).

Denominator Statement: The measure will be stratified by resident population. Rates will be reported separately for the long-stay (chronic care) and short-stay (post-acute care) populations.

Denominator Statement for Chronic Care (Long-Stay) Residents
All residents in the chronic care influenza vaccination sample with a valid MDS target record (any assessment or discharge tracking form) during the influenza vaccination reporting period (October 1 through June 30).

Chronic Care Influenza Vaccination Sample Definition
The chronic care influenza vaccination sample includes residents meeting any of the following three conditions indicating a non-PPS stay during the season:

(1) resident has a non-PPS assessment during the influenza season (October 1 through March 31); or

(2) resident has a discharge tracking form during the season and the prior MDS record was a non-PPS assessment within 100 days prior to discharge; or

(3) resident had a stay with days during the season and was discharged prior to completion of an initial assessment. (Note that the discharge can be after the flu season end.)

Denominator Statement for Post-Acute Care (Short-Stay) Residents
All residents in the post-acute care influenza vaccination sample with a valid MDS target record (any assessment or discharge) in the influenza vaccination reporting period (October 1 through June 30).

Post-Acute Care Influenza Vaccination Sample Definition
The post-acute care influenza vaccination sample includes residents meeting either of the following conditions:

(1) resident has a PPS assessment during the influenza season; or

(2) resident has a PPS assessment before the season with the next record being a discharge during the season.

Exclusions:
Resident-Level Exclusions
Residents satisfying any of the following conditions on the selected target assessment or discharge are excluded from the denominator:

(1) The resident was not in the facility during the influenza season.

Note: Residents are not excluded if either or both of the influenza vaccine items (W2a and W2b) have dash (-) values indicating inability to determine.

Facility-Level Exclusions
Facilities with small sample sizes are excluded from public reporting of the influenza vaccination measure.

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[a] IP owner—Intellectual Property owner. For the most current specifications and supporting information, please refer to the IP owner, the Centers for Medicare & Medicaid Services (www.cms.gov).

Appendix A—Specifications of the National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

0432 INFLUENZA VACCINATION OF NURSING HOME/SKILLED NURSING FACILITY RESIDENTS (CMS) *(continued)*

Chronic Care Facility-Level Exclusions
Facilities are excluded if either of the following is true:

(1) the chronic care influenza vaccination sample includes fewer than 30 residents; or

(2) the facility has fewer than 30 non-PPS quarterly assessments (AA8a=05) for the entire facility for the year ending with the last day of the last completed influenza season (March 31).

Post-Acute Care Facility-Level Exclusions
Facilities are excluded if either of the following is true:

(1) the post-acute care influenza vaccination sample includes fewer than 20 residents; or

(2) the facility is excluded if there are no 5-day PPS assessments (AA8b=1) for the entire facility for the year ending with the last day of the influenza season (March 31).

Data Source: Data collection instrument, Instrument/Survey, Data Dictionary/Code.

Numerator Codes: Included in the numerator are residents meeting any of the following criteria on the most recent MDS assessment (of any kind) or discharge tracking form during the influenza reporting period (October 1 through June 30—when a vaccination is completed at the end of the flu season, the next opportunity to report the vaccination may be after the season is over. Extending the influenza vaccination reporting period through June allows for the capture of those late season vaccinations):

(1) resident received the influenza vaccine during the most recent flu season, either in the facility (W2a=1) or outside the facility (W2b=2); or

(2) resident was offered and declined the influenza vaccine (W2b=4); or

(3) resident was ineligible due to contraindication(s) (W2b=3).

Denominator Codes:
Chronic Care Denominator Codes
A resident is included in the chronic care influenza vaccination sample in any of the following 3 cases:

(1) resident has a non-PPS OBRA assessment (AA8a=01, 02, 03, 04, 05, or 10 AND AA8b=6 or blank) with assessment reference date (A3a) during the influenza season; or

(2) resident has a discharge tracking form (AA8a=06, 07, or 08) with discharge date (R4) during the influenza season. The preceding MDS record is a non-PPS OBRA assessment (AA8a=01, 02, 03, 04, 05, or 10 AND AA8b=6 or blank) with assessment reference date (A3a) before October 1, and the discharge date (R4) minus the assessment reference date (A3a) is 100 days or less; or

(3) resident has a discharge tracking form "prior to completing the initial assessment" (AA8a=08). The start date of this stay is the later of the admission date (AB1) from the discharge tracking form or the 13th day prior to the discharge date (R4 date minus 13 days). Either the start date or the discharge date (R4) is within the influenza season.

Post-Acute Care Denominator Codes
A resident is included in the post-acute care influenza vaccination sample in either of the following cases:

(1) resident has a PPS assessment whether or not it is also an OBRA assessment (AA8b=1, 2, 3, 4, 5, 7, or 8 and AA8a=any value) with assessment reference date (A3a) during the influenza season; or

(2) resident has a discharge tracking form (AA8a=06, 07, or 08) with discharge date (R4) during the influenza season AND the preceding MDS record is a PPS assessment (whether or not it is also an OBRA assessment: AA8b=1, 2, 3, 4, 5, 7, or 8 and AA8a=any value) with assessment reference date (A3a) before October 1 and the discharge date (R4) minus the assessment reference date (A3a) is 45 days or less.

Exclusion Codes:
Resident-Level Exclusion Codes
Residents satisfying the following condition on the selected target assessment or target discharge (most recent record in the period from Oct. 1 through Jun. 30) are excluded: resident was not in the facility during the influenza season (W2b=1).

