

y its very definition, COPD is a condi-Btion on which most nursing home caregivers focus all of their intuition and medical know-how to improve residents' life quality.

As one of many dreadful and incurable post-industrial revolution diseases, however, COPD is now a beneficiary of a massive international effort to harness mankind's collective diagnostic and treatment experience. It comes in a body of work by the Global Initiative for Chronic Obstructive Lung Disease.

To Todd King, Pharm.D., CGP, and Omnicare's senior director of clinical services for long-term care, managing COPD (chronic obstructive pulmonary disease) is a hopeful exercise marked as much by the fact it is preventable as it is manageable.

"Nursing home caregivers have a great opportunity to have a very real and positive impact on patients with COPD," King told attendees at a McKnight's webinar in April. The session, "Management of COPD in Older Persons," was sponsored by Omnicare, a CVS company.

King addressed the gamut, from risk factors and pre-treatment considerations to the broad array of drug and non-pharmacological therapies available today.

Condition defined

COPD is a common, preventable and treatable disease characterized by persistent respiratory symptoms and airflow limitation due to airway and/or alveolar abnormalities, all of which are typically caused by significant exposure to noxious particles or gases.

Known risk factors include exposure to particulates such as cigarette smoke, indoor and outdoor air pollution, and occupational dust. Other factors include increasing age and recurring chronic respiratory infections. Meanwhile, genetics and malnutrition also can play a role.

The 'GOLD standard'

COPD is a condition whose symptomology and treatment are as complex as the disease itself.

Complicating matters is the fact that most elderly COPD sufferers are afflicted with a host of comorbidities. As patients with COPD continue struggling to catch their breath, they tend to stop being active. "From skeletal muscle wasting and cachexia, to increased cardiovascular risks and osteoporosis to anemia, you can see why it is important to prevent or manage COPD symptoms," King said.

In 2002, the Global Initiative for Chronic Obstructive Lung





WebinarPLUS[†]

Disease (GOLD) guidelines (www. goldcopd.org) were developed by an international community of health professionals to bring sense and order to the management of the disease. King's presentation was based on those auidelines.

"GOLD therapy guidelines are an important update on utilization of medications and managing this condition as it progresses," he said. "As we move through the process of managing patients with this chronic condition, and as it changes and progresses, we have to ensure we're adjusting, processing and utilizing these therapies as much as possible."

The critical step: Diagnosis

King asserts that COPD's complexity and comorbidities make arriving at an accurate diagnosis a challenging task, particularly in a nursing home setting.

For example, spirometry is required to make a proper diagnosis, but the procedure involves a great deal of inhaling and exhaling on the patient's part. For one, King said, spirometry could overestimate severity because of the normal physiological loss of lung volume with age. For another, the frail elderly may not be able to participate in spirometry because of a lack of dexterity, cognitive impairment or unwillingness.

If spirometry cannot be completed, the clinician must rely on key COPD indicators, including dyspnea, chronic cough, chronic sputum production, history of risk factor exposure and family history.

This illustrates one of the many intrinsic benefits behind the GOLD guidelines.

"These factors could actually give you an appropriate pathway to consider a COPD diagnosis without actually having the

SLEUTHING REQUIRED:

Symptoms of functional decline may be the only indicators of a patient in distress.

tools the guidelines recommend," King said.

Pre-treatment considerations

Once diagnosed, it's incumbent on caregivers to understand and accept the limitations of treatments in general before deciding on one, as King illustrated.

First, COPD is a progressive, incurable disease. "A fundamental goal of treatment is to keep the individual stable — in other words, to prevent further exacerbations that can permanently worsen their condition," he stressed. Given even those best efforts, it is common for COPD patients to experience sudden worsening or deterioration of their symptoms, formally referred to as "exacerbations," some of which could invariably



now to remove the drug from the resident," King said. In most cases, stopping therapy is not recommended as the disease progresses.

"Often, de-escalation of medication could put patients at risk for exacerbation or hospitalizaand infections; relieve anxiety or depression; improve quality of life and reduce mortality.

Non-pharma approaches

King stressed that keeping COPD residents up-to-date with their vaccines is an important tool in staying ahead of the disease because of their primary value in stemming or mitigating lung infections and other respiratory conditions.

Where appropriate, drug-free therapy can be a viable option for nursing home residents suffering from COPD.

Such considerations include smoking cessation, physical activity and education.

