

COPD-Nurtur Clinical Guidelines

Topic	Optimal Goal	Clinical Intervention Provided – Counseling provided to Participant/Member based on self-management as appropriate
1. Symptoms	Achieve and maintain control of symptoms utilizing the GOLD guidelines to assess, treat and monitor COPD:	<p>Obtain baseline COPD severity classification through the use of the GOLD guidelines¹</p> <p>Discuss pathophysiology of COPD</p> <p>Describe a COPD exacerbation and early warning signs</p> <p>Refer additional needs or case issues to health plan Case Management</p> <p>Provide a Self-management Kit consisting of: Holding chamber (spacer) for metered dose inhaler (MDI) Instructional video for spacer COPD self management guide</p> <p>Collect and evaluate details of the member's medical and lifestyle status upon assessment/baseline call/subsequent phone follow ups to include:</p> <ul style="list-style-type: none"> ▪ Health Care Utilization for the past year (ER Visits and Hospitalizations; missed work days) ▪ Current symptoms ▪ Current medication regime, including type and frequency of rescue medications used. ▪ Co-morbid conditions ▪ Identification of environmental triggers ▪ Home medical equipment use ▪ Quality of Life ▪ Functional Status ▪ Body Mass Index (calculated from height and weight) ▪ Caregiver availability and family support <p>Review member's goals and planning with focused education and problem solving as necessary</p> <p>Review clinical action path and send to physician for clarification of medications as well as instructions for increased symptoms.</p> <ul style="list-style-type: none"> ▪ A review of the self-management plan developed in collaboration with the member's physician according to GOLD guidelines² <p>Re-instruct member or caregiver on any poorly understood topics</p> <p>Assess changes in symptom severity</p> <p>Assess the member's understanding and compliance of disease self-management</p> <p>Perform regular (30, 60 or 90 days) data collection and follow up reporting to the physician if needed</p> <p>Recognize co-morbidities that may impact COPD (Heart disease, diabetes, depression, lung cancer, etc.)</p>
2. Pulmonary Function	Maintain pulmonary function as close to normal as	<p>Inform member on follow up calls or visits to ask their doctor to reassess spirometry, (if appropriate):</p> <ul style="list-style-type: none"> ▪ at least every 12 months to monitor disease progression, or ▪ if there's a substantial increase in symptoms or a complication

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	possible	Field HC to conduct spirometry screening at every in-home visit.
3. Medications and Equipment	Proper use and Compliance Avoid adverse effects	<p>Provide education on appropriate timing, technique and consistency of medication administration.</p> <ul style="list-style-type: none"> ▪ Re-evaluation of patient MDI and spacer technique and cleaning ▪ Re-evaluation of patient DPI technique and cleaning ▪ Re-evaluation of nebulizer techniques and cleaning ▪ Ensure proper instruction of keeping track of MDI content and expiration (calculating or counting puffs) ▪ Encourage that all COPD members carry a form of SABD with them ▪ Ensure that medication chart is kept up to date and encourage them to give it to all of their physicians <p>Assess member's understanding of oxygen use and safety (if applicable)</p> <p>Assess member's use and understanding of mucus clearing devices (i.e. PEP therapy, Flutter valve), if applicable</p>
4. Exacerbations	Manage COPD exacerbations	<p>Assist in identifying triggers (allergens and irritants) and methods to avoid or reduce them.</p> <ul style="list-style-type: none"> ▪ Encourage members to do an environmental assessment and take environmental control/avoidance measures ▪ Special attention should be considered for environment of the bedroom for night time symptoms ▪ Encourage reduction of risk factors (i.e. smoking cessation, occupational exposures, indoor/ outdoor air pollution) <p>Encourage regular cleaning and disinfection techniques of respiratory equipment</p> <p>Teach signs and symptoms and how to avoid infection</p> <p>Teach the importance of recognizing the severity of COPD exacerbations³</p> <ul style="list-style-type: none"> ▪ Seek medical help as appropriate
5. Physical Activity	Maintain normal activity levels, including improving exercise tolerance	<p>Obtain current physical activity status upon assessment (modified based on physical/medical limitations):</p> <ul style="list-style-type: none"> ▪ Provide specific recommendations to control symptomsIf at goal: ▪ Teach proper breathing, relaxation and conservation techniques....If not at goal: ▪ Provide specific recommendations for maintaining current physical activity program <p>Provide education on risk of increasing or decreasing the amount of physical activity as well as pre-medicating prior to physical activity</p> <ul style="list-style-type: none"> ▪ Always consult physician regarding increased physical activity ▪ Decreased activity due to COPD symptoms can lead to obesity which can cause additional breathing problems
6. Management/Prevention	Develop a patient/family/doctor partnership	<p>Encourage and assist with tracking of regular office visits including: physical assessment with breath sounds, pulse oximetry, spirometry, heart rate and respiratory rate</p> <p>Teach importance of keeping a symptom diary</p> <p>Recommend flu and pneumonia immunization (refer them to their physician)</p> <p>Instruct on proper identification of symptoms and appropriate treatment.</p> <p>Teach members to follow treatment plan and keep it up to date in accordance with their physician according to GOLD guidelines²</p>

