

**PNEUMONIA CORE PERFORMANCE MEASURES  
FOR NATIONAL IMPLEMENTATION**

<b>Performance Measure Identifier (Transmission ID #)</b>	<b>Set Measure ID #</b>	<b>Measure Short Name</b>
14441	<b>PN-1</b>	Oxygenation assessment
14442	<b>PN-2</b>	Pneumococcal vaccination
14443	<b>PN-3b</b>	Blood cultures
14445	<b>PN-4</b>	Adult smoking cessation advice/counseling
14444	<b>PN-5</b>	Antibiotic timing
14447	<b>PN-5a</b>	Initial antibiotic received within 8 hours of hospital arrival
14448	<b>PN-5b</b>	Initial antibiotic received within 4 hours of hospital arrival
14449	<b>PN-6a</b>	Initial antibiotic selection for PN immunocompetant – ICU
14450	<b>PN-6b</b>	Initial antibiotic selection for PN immunocompetant – Non ICU
14451	<b>PN-7</b>	Influenza vaccination

## PNEUMONIA DATA ELEMENT LIST

General Data Element Name	Collected for:
<i>Admission Date</i>	All Records
<i>Admission Source</i>	All Records (used in algorithm for PN-1, PN-2, PN-3b, PN-5, PN-5a, PN-5b, PN-6a, PN-6b, PN-7)
<i>Admission Type</i>	All Records
<i>Birthdate</i>	All Records
<i>Case Identifier*</i>	All Records
<i>Discharge Date</i>	All Records
<i>Discharge Status</i>	All Records (used in algorithm for PN-2, PN-4, PN-7)
<i>Health Care Organization Identifier</i>	Used in Data Transmission
<i>ICD-9-CM Other Diagnosis Codes</i>	All Records (used in algorithm for All PN measures)
<i>ICD-9-CM Other Procedure Codes</i>	All Records
<i>ICD-9-CM Other Procedure Dates</i>	All Records
<i>ICD-9-CM Principal Diagnosis Code</i>	All Records
<i>ICD-9-CM Principal Procedure Code</i>	All Records
<i>ICD-9-CM Principal Procedure Date</i>	All Records
<i>Other Patient Case Identifier**</i>	All Records
<i>Patient HIC #**</i>	All Records
<i>Patient Social Security Number**</i>	All Records
<i>Payment Source</i>	All Records
<i>Performance Measure Identifier</i>	Used in Data Transmission
<i>Postal Code</i>	All Records
<i>Provider ID</i>	All Records
<i>Sex</i>	All Records

Algorithm Output Data Element Name	Collected for:
<i>Measure Category Assignment</i>	Used in Verification
<i>Measurement Value</i>	PN-5, PN-5a, PN-5b

Pneumonia Data Element Name	Collected for:
<i>ABG Done</i>	PN-1
<i>Adult Smoking Counseling</i>	PN-4
<i>Adult Smoking History</i>	PN-4
<i>Antibiotics Administered During the First 36 Hours After Arrival</i>	PN-6a, PN-6b
<i>Antibiotics Prior to Arrival (PN)</i>	PN-5, PN-5a, PN-5b
<i>Antibiotic Received</i>	PN-3b, PN-5, PN-5a, PN-5b, PN-6a, PN-6b
<i>Arrival Date</i>	PN-3b, PN-5, PN-5a, PN-5b, PN-6a, PN-6b
<i>Arrival Time</i>	PN-3b, PN-5, PN-5a, PN-5b, PN-6a, PN-6b
<i>Blood Culture Collected After Arrival</i>	PN-3b
<i>Blood Cultures Prior To Arrival</i>	PN-3b
<i>Comfort Measures Only</i>	All PN Measures
<i>Compromised</i>	PN-6a, PN-6b
<i>History of Antibiotic Allergy(PN)</i>	PN-6a
<i>ICU Transfer or Admission Within First 24 Hours</i>	PN-6a, PN-6b
<i>Influenza Vaccination Status</i>	PN-7
<i>Initial Antibiotic Start Date</i>	PN-3b, PN-5, PN-5a, PN-5b
<i>Initial Antibiotic Start Time</i>	PN-3b, PN-5, PN-5a, PN-5b
<i>Initial Blood Culture Collection Date</i>	PN-3b

