Global Strategy for Diagnosis, Management and Prevention of Chronic Obstructive Pulmonary Disease
Clinical Practice Guidelines
Revised, 2014


The following are key components of these recommendations:

- Increase awareness of COPD among health professionals, health authorities, and the general public
- Improve diagnosis, management and prevention
- Decrease morbidity and mortality
- Stimulate research

Diagnosis and Assessment

- Prevention of COPD is to a large extent possible and should have high priority
- Spirometry is required to make the diagnosis of COPD; the presence of a post-bronchodilator FEV1/FVC< 0.70 confirms the presence of persistent airflow limitation and thus of COPD
- The beneficial effects of pulmonary rehabilitation and physical activity cannot be overstated
- Assessment of COPD requires assessment of symptoms, degree of airflow limitation, risk of exacerbations, and comorbidities
- Combined assessment of symptoms and risk of exacerbations is the basis for non-pharmacologic and pharmacologic management of COPD
- Treat COPD exacerbations to minimize their impact and to prevent the development of subsequent exacerbations
- Comorbidities occur frequently in COPD patients—and if present treat to the same extent as if the patient did not have COPD

Therapeutic Options

- In patients who continue to smoke, smoking cessation is very important. Pharmacotherapy and nicotine replacement reliably increase long-term smoking abstinence rates
- Influenza and pneumococcal vaccination should be offered to every COPD patient.
- Appropriate pharmacology therapy can reduce COPD symptoms, reduce the frequency and severity of exacerbations, and improve health status and exercise tolerance.
- Each pharmacological treatment regimen needs to be patient-specific, guided by severity, drug availability and the patient response.
- To date, none of the existing medications for COPD has been shown conclusively to modify the long term decline in lung functions.
- All patients who get short of breath when walking on their own pace on level ground should be offered rehabilitation; it can improve symptoms, quality of life and physical and emotional participations in everyday activities. (Many insurance plans have criteria for ‘approving’ Pulmonary Rehab).

**COPD, GOLD Key Points**

1. Chronic Obstructive Pulmonary Disease (COPD), a common preventable and treatable disease, is characterized by persistent airflow limitation that is usually progressive and associated with an enhanced chronic inflammatory response in the airways and the lung to noxious particles or gases. Exacerbations and comorbidities contribute to the overall severity in individual patients.
2. Consider COPD diagnosis in any patient who has dyspnea, chronic cough or sputum production, and a history of exposure to risk factors for the disease.
3. Spirometry is required to make the diagnosis of COPD.
4. Assessment of COPD includes: symptoms, degree of airflow limitation (using spirometry), risk of exacerbations, comorbidities.
5. Assess Symptoms using validated questionnaire: COPD Assessment Test (CAT) or Clinical COPD Questionnaire (CCQ). British Medical Research Council (mMRC) scale only assesses breathlessness.
6. Assess the degree of airflow limitation using Spirometry:

<table>
<thead>
<tr>
<th>Classification of Severity of Airflow Limitation in COPD (based on Post-Bronchodilator FEV)</th>
<th>In patients with FEV1/FVC&lt;0.70:</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOLD 1</td>
<td>Mild</td>
</tr>
<tr>
<td>GOLD 2</td>
<td>Moderate</td>
</tr>
<tr>
<td>GOLD 3</td>
<td>Severe</td>
</tr>
<tr>
<td>GOLD 4</td>
<td>Very Severe</td>
</tr>
</tbody>
</table>

**Combined assessment of COPD:**

- **Symptoms:**
  - Less Symptoms (mMRC 0-1 or CAT <10) patient is (A) or (C)
  - More Symptoms (mMRC > 2 or CAT > 10) patient is (B) or (D)
- **Airflow Limitation**
  - Low Risk (GOLD 1 or 2) patient is(A) or (B)
  - High Risk (GOLD 3 or 4) patient is (C) or (D)
- **Exacerbations**
COPD Management

- Low Risk $\leq 1$ per year and no hospitalization for exacerbation: patient is (A) or (B)
- High Risk $>2$ per year or $>1$ with hospitalization: patient is (C) or (D)

**Combined Assessment of COPD** When assessing risk, choose the highest risk according to GOLD grade or exacerbation history. One or more hospitalizations for COPD exacerbations should be considered high risk.

<table>
<thead>
<tr>
<th>Patient</th>
<th>Characteristic</th>
<th>Spirometric Classification</th>
<th>Exacerbations per year</th>
<th>CAT</th>
<th>mMRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Low Risk Less Symptoms</td>
<td>GOLD 1-2</td>
<td>$&lt;1$</td>
<td>$&lt;10$</td>
<td>0-1</td>
</tr>
<tr>
<td>B</td>
<td>Low Risk More Symptoms</td>
<td>GOLD 1-2</td>
<td>$&lt;1$</td>
<td>$&gt;10$</td>
<td>$&gt;2$</td>
</tr>
<tr>
<td>C</td>
<td>High Risk Less Symptoms</td>
<td>GOLD 3-4</td>
<td>$&gt;2$</td>
<td>$&lt;10$</td>
<td>0-1</td>
</tr>
<tr>
<td>D</td>
<td>High Risk More Symptoms</td>
<td>GOLD 3-4</td>
<td>$&gt;2$</td>
<td>$&gt;10$</td>
<td>$&gt;2$</td>
</tr>
</tbody>
</table>


**References**


