

Technology Innovations Designed to Empower COPD Patients

According to the American Lung Association, patients with Chronic Obstructive Pulmonary Disease (COPD) often say that one of the worst aspects of their illness is the feeling that they have lost control over their health.¹ At Nonin Medical, we are working to empower patients with the innovative pulse oximetry monitoring tools necessary to manage chronic respiratory diseases such as COPD at home. Used by clinicians worldwide, pulse oximetry monitoring is an essential vital stat used to detect, and prevent, complications from low oxygen saturation.

A chronic lung disease diagnosis often requires that adjustments be made to a patient's activities — however, it does not have to mean a life of limitation. With innovative solutions such as the GO₂ fingertip oximeter, Nonin is enabling the shift of this technology into the home so that patients can regain control of their health and also gain an increased awareness to changes in their condition. By providing indication of falling oxygen saturation levels, patients are alerted early on to stop what they are doing and either increase their liter flow, if they are on oxygen, or contact their doctor before their condition worsens.

Whether it's a night out at the movies, to safely walk those extra blocks around the neighborhood, or simply for peace of mind — the GO₂ fingertip oximeter is the perfect companion for any activity. Compact, durable and easy to use, the GO₂ discreetly tucks away in a purse or pocket and provides patients with the assurance that they are within their prescribed oxygen saturation and heart rate range — anywhere, anytime.

COPD: The “Silent Killer”

Affecting an estimated 600 million people worldwide, COPD is a progressive chronic respiratory disease consisting of chronic bronchitis and emphysema. According to the American Lung Association®, COPD is responsible for one death every four minutes in the United States and is currently the fourth leading cause of death (heart disease, cancer and stroke precede it) and is expected to jump to number three by 2020.¹ With no known cure, COPD is known as the “silent killer” because it develops slowly over time and is often mistakenly thought to be non-lethal. By the time a patient recognizes there is a problem, critical lung damage may already have occurred as well as the potential of developing serious respiratory and heart failure problems.¹ In fact, according to the National Heart, Lung and Blood Institute (NHLBI) over 12 million people are currently diagnosed in the U.S., and it is believed that an additional 12 million people have the disease without knowing it.²

Treatment

Pulmonary rehab and long-term oxygen therapy are two non-drug, noninvasive options for managing COPD and improving quality of life.

Pulmonary Rehab

Pulmonary rehab programs are designed to help patients manage their disease under the supervision of a team of medical professionals. Comprehensive in scope, programs may include nutritional counseling, as well as psychological and physical therapies. The American Lung Association states that physical activity is one factor that can slow the development/progression of COPD by effectively working the muscles to slow the decline of lung function. Benefitting patients of all ages, a supervised exercise training and education program can help patients manage their disease and increase their ability to perform daily activities.¹

Oxygen Therapy

Oxygen therapy is the administration of supplemental oxygen, typically from a portable tank through a nasal cannula or mask, for patients with severe COPD. According to the American Lung Association, close to one million people in the U.S. are on long-term oxygen therapy.¹ In order to help patients breathe better, extra oxygen may be needed on either a permanent or periodic basis. The NHLBI states that for those with severe COPD, using extra oxygen may help them:

- Perform tasks or activities with fewer symptoms
- Protect their hearts and other organs from other damage
- Sleep more during the night and improve alertness during the day
- Live longer

Related Facts from the NHLBI:

- 80 to 90 percent of COPD deaths are caused by smoking
- Since 2000, women have exceeded men in the number of COPD-related deaths
- An estimated 721,000 COPD-related hospitalizations were reported in 2005
 - Approximately 65% of all hospitalizations were people 65 years of age and older
- The annual cost to the nation for COPD was \$42.6 billion in 2007

References

- 1) American Lung Association. Information recorded from the American Lung Association's COPD Fact Sheet Web page, http://www.lungusa.org/site/apps/nlnet/content3.aspx?c=dvLUK9O0E&b=2058829&content_id={EE451F66-996B-4C23-874D-BF66586196FF}¬oc=1. Last accessed on 2-18-09.
- 2) National Heart Lung and Blood Institute. Information recorded from the NHLBI's Web page, http://www.nhlbi.nih.gov/health/dci/Diseases/Copd/Copd_WhatIs.html. Last accessed on 2-18-09.