<b><i>Pneumonia Data Element Name</i></b>	<b>Collected for:</b>
<i>Initial Blood Culture Collection Time</i>	PN-3b
<i>Name of Antibiotic Administered During the First 36 Hours (PN)</i>	PN-6a, PN-6b
<i>Pneumococcal Vaccination Status</i>	PN-2
<i>Pneumonia Working Diagnosis on Admission</i>	All PN Measures
<i>Pseudomonas Risk</i>	PN-6a
<i>Pulse Oximetry Done</i>	PN-1
<i>Route of Antibiotic Administration (PN)</i>	PN-6a, PN-6b
<i>Start Date of Antibiotic Administration (PN)</i>	PN-6a, PN-6b
<i>Start Time of Antibiotic Administration (PN)</i>	PN-6a, PN-6b
<i>Transfer From Another ED</i>	All PN Measures

\*Case Identifier is required for all episodes of care collected for the Joint Commission

\*\* These patient identifiers are required to uniquely identify an episode of care for the National Voluntary Hospital Reporting Initiative.

## Pneumonia Measure Population

The Pneumonia (PN) measure population can be initially identified by six data elements that are common to all of the performance measures in the set:

- *Admission Date*
- *Birthdate*
- *Comfort Measures Only*
- *ICD-9-CM Principal Diagnosis Code*
- *ICD-9-CM Other Diagnosis Codes*
- *Pneumonia Working Diagnosis on Admission*
- *Transfer From Another ED*

An ICD-9-CM diagnostic code of pneumonia is required for inclusion in the population as identified on Table 3.1 in Appendix A. The patient must have either an *ICD-9-CM Principal Diagnosis Code* of pneumonia, or an *ICD-9-CM Other Diagnosis Code* of pneumonia where the principal diagnosis is either respiratory failure or sepsis. See Table 3.2 and 3.3 for respiratory failure and sepsis ICD-9-CM diagnosis codes.

The ICD-9-CM codes alone will only identify pneumonia in a broad sense, and are not specific to community-acquired pneumonia. As a result, other types of pneumonia, such as nosocomial pneumonia, must be eliminated from the population. This is, in part, accomplished by using the principal diagnosis (the diagnosis which after study caused the patient to be admitted). However, where an other diagnosis of pneumonia is used in conjunction with respiratory failure or sepsis, and the origin of the pneumonia is not clear (nosocomial or community-acquired), the key data element used to define the PN population is *Pneumonia Working Diagnosis on Admission*. To be included in the PN population, a patient must have a working diagnosis of pneumonia. That is, physician documentation of the diagnosis of pneumonia written before or at admission. For an expanded definition of *Pneumonia Working Diagnosis on Admission*, reference the data element pages of this manual.

Patients who have physician orders *Comfort Measures Only* are excluded from the PN measure population. These patients receive palliative care and usual interventions are not received because a medical decision was made to limit care. Patients who are received in *Transfer From Another ED* are also excluded from the measure set.

The data elements *Birthdate* and *Admission Date* are used to calculate patient age and further determine the specific population for each measure in the set.

The following algorithm should be used to process all records in the PN core measure set. Records with a measure category assignment of “B” (not in measure population) will not need to be processed through individual measure algorithms. Records with a measure category assignment of “A” (missing or invalid population data) will also not need to be processed through the individual measure algorithms. However, the total count of records with an “A” category assignment must be added to the “A” count (number of cases with missing/invalid data which prevents assignment to the measure population) for each individual measure. This will provide a total count of **all** records that could not be

processed through each measure due to missing or invalid data. (Please refer to the Missing/Invalid section of the manual for greater detail.)

## Initial population, common to all measures in the PN set

