Memorandum

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

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What’s new:

Assess multiple aspects of disease severity: Determine extent of airflow limitation (spirometry), symptom severity (mMRC Dyspnea Scale or COPD Assessment Test), and exacerbation history (Table 5).

Pharmacologic therapy determined by combination of symptoms and exacerbations (algorithm in Figure 1):
• Initial treatment range: PRN SABD, LAMA, LAMA+LABA, or LABA+ICS
• Persistent symptoms range: LAMA or LAMA+LABA+ICS

New drugs: Several new beta-2-agonists, anticholinergics, inhaled corticosteroids, and combinations (Table 7).

Oxygen therapy. If on oxygen therapy and the clinical picture changes, consider reevaluating oxygen requirement. (Medicare requires annual recertification of continuing need for oxygen therapy.)

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.

Assess disease severity. Determine airflow limitation, symptom severity, and exacerbation history.

**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 (beta-2-agonists and anticholinergics) are used based on disease severity with the goal of improving symptoms and reducing exacerbations.
• Inhaled corticosteroids – consider adding to bronchodilators for patients with frequent exacerbations or with features suggesting asthma-COPD overlap.

Pulmonary rehabilitation should be considered for all patients with functional impairment.

Oxygen therapy should be titrated to achieve resting and exercise oxygen saturation ≥ 90%.

Acute exacerbation management includes bronchodilators, systemic corticosteroid therapy, and antibiotics.
Consider 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.

Refer patients with severe disease or frequent exacerbations to COPD specialist for co-management.

Palliative care should be discussed with patients with advanced COPD.
Patient education material.
  - COPD Education

**HEDIS indicators.** Managed care purchasers evaluate UMHS performance using the following HEDIS measures:

**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.

**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