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Appendix A—Specifications of the National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

0431 INFLUENZA VACCINATION COVERAGE AMONG HEALTHCARE PERSONNEL (CDC), TIME-LIMITED ENDORSEMENT

Description: Percentage of healthcare personnel (HCP) who receive the influenza vaccination.

Setting: All. The different healthcare settings in which this measure may be applied include acute care hospitals, nursing homes and other long-term care facilities, physician's offices, urgent care centers, outpatient clinics, dialysis facilities, home health agencies, and emergency medical services. **Level of Analysis:** Facility/organization.

Numerator Statement: HCP in the denominator population who, during the time from when the vaccine became available through March 31:

(a) received an influenza vaccination administered at the healthcare facility or reported having received influenza vaccination elsewhere (computed separately);

(b) were determined to have a medical contraindication for receiving the vaccination (computed separately); or

(c) declined the vaccination (computed separately).

Denominator Statement: Number of persons who are working in the healthcare facility between October 1 and March 31 who meet the CDC definition of healthcare personnel (HCP).*

- For each influenza season, influenza vaccination coverage among HCP should be measured at the overall facility level (e.g., hospital, nursing home).
- Additional stratification is recommended: component facility, ward, unit, and specialty; occupational group (e.g., nurse, physician, student/trainee); and HCP who perform direct patient care (i.e., hands on, face-to-face contact with patients for the purpose of diagnosis, treatment, and monitoring).

*The term HCP refers to all paid and unpaid persons working in healthcare settings and might include (but is not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the health-care facility, and persons (e.g., clerical, dietary, housekeeping, maintenance, and volunteers) not directly involved in patient care but potentially exposed to infectious agents that can be transmitted to and from HCP (MMWR 2006 vol. 55 RR-2).

Exclusions: None.

Data Source: CDC's National Healthcare Safety Network module for healthcare personnel influenza vaccination; alternate database; medical or administrative records.

Numerator Codes:

Inclusions:

1. Documentation that the HCP received the vaccination** at this institution or reported receipt in a different setting during the current influenza season.
2. Documentation that the HCP was offered the vaccination but declined due to one of the following contraindications/conditions:
   - Allergy/hypersensitivity to eggs or vaccine component (type of reaction must be specified), or
   - History of Guillian-Barré syndrome within 6 weeks following a previous influenza vaccination, or
   - Bone marrow transplant within the past 6 months.
3. Documentation that the HCP was offered the vaccination during the current or most recent influenza season and declined due to unspecified/other reasons.

** Influenza vaccination may be the trivalent inactivated vaccine (TIV) administered via intramuscular route or the live attenuated influenza vaccine (LAIV) administered via intranasal route. Healthy, nonpregnant individuals ≤49 years old without high-risk conditions who are not contacts of the severely immunocompromised persons in special care units can receive either the LAIV or the TIV. All other persons should receive the TIV.

Denominator Codes:

Exclusion Codes:

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Appendix A—Specifications of the National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

0433 PNEUMOCOCCAL VACCINATION OF NURSING HOME/SKILLED NURSING FACILITY RESIDENTS (CMS)

Description: Percent of nursing home/skilled nursing facility residents whose pneumococcal polysaccharide vaccine (PPV) status is up to date during the 12-month reporting period.

Setting: Nursing homes/skilled nursing facilities. **Level of Analysis:** Facility.

Numerator Statement: The number of residents in the denominator who meet any of the following criteria:

(1) have up-to-date PPV status (computed separately); or

(2) were offered and declined the vaccination (computed separately); or

(3) were determined to be ineligible due to medical contraindication(s) (computed separately) (i.e., anaphylactic hypersensitivity to component(s) of the vaccine, bone marrow transplant within past 12 months, or receiving course of chemotherapy or radiation therapy within past two weeks).

Denominator Statement: The measure will be stratified by resident population. Rates will be reported separately for the long-stay (chronic care) and short-stay (post-acute care) populations.

Denominator Statement for Chronic (Long-Stay) Residents
All residents in the chronic care pneumococcal vaccination sample with a valid MDS target record (any assessment or discharge tracking form) within the 12-month target period.

Chronic Care Pneumococcal Vaccination Sample Definition
The chronic care pneumococcal vaccination sample includes residents in the facility during the 12-month target period. The sample includes residents who meet any of the following conditions:

(1) resident has a non-PPS assessment during the 12-month target period; or

(2) resident has a discharge tracking form during the 12-month target period and the prior record was a non-PPS assessment within 100 days prior to discharge; or

(3) resident had a stay with days during the 12-month target period and was discharged prior to completion of an initial assessment. Note that the discharge can be after the target period end.

Denominator Statement for Post-Acute Care (Short-Stay) Residents
Residents in the post-acute care pneumococcal vaccination sample with a valid MDS target record (any assessment or discharge tracking form) within the 12-month target period.

Post-Acute Care Pneumococcal Vaccination Sample Definition
The post-acute care pneumococcal vaccination sample includes residents in the facility during the selected 12-month target period. The sample includes residents who meet either of the following conditions:

(1) resident has a PPS assessment with a reference date during the 12-month target period, or

(2) resident has a PPS assessment before the 12-month target period with the next record being a discharge tracking form during the target period.

Exclusions:

Resident-Level Exclusions
There are no resident-level exclusions. Note that residents are not excluded if either or both of the pneumococcal vaccine items (W3a and W3b) have dash (-) values indicating inability to determine.

Facility-Level Exclusions
Facilities with small sample sizes are excluded from public reporting of the pneumococcal vaccination measures.

