Every Breath You Take
Effective Management of COPD

Chronic obstructive pulmonary disease, or COPD, affects approximately 24 million Americans and killed 122,000 people in 2000. COPD is the fourth leading cause of death in the United States, following heart disease, cancer, and stroke. And it is the third leading cause of disability in the U.S.

As staggering as these numbers are, the most frightening aspect of this disease is the fact that many afflicted with COPD do not realize they have it until they’ve lost significant lung function. By that time, mundane activities such as walking short distances can become challenging.

COPD progresses slowly, appearing at first as shortness of breath, a cough or wheezing, increased mucus or frequent clearing of the throat. Oftentimes, these symptoms are attributed to a common cold, lack of exercise, or aging, and are therefore unrecognized by patients or underdiagnosed by physicians. Medical experts believe millions of people, 40 years old and older, have the disease but remain undiagnosed.

“COPD is a devastating disease that requires more attention focused on it—by both the public and the medical community,” said Allen Woolf, M.D., senior vice president and medical executive, CIGNA HealthCare.

COPD is used to describe a group of lung diseases, including chronic bronchitis and emphysema. Chronic bronchitis is a thickening of the airway walls and characterized by excessive mucus production. Emphysema is the destruction of lung tissue, which results in collapsing airway walls.

COPD causes damage to the airways and lung tissue, resulting in the obstruction of air moving in and out of the lungs. Many people with COPD are unable to maintain adequate oxygen levels in their blood and some retain high levels of carbon dioxide. The disease has a systemic effect and is characterized by chronic fatigue and increasingly severe shortness of breath or “dyspnea.” Cigarette smoking is the leading cause of COPD in the United States.

AN ALARMING TREND
According to the American Lung Association, smoking causes 80 to 90 percent of COPD cases; and smokers are 10 times more likely than non-smokers to die of the disease. The remaining 10 to 20 percent of COPD cases are attributed to frequent lung infections and exposure to specific industrial pollutants. The illness is responsible for more than 10 million doctor visits per year and more than 2 million hospitalizations.

Traditionally, men accounted for the majority of cases, but now women account for more COPD cases due to their increased rates of smoking over the last four decades. And, until recent years, COPD was considered a disease of the elderly and of limited impact to the working population. But Centers for Disease Control (CDC) data from a study published in 2002 shows that 70 percent of the COPD patients were below the age of 65.

ENSURING OPTIMAL CARE MANAGEMENT
COPD is not curable. However, there are steps that can be taken to relieve the symptoms of the disease in its early stages. Education of both the illness and methods for treating the illness become critical in enabling patients to fully understand what they are facing, and it provides them with the knowledge they need to make an informed decision about their health.

An effective disease management program, one that balances nutrition, exercise, and behavior modification, can also provide relief from another crippling symptom of COPD: depression. A high percentage of COPD patients experience some form of depression as the illness impacts their activity and, in many cases, social interactions.

Disease management can assist COPD patients to cope with anxiety and depression and to focus on a positive program to prolong quality of life.
COPD’S IMPACT
COPD is a devastating disease. It slowly incapacitates patients, robbing them of quality of life, placing tremendous strain on family members, and precluding them from maintaining an active role in the workforce. Their lost wages could cripple their families. Their absence from the workplace lowers productivity and reduces the availability to the organization of skills and experience that, in some cases, cannot be easily replaced. And the medical cost of COPD is in the billions of dollars.

SMOKING CESSATION
Among the most important is smoking cessation. Because smoking is the leading cause of COPD, smoking cessation programs are essential to slowing down or preventing onset of the illness. New research has shown that smoking cessation slows the progressive loss of lung function in COPD patients, increasing their chance of staving off the most debilitating effects of the disease.

The key to a successful smoking cessation program is the patient’s willingness to adhere to a regimen that could include behavior modification, education and such treatments as bronchial dilators to open airways and anti-inflammatory medications, and to finally give up a decades-old habit.

NUTRITION AND SELF-MONITORING SKILLS
Education focuses on two areas: nutrition and self-monitoring skills. Proper nutrition is just as important to the COPD patient as respiratory treatment. A well-nourished body helps fight infections, and it may help prevent illness and cut down on hospitalizations. Unfortunately, malnutrition is a common side effect of the disease. Patients often do not eat properly, due to bad habits or because the difficulty in breathing interferes with eating. Poor nutrition leads to infection and muscle wasting.

