Clinical Guideline



Guideline Number: CG005, Ver. 3

Oxygen Therapy

Disclaimer

Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Oscar may delegate utilization management decisions of certain services to third-party delegates, who may develop and adopt their own clinical criteria.

The clinical guidelines are applicable to all commercial plans. Services are subject to the terms, conditions, limitations of a member's plan contracts, state laws, and federal laws. Please reference the member's plan contracts (e.g., Certificate/Evidence of Coverage, Summary/Schedule of Benefits) or contact Oscar at 855-672-2755 to confirm coverage and benefit conditions.

Summary

Oscar members who have hypoxemia (abnormally low blood oxygen levels) and meet certain clinical criteria may be eligible for coverage of Short-Term Oxygen Therapy (STOT) or Long-Term Oxygen Therapy (LTOT). STOT should be prescribed for hypoxemia in the setting of the acute conditions detailed in the criteria below and, in general, requires frequent reassessment. LTOT should only be prescribed when there is evidence of persistent hypoxemia in a clinically stable patient, who is receiving otherwise optimal medical management, and meets specified clinical criteria. Optimal medical management should include treatment for the underlying condition. Patients who are clinically unstable may require oxygen therapy and be reassessed later for their long-term oxygen needs.

Oxygen therapy can be delivered via many different devices, including stationary units, portable or ambulatory equipment, and oxygen conserving devices. The device must be prescribed by a licensed physician or advanced practice provider and supplied by an in-network vendor.

Definitions

"Pulse Oximetry" is a non-invasive method of obtaining a member's oxygen saturation by analyzing light absorption of red blood cells in the arteries.

"Arterial Blood Gas" is a lab test run on blood collected from an artery that measure the adsorbed gases in blood, including oxygen.

"Oxygen Carriers" are pieces of equipment used to help a member transport an oxygen delivery system. These are included in the rented system. Oxygen carriers may include:

- 1. A carrier attached to a wheelchair that is used to carry an oxygen cylinder; or
- 2. A stand that holds a cylinder that can be moved by the user; or
- 3. A shoulder bag to hold portable tank.

"Oxygen Humidifiers" are bottles filled with water that attaches to the oxygen system to create humidity and increase moisture into the user's airway. These are included in the rental system.

"Oxygen Regulators" attach to the oxygen cylinder (green tank) where they are used to adjust the flow of oxygen to deliver the prescribed amount. These are included in the rented system.

"Oxygen Concentrators" are stationary or portable devices that extract oxygen from room air and deliver oxygen at high concentration to the user via tubing, face mask, or nasal cannula. A backup system, usually an oxygen gas cylinder, accompanies a concentrator in case of power failure and is included in the rented system.

"Oxygen Gas Cylinders" are green tanks that are available in various sizes and store oxygen in a gaseous state under high pressure. Portable smaller tanks can be used when away from home or as a backup system in case of power failure. Backup oxygen system is included in the rented system. When tanks are empty the vendor must replace them.

"Liquid Oxygen Systems" are special thermos-like containers that store oxygen at 297 degrees. They consist of a large main unit that is stationary and a separate smaller portable unit. The portable unit, used when away from home, can be refilled by the member from the large stationary unit.

"Portable Oxygen" provides the user with an oxygen supply when away from home. It comes in various forms such as: an oxygen gas cylinder with attached regulator flow gauge, a portable concentrator, a small liquid oxygen system or HELiOS. It includes a regulator, tubing, mask or cannula.

"Oxygen Conserving Devices (A9900)" or "Oxygen Regulators" (may also be called HELiOS), release oxygen only during inhalation. This unit replaces the traditional oxygen regulator/flowmeter, which delivers a continuous flow of oxygen.

