STAYING ACTIVE WHILE USING OXYGEN

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How do I qualify for oxygen?

- SpO2 ≤ 88% at rest, patient qualifies

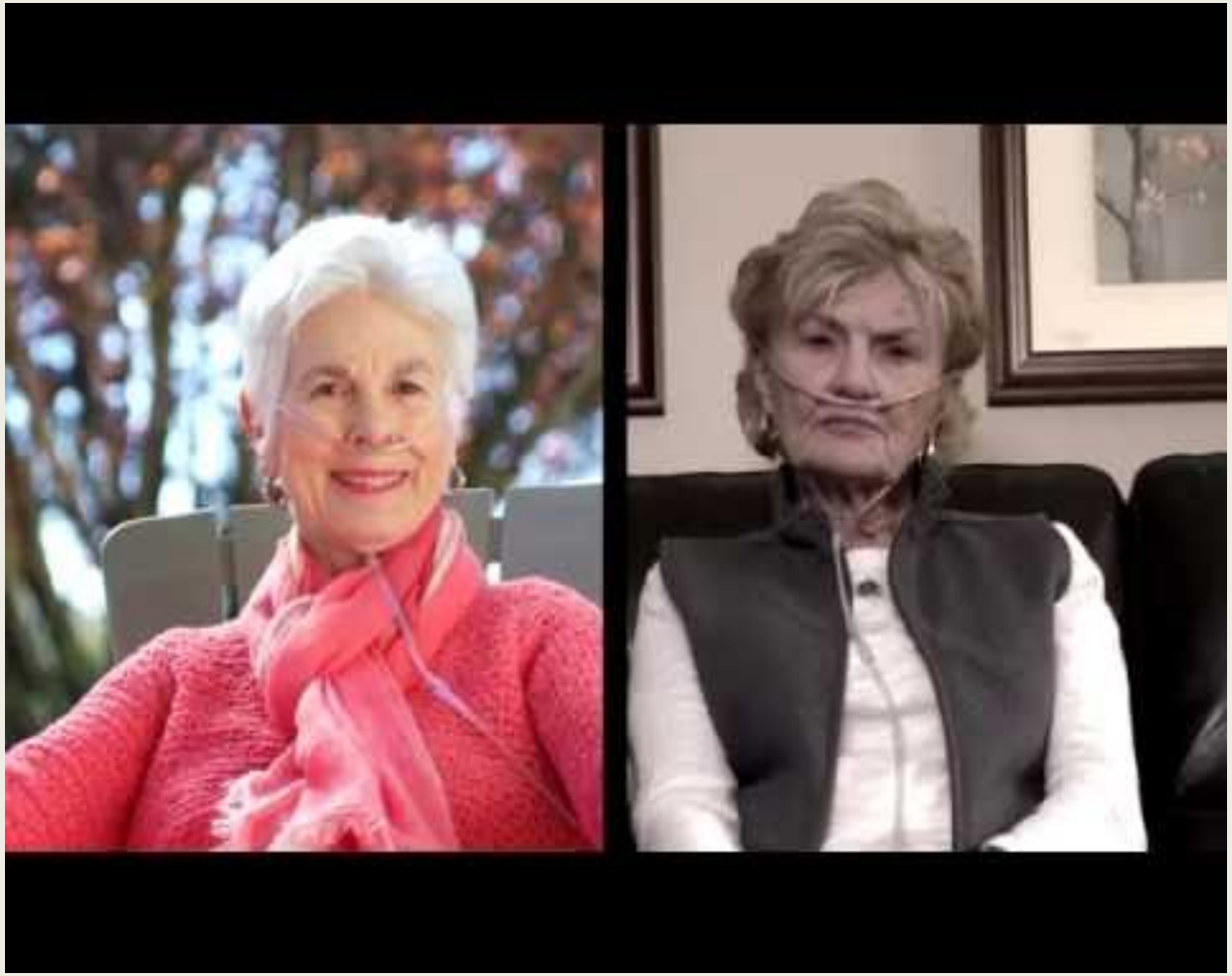
- SpO2 > 88% at rest, the following saturations must be documented:
  - *SpO2% = _____ resting on RA*
  - *SpO2% = _____ ambulating on RA*
  - *SpO2% = _____ ambulating on ____ LPM oxygen*

If patient only needs O2 at night – determined by overnight oximetry

Two Different Types of Oxygen Delivery

Patient's Definition of 2 types of Oxygen Delivery

https://youtu.be/7imr99Jreck



Pulse Dose & Continuous Flow

Continuous flow

- Steady flow oxygen throughout inhalation and exhalation
- CF= Liter of oxygen/minute

Pulse Dose

- On Demand/Pulse Dose (PD)
- Oxygen is only delivered during inhalation
  - Fixed bolus volume-mL/breath
  - Fixed minute volume-mL/minute
  - PD setting of 2 does NOT = 2L/min
  - PD setting of 2 on one POC does NOT = PD setting of 2 on another POC

Pulse Dose

- **Fixed Bolus Volume – mL/breath**

- A **predetermined bolus size** is delivered regardless of breathing rate.
- At very high respiratory rates, there may be a drop in oxygen purity because the total volume of O2 being delivered in the course of each minute exceeds the production capacity of the POC.

