Oxygen
Do I need it?
Should I use it?

Karla Schlichtmann, RRT
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
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

What equipment is covered?
Typically start out with concentrator that goes up to 5 liters per minute (LPM). If oxygen requirement is greater than 4 liters per minute (LPM), upgraded to high flow concentrator. It can deliver up to 10 LPM! Currently the highest LPM on the market is 10 LPM.
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

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<tr>
<th>Continuous Flow</th>
<th>Pulse Dose</th>
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<tr>
<td>• Most tolerate CF and maintain better oxygenation levels</td>
<td>• Must breathe through nose for POC to sense inhalation</td>
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<tr>
<td>• Works well with mouth breathers</td>
<td>• Lighter, smaller, batteries last 2-5 times longer than with CF POC</td>
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<td>• POCs are larger, heavier, and batteries don't last as long</td>
<td>• Some small models are very noisy</td>
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Your doctor needs to order you for a conserving device for you to be evaluated by your home care company.

Most portable units use Pulse Dose.

Pulse dose conserves your oxygen tanks.

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

Traditional
Up to 6 LPM

High Flow
Up to 15 LPM

Oxymizer
Up to 15 LPM
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
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
What is Activity?

- 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."
OXYDOG: THE DISCREET MOBILE OXYGEN CONCENTRATOR

* OXYCAT also available

NEW PRODUCT SPOTLIGHT

THIS IS OUR MOST PORTABLE TANK...
Unfortunately it only lasts 3 minutes.

How to contact me

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