Understanding the Different Modalities of Supplemental Oxygen

Supplemental oxygen is a medical treatment that is prescribed for patients with below-normal blood oxygen levels. Supplemental oxygen comes in several modalities, which differ in weight, portability, delivery capacity, and delivery method.

However, many Medicare patients struggle to access the oxygen modality that is needed for them to live their fullest possible lives. Medicare frequently reimburses supplemental oxygen at rates lower than the cost of portable modalities, especially liquid oxygen.

Home Stationary Oxygen Concentrators

- **Weight:** 20-50 pounds, similar to a full checked suitcase.
- **Portability:** Stationary, often with wheels.
- **Power Source:** Plug-in.
- **Oxygen Delivery Capacity:** Up to 10 liters per minute of continuous oxygen flow.
- **Convenience:** At-home concentrators are reliant on electricity and are not portable, making it difficult for patients to leave home. They typically include a 50 foot extension with a cannula to allow the patient to move around in the home.

Compressed Oxygen

- **Weight:** Portable oxygen tanks weigh 3-20 pounds, similar to a gallon of milk or a large bowling ball, and ranging in size from that of a wine bottle to 2.5 feet tall.
- **Portability:** Tanks are portable, either with a bag or pulled in a trolley.
- **Power Source:** None needed.
- **Oxygen Delivery Capacity:** Up to 10 liters per minute of continuous oxygen flow.
- **Convenience:** At high flow rates, oxygen tanks may last less than an hour, requiring multiple to leave the house. While patients can carry smaller tanks, they are bulky, often being wheeled in a trolley or put in backpacks. Tanks must be regularly replaced by oxygen suppliers.

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Portable Oxygen Concentrators (POCs)

- **Weight:** 3-10 pounds, similar to a bag of flour, though additional batteries add 1-5 pounds each, similar to carrying a bag of oranges for each battery.
- **Portability:** Designed for travel and mobility.
- **Power Source:** Batteries.
- **Oxygen Delivery Capacity:** Less than 2 liters of oxygen per minute, in pulse doses.
- **Convenience:** POCs do not provide enough oxygen for patients who need higher flow rates. Models that produce more oxygen are heavier with shorter battery life, requiring patients to carry multiple batteries with them during outings.

Liquid Oxygen

- **Weight:** 3-20 pounds, similar to a fire extinguisher.
- **Portability:** Highly portable; offers longer duration than compressed gas.
- **Power Source:** None needed.
- **Oxygen Delivery Capacity:** Up to 15 to 20 liters per minute of continuous oxygen flow.
- **Convenience:** Liquid oxygen can deliver higher flows of oxygen and can be stored in smaller containers. Most patients who need high flow oxygen are unable to access liquid oxygen due to low Medicare reimbursement rates.