Blue Care Network Clinical Practice Guideline Summary

Guidelines for the Diagnosis and Management of Chronic Obstructive Pulmonary Disease (COPD) (QM 2071)

The clinical practice guideline apply to Blue Care Network, Blue Care Network Advantage, and Blue Preferred Plus (benefit coverage for Blue Preferred plus may vary depending on the contract)

Eligible Population	Key Components	Recommendation
Patients Members ≥ 18 years of age	Diagnosis	• Consider COPD in any patient with respiratory symptoms and those with a history of exposure (e.g. occupational exposure) to risk factors for the disease, especially smoking. • Characteristic symptoms of COPD include: cough, sputum production that can be variable from day to day, chronic and progressive dyspnea. • Perform spirometry on all patients suspected of COPD to confirm diagnosis. **[C]** ◦ **A Post-bronchodilator FEV_1/FVC < 70% confirms the presence of airflow limitation**
	Management: Stable COPD	Together with symptoms, severity of spirometric abnormality, future risk of exacerbations, and the identification of comorbidities can be a guide for specific treatment steps (see stage table below)

	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 (e.g., pulmonologist, asthma)
		  · 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 with or without 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. influenza, S. pneumonia, and M catarrhalis. Bactrim and doxycydine 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.

I: Mild COPD	II: Moderate COPD	III: Severe COPD	IV: Very Severe COPD
FEV_1 ≥ 80% predicted Few symptoms, low risk of exacerbations · short acting bronchodilators as needed [A]	FEV_1 ≥50% and < 80% predicted More significant symptoms, low risk of exacerbations . long-acting bronchodilators	FEV_1 ≥30% and < 50% predicted Few symptoms, high risk of exacerbations · Daily long-acting bronchodilators plus inhaled corticosteroids if repeated exacerbations · Oral steroid bursts for exacerbations . Consider Daliresp for frequent exacerbations	FEV_1 < 30% predicted or <50% with deoxygenation Many symptoms, high risk of exacerbations · Combination therapy · Oral steroids as needed · Consider oxygen supplementation if oxygen saturation <= 88% or PaO2 <=55

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 *2014 Update, Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease* [2]

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5753a6.htm?s_cid=mm5753a6_e 1-9-09 **Clinical Quality Committee: Approved: August 15, 2012, July 16, 2014**