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Appendix A—Specifications of the National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations

0433 PNEUMOCOCCAL VACCINATION OF NURSING HOME/SKILLED NURSING FACILITY RESIDENTS (CMS) *(continued)*

Chronic Care Facility-Level Exclusions
Facilities are excluded if either of the following is true:

(1) the chronic care pneumococcal vaccination sample includes fewer than 30 residents; or

(2) the facility has fewer than 30 non-PPS quarterly assessments (AA8a=05) for the entire facility for the year ending with the last day of the selected 12-month target period.

Post-Acute Care Facility-Level Exclusions
Facilities are excluded if either of the following is true:

(1) the post-acute care pneumococcal vaccination sample includes fewer than 20 residents; or

(2) the facility is excluded if there are no 5-day PPS assessments (AA8b=1) for the entire facility for the year ending with the last day of the 12-month target period.

Data Source: Data collection instrument, Instrument/Survey, Data Dictionary/Code.

Numerator Codes: Residents meeting any of the following criteria on the most recent MDS assessment (of any type) or discharge tracking form during the 12-month reporting period are included in the numerator:

(1) resident's PPV status is up to date (W3a=1); or

(2) resident was offered and declined the vaccine (W3b=2); or

(3) resident was ineligible due to contraindication(s) (W3b=1).

Denominator Codes:

Chronic Care Denominator Codes
A resident is included in the chronic care pneumococcal vaccination sample in either of the following cases:

(1) resident has a non-PPS OBRA assessment (AA8a=01, 02, 03, 04, 05, or 10 AND AA8b=6 or blank) with assessment reference date (A3a) during the 12-month target period; or

(2) resident has a discharge tracking form (AA8a=06, 07, or 08) with discharge date (R4) during the 12-month target period AND the preceding MDS record is a non-PPS OBRA assessment (AA8a=01, 02, 03, 04, 05, or 10 AND AA8b=6 or blank) with assessment reference date (A3a) before the target period and the discharge date (R4) minus the assessment reference date (A3a) is 100 days or less; or

(3) resident has a discharge tracking form "prior to completing the initial assessment" (AA8a=08). The start date of this stay is the later of the admission date (AB1) from the discharge tracking form or the 13th day prior to the discharge date (R4 date minus 13 days). Either the start date or the discharge date (R4) is within the 12-month target period.

Post-Acute Care Denominator Codes
A resident is included in the post-acute care pneumococcal vaccination sample in either of the following cases:

(1) resident has a PPS assessment whether or not it is also an OBRA assessment (AA8b=1, 2, 3, 4, 5, 7, or 8 *AND* AA8a=any value) with assessment reference date (A3a) during the 12-month target period; or

(2) resident has a discharge tracking form (AA8a=06, 07, or 08) with discharge date (R4) during the 12-month target period AND the preceding MDS record is a PPS assessment whether or not it is also an OBRA assessment (AA8b=1, 2, 3, 4, 5, 7, or 8 and AA8a=any value) with assessment reference date (A3a) before the target period and the discharge date (R4) minus the assessment reference date (A3a) is 45 days or less.

Exclusion Codes:
Resident-Level Exclusion Codes
None.

Appendix B
Steering Committee and Project Staff

Influenza and Pneumococcal Immunizations Steering Committee

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Oakland, CA

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Appendix C
Candidate Consensus Standards and Comparison of Key Specifications

The following table includes a comparison of key specifications for new measures as submitted and for previously endorsed measures. It illustrates the lack of harmonization on the measure specifications.

Notes: 1. New measure numbers begin with IM; endorsed measure numbers are four-digit numbers. 2. The coding instructions are not included with the numerator and denominator statements. 3. Focus: V=vaccinate; R=recommend; A=assess.

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS									
0189 **Influenza vaccination for all nursing home residents** **CDC**	Nursing home residents who are screened for eligibility for influenza vaccine status and are either not eligible, or are eligible and receive the vaccine. Not eligible— Vaccination status is up-to-date *OR* Vaccine is medically contraindicated *OR* Resident refuses vaccination.	Nursing home residents who have resided in the facility for any length of stay from October 1 through March 31 of the year prior to the measurement (the most recent complete influenza season) including newly admitted residents.		V, A	Any age (presumed >6 mos).	NH residents.	10/1-3/31	Clinical database.	Nursing home/ Facility.
IM-001-07 **Percent of long-stay residents given influenza vaccination during the flu season** **CMS**	The number of residents in the Chronic Care influenza vaccination sample who received the influenza vaccine during the most recently completed influenza season (October 1 through March 31) as indicated on the selected target MDS record (assessment or discharge) by either of the following: (1) resident received the influenza vaccine in the facility	All residents in the Chronic Care influenza vaccination sample with a valid MDS target record (assessment or discharge) in the Influenza Vaccination Reporting Period (October 1 through June 30). **Chronic Care Influenza Sample Definition** The Chronic Care influenza sample involves residents in the facility during the most recently completed influenza	**Exclusions:** Residents satisfying any of the following conditions on the selected target assessment or target discharge: 1. The resident was not in the facility during the influenza season (W2b=1). 2. The resident was not eligible for the influenza vaccine (W2b=3)—Due to contraindications including:	V, A	Any age (presumed >6 mos).	Chronic care NH residents.	10/1-3/31	Data collection instrument, Instrument/ Survey, Data dictionary/ Code.	Nursing home/ Facility.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-001-07 **Percent of long-stay residents given influenza vaccination during the flu season** **CMS** *(continued)*	(W2a=1), or (2) resident received the influenza vaccine outside the facility (W2b=2). Vaccinations provided during the influenza season and reported during the influenza reporting period (October 1 through June 30) are included.	season (October 1 through March 31). Two types of residents are included in this sample: (1) chronic care residents with a non-PPS assessment in effect during any part of the season, and (2) post-acute care residents during the season with no assessment in effect.	• allergic reaction to eggs or other vaccine compound(s), • a physician order not to immunize, or • an acute febrile illness is present; however, the resident should be vaccinated if contraindications end. 3. The resident was offered the influenza vaccine but declined (W2b=4). 4. The facility was unable to obtain the vaccine (W2b=6)—Vaccine unavailable at the facility due to declared vaccine shortage; however the resident should be vaccinated once the vaccine is received. Note: Residents are not excluded if either or both of the influenza vaccine items (W2a and W2b) have dash (-) values indicating inability to determine.						*(more)*

