VA/DoD CLINICAL PRACTICE GUIDELINE FOR THE MANAGEMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Department of Veterans Affairs
Department of Defense

Patient Guide

QUALIFYING STATEMENTS

The Department of Veterans Affairs and the Department of Defense guidelines are based upon the best information available at the time of publication. They are designed to provide information and assist decision-making. They are not intended to define a standard of care and should not be construed as one. Neither should they be interpreted as prescribing an exclusive course of management.

This Clinical Practice Guideline is based on a systematic review of both clinical and epidemiological evidence. Developed by a panel of multidisciplinary experts, it provides a clear explanation of the logical relationships between various care options and health outcomes while rating both the quality of the evidence and the strength of the recommendations.

Variations in practice will inevitably and appropriately occur when clinicians take into account the needs of individual patients, available resources, and limitations unique to an institution or type of practice. Every healthcare professional making use of these guidelines is responsible for evaluating the appropriateness of applying them in the setting of any particular clinical situation.

These guidelines are not intended to represent TRICARE policy. Further, inclusion of recommendations for specific testing and/or therapeutic interventions within these guidelines does not guarantee coverage of civilian sector care. Additional information on current TRICARE benefits may be found at www.tricare.mil or by contacting your regional TRICARE Managed Care Support Contractor.

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Chronic Obstructive Pulmonary Disease

- Chronic obstructive pulmonary disease, or COPD, is a combination of ongoing conditions that affect your lungs and breathing. These conditions can include chronic bronchitis and emphysema.
- COPD can be prevented and treated. It can be recognized by its key characteristic: difficulty breathing, especially when breathing out. However, if you have COPD, you may have other symptoms.

<table>
<thead>
<tr>
<th>Did You Know?</th>
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<td>- Veterans are at higher risk of COPD than those in the general US population. [1]</td>
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<td>- Because some of their activities may pose a risk of environmental and occupational exposure, people in the military should be aware of COPD and know the signs that a person may have it.</td>
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<td>- The physical activity associated with military life may uncover symptoms of COPD earlier among people in the armed forces. Patients in the military or veterans may show signs of COPD earlier in their lives than their civilian counterparts. [2]</td>
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What Causes COPD?
People get COPD for different reasons. Often, people with COPD have been exposed to substances that irritate the lungs for long periods of time. They may smoke tobacco or may have smoked tobacco in the past. They could also be exposed to substances that irritate their lungs as part of their work or home environment. This can cause portions of the lungs to stop functioning as they should.

Figure 1: Images of healthy lungs and lungs affected by COPD

How is COPD Diagnosed?
Your provider (which may be a doctor, physician assistant, nurse practitioner, or other health care provider) can help you determine whether or not you have COPD. If your provider suspects you may have COPD, he or she can arrange for a simple breathing test in order to determine whether you do or do not have the disease.

What are the Goals of COPD Treatment?
The overall goal of treating your COPD is to optimize your health and your quality of life.

<table>
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<th>Goals of COPD Treatment</th>
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<td>• Prevent COPD from progressing</td>
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<td>• Improve symptoms:</td>
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<tr>
<td>o Breathing</td>
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<td>o Exercise tolerance</td>
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<td>o Quality of life</td>
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<td>• Treat and prevent:</td>
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<tr>
<td>o Exacerbations (when symptoms suddenly worsen)</td>
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<td>o Complications</td>
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What are the Options for COPD Treatment?
There are multiple treatment options for COPD that can help you reach the previously listed goals. By consulting with a provider, you can learn more about the available treatment options and how they can help you. Work with your provider to identify treatments that improve your symptoms and your health. The following treatment options are things that your provider may ask you to do at home or to make a part of your normal routine.

Medication
Your provider may prescribe medication that you breathe in, so it goes straight to your lungs. The medication can help you keep your symptoms from worsening or help manage your COPD. With minimal practice and instruction, these medications can be easy to use. You should ask for help and work with your provider to make sure that you are taking it correctly and as directed. There are many different types of medication. These medications work in different ways and affect different parts of the lungs in order to help improve your breathing.

Medications work for different lengths of time depending on the medication type (short-acting or long-acting).

• Short-acting medications work relatively quickly. When you are experiencing symptoms that are worse than normal, you should use short-acting medications.
• Long-acting medications help you to make sure your COPD does not worsen. You should take long-acting medications even if you do not feel like your COPD is worse than normal.

