2018 CMS Web Interface
PREV-8: Pneumococcal Vaccination Status for Older Adults
Measure Steward: NCQA
INTRODUCTION
There are a total of 15 individual measures (including one composite consisting of two measures) included in the 2018 CMS Web Interface targeting high-cost chronic conditions, preventive care, and patient safety. The measures documents are represented individually and contain measure specific information. The corresponding coding documents are posted separately in an Excel format.

The Measure Documents are being provided to allow group practices and Accountable Care Organizations (ACOs) an opportunity to better understand each of the 15 individual measures included in the 2018 CMS Web Interface data submission method. Each Measure Document contains information necessary to submit data through the CMS Web Interface.

Narrative specifications, supporting submission documentation, and calculation flows are provided within each document. Please review all of the measure documentation in its entirety to ensure complete understanding of these measures.
CMS WEB INTERFACE SAMPLING INFORMATION

**BENEFICIARY SAMPLING**
For more information on the sampling process and methodology please refer to the 2018 CMS Web Interface Sampling Document, which will be made available during the performance year at CMS.gov.
NARRATIVE MEASURE SPECIFICATION

DESCRIPTION:
Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine

IMPROVEMENT NOTATION
Higher score indicates better quality

INITIAL POPULATION
Patients 65 years of age and older with a visit during the measurement period

DENOMINATOR:
Equals Initial Population

   DENOMINATOR EXCLUSIONS:
   None

   DENOMINATOR EXCEPTIONS:
   None

NUMERATOR:
Patients who have ever received a pneumococcal vaccination

   NUMERATOR EXCLUSIONS:
   Not Applicable

DEFINITION:
None

GUIDANCE:
None
SUBMISSION GUIDANCE

PATIENT CONFIRMATION

Establishing patient eligibility for reporting requires the following:

- Determine if the patient’s medical record can be found
  - If you can locate the medical record select “Yes”
  - OR
  - If you cannot locate the medical record select “No - Medical Record Not Found”
  - OR
  - Determine if the patient is qualified for the sample
    - If the patient is deceased, in hospice, moved out of the country or was enrolled in HMO select “Not Qualified for Sample”, select the applicable reason from the provided drop-down menu, and enter the date the patient became ineligible

Guidance: Patient Confirmation

If “No – Medical Record Not Found” or “Not Qualified for Sample” is selected, the patient is completed but not confirmed. The patient will be “skipped” and another patient must be reported in their place, if available. The CMS Web Interface will automatically skip any patient for whom “No – Medical Record Not Found” or “Not Qualified for Sample” is selected in all other measures into which they have been sampled.

If “Not Qualified for Sample” is selected and the date is unknown, you may enter the last date of the measurement period (i.e., 12/31/2018).

The Measurement Period is defined as January 1 – December 31, 2018.

NOTE:

- **In Hospice**: Select this option if the patient is not qualified for sample due to being in hospice care at any time during the measurement period (this includes non-hospice patients receiving palliative goals or comfort care)
- **Moved out of Country**: Select this option if the patient is not qualified for sample because they moved out of the country any time during the measurement period
- **Deceased**: Select this option if the patient died during the measurement period
- **HMO Enrollment**: Select this option if the patient was enrolled in an HMO at any time during the measurement period (i.e., Medicare Advantage, non-Medicare HMOs, etc.)
DENOMINATOR CONFIRMATION

- Determine if the patient is qualified for the measure
  - If the patient is qualified for this measure select “Yes”
  - OR
  - If there is an "other" CMS approved reason for patient disqualification from the measure select “No - Other CMS Approved Reason”

**Guidance**  **Denominator**

*CMS Approved Reason* may only be selected when approved by CMS. To request a CMS Approved Reason, you would need to provide the patient rank, measure, and reason for request in a Quality Payment Program Service Desk inquiry. A CMS decision will be provided in the resolution of the inquiry. Patients for whom a CMS Approved Reason is selected will be “skipped” and another patient must be reported in their place, if available.

*By selecting "No - Other CMS Approved Reason", the patient is only removed from the measure for which the reason was requested, not all CMS Web Interface measures.*
NUMERATOR SUBMISSION

- Determine if the patient has ever received a pneumococcal vaccination
  - If the patient has never received a pneumococcal vaccination select “No”
  - OR
  - If the patient has ever received a pneumococcal vaccination select “Yes”

Numerator codes can be found in the 2018 CMS Web Interface PREV Coding Document. The Downloadable Resource Mapping Table can be located in Appendix II of this document.