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-002-07 **Percent of short-stay residents given influenza vaccination during the flu season** **CMS**	The number of residents in the influenza vaccination sample (Post-Acute Care) who received the influenza vaccine during the most recently completed influenza season (October 1 through March 31) as indicated on the selected target MDS record (assessment or discharge) by either of the following: (1) resident received the influenza vaccine in the facility (W2a=1), or (2) resident received the influenza vaccine outside the facility (W2b=2). Vaccinations provided during the influenza season and reported during the influenza reporting period (October 1 through June 30) are included.	All residents in the influenza vaccination sample (Post-Acute Care) with a valid MDS target record (assessment or discharge) in the Influenza Vaccination Reporting Period (October 1 through June 30). **Post-Acute Care Influenza Sample Definition** The Post-Acute Care influenza sample involves residents in the facility during the most recently completed influenza season (October 1 through March 31). A resident is included in the Post-Acute Care influenza vaccination sample in either of the following 2 cases: 1. The resident is Post-Acute Care during the influenza season, as indicated by a Post-Acute PPS assessment with reference date during the influenza season. 2. The resident is Post-Acute Care during the influenza season, as indicated by a	**Exclusions:** Residents satisfying any of the following conditions on the selected target assessment or target discharge: 1. The resident was not in the facility during the influenza season (W2b=1). 2. The resident was not eligible for the influenza vaccine (W2b=3)—Due to contraindications including: • allergic reaction to eggs or other vaccine component(s), a physician order not to immunize, or an acute febrile illnes is present; however, the resident should be vaccinated if contraindications end. 3. The resident was offered the influenza vaccine but declined (W2b=4).	V, A	Any age (presumed >6 mos).	Post-acute care NH residents.	10/1-3/31	Data collection instrument, Instrument/ Survey, Data dictionary/ Code.	Nursing home/ Facility.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-002-07 **Percent of short-stay residents given influenza vaccination during the flu season** **CMS** *(continued)*		Post-Acute Care PPS assessment before the season with the next record being a discharge during the season.	4. The facility was unable to obtain the vaccine (W2b=6)—Vaccine unavailable at the facility due to declared vaccine shortage; however, the resident should by vaccinated once the vaccine is received. Note: Residents are not excluded if either or both of the influenza vaccine items (W2a and W2b) have dash (-) values indicating inability to determine.						
0149 **Influenza vaccination** **The Joint Commission** **CMS**	Patients discharged during October, November, December, January, February, or March with pneumonia, age 50 and older, who were screened for influenza vaccine status and were vaccinated prior to discharge, if indicated.	Pneumonia patients 50 years of age and older **Discharges:** ■ With an ICD-9-CM Principal Diagnosis Code of pneumonia as defined in Appendix A, Table 3.1 *OR* ICD-9-CM Principal Diagnosis Code of septicemia or respiratory failure (acute or chronic) as defined in Appendix A, Tables 3.2, or 3.3	■ Patients who received Comfort Measures Only ■ Patients who expired in the hospital ■ Patients who left the hospital against medical advice (AMA) ■ Patients who were discharged to hospice care ■ Patients with a secondary diagnosis of 487.0 (influenza with pneumonia)	V, A	≥50 yrs.	Pneumonia.	Oct-Mar.	Medical record, Administrative claims data.	Hospital/ Facility.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
0149 **Influenza vaccination** **The Joint Commission CMS** *(continued)*		*AND* ■ With an ICD-9-CM Other Diagnosis Code of pneumonia (Appendix A, Table 3.1) ■ Who are inpatient, 50 years of age and older who were discharged during October, November, December, January, February, or March.	■ Patients who were transferred to another short term general hospital for inpatient care, or who were discharged/transferred to a federal hospital ■ Patients who had no chest x-ray or CT scan that indicated abnormal findings within 24 hours prior to hospital arrival or any time during this hospitalization ■ Patients with Cystic Fibrosis (Appendix A, Table 3.4) ■ Patients involved in clinical trials ■ Patients who have a Length of Stay >120 days ■ Vaccine has been ordered but has not yet been received by the hospital due to problems with vaccine production or distribution.						