- **Fixed Minute Volume**

- A **predetermined volume** of O2 is produced for each POC setting over the course of a minute. The bolus size is determined by respiratory rate (minute volume/respiratory rate).
- At higher respiratory rates, bolus size decreases, but **total** amounts of oxygen delivered per minute and oxygen purity remain the same.

Continuous Flow VS Pulse Dose

- **Continuous Flow**
  - Most tolerate CF and maintain better oxygenation levels
  - Works well with mouth breathers
  - POC's are larger, heavier, batteries don't last as long
- **Pulse Dose**
  - Must breathe through nose for POC to sense inhalation
  - Lighter, smaller, batteries last 2-5 times longer with PD
  - Some small models are very noisy

What equipment is covered?

Patient requires O2 with activity or 24/7

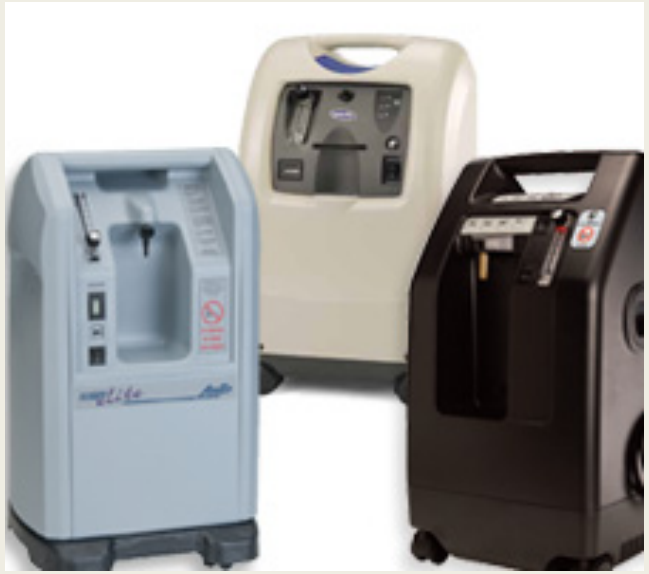
- Stationary concentrator and
- 1 form of portable oxygen
  - Portable concentrator
  - OR
  - Multiple Tanks

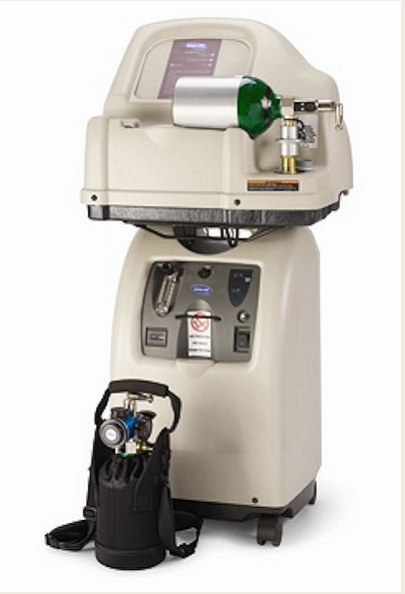
Patient only needs O2 at night

- –stationary concentrator

Types of Stationary Concentrators

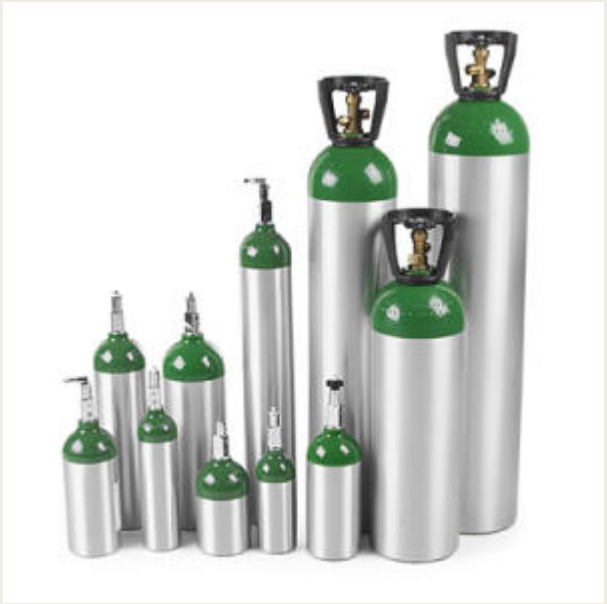
- Normally Start out with Concentrator that is up to 5 LPM
- If oxygen requirement is larger, company changes out to a concentrator that can do up to 10 LPM
- Currently, the highest on the market is 10 LPM