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¹See attached table. Figure 1-2 – Spirometric Classification of COPD Severity Based on Post-Bronchodilator FEV1

²See attached table. Table 3 – Therapy at Each Stage of COPD

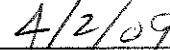
³See attached table. Figure 5.4-1. Assessment of COPD Exacerbations

Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2008. Available from: <http://www.goldcopd.org>.

I have reviewed and approved the Nurtur Clinical Guidelines for COPD and agree with the use in supporting the clinical staff in providing Disease Management services as outlined in the Standards of Care.



Medical Director Signature and Credentials




Date

Approved by the Quality Management Committee



QMC Chairperson



Date

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Figure 1-2. Spirometric Classification of COPD Severity Based on Post-Bronchodilator FEV₁

Stage I: Mild	FEV ₁ /FVC < 0.70 FEV ₁ ≥ 80% predicted
Stage II: Moderate	FEV ₁ /FVC < 0.70 50% ≤ FEV ₁ < 80% predicted
Stage III: Severe	FEV ₁ /FVC < 0.70 30% ≤ FEV ₁ < 50% predicted
Stage IV: Very Severe	FEV ₁ /FVC < 0.70 FEV ₁ < 30% predicted or FEV ₁ < 50% predicted plus chronic respiratory failure

FEV₁: forced expiratory volume in one second; FVC: forced vital capacity; respiratory failure: arterial partial pressure of oxygen (PaO₂) less than 8.0 kPa (60 mm Hg) with or without arterial partial pressure of CO₂ (PaCO₂) greater than 6.7 kPa (50 mm Hg) while breathing air at sea level.

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**Figure 5.4-1. Assessment of COPD Exacerbations:
Medical History and Signs of Severity**

<u>Medical History</u>	<u>Signs of Severity</u>
<ul style="list-style-type: none">• Severity of FEV₁• Duration of worsening or new symptoms• Number of previous episodes (exacerbations/hospitalizations)• Comorbidities• Present treatment regimen	<ul style="list-style-type: none">• Use of accessory respiratory muscles• Paradoxical chest wall movements• Worsening or new onset central cyanosis• Development of peripheral edema• Hemodynamic instability• Signs of right heart failure• Reduced alertness

Clinical Guidelines Approval Form

- I have reviewed and approved the OP CG 3-COPD Clinical Guidelines and agree with the use in supporting the clinical staff in providing Disease Management Services as outlined in the Standards of Care.
- I have reviewed the OP CG 3-COPD Clinical Guidelines and recommend the following prior to implementation:

Name: *A. V. Kogler, M.D.*

Date: *4/2/09*