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
0039 **Flu shots for adults ages 50-64** **NCQA**	The number of patients in the denominator who responded "Yes" to the question "Have you had a flu shot since September 1, YYYY?"	The number of patients 50-64 years who responded "Yes" or "No" to the question "Have you had a flu shot since September 1, YYYY?"		V	50-64 yrs.	All.	9/1-present (current flu season).	Patient survey.	Out-patient/ Individual/ Group.
0040 **Flu shots for older adults** **NCQA**	The number of patients in the denominator who responded "Yes" to the question, "Have you had a flu shot since September 1, YYYY?"	The number of patients 65 years or older who responded "Yes" or "No" to the question, "Have you had a flu shot since September 1, YYYY?"		V	≥65 yrs.	All.	9/1-present (current flu season).	Patient survey.	Out-patient/ Individual/ Group.
0041 **Influenza vaccination** **AMA PCPI**	Patients who received influenza vaccination from September through February of the year prior to the measurement period.	All patients ≥50 years of age at the beginning of the one-year measurement period.	**Exclusions:** ■ Egg allergy ■ Adverse reaction to influenza vaccine ■ Other medical reason(s) documented by the practitioner for not receiving an influenza vaccination ■ Patient reason(s) (e.g., economic, social, religious).	V	≥50 yrs.	All.	Sept-Feb.	Medical record, Electronic health record.	Physician office/ Individual/ Group.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-010-07 **Chronic obstructive pulmonary disease (COPD) influenza immunization administered** **AMA PCPI**	Patients who are administered an influenza immunization during the visit or who have already received an influenza immunization the current flu season.* *Current flu season is defined as September through February.	All patients aged 18 years and older with the diagnosis of COPD seen during the flu season.	Documentation of medical reason(s) for not administering the influenza immunization; documentation of patient reason(s) for not administering the influenza immunization (e.g., documentation that patient is planning to receive influenza immunization during the current flu season); documentation of system reason(s) for not recommending an influenza immunization.	V, A	≥18 yrs.	COPD.	Sept-Feb.	Medical record, Administrative claims data, Electronic health record.	Physician office/ Individual/ Group.
IM-014-07 **HIV/AIDS-influenza immunization** **NCQA**	All patients for whom an influenza immunization was administered or documented to have been previously received within the past 12 months.	All patients aged 6 months and older with a diagnosis of HIV/AIDS who have been seen at least once in each 6-month period, with at least 60 days in between each visit.	Medical reasons, which includes contraindication (patient allergic history, potential adverse drug interaction, other); system reasons, which includes vaccine unavailable.	V, A	≥6 mos.	HIV/AIDS.	Past 12 mos.	Medical record, Administrative claims data, Electronic health record, Other.	Out-patient/ All.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-007-07 Chronic kidney disease: influenza immunization **AMA PCPI**	Patients who received the influenza immunization during the flu season (September through February).	All patients aged 18 years and older with the diagnosis of advanced CKD (stage 4 or 5, not receiving RRT).	Documentation of medical reason(s) for patient not receiving the influenza immunization; documentation of patient reason(s) for patient not receiving the influenza immunization; documentation of system reason(s) for patient not receiving the influenza immunization.	V	≥18 yrs.	Stage 4-5 CKD.	Sept-Feb.	Medical record, Administrative claims data, Electronic health record.	Physician office/ Individual/ Group.
0227 Influenza immunization **AMA PCPI RPA**	Patients who received the influenza immunization during the flu season (September through February).	All patients aged 18 years and older with a diagnosis of ESRD and receiving dialysis.	Documentation of medical reason(s) for patient not receiving the influenza immunization; documentation of patient reason(s) for patient not receiving the influenza immunization; documentation of system reason(s) for patient not receiving the influenza immunization.	V	≥18 yrs.	ESRD-dialysis.	Sept-Feb.	Medical record, Administrative claims data, Pharmacy.	Physician office/ Individual/ Group.
0226 Influenza vaccination in the ESRD population-facilities **KCQA**	Number of patients who receive an influenza vaccination during the flu season (October 1 - March 31).	All ESRD patients aged 18 years and older receiving hemodialysis or peritoneal dialysis during the flu season (October 1 - March 31).	None.	V	≥18 yrs.	ESRD-dialysis.	10/1-3/31	Administrative data; Medical record data.	Physician office/ Individual/ Group.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-015-07 **Influenza vaccination of all healthcare personnel** **CDC**	Number of healthcare personnel who receive influenza vaccination.	Number of healthcare personnel who work in facility. HCP refers to all paid and unpaid persons working in health-care settings who have the potential for exposure to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air. HCP might include (but are not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the health-care facility, and persons (e.g., clerical, dietary, housekeeping, maintenance, and volunteers) not directly involved in patient	Healthcare personnel who have medical or religious contraindications to vaccination or healthcare personnel who refuse vaccination.	V	All.	Healthcare personnel.	?	Other.	All/All.

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
INFLUENZA IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-015-07 **Influenza vaccination of all healthcare personnel** **CDC** *(continued)*		care but potentially exposed to infectious agents that can be transmitted to and from HCP. The recommendations in this report apply to HCP in acute care hospitals, nursing homes, skilled nursing facilities, physician's offices, urgent care centers, and outpatient clinics, and to persons who provide home healthcare and emergency medical services.							