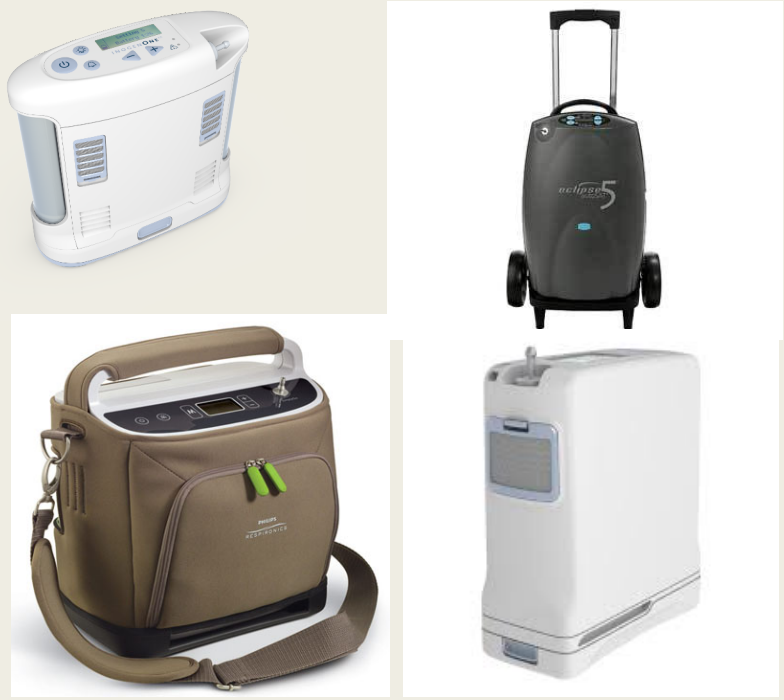


Types of Portable Oxygen

- Oxygen tanks



- Portable Oxygen Concentrator



Traveling with Oxygen

- All airlines require you to have a POC with 3 times the battery duration needed. Must notify airline you plan to travel with POC.
- Home care doesn't supply POC and this cost is covered by you!
- If traveling on a cruise, they will need to be notified as well
- Always check prior to traveling

- Where can you rent a POC?
  - Home care companies such as Lincare and Apria
    - Need at least 4-6 week notice and need a prescription from your doctor
  - From an independent company
    - Need at least 3-6 weeks and need a prescription

Purchasing your own POC

- You will need a prescription from your doctor
- Most units cost from $2500-4000
- Be aware most carried units only go up to 5 PULSE Dose
- Highest CONTINUOUS Flow is 3 LPM
- Your oxygen requirements may change over time

- Good references if you would like to purchase your own unit
  - Oxygen Express: Mike Quinlin
    o2-express.com
  - Oxygenconcentratorstore.com
  - Inogen.com
  - Store.mainclinicsupply.com

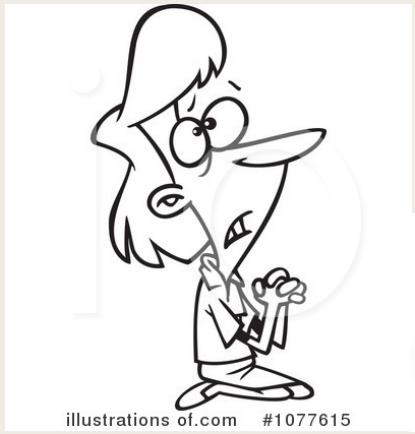
If Requiring a High Liter Flow of Oxygen

- Testing must be done on 4 LPM
  - SpO2 on 4 LPM at rest
  - SpO2 on 4 LPM with ambulation
  - SpO2 on ___LPM with ambulation

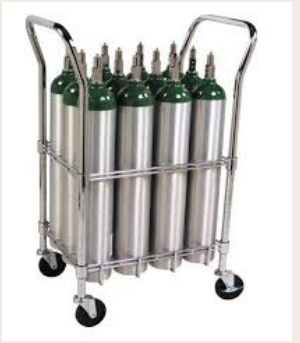
- If patient qualifies, they will be upgraded to a high flow stationary concentrator with a maximum flow of 10 LPM

Oxygen Options on High Liter Flow

- Everyone asks if they can have a POC. POC will not give you the amount of oxygen your body needs



- Stationary Concentrator
- Tanks, Tanks, and more Tanks



OXYMIZER RESERVOIR CANNULA

Oxymizer Reservoir Cannula

- Larger bore and tubing to accommodate higher flows
- Can be used at flows as high as 10 LPM
- Can only be used with continuous flow devices
- Reservoir stores oxygen during exhalation and delivers bolus as well as set flow during inhalation
- Increases oxygenation
- In some cases, enhances patient comfort

Things to keep in mind!

- The higher a person's oxygen requirement, the less likely pulse dose will work effectively for them
- Currently the highest continuous flow from a POC is 3 LPM
- The pulse dose settings of 7-9 on the larger POC's are "rescue" settings-they can only be used for a brief period of time
- Travel rentals are not covered by insurance
- Only POC's can be taken on flights
- The Oxymizer can **only** be used with continuous flow