

Management of Chronic Obstructive Pulmonary Disease: Review of the Performance Measures by the Performance Measurement Committee of the American College of Physicians

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Introduction

Chronic obstructive pulmonary disease (COPD) is a common disease involving the airways and pulmonary parenchyma that results in airflow obstruction. Manifestations of COPD include dyspnea, poor exercise tolerance, chronic cough with or without sputum production, and wheezing. When severe, COPD can result in respiratory failure, cor pulmonale, or death. In the United States, COPD affects more than 5% of the adult population; it is the third leading cause of death and the 12th leading cause of morbidity (1–3). The total economic costs of COPD in the United States were estimated to be \$49.9 billion in 2010, and the total direct cost of medical care is approximately \$29.5 billion per year (4).

The American College of Physicians (ACP), American College of Chest Physicians (ACCP), American Thoracic Society (ATS), and the European Respiratory Society (ERS) published a joint clinical practice guideline on the diagnosis and management of stable chronic obstructive pulmonary disease (5) updating a prior guideline and incorporating additional systematic reviews (6-8). The goal of the guideline is to present the best available evidence for the diagnosis and clinical management of COPD. In order to encourage alignment between clinical guidelines and performance measures, the ACP Performance Measurement Committee (PMC) reviewed performance measures related to COPD based on the evidence presented in the joint clinical practice guideline to assess whether the measures are evidence-based, methodologically sound, and clinically meaningful.

Methods

We performed a search to identify relevant performance measures from the National Quality Forum (NQF), the American Medical Association-Physician Consortium for Performance Improvement (AMA-PCPI), and National Quality Measure Clearinghouse (NQMC) websites. The inclusion criteria included performance measures currently used in the Centers for Medicare and Medicaid Services (CMS) Physician Quality Reporting System (PQRS) or currently used in the CMS Electronic Record Incentive program. The PMC identified and reviewed five COPD measures.

Conclusion

Recommendation

ACP supports NQF 0028: "Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention."

Rationale

The PMC supports this measure because assessment and reduction of tobacco use have been proven to slow the progression of COPD and are key elements in the management of pulmonary disease. The ACP/ACCP/ AT/ERS guideline states that a history of heavy smoking (greater than 40 pack-years) is a strong predictor of airflow obstruction (5). The US Preventive Services Task Force also recommends that clinicians ask all their adult patients about tobacco use and offer cessation interventions (9). Tobacco use is a modifiable risk factor and clinical evidence suggests that patient counseling and re-counseling by physicians increases attempts to quit (10).

Measure Specifications

NQF 0028: Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention	
Status:	NQF Endorsed Apr 3, 2013 (2013 PQRS Measure #226)
Measure Steward:	American Medical Association-Physician Consortium for Performance Improvement
Description:	Percentage of patients aged 18 years and older who were screened for tobacco use at least once during the two-year measurement period AND who received cessation counseling intervention if identified as a tobacco user
Clinical Topic:	Prevention, Tobacco Use
Numerator Statement:	Patients who were screened for tobacco use* at least once during the two-year measurement period AND who received tobacco cessation counseling intervention** if identified as a tobacco user * Includes use of any type of tobacco ** Cessation counseling intervention includes brief counseling (3 minutes or less), and/or pharmacotherapy
Denominator Statement:	All patients aged 18 years and older who were seen twice for any visits or who had at least one preventive care visit during the two year measurement period
Exclusions:	Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy)
Risk Adjustment:	No
Type of Measure:	Process
Level of Analysis:	Group/Practice, Individual, Team
Care Setting:	Clinician Office/Clinic, Behavioral Health/Inpatient, Behavioral Health/Outpatient
Data Source:	Administrative Claims, Electronic Clinical Data, Electronic Health Record, Registry, Paper Medical Records

Recommendation

ACP supports NQF 0041: "Influenza Immunization."

Rationale

The PMC supports this measure because it aligns with CDC's Advisory Committee on Immunization Practices' (ACIP) recommendations on influenza vaccination (11).

Measure Specifications

NQF 0041: Influenza Immunization	
Status:	NQF Endorsed Apr 3, 2013 (2013 PQRS Measure #110)
Measure Steward:	American Medical Association-Physician Consortium for Performance Improvement
Description:	Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization
Clinical Topic:	Prevention, Immunization
Numerator Statement:	Patients who received an influenza immunization OR who reported previous receipt* of an influenza immunization *Previous receipt can include: previous receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measures is applied (typically, prior vaccination would include influenza vaccine given since August 1st).
Denominator Statement:	All patients aged 6 months and older seen for a visit between October 1 and March 31
Exclusions:	Documentation of medical reason(s) for not receiving influenza immunization (eg, patient allergy, other medical reasons) Documentation of patient reason(s) for not receiving influenza immunization (eg, patient declined, other patient reasons) Documentation of system reason(s) for not receiving influenza immunization (eg, vaccine not available, other system reasons)
Risk Adjustment:	No
Type of Measure:	Process
Level of Analysis:	Group/Practice, Individual, Team
Care Setting:	Clinician Office/Clinic, Ambulatory Care: Urgent Care, Dialysis Facility, Home Health, Other, Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility
Data Source:	Administrative Claims, Electronic Clinical Data, Electronic Health Record, Registry, Paper Medical Records

Recommendation

ACP supports NQF 0043: "Pneumonia Vaccination Status for Older Adults."