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS									
0188 **Pneumococcal polysaccharide vaccination of residents age 65 or older** **CDC**	Nursing home residents who are screened for eligibility for pneumococcal vaccine status within 30 days of admission and are either not eligible or are eligible and receive the vaccination. Not eligible—Vaccination status is up-to-date *OR* Vaccine is medically contraindicated *OR* Resident refuses vaccination.	All newly admitted residents age 65 or older.		V, A	≥65 yrs.	Newly admitted NH residents.	One-year period?	Clinical database.	Nursing home/ Facility.
IM-003-07 **Percent of long-stay residents who were assessed and given pneumococcal vaccination** **CMS**	Chronic care residents in the pneumococcal vaccination sample who have an up-to-date pneumococcal vaccination (W3a=1) within the 6-month target period as indicated on the selected MDS target record (assessment or discharge). Up-to-date: All the Pneumococcal Polysaccharide Vaccine	Residents in the pneumococcal vaccination sample with a valid MDS target record (assessment or discharge) within the 6-month target period. The Chronic Care pneumococcal sample involves residents in the facility during the selected 6-month target period used for the pneumococcal vaccination QM. Two types of residents	Exclusions: Residents satisfying any of the following conditions on the selected target assessment or target discharge: 1. Resident not eligible for pneumococcal vaccination (W3b=1)—Due to contraindications including: allergic reaction to vaccine component(s), a physician order not to immunize, or an acute febrile illness is	V, A	Any age (presumed >2 yrs.).	Chronic care NH residents.	Ever.	Data collection instrument, Instrument/ Survey, Data dictionary/ Code.	Nursing home/ Facility.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-003-07 **Percent of long-stay residents who were assessed and given pneumococcal vaccination** **CMS** *(continued)*	(PPV) is given once in a lifetime, with certain exceptions. Persons 65 and older should be administered a second dose of vaccine (booster vaccine), if they received the first dose of vaccine more than 5 years earlier and were less than 65 years old at the time. For any immuno-competent person who has received a dose of PPV at age 65 or older, revaccination is not indicated. The CDC recommends a second (booster) dose for immuno-compromised persons due to: a damaged spleen or no spleen, Sickle-cell disease, HIV infections or AIDS, Cancer, leukemia, lymphoma, multiple myeloma, kidney failure, nephrotic syndrome, history of an organ or bone transplant, or medication	are included in the Chronic Care pneumococcal sample: (1) chronic care residents with a non-PPS assessment in effect during any part of the 6-month target period and (2) post-acute care residents during the target period with no assessment in effect.	present; however, the resident should be vaccinated after contraindications end. 2. Pneumococcal vaccination was offered but declined by the resident (W3b=2). Note: Residents are not excluded if either or both of the pneumococcal vaccine items (W3a and W3b) have dash (-) values indicating inability to determine.						

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-003-07 **Percent of long-stay residents who were assessed and given pneumococcal vaccination** **CMS** *(continued)*	regimens that lowers immunity (such as chemotherapy or long-term steroids). When any of these conditions are present, persons older than 10 years old (including those 65 years of age and older) should get the second (booster) dose 5 years after the first dose. Children 10 years old and younger may get this second (booster) dose 3 years after the first dose.								

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-004-07 **Percent of short-stay residents who were assessed and given the pneumococcal vaccination** **CMS**	Post-acute care residents in the pneumococcal vaccination sample who have an up-to-date pneumococcal vaccination (W3a=1) within the 6-month target period as indicated on the selected MDS target record (assessment or discharge). Up-to-date: All the Pneumococcal Polysaccharide Vaccine (PPV) is given once in a lifetime, with certain exceptions. Persons 65 and older should be administered a second dose of vaccine (booster vaccine), if they received the first dose of vaccine more than 5 years earlier and were less than 65 years old at the time. For any immunocompetent person who has received a dose of PPV at age 65 or older, revaccination is not indicated. The	Residents in the pneumococcal vaccination sample with a valid MDS target record (assessment or discharge) within the 6-month target period. The Post-Acute Care pneumococcal sample involves residents in the facility during the selected 6-month target period used for the pneumococcal vaccination QM. Post-Acute residents with a PPS assessment in effect during any part of the target period are included. A resident is included in either of the following cases: 1 The resident is Post-Acute Care during the 6-month target period, as indicated by a Post-Acute PPS assessment with reference date during the target period. 2. The resident is Post-Acute Care during the 6-month target period, as indicated by	Exclusions: Residents satisfying any of the following conditions on the selected target assessment or target discharge: 1. Resident not eligible for pneumococcal vaccination (W3b=1)—Due to contraindications including: allergic reaction to vaccine component(s), a physician order not to immunize, or an acute febrile illness is present; however, the resident should be vaccinated after contraindications end. 2. Pneumococcal vaccination was offered but declined by the resident (W3b=2). Note: Residents are not excluded if either or both of the pneumococcal vaccine items (W3a and W3b) have dash (-) values indicating inability to determine.	V, A	Any age (presumed >2 yrs.).	Post-acute care NH residents.	Ever.	Data collection instrument, Instrument/ Survey, Data dictionary/ Code.	Nursing home/ Facility.

(more)

Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-004-07 **Percent of short-stay residents who were assessed and given the pneumococcal vaccination** **CMS** *(continued)*	CDC recommends a second (booster) dose for immuno-compromised persons due to: a damaged spleen or no spleen, Sickle-cell disease, HIV infections or AIDS, Cancer, leukemia, lymphoma, multiple myeloma, kidney failure, nephrotic syndrome, history of an organ or bone transplant, or medication regimens that lowers immunity (such as chemotherapy or long-term steroids). When any of these conditions are present, persons older than 10 years old (including those 65 years of age and older) should get the second (booster) dose 5 years after the first dose. Children 10 years old and younger may get this second (booster) dose 3 years after the first dose.	a Post-Acute Care PPS assessment before the target period with the next record being a discharge during the target period.							

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
0150 **Pneumococcal vaccination** **The Joint Commission** **CMS**	Patients with pneumonia, age 65 and older, who were screened for pneumococcal vaccine status and were vaccinated prior to discharge, if indicated.	Pneumonia patients 65 years of age and older **Discharges:** ▪ Who were age 65 years and older ▪ With an ICD-9-CM Principal Diagnosis Code of pneumonia as defined in Appendix A, Table 3.1 *OR* ICD-9-CM Principal Diagnosis Code of septicemia or respiratory failure (acute or chronic) as defined in Appendix A, Tables 3.2 or 3.3 *AND* ▪ With an ICD-9-CM Other Diagnosis Code of pneumonia (Appendix A, Table 3.1).	▪ Patients receiving Comfort Measures Only ▪ Patients who expired in the hospital ▪ Patients who left against medical advice (AMA) ▪ Patients who were discharged to hospice care ▪ Patients who were transferred to another short-term general hospital for inpatient care ▪ Patients who were discharged to a federal hospital ▪ Patients less than 65 years of age ▪ Patients who had no chest x-ray or CT scan that indicated abnormal findings within 24 hours prior to hospital arrival or anytime during this hospitalization ▪ Patients with Cystic Fibrosis (Appendix A, Table 3.4) ▪ Patients involved in clinical trials ▪ Patients who have a Length of Stay >120 days.	V, A	≥65 yrs.	Pneumonia.	One-year period?	Medical record, administrative claims data.	Hospital/ Facility.

