Blue Cross Complete Clinical Practice Guideline Summary

Guidelines for the Diagnosis and Management of Chronic Obstructive Pulmonary Disease (COPD)

The clinical practice guideline applies to Blue Cross Complete of Michigan.

Eligible Population	Key Components	Recommendation
Patients Members ≥ 18 years of age	Diagnosis	• Consider COPD in those with a history of exposure (e.g. occupational exposure) to risk factors for the disease, especially smoking. • Characteristic symptoms of COPD include: cough, increased sputum production, discoloration and dyspnea on exertion. • Perform spirometry on all patients suspected of COPD to establish diagnosis. **[C]** • **A Post-bronchodilator $FEV_1/FVC < 70\%$ confirms the presence of airflow limitation that is not fully reversible**
	Management: Stable COPD	Together with symptoms, spirometry helps stage severity of COPD and can be a guide for specific treatment steps The lower the percentage predicted FEV_1, the worse the prognosis.

I: Mild COPD	**II: Moderate COPD**	**III: Severe COPD**	**IV: Very Severe COPD**
FEV_1/FVC <0.70 $FEV_1 \geq$ 80% predicted · short acting bronchodilators as need [A]	FEV_1/FVC <0.70 FEV_1 ≥50% and < 80% predicted · Daily long-acting bronchodilators (· Inhaled corticosteroids are indicated if hospitalized for frequent COPD exacerbations	FEV_1/FVC <0.70 FEV_1 ≥30% and < 50% predicted · Daily long-acting bronchodilators as before plus inhaled corticosteroids · Oral steroid bursts for exacerbations	FEV_1/FVC <0.70 FEV_1 < 30% of predicted or < 50% predicted plus chronic -respiratory failure · Combination therapy · Oral steroids as needed · Oxygen supplementation

	Therapy for all severities	• Smoking cessation is a primary management goal for COPD **[A]**. Counsel all smokers (and household members) to quit at each visit **[A]**. • Active reduction of risk factors; influenza vaccination **[A]** and pneumococcal vaccine. • Trigger avoidance • COPD education • Pulmonary rehabilitation [A] (if functional impairment) • Assess need for referral to specialist. · May be beneficial at any stage of the disease · When lung function deficits are not consistent with symptoms · To confirm the diagnosis and rule out other diagnoses · Patient with COPD has less than 10-year pack history of smoking · Hospitalized for COPD · Frequent exacerbations · Rapid decline in FEV_1 · Consideration/monitoring of oxygen therapy · Patient may be a candidate for lung transplant or volume reduction surgery (if stage IV)
	Management: Exacerbations	• Generally exacerbations present with worsening in baseline dyspnea, increased sputum volume, and/or increase in sputum purulence. • Outpatient pharmacological management of COPD exacerbations may include a variety of treatments. – Bronchodilators (beta 2 agonist and anticholinergic). Beta agonist preferred due to its rapid onset of action **(A).** Inhaled or systemic **corticosteroids [A]**. – Supplemental oxygen therapy. • Antibiotic therapy may be beneficial **[B] but remains controversial.** The most common bacterial organisms include H. influenzae, S. pneumoniae, and M catar halis. Bactrim and doxycycline are adequate "first-line" agents. Antibiotic choice should be based on *local bacterial resistance patterns*
	Periodic Assessment	• Educate patient/family regarding COPD disease process **[A]**. ▪ Correct use of devices and understanding of medications. ▪ Recognition of COPD exacerbations **[B]**. ▪ Maintain physical and nutritional status. • Quality of life assessment to include, ability to perform daily activities, quality of sleep and screening for depression. • Discussions of end-of-life care **[B]** should take place while COPD is still stable, and following frequent hospital admissions for COPD.

Levels of Evidence for the most significant recommendations: A=randomized controlled trials; B=controlled trials, no randomization; C=observational studies; D=opinion of expert panel
For a copy of the full clinical practice guideline please visit http://blueslink.bcbsm.com/bcn_medadmin/medpp/index.html

[1]Adapted from GOLD *2008 Update*, *Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease (p. 54)*
[2] http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5753a6.htm?s_cid=mm5753a6_e 1-9-09

Last Reviewed 4/6/2021