

Screening for Chronic Obstructive Pulmonary Disease: U.S. Preventive Services Task Force Recommendations

Summaries for Patients are a service provided by *Annals* to help patients better understand the complicated and often mystifying language of modern medicine.

The full reports are titled “Screening for Chronic Obstructive Pulmonary Disease Using Spirometry: U.S. Preventive Services Task Force Recommendation Statement” and “Screening for Chronic Obstructive Pulmonary Disease Using Spirometry: Summary of the Evidence for the U.S. Preventive Services Task Force.” They are in the 1 April 2008 issue of *Annals of Internal Medicine* (volume 148, pages 529-534 and pages 535-543). The first report was written by the U.S. Preventive Services Task Force; the second report was written by K. Lin, B. Watkins, T. Johnson, J.A. Rodriguez, and M.B. Barton.

Who developed these guidelines?

The U.S. Preventive Services Task Force (USPSTF) is a group of health experts that reviews published research and makes recommendations about preventive health care.

What is the problem and what is known about it so far?

Chronic obstructive pulmonary disease (COPD) is a disease of the lungs and the breathing tubes that bring air to the lungs (airways). The disease usually occurs in cigarette smokers. People with COPD cough and get short of breath. Damage to the lungs and symptoms slowly worsen over time. Doctors treat COPD with drugs that widen and decrease swelling in the airways. Oxygen therapy can help some people with COPD. Pulmonary rehabilitation, which involves patient education and exercise, is another type of COPD treatment.

Spirometry is a breathing test that can diagnose COPD on the basis of a measurement called FEV₁ (forced expiratory volume in 1 second), which is the amount of air that a person exhales in 1 second compared with that of a healthy person of the same age and size. A person with an FEV₁ of 60% exhales about 60% the amount that a typical, healthy person the same age and size exhales in 1 second. Spirometry can sometimes find COPD in people who do not know they have the disease. For this reason, some people wonder whether doctors should include spirometry as part of routine preventive health care.

How did the USPSTF develop these recommendations?

The authors reviewed studies about the benefits and harms of using spirometry to test people who have no symptoms for COPD. Benefits included preventing COPD symptoms. Also, abnormal spirometry results may motivate smokers to quit. Harms included labeling people who might never develop symptoms with the diagnosis of COPD and exposing them to side effects of COPD treatments.

What did the authors find?

Available studies show that spirometry can be helpful in diagnosing COPD in patients who present with breathing symptoms but is not helpful in patients without symptoms. There is little evidence that spirometry helps to select treatment or motivates smokers to quit.

What does the USPSTF suggest that patients and doctors do?

Adults without symptoms should not have routine spirometry to screen for COPD.

What are the cautions related to these recommendations?

These recommendations do not apply to people who have such symptoms as cough or shortness of breath that might be due to COPD. Recommendations may change as new studies become available.

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