Rationale

The PMC supports this measure because it aligns with the ACIP recommendation that persons older than 65 years of age be given a pneumonia vaccination (12). Clinicians should be aware of the potential for overuse of this treatment if patients see multiple providers and/or have poor medical record continuity.

Measure Specifications

NQF 0043: Pneumonia Vaccination Status for Older Adults	
Status:	NQF Endorsed May 2, 2012 (2013 PQRS Measure #111)
Measure Steward:	National Committee for Quality Assurance
Description:	Percentage of patients 65 years of age and older who ever received a pneumococcal vaccination
Clinical Topic:	Infectious Diseases, Prevention
Numerator Statement:	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."
Denominator Statement:	The number of members who responded "Yes" or "No" to the question "Have you ever had a pneumonia shot? This shot is usually given only once or twice in a person's lifetime and is different from the flu shot. It is also called the pneumococcal vaccine."
Exclusions:	Does not meet age criteria
Risk Adjustment:	No
Type of Measure:	Process
Level of Analysis:	Group/Practice, Individual, Team, Facility, Health Plan, Integrated Delivery System, County or City
Care Setting:	Ambulatory Care: Clinician Office/Clinic, Home Health, Hospital/Acute Care Facility, Pharmacy, Post Acute/Long Term Care Facility: Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility
Data Source:	Administrative Claims, Healthcare Provider Survey, Paper Medical Records, Patient Reported Data/Survey

Recommendation

ACP supports NQF 0091: "COPD: Spirometry Evaluation."

Rationale

ACP supports this measure because it aligns with the ACP/ACCP/ ATS/ERS guideline recommendation that spirometry be obtained to diagnose airflow obstruction and assess severity in patients with respiratory symptoms (5). Diagnosing or labeling a patient with COPD without performing or reviewing spirometry results may adversely impact future management.

Measure Specifications

NQF 0091: COPD: Spirometry Evaluation	
Status:	NQF Endorsed Jul 31, 2012 (2013 PQRS #51)
Measure Steward:	American Medical Association-Physician Consortium for Performance Improvement
Description:	Percentage of patients aged 18 years and older with a diagnosis of COPD who had spirometry results documented
Clinical Topic:	Pulmonary/Critical Care, Chronic Obstructive Pulmonary Disease (COPD)
Numerator Statement:	Patients with documented spirometry results in the medical record (FEV1 and FEV1/FVC)
Denominator Statement:	All patients aged 18 years and older with a diagnosis of COPD
Exclusions:	Documentation of medical reason(s) for not documenting spirometry results; Documentation of patient reason(s) for not documenting spirometry results; Documentation of system reason(s) for not documenting spirometry results
Risk Adjustment:	No
Type of Measure:	Process
Level of Analysis:	Group/Practice, Individual, Team
Care Setting:	Clinician Office/Clinic
Data Source:	Administrative Claims, Electronic Clinical Data, Electronic Health Record, Registry, Paper Medical Records

Recommendation

ACP does not support NQF 0102: "COPD: Inhaled Bronchodilator Therapy."

Rationale

ACP does not support this measure because it lacks specificity regarding patients' reported symptoms, the severity of COPD to which the measure applies, and the type of bronchodilator to be prescribed, and the timing of its application.

Measure Specifications

NQF 0102: COPD: Inhaled Bronchodilator Therapy	
Status:	NQF Endorsed Jul 31, 2012 (2013 PQRS #52)
Measure Steward:	American Medical Association-Physician Consortium for Performance Improvement
Description:	Percentage of patients aged 18 years and older with a diagnosis of COPD and who have an FEV1/FVC < 70% and have symptoms who were prescribed an inhaled bronchodilator
Clinical Topic:	Pulmonary/Critical Care, Chronic Obstructive Pulmonary Disease (COPD)
Numerator Statement:	Patients who were prescribed an inhaled bronchodilator
Denominator Statement:	All patients aged 18 years and older with a diagnosis of COPD, who have an FEV1/FVC <70% and have symptoms (eg, dyspnea, cough/sputum, wheezing)
Exclusions:	Documentation of medical reason(s) for not prescribing an inhaled bronchodilator; documentation of patient reason(s) for not prescribing an inhaled bronchodilator; documentation of system reason(s) for not prescribing an inhaled bronchodilator
Risk Adjustment:	No
Type of Measure:	Process
Level of Analysis:	Group/Practice, Individual, Team
Care Setting:	Clinician Office/Clinic
Data Source:	Administrative Claims, Electronic Clinical Data, Electronic Health Record, Registry, Paper Medical Records

Gaps in Performance Measurement — Opportunities to Promote High-Value Care

ACP recommends the development of a measure of overuse of spirometry. Its use in asymptomatic patients is unlikely to produce information leading to reductions in COPD exacerbations. Variations in the diagnosis and recording of COPD symptoms may result in overuse.

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