Clinical Indications and Coverage

General Indications:

Oxygen therapy is indicated when the patient has a medical condition that has been shown by evidence-based medicine to respond to the short- or long- term administration of oxygen therapy and when **ALL** of the following criteria are met:

- 1. The treating physician has determined that the member has a severe lung disease or hypoxiarelated symptoms that might be expected to improve with oxygen therapy; **and**
- The treating physician has prescribed and indicated the type of device, delivery mechanism (cannula or mask), instructions for how it is to be used, duration of anticipated need, and oxygen flow rate; and
- 3. The qualifying arterial blood gas or pulse oximetry measurement was performed by a physician or by a qualified provider or supplier of laboratory services and the qualifying arterial blood gas was obtained under **ONE** of the following conditions:
 - a. If the qualifying arterial blood gas study is performed during an inpatient hospital stay, no earlier than one (1) day prior to the hospital discharge date; **or**
 - b. If the qualifying arterial blood gas study or pulse oximetry measurement is not performed during an inpatient hospital stay and the oxygen is being prescribed for a chronic condition, the arterial blood gas or pulse oximetry must be performed while the member is in a chronic stable state, i.e., not during acute illness or an exacerbation of their underlying disease.
- 4. Alternative treatment measures (e.g., pulmonary rehabilitation, medical therapy) have been tried or considered and deemed clinically ineffective; **and**
- 5. STOT or LTOT is deemed medically necessary based on the criteria below.

Short Term Oxygen Therapy (STOT):

Oscar covers STOT only if ALL of the following criteria are met:

- 1. Arterial blood gas study demonstrates PaO2 (partial pressure of oxygen) <**60** or oxygen saturation 89% or less that may resolve with limited or short-term oxygen therapy; **and**
- 2. Documentation of hypoxia-related symptoms or findings; and
- 3. Diagnosis of one of the following conditions:
 - a. Asthma; or
 - b. Bronchitis; or
 - c. Croup; or
 - d. Pneumonia

Subject to medical necessity review, STOT may also be indicated for the following conditions:

- a. Cluster headaches when ALL the following criteria are met:
 - i. A diagnosis of cluster headaches has been clearly established and is consistent with criteria used by the International Headache Society; and
 - Member is receiving and/or is refractory to prescription preventive headache medications, or such medications are contraindicated; and
 - iii. Member has no contraindications to high flow oxygen therapy.
- b. Infants with Bronchopulmonary Dysplasia (BPD)
 - i. The infant's mean pulse oximetry measures 95 percent or greater; and
 - ii. The infant does not have frequent episodes of oxygen desaturation; and
 - iii. Medical records include documentation of parent/caregiver education on equipment usage.
- c. Sickle cell disease with acute vaso-occlusion and hypoxia documented by arterial blood gas study

Reassessment of STOT

Oxygen therapy for the treatment of the above diagnoses is not considered medically necessary on an ongoing basis in the absence of special circumstances. In the absence of special circumstances, oxygen therapy requests meeting the above criteria will be authorized for up to **one month**. Continuation of STOT beyond the initial authorization period will require repeat arterial blood gas or pulse oximetry to demonstrate persistent hypoxemia.

Long Term Oxygen Therapy (LTOT)

Oscar covers LTOT from a network DME provider. LTOT will be covered only if it meets the criteria outlined in MCG Oxygen Therapy, Continuous and Noncontinuous: Home (A-0343).

Reassessment of LTOT

The expected lifespan of Oxygen equipment is **5 years** from the initiation of therapy. Reassessment of LTOT must be performed via pulse oximetry or arterial blood gas and must be performed by an independent respiratory provider at **12 months** after the initiation of therapy or prior to any request for continuation of LTOT. Additional reassessments may be requested at any time at the discretion of Oscar. The member's primary care and/or treating doctor must be notified for authorization of all testing and treatment changes, including the discontinuation of coverage for oxygen therapy.

Oxygen Therapy & Travel

- 1. If a member travels out of his/her vendor's service area, the member is responsible to work with his/her vendor to arrange for oxygen during travel.
- 2. For use on airplanes, members must work with the airline to determine what type of portable oxygen is allowed. They also need to coordinate with their oxygen DME vendor to obtain the proper equipment while traveling. Upgrades or duplicate oxygen equipment are not covered per your Oscar benefit.

