

# Primary-Care Screening Helps Diagnose COPD



By Lorraine L. Janeczko | September 30, 2014

NEW YORK (Reuters Health) - Office-based screening tools help primary care doctors diagnose chronic obstructive pulmonary disease (COPD), but the effects on outcomes are unclear, according to new research.

COPD is often misdiagnosed or undiagnosed, leading to delayed medical care, the researchers say.

"A lot of people with COPD have a lot of symptoms but they don't tell their physician or nurse about them. They don't even admit them to themselves," said lead author Dr. Barbara P. Yawn of the Olmsted Medical Center in Rochester, Minnesota, by phone with Reuters Health.

"People with COPD have a gradual decline in ability to perform activities because of breathlessness, so they change their activities slowly, sometimes over years. Unless I ask the right questions, I don't find that out," she said.

"Having a tool that highlights those symptoms and makes the patient share them with their physician or nurse would help bring the symptoms out in the open so the clinician can act on them," she said.

As reported online September 15 in the American Journal of Preventive Medicine, Dr. Yawn and colleagues investigated whether the COPD Population Screener (COPD-PS) questionnaire, with or without a handheld spirometer (the Vitalgraph copd-6 device), can increase COPD diagnosis and respiratory-related actions by primary care clinicians.

Their SEARCH1 study was a cluster-randomized, single-visit trial in 168 centers in the U.S. conducted over roughly two years. Practices were assigned to one of three groups: the COPD-PS questionnaire plus spirometry testing, the COPD-PS questionnaire only, and usual care (without COPD-PS or spirometry).

Practices did not receive any specific education about COPD or its diagnosis.

Adults aged 40 and above who were visiting participating primary care practices for any reason were enrolled in the study. Of 9,704 enrolled patients, 8,770 had no prior COPD diagnosis and were included in the final analyses.

Patient numbers and demographics were similar in all the groups. Among the analyzed patients, the mean patient age was 60; 3,559 (40.6%) were male; 4,297 (49.0%) were current or ex-smokers; 326 (3.7%) had respiratory complaints and 1,220 (13.9%) had previously been prescribed a respiratory medication.

The number of new, documented diagnoses of COPD was significantly higher in both study groups than in the usual care group over 8 weeks.

The average yield was 0.49%, and 0.13% for controls. Compared to that, the yields were 1.07% for COPD-PS vs 0.20% for controls (OR=2.20, 95% CI=1.26 to 3.84, p=0.006) and 1.16% for COPD-PS plus spirometry vs 0.22% for controls (OR=2.38, 95%CI=1.38 to 4.13, p=0.002).

There were, however, no significant differences in the overall yield of respiratory-related clinician actions between practices using the screening tools and those that carried out usual care procedures.

In two post hoc analyses, though, one that excluded "prescription of new respiratory medication" and another that evaluated only referral for PFT and referral to a pulmonologist, the authors found significant differences between the study groups and usual care group, with a significant positive impact of the COPD-PS and copd-6.

"Most COPD patients are recognized at the time of an exacerbation, which they might call a really bad cold, bronchitis, or pneumonia, or they end up in the hospital. Screening provides the opportunity to identify these patients before they've had these major exacerbations," Dr. Yawn said.

Asked how office-based screenings by PCPs may affect outcomes, Dr. Yawn replied, "We don't have the evidence. We know that diagnosing COPD is worthwhile because, although we have no cure, we have therapy, including medication and pulmonary rehabilitation, that improve quality of life, reduce symptoms and reduce the risk of exacerbation. But we don't yet have any single study that goes from screening all the way through looking at outcomes," she said.

The study was supported by Boehringer Ingelheim Pharmaceuticals, Inc. and Pzer Inc. Various authors, including Dr. Yawn, have had financial relationships or are employed by these companies.

SOURCE: <http://bit.ly/1uVWe8p>

Am J Prev Med 2014.

Reuters Health Information © 2014

Cite this article: Primary-Care Screening Helps Diagnose COPD. *Medscape*. Sep 29, 2014.