

## **Q&A Summary**

### **COPD: Optimal Management and Readmission Avoidance**

*Responses completed by: Markesha Daniel, MD, National Accounts Medical Director, Clinical SME for COPD, Optum, Population Health Solutions and Prevention*

#### **At what point is liquid oxygen utilized?**

Liquid oxygen is used in portable oxygen systems.

Liquid oxygen does not require a high pressure container for oxygen storage; rather, a thermos-like device called a Dewar Flask is used. One liquid liter of liquid oxygen expands to nearly 1,000 liters of gaseous oxygen deliverable to the patient. Liquid oxygen also offers safe and easy transfer (known as transfilling) of oxygen to an ambulatory unit from a main storage device or certain types of oxygen concentrators.

Most patients who are active away from their stationary system prefer to use a lightweight liquid oxygen system combined with an oxygen pulsing device to maximize ease of portability and duration of oxygen supply.

Portable oxygen delivery and oxygen conserving devices:

[https://www.uptodate.com/contents/portable-oxygen-delivery-and-oxygen-conserving-devices?search=liquid%20oxygen&source=search\\_result&selectedTitle=1~11&usage\\_type=default&display\\_rank=1](https://www.uptodate.com/contents/portable-oxygen-delivery-and-oxygen-conserving-devices?search=liquid%20oxygen&source=search_result&selectedTitle=1~11&usage_type=default&display_rank=1)

#### **For a COPD patient with co-morbidity of asthma, would an asthma action plan and peak flow meter be at all useful?**

Global Initiative for Asthma (GINA) and Global Initiative for Chronic Obstructive Lung Disease (GOLD) published diagnostic criteria and recommendations for management of such patients, “Global Initiative for Asthma (GINA) and GOLD: Guidelines for the Diagnosis of Diseases of Chronic Airflow Limitation — Asthma, COPD and Asthma-COPD-Overlap Syndrome (ACOS)” (2015) but noted that further research is necessary “to guide better recognition and appropriate treatment.”

It was recommended that individuals with asthma-predominant features follow an asthma-treatment algorithm; individuals with COPD-predominant features follow a COPD-treatment algorithm. If there are balanced features and the patient’s assessment is ACOS, the default recommendation was to start treatment based on an asthma algorithm. “This approach recognizes the pivotal role of ICS (inhaled corticosteroids) in preventing morbidity and even death in patients with uncontrolled asthma symptoms.”

This consensus did not mention the utility of action plans or peak flow meters.

However, both asthma and treatment algorithms include action plans, so I highly recommend all individuals with chronic airflow limitations have an action plan in place.

Peak flow meters are indicated in the monitoring of asthma.