Coverage Exclusions

- 1. Oxygen for home use is not covered as it has not been established and is considered experimental and investigational for the following:
 - a. Treatment of migraine headaches
 - b. Treatment of obstructive sleep apnea
- 2. Oxygen for home use is not covered, because it is not considered medically necessary for the following:
 - a. Angina pectoris in the absence of hypoxemia
 - b. Dyspnea without evidence of hypoxemia
 - c. Severe peripheral vascular disease with evidence of desaturation in one or more extremities but in the absence of systemic hypoxemia
 - d. Terminal illness that does not affect the respiratory system

Applicable Billing Codes (HCPCS/CPT Codes)

Codes covered if clinical criteria are met:

Code	Description
A4611	Battery, heavy-duty; replacement for patient-owned ventilator
A4612	Battery cables; replacement for patient-owned ventilator
A4613	Battery charger; replacement for patient-owned ventilator
A4615	Cannula, nasal
A4616	Tubing (oxygen), per foot
A4617	Mouthpiece
A4618	Breathing circuits
A4619	Face tent
A4620	Variable concentration mask

E0424	Casting and a second as a
E0424	Stationary compressed gaseous oxygen system, rental; includes container,
	contents, regulator, flowmeter, humidifier, nebulizer, cannula or mask, and tubing
E0425	Stationary compressed gas system, purchase; includes regulator, flowmeter,
	humidifier, nebulizer, cannula or mask, and tubing
E0430	Portable gaseous oxygen system, purchase; includes regulator, flowmeter,
	humidifier, cannula or mask, and tubing
E0431	Portable gaseous oxygen system, rental; includes portable container, regulator,
	flowmeter, humidifier, cannula or mask, and tubing
E0433	Portable liquid oxygen system, rental; home liquefier used to fill portable liquid
	oxygen containers, includes portable containers, regulator, flowmeter, humidifier,
	cannula or mask and tubing, with or without supply reservoir and content gauge
E0434	Portable liquid oxygen system, rental; includes portable container, supply
	reservoir, humidifier, flowmeter, refill adaptor, contents gauge, cannula or mask,
	and tubing
E0435	Portable liquid oxygen system purchase; includes portable container, supply
	reservoir, flowmeter, humidifier, contents gauge, cannula or mask, tubing and
	refill adaptor
E0439	Stationary liquid oxygen system, rental; includes container, contents, regulator,
	flowmeter, humidifier, nebulizer, cannula or mask, and tubing
E0440	Stationary liquid oxygen system, purchase; includes use of reservoir, contents
	indicator, regulator, flowmeter, humidifier, nebulizer, cannula or mask, and tubing
E0441	Oxygen contents, gaseous (for use with owned gaseous stationary systems or
	when both a stationary and portable gaseous system are owned), 1 month's
	supply = 1 unit
E0442	Oxygen contents, liquid (for use with owned liquid stationary systems or when
	both a stationary and portable liquid system are owned), 1 month's supply = 1
	unit
E0443	Portable oxygen contents, gaseous (for use only with portable gaseous systems
	when no stationary gas or liquid system is used), 1 month's supply = 1 unit
E0444	Portable oxygen contents, liquid (for use only with portable liquid systems when
	no stationary gas or liquid system is used), 1 month's supply = 1 unit
E0455	Oxygen tent, excluding croup or pediatric tents