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
0042 **Pneumococcal vaccine needed for all adults aged 65 years or older** **Resolution Health, Inc.**	Adults aged 65 to 67 years who have received a pneumococcal vaccine.	Adults aged 65 to 67 years old Inclusion criteria: Patients must be between 65 and 67 years old and eligible to receive services during the past 2 years.	Exclusion criteria: None (Claims data does not currently include clinical information).	V	65-67 yrs.	All.	Ever in 2 years prior to observation point.	Administrative claims data.	Physician office/ Individual/ Group.
0043 **Pneumonia vaccination status for older adults** **NCQA**	The number of patients in the denominator who responded "Yes" to the question "Have you ever had a pneumonia shot? This shot is usually given only once or twice in the person's lifetime and is different from the flu shot. It is also called the pneumococcal vaccine."	The number of patients 65 years and older as of January 1 of the measurement year who responded "Yes" or "No" to the questions "Have you ever had a pneumonia shot? This shot is usually given only once or twice in the person's lifetime and is different from the flu shot. It is also called the pneumococcal vaccine."		V	≥65 yrs.	All.	Ever.	Patient survey.	Physician office/ Individual/ Group.

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
0044 Pneumonia vaccination **NCQA CMS**	Patients who have ever received a pneumococcal vaccination.	All patients ≥65 years of age in the measurement year.	**Exclusions:** ■ Previous anaphylactic reaction to the vaccine or any of its components ■ Other medical reason(s) documented by the practitioner for not receiving a pneumococcal vaccination (ICD-9-CM exclusion codes for PC-8 Pneumonia Vaccination: 995.0 and E949.6, 995.1 and E949.6, 995.2 and E949.6) ■ Patient reason(s) (e.g., economic, social, religious).	V	≥65 yrs.	All.	Ever.	Medical record, Electronic health record.	Physician office/ Individual/ Group.
IM-011-07 HIV/AIDS-pneumonia vaccination **NCQA**	Patients for whom a pneumococcal immunization was administered at least once since diagnosis of HIV infection.	All patients aged 2 years and older with a diagnosis of HIV/AIDS who have been seen at least once in each 6-month period, with at least 60 days in between each visit.	Medical reasons, which includes: contraindicated (patient allergic history, potential adverse drug interaction, other).	V	≥2 yrs.	HIV/AIDS.	Once since dx of infection.	Administrative claims data, Electronic health record, Other.	Outpatient/ All.

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-013-07 **Chronic obstructive pulmonary disease (COPD) pneumococcus immunization administered** **AMA PCPI**	Patients who are administered a pneumococcus immunization during a visit or who have already received a pneumococcus immunization.	Patients aged 18 years and older with a diagnosis of COPD.	Documentation of medical reason(s) for not administering the pneumococcus immunization; documentation of patient reason(s) for not administering the pneumococcus immunization; documentation of system reason(s) for not administering the pneumococcus immunization (e.g., pneumococcus immunization recommended, but not administered).	V, A	≥18 yrs.	COPD.	One year?	Medical record, Administrative claims data, Electronic health record.	Physician office/ Individual/ Group.
IM-005-07 **Community-acquired bacterial pneumonia: assessment of influenza immunization status** **AMA PCPI**	Patients who were assessed for influenza immunization status.	All patients aged 18 years and older with a diagnosis of community-acquired bacterial pneumonia *AND* CPT® E/M Service Code.	Documentation of medical reason(s) for not assessing influenza immunization status (e.g., documentation that immunization was not indicated).	A	≥18 yrs.	Community-acquired bacterial pneumonia.	Flu season?	Medical record, Administrative claims data, Electronic health record.	Hospital/ Individual/ Group.

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-009-07 **Chronic obstructive pulmonary disease (COPD) recommendation of influenza immunization** **AMA PCPI**	Patients who were recommended to receive an influenza immunization annually.	All patients aged 18 years and older with the diagnosis of advanced COPD.	Documentation of medical reason(s) for not recommending an influenza immunization (e.g., documentation of immunization previously given during the current flu season*); documentation of system reason(s) for not recommending an influenza immunization. *Current flu season is defined as September-February.	R	≥18 yrs.	Advanced COPD.	Sept-Feb or annual?	Medical record, Administrative claims data, Electronic health record.	Physician office/ Individual/ Group.
IM-012-07 **Universal influenza vaccine screening and counseling** **CMS**	Patients screened and counseled about the influenza vaccine.	Patients aged 50 years and older and dates of service in January, February, March, October, November, and December.	Documentation that patient was not appropriate for screening and or counseling about the influenza vaccine (e.g., allergy to eggs).	R, A	≥50 yrs.	All.	(Jan, Feb, Mar, Oct, Nov, Dec) of a calendar year.	Medical record.	All/ Individual clinician.
IM-006-07 **Community-acquired bacterial pneumonia: assessment of pneumococcus immunization status** **AMA PCPI**	Patients who were assessed for pneumococcus immunization status.	All patients aged 18 years and older with a diagnosis of community-acquired bacterial pneumonia Denominator (Eligible Population): *AND* CPT® E/M Service Code.	Documentation of medical reason(s) for not assessing pneumococcus immunization status (e.g., documentation that immunization was not indicated).	A	≥18 yrs.	Community-acquired bacterial pneumonia.	One-year?	Medical record, Administrative claims data, Electronic health record.	Physician office/ Individual/ Group.