"Even in residents who have smoked for decades, smoking cessation is the single most effective way to improve outcomes for all stages of COPD, as it substantially benefits lung function

"Often, de-escalation of medication could put patients at risk for exacerbation or hospitalization."

send them to the hospital. A process called de-escalation involves, among other things, maintenance therapy and if needed, additional treatments such as inhaled corticosteroids.

Addressing exacerbations, in fact, can challenge the way most caregivers approach treating chronic conditions in the elderly.

"We're always trying to reevaluate therapies to determine whether or not we can take them away, whether it's appropriate tion," he explained. "So we need to keep these treatment concepts in mind."

Treating COPD in an elderly person who smokes can be especially difficult. The upside? Smoking cessation is the only therapy that's shown to slow the disease's progression.

Among the other treatment goals for long-term care residents: slow the progression of lung disease; provide symptomatic relief; prevent and treat exacerbations

For more information

The original webcast is available at www.mcknights.com/ April9webinar.

WebinarPLUS[†]

by slowing respiratory decline," King said. And while COPD can greatly impact a resident's ability to actively exercise, lack of physical activity results in further deconditioning, worsening symptoms, and reduced quality of life. "We need to encourage folks to stay active, especially if they can do upper body exercises that will help them with inspiratory muscle training."

Pre-drug assessments

The GOLD guidelines recommend one approach of classifying four COPD patient groups based on combined assessments, while connecting specific initial medication treatments. King explained it this way:

- Group A, which includes a low exacerbation risk (up to once annually) and mild to moderate symptoms. Treatments include any bronchodilator, short-acting beta agonists (SABA), long-acting muscarinic antagonists (LAMA), and long-acting beta-agonists (LABA).
- Group B, which includes a low exacerbation risk but more severe symptoms and significantly impaired health status from COPD. Treatments include long-acting bronchodilators, LABAs and LAMAs.
- Group C, which includes a high exacerbation risk of two or more per year, at least one of which results in hospitalization, and mild or moderate symptoms that frequently become severe. Treatments include LAMAs.
- Group D, which includes a high exacerbation risk of two or more per year, at least one of which results in hospitalization, and more severe symptoms that frequently decompensate, along with



"Smoking cessation is the single most effective way to improve outcomes for all stages of COPD."

significantly impaired health status from COPD. Treatments include LAMAs, a LAMA/LABA combination and inhaled corticosteroids (ICs)/I ABA combination (when eosinophil levels are at or greater than

"Determining the COPD patient group not only helps define the appropriate initial treatment options, but it also helps us categorize the severity of the disease," King said. He did caution, however, that in these four groups, the severity of symptoms and the degree of airflow limitation demonstrated by spirometry may not correlate.

King stressed that assessments with these four groups take into consideration the severity of both airway limitations and symptoms, and should be a starting point for newly diagnosed patients. If the treatments are successful, additional medications aren't needed.

Medication classes to consider

King reviewed a number of classes of drugs and delivery devices that are used to achieve various outcomes and under specific circumstances.

There are myriad considerations with each class and device. For example, metered-dose inhalers often require more dexterity and slow, deep inhalation, while a dry powder inhaler may require a more rapid inhalation to actuate.

Nebulizers require additional administration time, infection control considerations, adherence concerns and lack critical quality data, he added.

Other considerations are cost and the appropriateness of combination products. Ultimately, the correct choice of both medication and device will improve adherence and improve outcomes.

When choosing medications, King stressed the importance of matching the product to the

NEVER TOO LATE:

Even residents who have smoked for decades can benefit from quitting, experts point out.

severity of disease and the individual's ability to adhere to the therapy.

Major classes include inhaled SABA and LABA and inhaled LAMA, some of which include popular "rescue" inhalers and medications.

Other meds may include:

- Methylxanthines (theophylline is one example), which is not recommended unless other long-term treatment bronchodilators are unavailable or unaffordable.
- Oxygen. Long-term administration of oxygen (greater than 15 hours per day) has been shown to increase survival in those with severe resting hypoxemia.
- Mucolytics (examples include acetylcysteine and quaifenesin).

Conclusions

If any COPD "clues" like dyspnea, fatigue, weight loss, cough, or anxiety and depression crop up, caregivers should immediately notify nursing to ensure the most appropriate prescriber response, King said.

"Symptoms or a functional decline may be the only indicators we get to identify the COPD patient in distress," he explained. "Early intervention and tailoring of maintenance medications are key to preventing exacerbation and hospitalization." ■

Editor's note

This McKnight's Webinar Plus supplement is based on a similarly named webinar presented on April 9. The event was sponsored by Omnicare. The full presentation is available at www. mcknights.com/April9webinar.