Oxygen concentrators are medical devices that concentrate the oxygen in room air and deliver it to patients who have significant hypoxemia. Oxygen concentrators may be categorized by whether they are portable or stationary.

### Oxygen billing criteria

Oxygen equipment is covered by Medicare for patients with significant hypoxemia who meet the medical documentation, laboratory evidence and health conditions specified in the Medicare national and local coverage determination policies. Conditions for which oxygen therapy may be covered include severe lung diseases (e.g. COPD, cystic fibrosis and bronchiectasis), as well as hypoxia-related symptoms expected to improve with oxygen therapy (e.g. pulmonary hypertension, recurring congestive heart failure due to chronic cor pulmonale, erythrocythemia and nocturnal restlessness).

Coverage is also contingent upon documentation of a qualified blood gas study (oximetry test or arterial blood gas test) that meets the oxygen group coverage criteria (see next page).

### Coverage criteria

Home oxygen therapy is reasonable and necessary only if all of the following conditions are met:

1. The treating physician has determined that the patient has a severe lung disease or hypoxia-related symptoms that might be expected to improve with oxygen therapy, and
2. The patient’s blood gas study meets the criteria stated below, and
3. The qualifying blood gas study was performed by a physician, qualified provider or supplier of laboratory services, and
4. The qualifying blood gas study was obtained under the following conditions:
   - If the qualifying blood gas study was performed during an inpatient hospital stay, the reported test must be the one obtained closest to, but no earlier than, two days prior to the hospital discharge date, or
   - If the qualifying blood gas study was performed outside of an inpatient hospital stay, the reported test must be performed while the patient is in a chronic stable state (i.e. not during a period of acute illness or an exacerbation of their underlying disease) and
5. Alternative treatment measures have been tried or considered and deemed clinically ineffective.

In this policy, the term “blood gas study” (BGS) refers to either an oximetry or arterial blood gas (ABG) test.

### Table: Oxygen concentrator reimbursement

<table>
<thead>
<tr>
<th>Device</th>
<th>Description</th>
<th>HCPCS Code</th>
<th>Medicare Jan 2019 former Competitive Bid Area rate* ceiling - floor</th>
<th>Medicare Jan 2019 non-CBA non-rural rate* ceiling - floor</th>
<th>Medicare Jan 2019 non-CBA rural rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen concentrator</td>
<td>Single delivery port, capable of delivering 85% or greater oxygen concentration at the prescribed flow rate</td>
<td>E1390</td>
<td>$86.24 - $65.44</td>
<td>$134.71 - $68.99</td>
<td>$134.71</td>
</tr>
<tr>
<td>Portable oxygen concentrator</td>
<td>Portable oxygen concentrator, rental</td>
<td>E1392</td>
<td>$39.36 - $31.98</td>
<td>$44.32 - $33.84</td>
<td>$44.32</td>
</tr>
</tbody>
</table>

*Oxygen reimbursement is a bundled payment. All options, supplies and accessories are considered included in the monthly rental payment for oxygen equipment. Non-CBA non-rural rate includes the non-contiguous (Alaska, Hawaii and United States territories) rates. CMS DME19-A January 2019 DMEPOS fee schedules.
Medicare’s oxygen coverage criteria divide patients into three coverage groups (Group I, II and III). Payment is available for patients whose test results place them in either Group I or II.

**Group I criteria include any of the following:**
An ABG at or below 55 mm Hg or oxygen saturation (SAT) at or below 88% and is performed:
1. At rest, or
2. During exercise (three tests), or
3. During sleep for at least five minutes, or
4. During sleep with signs of hypoxemia and test shows a decrease in the ABG of more than 10 mm Hg or a decrease in the SAT of more than 5% from baseline for at least five minutes.

Initial coverage for patients meeting Group I criteria is limited to 12 months or the physician-specified length of need, whichever is shorter. (Refer to the “documentation requirements” section for information on recertification.)

**Group II criteria include:**
1. An ABG between 56–59 mm Hg or SAT at 89%  
   a. Follows same testing requirements as Group I, and
2. Patient has one of the following conditions:  
   a. Dependent edema suggesting congestive heart failure, or  
   b. Pulmonary hypertension or cor pulmonale, or  
   c. Erythrocythemia with a hematocrit greater than 56%

Initial coverage for patients meeting Group II criteria is limited to three months or the physician-specified length of need, whichever is shorter. (Refer to the “documentation requirements” section for information on recertification.)

