Breathing Easier In Tennessee: Employers Mitigate Health and Economic Costs of Chronic Obstructive Pulmonary Disease

By John W. Walsh, Co-Founder and President of the COPD Foundation
Chronic obstructive pulmonary disease (COPD), a progressive lung disease, affects individuals at the peak of their earning and spending power – and triples employers’ health costs compared to employees without COPD.\(^1\) The rate of prevalence of COPD in Tennessee is 8.7 percent. In contrast, the state with the highest COPD rate is Kentucky at 9.3 percent, while the lowest in the contiguous 48 states are Minnesota and Washington, both at 3.9 percent.\(^2\)

Nearly 70 percent of the 24 million Americans with COPD are under the age of 65.\(^3\) But too often, symptoms -- increased breathlessness, frequent coughing, wheezing, tightness in the chest, and constant clearing of the throat -- are dismissed as signs of aging, allergies or frequent colds. While smoking is the primary risk factor for COPD, exposure to second-hand smoke or pollutants and genetic factors also play a role.

In 2010 the U.S. spent $29.5 billion in direct healthcare expenditures, with additional costs not captured in claims due to under-diagnosis and misdiagnosis.\(^4\) For a misdiagnosed employee, what begins as an occasional sick day caused by frequent colds and respiratory infections may evolve into weeks of dealing with greater disability, leading to reduced productivity and higher medical costs due to long-term chronic illness.

**Tennessee: Hit Hard by COPD**

Tennessee has the third highest rate of COPD in the U.S., and COPD is the third leading cause of death, causing almost 2,000 deaths per year.\(^5\)

Currently, the disease affects women at almost two times the rate of men (11.6 percent vs. 6.7 percent). It’s important to note that the lower a person’s income, the more likely they are to have COPD.\(^6\) The rate of prevalence for those making under $15,000 per year is over 19 percent, more than double the average rate of prevalence for Tennessee.\(^7\)
The Behavioral Risk Factor Surveillance System (BRFSS) data for Tennessee showed that:

- Less than 70 percent of adults with diagnosed COPD had received spirometry, a simple breathing test that is the gold standard for COPD diagnosis.
- Over 60 percent of adults with any stage of diagnosed COPD said it negatively affected the quality of their lives.
- 11.7 percent of adults, more than 57,000 people, with COPD were hospitalized or had an emergency room (ER) visit at least once in the last 12 months. Most of those ER visits could have been prevented with early diagnosis and proper treatment and management regimens.

Other significant data included:

- In 2011 there were over 20,000 hospital discharges for COPD. These hospital stays had an average length of 4.2 days and average costs of over $20,000 per stay for principal diagnosis. Costs for hospital stays among people 45-64 were higher than people over 65.
- Almost 50 percent of people in Tennessee currently smoke or have a history of smoking.
- Workers in mining, auto production, and farming – some of Tennessee’s major industries – have shown an increased risk for developing COPD.

To take the first step in avoiding the high cost of COPD in the workplace, visit: www.copdfoundation.org/employertoolkit.

What Employers Can Do

COPD is causing avoidable losses of productivity and higher than necessary healthcare costs. Fortunately, employers in Tennessee and other states can help mitigate financial costs and improve the quality of life for employees living with COPD by taking action now:
**Educate**
Learn about COPD by accessing tools to better understand the full impact and implications of the disease in the workplace. The COPD Foundation has created an employer toolkit (www.copdfoundation.org/employertoolkit) with a calculator that employers can use to estimate how much COPD costs them and the potential savings that could result from better management.

In addition, disease education can teach patients how to prevent or lessen the frequency and severity of acute exacerbations of COPD (a flare-up), thereby decreasing sick days and increasing productivity while at work. Individuals who fail to seek treatment for their flare-ups from their primary care physicians are more likely to be admitted to the hospital. Also, incomplete recovery from flare-ups may be one of the main reasons for faster lung function decline, which may speed up the pace of declining productivity, and lead to premature retirement.\(^{13}\)

**Incentivize**
Establish a benefit plan with employee incentives – a lower cost premium share and lower out-of-pocket costs – for tests, treatments and prescriptions in exchange for following COPD preventive care and taking medication as indicated.