**Guidance**

**NOTE:**

- **While the measure provides credit** for adults 65 years of age and older who have ever received either the PCV13 or PPSV23 vaccine (or both) to adults 65 years of age and older, according to ACIP recommendations, patients should receive both vaccines. The order and timing of the vaccinations depends on certain patient characteristics, and are described in more detail in the ACIP recommendations
- **PCV-7** is not a vaccine considered numerator compliant for this population
- **Patient Reported Requirement**: Date (year) and type of vaccine
- **Pneumococcal vaccination status** may be completed during a telehealth encounter
DOCUMENTATION REQUIREMENTS

When submitting data through the CMS Web Interface, the expectation is that medical record documentation is available that supports the action reported in the CMS Web Interface i.e., medical record documentation is necessary to support the information that has been submitted.
Appendix I: Performance Calculation Flow

Patient Confirmation Flow

For 2018, confirmation of the "Medical Record Found", or indicating the patient is "Not Qualified for Sample" with a reason of "In Hospice", "Moved out of Country", "Deceased", or "HMO Enrollment", will only need to be done once per patient.

*See the Measure Submission Document for further instructions on how to submit this measure
**If date is unknown, enter 12/31/2018
Measure Confirmation Flow for PREV-8

For 2018, measure specific reasons a patient is “Not Confirmed” or excluded for “Denominator Exclusion” or “Other CMS Approved Reason” will need to be done for each measure where the patient appears.

*See the Measure Submission Document for further instructions on how to submit this measure.

**Further information regarding patient selection for specific disease and patient care measures can be found in the CMS Web Interface Sampling Methodology Document. For patients who have the incorrect date of birth listed, a change of the patient date of birth by the abstractor may result in the patient no longer qualifying for the PREV-8 measure. If this is the case, the system will automatically remove the patient from the measure requirements.

***“Other CMS Approved Reason” may only be selected if you have received an approval from CMS in the resolution of a requested Quality Payment Program Service Desk Inquiry at qpp@cms.hhs.gov
Measure Flow for PREV-8

The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used as a substitution for the measure specification. For Downloadable Resource Mapping Table, go to Appendix II and use the Variable Names located in the appendix along with the applicable tabs within the PREV Coding Document.

Start*

Include Remainder of Patients Listed in CMS Web Interface that were Consecutively Confirmed and Completed for this Measure in the Denominator (i.e., 230 Patients)  d

Patient Has Ever Received a Pneumococcal Vaccination

Performance Met: Include in Numerator (i.e., 175 Patients)  a

Performance Not Met: Do Not Include in Numerator

SAMPLE CALCULATION:

Performance Rate = \frac{\text{Performance Met (a=175 Patients)}}{\text{Eligible Denominator (d=230 Patients)}} \times 100 = \frac{175}{230} \times 100 = 76.09%

CALCULATION MAY CHANGE PENDING PERFORMANCE MET ABOVE

*See the Measure Submission Document for further instructions on how to submit this measure
Patient Confirmation Flow

For 2018, confirmation of the “Medical Record Found”, or indicating the patient is “Not Qualified for Sample” with a reason of “In Hospice”, “Moved out of Country”, “Deceased”, or “HMO Enrollment”, will only need to be done once per patient. Refer to the Measure Submission Document for further instructions.


2. Check to determine if Medical Record can be found.
   a. If no, Medical Record not found, mark appropriately for completion and stop abstraction. This removes the patient from the beneficiary sample for all measures. The patient will be skipped and replaced. Stop processing.
   b. If yes, Medical Record found, continue processing.

3. Check to determine if Patient Qualified for the sample.
   a. If no, the patient does not qualify for the sample, select the reason why and enter the date (if date is unknown, enter 12/31/2018) the patient became ineligible for sample. For example; In Hospice, Moved out of Country, Deceased, HMO Enrollment. Mark appropriately for completion and stop abstraction. This removes the patient from the beneficiary sample for all measures. The patient will be skipped and replaced. Stop processing.
   b. If yes, the patient does qualify for the sample; continue to the Measure Confirmation Flow for PREV-8.
Measure Confirmation Flow for PREV-8

For 2018, measure specific reasons a patient is “Not Confirmed” or excluded for “Denominator Exclusion” or “Other CMS Approved Reason” will need to be done for each measure where the patient appears. Refer to the Measure Submission Document for further instructions.

1. Start Measure Confirmation Flow for PREV-8. Complete for consecutively ranked patients aged 65 years and older at the beginning of the measurement period. Further information regarding patient selection for specific disease and patient care measures can be found in the CMS Web Interface Sampling Methodology Document. For patients who have the incorrect date of birth listed, a change of the patient date of birth by the abstractor may result in the patient no longer qualifying for the PREV-8 measure. If this is the case, the system will automatically remove the patient from the measure requirements.

2. Check to determine if the patient qualifies for the measure (Other CMS Approved Reason).
   a. If no, the patient does not qualify for the measure select: No – Other CMS Approved Reason for patient disqualification. Mark appropriately for completion and stop abstraction. Patient is removed from the performance calculations for this measure. The patient will be skipped and replaced. “Other CMS Approved Reason” may only be selected if you have received an approval from CMS in the resolution of a requested Quality Payment Program Service Desk Inquiry at qpp@cms.hhs.gov. Stop processing.
   b. If yes, the patient does qualify for the measure, continue to the PREV-8 measure flow.
Measure Flow for PREV-8

The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used as a substitution for the measure specifications. For Downloadable Resource Mapping Table, go to Appendix II and use the Variable Names located in the appendix along with the applicable tabs within the PREV Coding Document.