E1352	Oxygen accessory, flow regulator capable of positive inspiratory pressure	
E1353	Regulator	
E1354	Oxygen accessory, wheeled cart for portable cylinder or portable concentrator, any type, replacement only, each	
E1355	Stand/rack	
E1356	Oxygen accessory, battery pack / cartridge for portable concentrator, any type, replacement only, each	
E1357	Oxygen accessory, battery charger for portable concentrator, any type, replacement only, each	
E1358	Oxygen accessory, DC power adapter for portable concentrator, any type, replacement only, each	
E1390	Oxygen concentrator, single delivery port, capable of delivering 85 percent or greater oxygen concentration at the prescribed flow rate	
E1391	Oxygen concentrator, dual delivery port, capable of delivering 85 percent or greater oxygen concentration at the prescribed flow rate, each	
E1392	Portable oxygen concentrator, rental	
E1405	Oxygen and water vapor enriching system with heated delivery	
E1406	Oxygen and water vapor enriching system without heated delivery	
K0738	Portable gaseous oxygen system, rental; home compressor used to fill portable oxygen cylinders; includes portable containers, regulator, flowmeter, humidifier, cannula or mask, and tubing	
S8120	Oxygen contents, gaseous, 1 unit equals 1 cubic foot	
S8121	Oxygen contents, liquid, 1 unit equals 1 pound	
82803 - 82810	Gases, blood, any combination of pH, pCO2, pO2, CO2, HCO3 (including calculated O2 saturation); with O2 saturation, by direct measurement, except pulse oximetry; or gases, blood, O2 saturation only, by direct measurement, except pulse oximetry	
94010 - 94777	Pulmonary medicine	
99503	Home visit for respiratory therapy care (e.g., bronchodilator, oxygen therapy, respiratory assessment, apnea evaluation)	
99504	Home visit for mechanical ventilation care	

ICD-10 codes covered if criteria are met:		
A22.1	Pulmonary anthrax	
A37.01, A37.11, A37.81, A37.91	Pneumonia in whooping cough	
A48.1	Legionnaires' disease	
A50.04	Early congenital syphilitic pneumonia	
B25.0	Cytomegaloviral pneumonitis	
B37.1	Pulmonary candidiasis	
B44.0	Invasive pulmonary aspergillosis	
B77.81	Ascariasis pneumonia	
C00.0 - C96.a	Malignant neoplasms [cancer]	
D00.0 - D09.09	In situ neoplasms [cancer]	
D57.00 - D57.219, D57.40 - D57.819	Sickle-cell disorders	
E66.2	Morbid (severe) obesity with alveolar hypoventilation [obesity hypoventilation syndrome]	
E84.0 - E84.9	Cystic fibrosis	
G44.001 - G44.029	Cluster Headache	
G47.31	Primary central sleep apnea	
G70.0 - G73.7	Diseases of myoneural junction and muscle	
127.0 - 127.2	Pulmonary hypertension	
127.81	Cor pulmonale (chronic)	

150.20 - 150.9	Congestive heart failure	
J05.0	Croup	
J12.0 - J18.9	Pneumonia	
J15.8	Pneumonia due to other specified bacteria	
J20-J20.9	Bronchitis	
J40 – J42		
J21.0 - J21.9	Bronchiolitis	
J44.0 - J44.9	Other chronic obstructive pulmonary disease	
J45-J45.998	Asthma	
J47.0 - J47.9	Bronchiectasis	
J69.0	Pneumonitis due to inhalation of food and vomit	
J80 - J84.9	Other respiratory diseases principally affecting the interstitium	
J82	Pulmonary eosinophilia, not elsewhere classified	
J84.111 - J84.116	Idiopathic interstitial pneumonia	
J84.117	Desquamative interstitial pneumonia	
J84.89	Other specified interstitial pulmonary diseases	
J95.4	Chemical pneumonitis due to anesthesia	
P23.0 - P23.9	Congenital pneumonia	
P24.81	Other neonatal aspiration with respiratory symptoms	
P27.1	Bronchopulmonary dysplasia originating in the perinatal period	
Q10 - Q26.9	Congenital malformations of cardiac chambers and connections; cardiac septa;	
	pulmonary and tricuspid valves; aortic and mitral valves; heart; great arteries;	
	great veins [congenital heart disease]	
Q33.6	Congenital hypoplasia and dysplasia of lung	

R09.02	Hypoxemia
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Codes **not covered** for indications listed in this Guideline:

Code	Description
E1399	Durable medical equipment, miscellaneous

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