

Karla Schlichtmann, RRT

How do I qualify for oxygen?

SpO2 < 88% at rest, patient qualifies</p>

• 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



Patient requires O2 with activity or 24/7

- Stationary concentrator and
- <u>1</u> form of portable oxygen
 Portable concentrator
- <u>OR</u>
 - Multiple Tanks

Patient only needs O2 at night

 stationary concentrator

What equipment is covered?





Types of Stationary Concentrators

Typically start out with concentrator that goes up to 5 liters per a minute (LPM)

If oxygen requirment is greater than 4 liters per a minute (LPM), upgraded to high flow concentrator. It can deliver up to 10 LPM!

Currently the highest LPM on the market is 10 LPM



Ε

Types of Portable Oxygen

Oxygen Tanks



Types of Portable Oxygen





- Portable Oxygen Concentrator (POC)
 - Most requested is Inogen (only does pulse dose)
 - Max out at 3 LPM







Refillable Home System

- Unit attaches to home concentrator
- Home care typically provides two tanks
- If you would like additional tanks, there is normally a fee
- Can do both pulse dose and continuous flow



Pulse Dose VS Continuous Flow

Continuous Flow

- Most tolerate CF and maintain better oxygenation levels
- Works well with mouth breathers
- POCs are larger, heavier, and 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 than with CF POC
- Some small models are very noisy



Pulse dose are small boluses of oxygen that are typically triggered by you breathing through your nose

Pulse dose conserves your oxygen tanks

Most portable units use Pulse Dose

Your doctor needs to order you for a conserving device for you to be evaluated by your home care company

Pulse Dose



Pulse Dose



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.



Steady flow oxygen throughout inhalation and exhalation

CF= Liter of oxygen/minute

Continuous Flow



Types of Nasal Cannulas







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 exhalaton and delivers bolus as well as set flow during inhalation
- Increases oxygenation
- In some cases, enhances patient comfort



How to Check Oxygen Values at Home

- Portable Oximeter
 - Measure values while doing activity as well as when at rest
 - Maintain values 88% or higher
 - Values 87% or lower mean you need the oxygen!!!
 - People have purchased through
 - Amazon.com
 - Walmart.com
 - CVS



- ANY TIME you are MOVING!
 - Examples:
 - Walking from the house to the car
 - Walking up stairs
 - Walking from sofa to and from bathroom
 - Taking a shower
 - Folding laundry or doing household chores
 - Grocery shopping
 - Lifting items



If Your Oxygen Level Drops While Moving BUT Recovers While You Sit Down You STILL NEED OXYGEN

 Famous patient line, "Oh I thought if I sat down and my numbers came back up, I was ok."



THIS IS OUR MOST PORTABLE TANK ... INFORTUNATELY IT ONLY LASTS 3 MINUTES.





MASSACHUSETTS GENERAL HOSPITAL

Karla Schlichtmann, RRT

Chronic Care, Coordinator Respiratory Care Services

Massachusetts General Hospital 55 Fruit Street, Warren 1225 Boston, MA 02114 email: kschlichtmann.partners.org Tel: 617-724-4496 Pager: 22798 Fax: 617-724-4495 Page: 617-724-5700

How to contact me