1. Start processing 2018 PREV-8 (NQF 0043) Flow for the patients that qualified for sample in the Patient Confirmation Flow and the Measure Confirmation Flow for PREV-8. Note: Include remainder of patients listed in CMS Web Interface that were consecutively confirmed and completed for this measure in the denominator. For the sample calculation in the flow these patients would fall into the ‘d’ category (eligible denominator, i.e. 230 patients).

2. Check to determine if the patient has ever received a pneumococcal vaccination.
   a. If no, the patient has not ever received a pneumococcal vaccination, performance is not met and should not be included in the numerator. Stop processing.
   b. If yes, patient has ever received a pneumococcal vaccination, performance is met and the patient will be included in the numerator. For the sample calculation in the flow these patients would fall into the ‘a’ category (numerator, i.e. 175 patients). Stop processing.

Sample Calculation

Performance Rate Equals
Performance Met is category ‘a’ in the measure flow (175 patients)
Denominator is category ‘d’ in the measure flow (230 patients)
175 (Performance Met) divided by 230 (Denominator) equals a performance rate of 76.09 percent
Calculation May Change Pending Performance Met
Appendix II: Downloadable Resource Mapping Table

Each data element within this measure’s denominator or numerator is defined as a pre-determined set of clinical codes. These codes can be found in the 2018 CMS Web Interface PREV Coding Document.

*PREV-8: Pneumococcal Vaccination Status for Older Adults

<table>
<thead>
<tr>
<th>Measure Component/Excel Tab</th>
<th>Data Element</th>
<th>Variable Name</th>
<th>Coding System(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator/Numerator Codes</td>
<td>Pneumococcal Vaccination</td>
<td>PNEUMO_CODE</td>
<td>C4 CVX SNM</td>
</tr>
</tbody>
</table>

*For EHR mapping, the coding within PREV-8 is considered to be all inclusive*
Appendix III: Measure Rationale and Clinical Recommendation Statements

RATIONALE:
Pneumonia is a common cause of illness and death in the elderly and persons with certain underlying conditions such as heart failure, diabetes, cystic fibrosis, asthma, sickle cell anemia, or chronic obstructive pulmonary disease. (NHLBI, 2011) In 1998, an estimated 3,400 adults aged > 65 years died as a result of invasive pneumococcal disease. (IPD) (CDC, 2003)

Among the 91.5 million US adults aged > 50 years, 29,500 cases of IPD, 502,600 cases of nonbacteremic pneumococcal pneumonia and 25,400 pneumococcal-related deaths are estimated to occur yearly; annual direct and indirect costs are estimated to total $3.7 billion and $1.8 billion, respectively. Pneumococcal disease remains a substantial burden among older US adults, despite increased coverage with 23-valent pneumococcal polysaccharide vaccine, (PPV23) and indirect benefits afforded by PCV7 vaccination of young children. (Weycker, et al., 2011)

Vaccination has been found to be effective against bacteremic cases (OR: 0.34; 95% CI: 0.27–0.66) as well as nonbacteremic cases (OR: 0.58; 95% CI: 0.39–0.86). Vaccine effectiveness was highest against bacteremic infections caused by vaccine types (OR: 0.24; 95% CI: 0.09–0.66). (Vila-Corcoles, et al., 2009)

CLINICAL RECOMMENDATION STATEMENTS:
In 2014, the Advisory Committee on Immunization Practices (ACIP) began recommending a dose of 13-valent pneumococcal conjugate vaccine (PCV13) be followed by a dose of 23-valent pneumococcal polysaccharide vaccine (PPSV23) 6-12 months later in adults aged 65 and older who have not previously received a pneumococcal vaccination, and in persons over the age of two years who are considered to be at higher risk for pneumococcal disease due to an underlying condition. The two vaccines should not be coadministered and intervals for administration of the two vaccines vary slightly depending on the age, risk group, and history of vaccination (Kobayashi, 2015).

In 2015, ACIP updated its recommendation and changed the interval between PCV13 and PPSV23, from 6-12 months to at least one year for immunocompetent adults aged >=65 years who have not previously received pneumococcal vaccine. For immunocompromised vaccine-naive adults, the minimum acceptable interval between PCV13 and PPSV23 is 8 weeks. Both immunocompetent and immunocompromised adults aged >=65 years who have previously received a dose of PPSV23 when over the age of 65 should receive a dose of PCV13 at least one year after PPSV23 (>=1 year). Immunocompetent and immunocompromised adults aged >=65 who have previously received a dose of PPSV23 when under the age of 65, should also receive a dose of PCV13 at least one year after PPSV23 (>=1 year) and then another dose of PPSV23 at least one year after PCV13. It is recommended that for those that have this alternative three-dose schedule (2 PPSV23 and 1 PCV13), the three doses should be spread over a time period of five or more years (Kobayashi, 2015).
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