



Complete Summary

TITLE

Pneumococcal immunization: percent of patients receiving pneumococcal immunizations.

SOURCE(S)

Office of Quality and Performance (10Q). FY2001 VHA performance measurement system. Technical Manual. Washington (DC): Veterans Health Administration (VHA); 2000 Dec 7 [update 2001 Apr 18]. 37 p.

Brief Abstract

DESCRIPTION

This measure assesses the percent of eligible patients receiving pneumococcal immunizations.

This measure is a component of a composite measure; it can also be used on its own.

RATIONALE

Pneumococcal disease is a significant cause of morbidity and mortality in the United States. Although pneumococcal infection is not a reportable disease, population-based surveillance studies have reported annual invasive pneumococcal disease rates of at least 15-19/100,000 population and pneumococcal meningitis rates of 0.3-1.2/100,000. Significantly higher incidence rates are reported for persons less than 5 years of age or over age 65; blacks, Native Americans, and Alaska Natives; nursing home residents; alcoholics; and those with underlying chronic medical or immunodeficient conditions. Pneumococcal disease accounts for about 15% of severe community-acquired pneumonia, which has a case-fatality rate (proportion of cases resulting in death) of 9-26%. Pneumococcal bacteremia and meningitis are also associated with high case-fatality rates. The highest case-fatality rates from invasive pneumococcal infection occur in elderly persons (30-43%) and patients with comorbid conditions (25-27%). In recent years, drug-resistant strains of *Streptococcus pneumoniae* have emerged; recent estimates suggest that in some locales 15% or more of pneumococcal isolates are drug resistant. The emergence of drug-resistant strains underscores the importance of preventing pneumococcal disease by vaccination.

Pneumococcal vaccine is recommended for all immunocompetent individuals who are age 65 years and older or otherwise at increased risk for pneumococcal disease. There is insufficient evidence to recommend for or against pneumococcal

vaccine for high-risk immunocompromised individuals, but recommendations for vaccinating these persons may be made on other grounds.

PRIMARY CLINICAL COMPONENT

Pneumococcal disease; immunization

DENOMINATOR DESCRIPTION

The number of eligible patients (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary) seen at least once by a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP) at a specified clinic. Patients who have a life expectancy that does not lend itself to prevention screening are excluded.

NUMERATOR DESCRIPTION

The number of patients from the denominator receiving pneumococcal immunizations

Evidence Supporting the Measure

PRIMARY MEASURE DOMAIN

Process

SECONDARY MEASURE DOMAIN

Not applicable

EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance

EVIDENCE SUPPORTING NEED FOR THE MEASURE

U.S. Preventive Services Task Force. Guide to clinical preventive services: report of the U.S. Preventive Services Task Force. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. Adult immunizations including chemoprophylaxis against influenza A. p. 791-814. [202 references]

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

External oversight/Veterans Health Administration
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Physician Assistants
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age greater than 64 years (or younger if clinically indicated [see "Denominator Inclusions/Exclusions" field])

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

From the 'eligible patients' universe, certain patient cohort groups, including women, are selected

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Although pneumococcal infection is not a reportable disease, population-based surveillance studies have reported annual invasive pneumococcal disease rates of at least 15-19/100,000 population and pneumococcal meningitis rates of 0.3-1.2/100,000.

EVIDENCE FOR INCIDENCE/PREVALENCE

U.S. Preventive Services Task Force. Guide to clinical preventive services: report of the U.S. Preventive Services Task Force. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. Adult immunizations including chemoprophylaxis against influenza A. p. 791-814. [202 references]

ASSOCIATION WITH VULNERABLE POPULATIONS

Significantly higher incidence rates are reported for persons less than 5 years of age or over age 65; blacks, Native Americans, and Alaska Natives; nursing home residents; alcoholics, and those with underlying chronic medical or immunodeficient conditions.

EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

U.S. Preventive Services Task Force. Guide to clinical preventive services: report of the U.S. Preventive Services Task Force. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. Adult immunizations including chemoprophylaxis against influenza A. p. 791-814. [202 references]

BURDEN OF ILLNESS

Pneumococcal disease accounts for about 15% of severe community-acquired pneumonia, which has a case-fatality rate (proportion of cases resulting in death) of 9-26%. Pneumococcal bacteremia and meningitis are also associated with high case-fatality rates. The highest case-fatality rates from invasive pneumococcal infection occur in elderly persons (30-43%) and patients with comorbid conditions (25-27%).

EVIDENCE FOR BURDEN OF ILLNESS

U.S. Preventive Services Task Force. Guide to clinical preventive services: report of the U.S. Preventive Services Task Force. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. Adult immunizations including chemoprophylaxis against influenza A. p. 791-814. [202 references]

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patients not already reviewed during the current Fiscal Year with a qualifying visit at one of a specified list of outpatient clinics

DENOMINATOR (INDEX) EVENT

Encounter

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All eligible patients* not already reviewed during the current Fiscal Year with a qualifying visit (refer to the original measure documentation for details) at one of the following 8 outpatient clinics:

- Primary Care
- General Medicine
- Cardiology
- Endocrinology/Metabolism
- Diabetes
- Hypertension
- Pulmonary/Chest
- Women's Clinic

All patients seen in one of the above clinics and seen by a:

- Physician (MD or DO),
- Physician Assistant (PA), or
- Nurse Practitioner (NP)

All patients having a life expectancy that lends itself to prevention screening

*Eligible patients (any one of the following):

- Age greater than 64 years
- Resident of long term care facility, Domiciliary, etc.
- Chronic heart failure, or cardiomyopathies, or past myocardial infarction
- Diagnosis of diabetes
- Diagnosis of chronic obstructive pulmonary disease (COPD) or emphysema

- Diagnosis of sickle cell disease or splenectomy

Exclusions

Visits at a tertiary facility for a specialty consult only (no other primary care or general medicine visit at the tertiary center)

Preventive care screening questions are not applied to certain designated groups of patients included in other samples (see original measure documentation for details).

Any of the following exclude the patient from screening for this prevention measure:

- Documented diagnosis of cancer of the esophagus, liver, or pancreas
- Enrolled in a Veterans Health Administration (VHA) or community-based Hospice program
- Documented in the Medical Record a life expectancy less than 6 months

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

The number of patients from the denominator receiving pneumococcal immunizations (i.e. documented given once)

Exclusions

Unspecified

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Fiscal Year (FY) 2001 target for pneumococcal immunization component: 78%

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

PI - Pneumococcal Immunization.

MEASURE COLLECTION

[Fiscal Year \(FY\) 2001: Veterans Health Administration \(VHA\) Performance Measurement System](#)

COMPOSITE MEASURE NAME

[Prevention Care Index](#)

DEVELOPER

Veterans Health Administration

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2000 Dec

REVISION DATE

2001 Apr

MEASURE STATUS

Please note: This measure has been updated. The National Quality Measures Clearinghouse is working to update this summary.

SOURCE(S)

Office of Quality and Performance (10Q). FY2001 VHA performance measurement system. Technical Manual. Washington (DC): Veterans Health Administration (VHA); 2000 Dec 7 [update 2001 Apr 18]. 37 p.

MEASURE AVAILABILITY

The individual measure, "PI - Pneumococcal Immunization," is published in "FY 2001 VHA Performance Measurement System: Technical Manual."

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NQMC STATUS

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