**Group III includes** patients with arterial PO2 levels at or above 60 mm Hg or arterial blood oxygen saturations at or above 90%. Group III patients are generally not covered. Refer to the Oxygen and Oxygen Equipment Local Coverage Determination policy for complete Group I, II and III coverage criteria.

**Below are documentation requirements for:**

**Supporting initial oxygen medical necessity:**
- Dispensing order
- Detailed Written Order (DWO) or Certificate of Medical Necessity (CMN) if it contains the same information as required in a DWO²
- Medical records¹ that support the patient meets the Local Coverage Determination (LCD) coverage and payment requirements:
  - Patient Authorization
  - Continued Use
  - Continued Need
  - Proof of Delivery

**Ongoing coverage:**
- Recertification CMN
  - Group I: 12 months after initial certification with most recent BGS performed prior to 13th month of therapy  
  - Group II: three months after initial certification with most recent BGS performed between 61st and 90th day following initial certification
- Medical records documenting that the patient was seen and re-evaluated by the treating physician within 90 days prior to the date of any recertification.³
- Continued medical need for the equipment, accessories and/or supplies is verified by either:  
  - A properly completed CMN with a specified length of need, or  
  - A recent refill order by the treating physician, or  
  - A recent change in prescription, or  
  - Timely documentation in the patient’s medical record specifying item usage

**Portable oxygen systems:**
- Medical records supporting that the patient is mobile within the home and the qualifying blood gas study was performed at rest (awake) or during exercise.

**Liter flows greater than 4 LPM:**
- A copy of the blood gas study showing blood gas levels in the Group I or Group II range while the patient was receiving oxygen at the rate of at least 4 LPM
Q & A

Q: When oxygen qualification testing is obtained from a titration polysomnogram, is portable oxygen covered?
No, as with overnight oximetry, only stationary oxygen may be justified based on titration polysomnography (PSG).4

Q: What testing is required for patients with suspected or known obstructive sleep apnea (OSA) to qualify for home oxygen?
During qualification testing, the patient must be in a chronic stable state, meaning obstructions need to be resolved during testing. Therefore, an OSA patient must qualify while they are awake or during a titration PSG conducted at sleep. CGS has provided a helpful decision tree to illustrate this point (see chart below).4

Q: Can oximetry data from ResMed ApneaLink Air™ or ResMed AirView™ (when an oximeter is connected to a positive airway pressure device) be used to qualify a patient for home oxygen?
No, patients with known or suspected OSA must be tested in-person, either via an overnight titration polysomnogram or via an awake in-person oximetry test. All awake oximetry results must be obtained in-person by a qualified medical professional with the exception of overnight oximetry. Unsupervised or remotely supervised awake home testing does not qualify as a valid test. For patients with OSA, a qualifying oxygen saturation test may only occur during a titration polysomnographic study or during an in-person, supervised, awake test.1

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**Testing required for home oxygen qualification in patients with known or suspected OSA**

<table>
<thead>
<tr>
<th>Known or suspected OSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oximetry while awake?</td>
</tr>
<tr>
<td>Qualifying result?</td>
</tr>
<tr>
<td>HST done?</td>
</tr>
<tr>
<td>HST diagnostic?</td>
</tr>
<tr>
<td>PSG done</td>
</tr>
<tr>
<td>PSG diagnostic?</td>
</tr>
<tr>
<td>PAP not covered</td>
</tr>
<tr>
<td>PAP covered</td>
</tr>
<tr>
<td>Titation PSG</td>
</tr>
<tr>
<td>Hypoxic after titration</td>
</tr>
<tr>
<td>Home oxygen not covered</td>
</tr>
<tr>
<td>Home oxygen covered</td>
</tr>
</tbody>
</table>

All testing must meet the requirements set out in the Medicare LCDs for positive airway pressure (PAP) devices and oxygen and oxygen equipment.

As of Nov 2013
Q: What oxygen equipment is billable for contents post 36-month cap?

