2010 Bravo Health Chronic Obstructive Pulmonary Disease (COPD) Guidelines

Bravo Health supports the Global Initiative for Chronic Obstructive Lung Disease (GOLD) Guidelines (2009). Guidelines should never supersede clinical judgment. The practitioner, in conjunction with the patient or responsible party, should decide whether these or other recommended services should be performed more frequently, less frequently, or not at all.

ASPECT OF CARE	BACKGROUND INFORMATION	RECOMMENDATIONS
Screening	It is important to obtain a thorough history to screen for risk factors especially cigarette smoking, occupational exposure and outdoor and indoor pollution. The most important risk factor for COPD is cigarette smoking.	At initial assessment and periodically determine risk factors and causes of exacerbations. Attempt to reduce risk factors and most importantly initiate smoking cessation therapies if applicable.
Diagnosis	Symptoms: • Chronic cough that may be intermittent and may not be productive of sputum. • Any pattern of chronic sputum production. • Dyspnea that is progressive, persistent, worse on exercise or worse during respiratory infections. • Repeated episodes of acute bronchitis. • History of exposure to tobacco smoke, occupational dusts and chemicals or smoke from home cooking and heating fuels.	The diagnosis should be confirmed by spirometry if patient has symptoms. Additional tests for the assessment of a patient with stages II-IV COPD include bronchodilator reversibility testing, chest x-ray, arterial blood gas measurement and alpha-1 antitrypsin deficiency screening.
Therapy At Each Stage Of COPD	**Stage 1 Mild COPD** FEV1/FVC<70%, FEV1>=80% predicted. Mild airflow limitation, and sometimes, but not always, chronic cough and sputum production.	• Add short acting bronchodilator (when needed)
	Stage II Moderate COPD FEV1/FVC <70%, 50%<=FEV1<80% predicted. Worsening airflow limitation with shortness of breath typically developing on exertion.	• Add short acting bronchodilators (when needed) • Add regular treatment with one or more long acting bronchodilators (when needed) • Add pulmonary rehabilitation.
	Stage III Severe COPD FEV1/FVC < 70%, 30%<=FEV1<50% predicted. Further worsening of airflow limitation, increased shortness of breath, reduced exercise capacity and repeated exacerbations which have an impact on the patients' quality of life.	• Add short acting bronchodilators (when needed) • Add regular treatment with one or more long acting bronchodilators (when needed) • Add pulmonary rehabilitation • Add inhaled glucocorticosteroids if repeated exacerbations.
	Stage IV Very Severe COPD FEV1/FVC < 70%, FEV1<30% predicted or FEV1<50% predicted plus chronic respiratory failure. Severe airflow limitation. Quality of life is very appreciably impaired and exacerbations may be life threatening.	• Add short acting bronchodilators (when needed) • Add regular treatment with one or more long acting bronchodilators (when needed) • Add pulmonary rehabilitation • Add inhaled glucocorticosteroids if repeated exacerbations. • Add long term care oxygen if chronic respiratory failure. • Consider surgical treatments.

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Therapy At Each Stage Of COPD	**All Stages**	• Patient education is an effective way to: o Accomplish smoking cessation o Improve knowledge of disease and associated signs and symptoms o Improve responses to acute exacerbations o Reduce risk factors • Influenza vaccination annually. • Pneumococcal vaccine: o One dose for persons under 65 who have an FEV1<40% predicted. o One dose for unvaccinated persons age 65 and older. o One dose revaccination for persons age 65 and older if they received the vaccine greater than or equal to 5 years previously and were less than 65 years at time of primary vaccination.