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Appendix C—Candidate Consensus Standards and Comparison of Key Specifications

Measure Number Measure Title IP Owner*	Numerator Statement	Denominator Statement	Exclusions	Focus	Age	Target Population	Vaccination Time	Data Source	Setting/ Level
PNEUMOCOCCAL IMMUNIZATION CANDIDATE CONSENSUS STANDARDS *(continued)*									
IM-008-07 **Chronic obstructive pulmonary disease (COPD) assessment of pneumococcus immunization status** **AMA PCPI**	Patients who were assessed for pneumococcus immunization status.	Patients aged 18 years and older with the diagnosis of COPD.	Documentation of medical reason(s) for not assessing pneumococcus immunization status (e.g., documentation that pneumococcus immunization was not indicated); documentation of patient reason(s) for not assessing pneumococcus immunization status; documentation of system reason(s) for not assessing pneumococcus immunization status.	A	≥18 yrs.	COPD.	One year?	Medical record, Administrative claims data, Electronic health record.	Physician office/ Individual/ Group.

Appendix D
Future Review of Previously Endorsed Measures

As noted in the report, the Steering Committee made recommendations on the previously endorsed measures—primarily to create one comprehensive measure for each setting that is aligned with the standard specifications. However, NQF decided that the necessary modifications for measures endorsed prior to the start of this project are not required until the time of maintenance or time-limited endorsement review. Measure maintenance occurs every three years, and measures that are granted time-limited endorsement are reviewed within two years. None of the measure owners for the previously endorsed measures submitted modifications for review during this project. The following table lists the currently endorsed measures, the Steering Committee's recommendations, and the date of last action by the Board of Directors on the measure. When implemented, the Steering Committee recommendations for the previously endorsed measures will result in having one endorsed measure for influenza immunization and one endorsed measure for pneumococcal immunization for each setting (e.g., clinician, hospital, end stage renal disease facility).

Appendix D—Future Review of Previously Endorsed Measures

Measure Number/Title IP Owner	Measure Description	Committee Recommendation	Endorsement Most Recent NQF Action
INFLUENZA			
0041 Influenza vaccination AMA PCPI	Percentage of patients who received an influenza vaccination.	Modifications to continue endorsement.	03/09/2007
0227 Influenza immunization AMA PCPI/RPA	Percentage of patients aged 18 years and older with a diagnosis of ESRD and receiving dialysis who received the influenza immunization during the flu season (September through February).	Modifications to continue endorsement.	11/15/2007 Time-limited endorsement (two years)
0226 Influenza vaccination in the ESRD population—facilities KCQA	Percentage of all ESRD patients aged 18 years and older receiving hemodialysis and peritoneal dialysis during the flu season (October 1-March 31) who receive an influenza vaccination during the October 1-March 31 reporting period.	Modifications to continue endorsement.	11/15/2007 Time-limited endorsement (two years)
0149 Influenza vaccination The Joint Commission CMS	Pneumonia patients age 50 years and older, hospitalized during October, November, December, January, February, or March who were screened for influenza vaccine status and were vaccinated prior to discharge, if indicated.	Do not recommend. Recommend creating a comprehensive measure consistent with guidelines and standard specifications.	03/09/2007
0039 Flu shots for adults ages 50-64 NCQA	Percentage of patients age 50-64 who report having received an influenza vaccination during the past influenza vaccination season.	Do not recommend.	03/09/2007
0040 Flu shots for older adults NCQA	Percentage of patients age 65 and over who received an influenza vaccination from September through December of the year.	Do not recommend.	03/09/2007

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Appendix D—Future Review of Previously Endorsed Measures

Measure Number/Title IP Owner	Measure Description	Committee Recommendation	Endorsement Most Recent NQF Action
PNEUMOCOCCAL			
0044 Pneumonia vaccination NCQA/CMS	Percentage of patients who ever received a pneumococcal vaccination.	Modifications to continue endorsement.	03/09/2007
0150 Pneumococcal vaccination The Joint Commission CMS	Pneumonia patients, age 65 and older, who were screened for pneumococcal vaccine status and were administered the vaccine prior to discharge, if indicated.	Do not recommend. Recommend creating a comprehensive measure consistent with guidelines and standard specifications.	03/09/2007
0042 Pneumococcal vaccine needed for all adults aged 65 years or older Resolution Health, Inc.	Percentage of adults aged 65 to 67 years who have received an pneumococcal vaccine.	Do not recommend.	03/09/2007
0043 Pneumonia vaccination status for older adults NCQA	The percentage of Medicare patients 65 years of age and older who ever received a pneumococcal vaccination.	Do not recommend.	03/09/2007

The National Quality Forum (NQF) is a private, nonprofit, open membership, public benefit corporation whose mission is to improve the American healthcare system so that it can be counted on to provide safe, timely, compassionate, and accountable care using the best current knowledge. Established in 1999, NQF is a unique public-private partnership having broad participation from all parts of the healthcare industry. As a voluntary consensus standard-setting organization, NQF seeks to develop a common vision for healthcare quality improvement, create a foundation for standardized healthcare performance data collection and reporting, and identify a national strategy for healthcare quality improvement. NQF provides an equitable mechanism for addressing the disparate priorities of healthcare's many stakeholders.

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