May 5, 2010

Memorandum

To: Cardiologists, Emergency Medicine Physicians, Family Physicians, General Internists, Internal Medicine Pediatric Physicians, Geriatricians

From: GUIDES (Guideline Utilization Implementation Development and Evaluation Studies)
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Subject: New UMHS Clinical Care Guideline: Chronic Obstructive Pulmonary Disease

Key aspects of care include:

**Diagnosis:**
Consider COPD in any patient with inhaled irritants (including smoking), chronic cough, sputum production, or dyspnea.

Pulmonary function testing is required for diagnosis. Post-bronchodilator FEV1/FVC < 0.70 confirms airflow obstruction that is not fully reversible. Severity of FEV1 decline (measured as % of predicted FEV1) establishes severity.

**Treatment:**

Secondary prevention: Avoid acute exacerbations – linked to lung function decline and impairment!
- **Smoking cessation** is the single most important intervention to slow the rate of lung function decline at any severity.
- **Other preventive care** includes counseling regarding avoidance of inhalation irritants, avoidance of infection, and routine vaccinations.

Medications for chronic symptom management:
- **Bronchodilators** (B2-agonists and anticholinergics) are used in stepwise progression based on disease severity with the goal of improving symptoms. Long acting anti-cholinergic bronchodilation is first line for patients with FEV1 <80% predicted or otherwise needing daily bronchodilation.
- **Inhaled corticosteroids** are reserved for patients with severe disease (FEV1 < 50% predicted) and documented acute exacerbations.

**Oxygen** therapy should be titrated to achieve resting and exercise oxygen saturation >= 90%, both for chronic therapy and during acute exacerbations.

**Acute exacerbation** management includes empiric antibiotics for patients with increased sputum purulence plus either increased dyspnea or increased sputum volume. Sputum culture is not routinely recommended for uncomplicated acute exacerbations.

**Pulmonary rehabilitation** should be considered for all patients with functional impairment, though insurance limitations exist.

Refer patients with severe disease or frequent exacerbations to COPD specialist for comanagement.

**Patient education material.**
- [Chronic obstructive pulmonary disease](printer-friendly)
- [Learn about COPD](chronic obstructive pulmonary disease) (interactive for patients)
**HEDIS indicators.** Managed care purchasers evaluate UMHS performance using the following HEDIS measures:

**Pharmacotherapy Management of COPD Exacerbation**

The percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED encounter between January 1–November 30 of the measurement year and were dispensed appropriate medications. Two rates are reported.

1. Dispensed a systemic corticosteroid within 14 days of the event
2. Dispensed a bronchodilator within 30 days of the event

**Use of Spirometry Testing in the Assessment and Diagnosis of COPD**

The percentage of patients 40 years of age and older during the measurement year with a new diagnosis of or newly active chronic obstructive pulmonary disease (COPD), who received appropriate spirometry testing to confirm the diagnosis.