Only gaseous and liquid tank systems are eligible for post 36-month cap content billing. Oxygen concentrators and transfilling equipment are not eligible for contents payment.5

<table>
<thead>
<tr>
<th>Oxygen equipment furnished in month 36</th>
<th>Monthly contents payment after the stationary cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen Concentrator (E1390 or E1391)</td>
<td>None</td>
</tr>
<tr>
<td>Portable Gaseous or Liquid Transfilling Equipment (K0738, E1392 or E0433)</td>
<td>None</td>
</tr>
<tr>
<td>E0424 Stationary Gaseous System</td>
<td>E0441 Stationary Gaseous Contents</td>
</tr>
<tr>
<td>E0439 Stationary Liquid System</td>
<td>E0442 Stationary Liquid Contents</td>
</tr>
<tr>
<td>E0431 Portable Gaseous System</td>
<td>E0443 Portable Gaseous Contents</td>
</tr>
<tr>
<td>E0434 Portable Liquid System</td>
<td>E0444 Portable Liquid Contents</td>
</tr>
</tbody>
</table>

Q: Do all oxygen items require a written order prior to delivery (WOPD)?

No, the following items do not require a WOPD: oxygen concentrators (E1390 or E1391), portable oxygen concentrators (E1392) and portable gaseous equipment (K0738). While a WOPD is not required for these specific items, a detailed written order (DWO) is required prior to billing for other oxygen equipment.6

Q: What maintenance and servicing fees are applicable to oxygen concentrators?

A maintenance and servicing fee of ~$72 is paid every six months, either beginning: 1) six months after the 36th paid rental month, or 2) when the item is no longer covered under the supplier’s or manufacturer’s warranty (whichever is later). Only one maintenance and servicing payment can be made for patients using both stationary (E1390) and portable oxygen concentrators (E1392). Note: Neither patient-owned gaseous nor liquid oxygen equipment (stationary or portable) is eligible for maintenance and servicing payments. Service must be performed and documented via a service ticket to bill for maintenance fees.7

Q: How does payment change for patients who need more than 4 LPM or less than 1 LPM?

This depends on several factors and the modifier being used. Selecting the appropriate modifier depends on the liter flow, whether the stationary oxygen liter flow differs between day and nighttime use, and whether portable oxygen is prescribed. The monthly payment for stationary oxygen is reduced by 50% when the stationary at rest liter flow is less than 1 LPM and increased by 50% when the at rest liter flow is greater than 4 LPM. When portable oxygen is also prescribed, payment is increased by the higher of 50% of the monthly stationary payment amount or the fee schedule amount for the portable oxygen add-on. When the stationary liter flow rates differ between day and nighttime use, Medicare expects suppliers to average the liter flow prior to assessing payment eligibility for the volume adjustment.8

The following table identifies the modifier to use based upon the situation.

<table>
<thead>
<tr>
<th>Description</th>
<th>At rest (no liter flow change)</th>
<th>Average of day &amp; nighttime use</th>
<th>Stationary payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary O2 is &lt; 1 LPM</td>
<td>QE</td>
<td>QA</td>
<td>reduced 50%</td>
</tr>
<tr>
<td>Stationary O2 is &gt; 4 LPM</td>
<td>QG</td>
<td>QR</td>
<td>increased 50%</td>
</tr>
<tr>
<td>Stationary O2 is &gt; 4 LPM and portable O2 is prescribed*</td>
<td>QF</td>
<td>QB</td>
<td>increased 50% or add-on portable fee schedule (whichever is higher)</td>
</tr>
</tbody>
</table>

*Note: When billing for higher liter flow reimbursement, separate payment for portable oxygen is not allowed.8

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1 Local Coverage Determination (LCD): Oxygen and Oxygen Equipment (L33787) 2 Oxygen and Oxygen Equipment Local Coverage Determination (LCD) and Policy Article (PLA) 3 Oxygen and Oxygen Equipment Beneficiaries Meeting Guidelines; Correct Documentation Checklist; CAGS August 18, 2017 4 Frequently Asked Questions: Oxygen Use in Beneficiaries with Disturbance Sleep Apnea (November 22, 2011) 5 MACs/EDS Payment for Oxygen Contents 6 Local Coverage Articles; Standard Documentation Requirements for All Claims Submitted to DME POS (A55426) 7 Calendar Year (CY) 2019 Update for Durable Medical Equipment, Prosthetics, Orthotics and Supplies (DMEPOS) Fee Schedule 8 Revised and New Modifiers for Oxygen Flow Rates