

Figure. Screening for chronic obstructive pulmonary disease (COPD) using spirometry: clinical summary of a U.S. Preventive Services Task Force (USPSTF) recommendation statement.

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**Screening for Chronic Obstructive Pulmonary Disease Using Spirometry:
Clinical Summary of a U.S. Preventive Services Task Force Recommendation Statement**

Population	Adult General Population
Recommendation	Grade: D Do not screen for chronic obstructive pulmonary disease using spirometry
Additional population information	This screening recommendation applies to healthy adults who do not recognize or report respiratory symptoms to a clinician. It does not apply to individuals with a family history of α_1 -antitrypsin deficiency.
Risk assessment	Risk factors for COPD include: <ul style="list-style-type: none"> • current or past tobacco use • exposure to occupational and environmental pollutants • age 40 years or older
Screening tests*	Spirometry can be performed in a primary care physician's office or in a pulmonary testing laboratory. The USPSTF did not review evidence comparing the accuracy of spirometry performed in primary care versus referral settings. For individuals who present to clinicians reporting chronic cough, increased sputum production, wheezing, or dyspnea, spirometry would be indicated as a diagnostic test for COPD, asthma, and other pulmonary diseases.
Other approaches to the prevention of pulmonary illnesses	These services should be offered to patients regardless of COPD status: <ul style="list-style-type: none"> • All current smokers should receive smoking cessation counseling and be offered pharmacologic therapies demonstrated to increase cessation rates. • All patients 50 years of age or older should be offered influenza immunization annually. • All patients 65 years of age or older should be offered one-time pneumococcal immunization.
Relevant USPSTF recommendations	Clinicians should screen all adults for tobacco use and provide tobacco cessation interventions for those who use tobacco products. The USPSTF tobacco cessation counseling recommendation and supporting evidence are available at www.ahrq.gov/clinic/uspstf/uspstbac.htm

For a summary of the evidence systematically reviewed in making this recommendation, the full recommendation statement of *Screening for Chronic Obstructive Pulmonary Disease Using Spirometry*, and supporting documents, please go to www.preventiveservices.ahrq.gov. *The potential benefit of spirometry-based screening for COPD is prevention of 1 or more exacerbations by treating patients found to have previously undetected airflow obstruction. However, even in groups with the greatest prevalence of airflow obstruction, hundreds of patients would need to be screened with spirometry to defer 1 exacerbation.

Table 1. What the U.S. Preventive Services Task Force Grades Mean and Suggestions for Practice*

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer/provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer/provide this service.
C	The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is moderate or high certainty that the net benefit is small.	Offer/provide this service only if other considerations support offering or providing the service in an individual patient.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

* USPSTF = U.S. Preventive Services Task Force.

Table 2. U.S. Preventive Services Task Force Levels of Certainty Regarding Net Benefit

Level of Certainty*	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by such factors as: the number, size, or quality of individual studies inconsistency of findings across individual studies limited generalizability of findings to routine primary care practice lack of coherence in the chain of evidence. As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.
Low	The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of: the limited number or size of studies important flaws in study design or methods inconsistency of findings across individual studies gaps in the chain of evidence findings that are not generalizable to routine primary care practice a lack of information on important health outcomes. More information may allow an estimation of effects on health outcomes.

* The U.S. Preventive Services Task Force (USPSTF) defines *certainty* as “likelihood that the USPSTF assessment of the net benefit of a preventive service is correct.” The net benefit is defined as benefit minus harm of the preventive service as implemented in a general primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.