**Leverage**
Ensure that the employee health plan includes coverage for COPD-related care, such as pulmonary rehabilitation services, spirometry and disease management programs. Spirometry is important for avoiding a misdiagnosis and understanding the severity of the disease.

Employers should also capitalize on health plan data that pinpoints gaps in care, and establish goals for continued improvement of the plan’s existing support services, including its ability to identify members who would benefit from coaching or self-management tools. Plans should also adopt and test strategies that improve uptake and effectiveness, such as communications through social media.

**Engage**
Support and engage employees by providing information about COPD and its management. For example, provide a COPD Information Line postcard to connect them to support and education resources, and observe COPD Awareness Month every November, using resources such as those developed by the COPD Foundation and the National Heart, Lung, and Blood Institute.

Identifying employees at risk for COPD is an important step in managing healthcare costs. Employees can answer five easy questions online to see if they are at risk at http://www.copdfoundation.org/screener.aspx. More than 2.7 million Americans have assessed their risk for
COPD this way. Employers can also host an on-site COPD screening day so that employees can receive peak flow and spirometry screening.

Many adults who have COPD are misdiagnosed with asthma. Therefore, getting the right diagnosis and the appropriate treatment is critical. Employers can play a key role in encouraging employees to identify COPD symptoms and seek the medical care they need.

The Importance of Offering Employees a Tobacco Cessation Program
Employee smoking cessation programs have a high 25 percent success rate. Asking participants in a workplace tobacco cessation program if they have COPD provides the counselor with information they can use to individualize the quit approach. Furthermore, stopping smoking is the only proven method that slows the rapid rate of lung function decline.

What's more, smoke-free policies, such as limiting smoking to an area away from the building or prohibiting smoking on the worksite, protect employees from the harmful effects of second-hand smoke.

COPD is the third leading cause of death in the U.S. When diagnosed, COPD is treatable, and individuals with COPD can lead full and productive lives. Employers have everything to gain by offering wellness programs that encourage early screening to facilitate earlier diagnosis. Education and health management can lessen the frequency and severity of COPD flare-ups, resulting in fewer work days missed, reductions in hospital claims, and increased productivity while on the job.

To begin the process of reducing COPD's economic burden, employers must access COPD-related resources and expertise, which is critical for analyzing the status of the company wellness programs relative to COPD outcomes, facilitating the integration of tailored screening and education strategies, and helping define measurable health outcome goals to increase productivity and lower costs.

About the Author
John W. Walsh, who was diagnosed with Alpha-1-related genetic COPD in 1989, is the Co-Founder and President of the COPD Foundation, a not-for-profit organization dedicated to developing and supporting programs, which improve the quality of life through research, education, early diagnosis and enhanced therapy for persons whose lives are impacted by chronic obstructive pulmonary disease (COPD). He is also the Co-Founder of the Alpha-1 Foundation (a research organization) and AlphaNet, Inc. (a unique, not-for-profit disease management services company run by and for patients). He can be reached at 1-866-316-COPD (2673) or info@copdfoundation.org.
1 NBCH and DRIVE4COPD; Action Brief; NBCH.org; September 2012; http://www.nbch.org/nbch/files/ccLibraryFiles/Filename/000000002422/NBCH_AB_COPD_F.PDF; accessed July 10, 2013.

2 Centers for Disease Control and Prevention; Chronic Obstructive Pulmonary Disease Among Adults — United States, 2011; Nov. 23, 2012; http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6146a2.htm?s_cid=mm6146a2_w; accessed July 10, 2013.


4 NBCH and DRIVE4COPD; 2012.

5 Centers for Disease Control and Prevention; 2012.


7 Centers for Disease Control and Prevention; 2012.


11 Centers for Disease Control and Prevention; 2012.

12 NBCH and DRIVE4COPD; 2012.


14 American Cancer Society; 2011.