More information on types of medications can be found in Table 1.
Table 1: Types of Medication Used to Treat COPD

<table>
<thead>
<tr>
<th>Medication</th>
<th>How It Works</th>
<th>Types and Abbreviations</th>
<th>How Long It Works</th>
<th>Examples of the Medications</th>
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<tr>
<td>Beta 2-agonist</td>
<td>Relaxes muscles around small airways to increase space inside</td>
<td>Short-acting (SABA)</td>
<td>Works in 1-5 minutes; lasts 3-6 hours</td>
<td>albuterol, levalbuterol</td>
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<td></td>
<td></td>
<td>Long-acting (LABA)</td>
<td>Works in 20 minutes; lasts 4-6 hours</td>
<td>formoterol, salmeterol</td>
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<tr>
<td>Antimuscarinic</td>
<td>Prevents muscles around large airways from tightening</td>
<td>Short-acting (SAMA)</td>
<td>Works in 15 minutes; lasts 6-8 hours</td>
<td>ipratropium</td>
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<tr>
<td></td>
<td></td>
<td>Long-acting (LAMA)</td>
<td>Works in 20 minutes; lasts 24 hours</td>
<td>tiotropium</td>
</tr>
<tr>
<td>Inhaled corticosteroid</td>
<td>Reduces and prevents swelling in the airways</td>
<td>Long-acting (ICS)</td>
<td>Works in a few days - a few weeks</td>
<td>beclomethasone, fluticasone</td>
</tr>
</tbody>
</table>

There are other medications such as theophylline, roflumilast, and chronic macrolides. Your provider may prescribe one of these after consulting with a pulmonologist.

Other Treatment Options

Your provider may discuss other forms of treatment with you. These may include:

- Oxygen therapy
- Supported self-management (working with a case manager to help you manage your COPD), and pulmonary rehabilitation programs
- Telehealth
- Breathing exercises
- Nutrition referral
- Surgery

What Should You Do If Your COPD Worsens?

If you are experiencing an exacerbation, which is a sudden worsening in your ability to breath, an increase in your coughing, or a change in the color of your mucus, you should seek help immediately from the clinic or emergency department. If your provider has given you an action plan, you may begin your medications.

What Else Can You Do To Improve Your Health?

- **Quit smoking and avoid secondhand smoke.** Ask your provider about ways to do this. Consult the Department of Veterans Affairs/Department of Defense Clinical Practice Guideline for Treating Tobacco Use and Dependence (http://www.healthquality.va.gov/guidelines/CD/mtu/) or http://smokefree.gov/.
- **Breathe clean air.** If there is more pollution than usual in the air outside, stay inside. Avoid spraying cleaning products or other substances, such as hairspray, that linger in the air. If you do have to use one of these substances, make sure it is natural and free from harmful chemicals.
• **Eat right and maintain a healthy weight.** If you are underweight, you may not have enough energy to be active or to breathe as well as you can. If you are overweight, your lungs have to work harder. Make sure you eat the right amount of healthy food to keep your body nourished and get to a healthy weight.

• **Get enough rest.** Some people with COPD have trouble sleeping. Do not use sleeping pills or over the counter medications if you are having trouble sleeping. Instead, talk with your provider.

• **Stay positive.** Take steps to reduce stress in your life. Keep a positive outlook. If you feel depressed or anxious, talk about it with your provider.

• **Get vaccinated.** Illnesses such as a cold or the flu may impact you more than others. Make sure to get flu shots annually. Get additional vaccinations, such as the one for pneumonia, as they are needed.

**Questions to Ask Your Provider**

• Is my COPD diagnosis confirmed?
• How is my COPD progressing compared to an average COPD patient?
• Am I taking my medication the correct way? (Take your inhaler with you when you see your provider or clinical pharmacist and show him or her how you use it.)
• What medication should I take when my symptoms are worse than usual?
• Should I take any of my medications all the time?
• When should I go to the emergency department?
• How much activity should I have in my everyday life?
• Are there any special exercises I should be doing?
• Should I change my diet?

**Frequently Asked Questions**

• **If I quit smoking, will it really help my COPD?**
  Yes, if you still smoke, the single best thing you can do to prevent your COPD from getting worse is to stop smoking. Ask your provider how he or she can help you stop smoking. You should also avoid places where other people are smoking. This will help you avoid breathing in secondhand smoke.

• **Is it safe to be around my family and friends?**
  Yes, you should still spend time with your family and friends. COPD is not contagious, and you may feel better after spending time with loved ones. However, if a family member or friend smokes, you should make sure you are not around them when they are smoking. Also, if one of your family members has a cold, a cough, or the flu, try to avoid contact with them; because of COPD, if you catch one of these viruses, you are more likely to have serious complications.

• **Is it safe for me to receive the flu vaccine and other vaccines that my provider recommends?**
  Yes, it is safe for you to receive these vaccines. In fact, because of COPD, it is more important for you to receive the flu vaccine every year and other vaccines that your provider recommends. These can protect you from serious complications that can happen when people with COPD have these respiratory infections.
You Can Find More Information on COPD and Living with COPD Here:

- National Heart Lung and Blood Institute: http://www.nhlbi.nih.gov/health/health-topics/topics/copd/; 301-592-8573 (dial 7-1-1 for access to free Telecommunications Relay Services (TRS))
- Centers for Disease Control and Prevention: http://www.cdc.gov/copd/; 800-CDC-INFO (800-232-4636); TTY: (888) 232-6348

References