Food is fuel for the body, and the COPD patient expends a great deal of energy in the simple act of breathing. Therefore, a proper diet, one that is rich in food that provides the patient with natural energy, is essential for the COPD patient.

In addition to providing energy, diet plays an important role in the body’s ability to fight infection. A person with COPD is at a high risk of developing respiratory infections. A poor diet makes it difficult for the body to fight infections and repair damaged tissues. A diet deficient in calories, protein, and vitamins and minerals has a negative affect on immune function.

PHARMACEUTICALS AND DURABLE MEDICAL EQUIPMENT
The quality of life for a person suffering from COPD diminishes as the disease progresses. During the latter stages of the disease, patients often require supplemental oxygen and may have to rely on mechanical respiratory assistance.

In addition, COPD patients are often required to take daily medications, mainly inhaled bronchodilators to keep airways open, which are central to the symptomatic management of COPD. Patients are also required to have a pneumonia shot and an annual flu shot.

However, none of the existing medications for COPD has been shown to modify the long-term decline in lung function that is the hallmark of the disease. Therefore, pharmacotherapy is used to decrease symptoms and complications.

TELEPHONIC NURSE INTERVENTION
Telephonic nurse intervention provides effective support to COPD patients, with readily available information from a skilled clinician, using up-to-date treatment practices and the latest data on the disease. For the patient, this vital link to a nurse is instrumental in helping patients achieve steady progress in staying on the specified treatment program. The relationship between nurse and patient provides a critical link that helps motivate patients, which in turn improves their willingness to change unhealthy behavior patterns.

A PRICE TO PAY—THE COST OF COPD
COPD costs the United States economy approximately $32.1 billion a year ($18 billion every year for direct medical costs and $14.1 billion a year in indirect costs such as lost wages).

Health care resource use is substantial for COPD patients. Non-respiratory related hospitalizations for COPD patients were two times higher than for asthma patients. The number jumped to more than three times higher for COPD patients than for asthma patients when the hospitalizations were related to respiratory issues.

“This has significant implications for employers,” said Christopher Coloian, vice president, care management for CIGNA HealthCare. “Education will aid in early detection and treatment, which will help an affected person’s ability to be active and productive as long as possible.”

According to a recent study conducted by the American Lung Association, half of all COPD patients (51 percent) said that their condition limited their ability to work. The illness also limited those patients from performing normal physical exertion (70 percent); household...
chores (56 percent); social activities (53 percent); sleeping (50 percent) and family activities (46 percent).”

There are other costs of the disease that go beyond medical bills. The families of COPD patients absorb a tremendous burden, particularly in the later stages of the disease, when mild exertion is difficult and the patient ceases to be ambulatory. Care and transportation of the patient fall to family members. In addition to the strain of lost wages, other factors such as the need to rearrange work schedules, preparing special meals, and, in some cases, modifying one’s living quarters to accommodate necessary equipment, all take a toll on family members who must assume the role of caregiver.

**CALL TO ACTION**

What can you do as a benefits decision-maker to address this issue? More companies than ever have turned to disease management to help control the cost of chronic diseases, such as asthma, diabetes and chronic heart failure. Unfortunately, because COPD has historically been underdiagnosed or perceived to be a condition among the elderly population, and therefore no concern to employers, it is often not included as a disease state within a company’s disease management program.

This could be a serious oversight. COPD is the fourth leading cause of death in the United States. Without expert intervention, without a rigorous regimen of proper nutrition and appropriate exercise, the disease will continue to exact a heavy toll on millions of lives, which will have a large impact on the U.S. economy and on companies’ capacity to stay productive and competitive.

Find out if your company offers COPD as part of its disease management program. If not, contact your disease management provider and ask how your company can offer a COPD program to your employee population. One phone call could have a positive impact on the health of both your employees and your organization.

**FOOTNOTES**

i Centers for Disease Control and Prevention  
ii National Center for Health Statistics  
iii Centers for Disease Control and Prevention  
iv *Breathe Deep*, BenefitNews.com, March 2003  
v Cost and Quality Issues Related to the Management of COPD, 1999  
vi American Lung Association Fact Sheet, October 2003  
vii “Cost and Quality Issues Related to the Management of COPD,” 1999  
viii Disease Management for Chronic Obstructive Pulmonary Disease, National Pharmaceutical Council, Inc., September 2003  
ix Ibid.  
x Ibid.  
xi National Lung Association Fact Sheet, 2003  
xii Ibid.  
xiii American Lung Association Fact Sheet, October 2003