



## Complete Summary

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### TITLE

Pneumococcal immunization: percent of patients with chronic obstructive pulmonary disease (COPD) having pneumococcal immunization.

### 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 patients with chronic obstructive pulmonary disease (COPD) having pneumococcal immunization.

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. 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, underscoring 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

Chronic obstructive pulmonary disease; pneumococcal disease; immunization

#### DENOMINATOR DESCRIPTION

The number of patients with chronic obstructive pulmonary disease (COPD) seen at least once by a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP) at a specified clinic

#### NUMERATOR DESCRIPTION

The number of patients from the denominator having 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

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.

### 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

Unspecified

#### 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.

#### 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

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patients with chronic obstructive pulmonary disease (COPD) 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 patients with a diagnosis of chronic obstructive pulmonary disease (COPD)\* 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)

\*COPD: International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM) codes: 491.0-491.9, 492.0-492.8, 494, or 496 listed in any order (primary or secondary diagnosis)

Exclusions

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

Note: patients who refuse/decline immunization are included in the denominator, but not the numerator.

## NUMERATOR INCLUSIONS/EXCLUSIONS

### Inclusions

The number of patients from the denominator having pneumococcal immunizations

### Exclusions

Patients who refuse/decline immunization

## DENOMINATOR TIME WINDOW

Time window precedes index event

## NUMERATOR TIME WINDOW

Fixed time period

## DATA SOURCE

Administrative and medical records data

## 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: 84%

#### EVIDENCE FOR PRESCRIPTIVE STANDARD

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.

### Evaluation of Measure Properties

#### EXTENT OF MEASURE TESTING

Unspecified

### Identifying Information

#### ORIGINAL TITLE

CPG - COPD: Pneumococcal Immunization.

#### MEASURE COLLECTION

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

#### COMPOSITE MEASURE NAME

[Clinical Practice Guidelines \(FY 2001\)](#)

#### 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, "CPG - COPD: Pneumococcal Immunization.," is published in "FY 2001 VHA Performance Measurement System: Technical Manual."

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## NQMC STATUS

This NQMC summary was completed by ECRI on April 18, 2003. The information was verified by the Veterans Health Administration on May 20, 2003.

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