



MEDICAL POLICY

MEDICAL POLICY DETAILS	
Medical Policy Title	HOME AND COMMUNITY OXYGEN THERAPY
Policy Number	1.01.05
Category	Equipment/Supplies
Effective Date	10/18/01
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Product Disclaimer	<ul style="list-style-type: none"> • If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. • If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit. • If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.

POLICY STATEMENT

- I. Based upon our criteria and review of the peer reviewed literature, oxygen and oxygen supplies are considered **medically appropriate** for patients with significant hypoxemia when oxygen is prescribed by a physician and as evidenced by any of the following blood gas values:
 - A. An arterial PO₂ at or below 55 mm Hg, or an arterial O₂ saturation and/or oximetry level at or below 88%, (90% in children - age 18 and under) taken at rest, breathing on room air; or
 - B. An arterial PO₂ at or below 55 mm Hg, or an arterial O₂ saturation and/or oximetry level at or below 88%, (90% in children) taken during sleep for a patient who demonstrates an arterial PO₂ at or above 56 mm Hg, or O₂ saturation at or above 89% while awake; or a decrease in arterial PO₂ of more than 10 mm Hg or a decrease in arterial O₂ saturation and/or oximetry level of more than 5% during sleep associated with symptoms/signs of hypoxemia; *Refer to Policy Statement IV for coverage criteria for obstructive sleep apnea (OSA)*
 - C. An arterial PO₂ at or below 55 mm Hg, or an arterial O₂ saturation and/or oximetry level at or below 88%, (90% in children) taken during exercise for a patient who demonstrates an arterial PO₂ at or above 56 mm Hg, or O₂ saturation at or above 89% (90% in children) during the day while at rest; or
 - D. Arterial PO₂ of 56-59 mm Hg or arterial blood O₂ saturation and/or oximetry level of 89% (90% in children) taken at rest (awake), during sleep, or during exercise and dependent edema suggesting congestive heart failure, pulmonary hypertension or cor pulmonale, or erythrocythemia with a hematocrit greater than 56%.
- II. Short-term use of oxygen for conditions unrelated to hypoxemia has been shown to be beneficial and is considered **medically appropriate** for the following conditions:
 - A. Cluster headache when other treatments fail;
 - B. Infants with BPD who have variable oxygen needs; and
 - C. Hemoglobinopathies.
- III. Oxygen is considered **not medically necessary** for the following conditions:
 - A. Angina pectoris in the absence of hypoxemia;
 - B. Breathlessness without evidence of hypoxemia;
 - C. Severe peripheral vascular disease resulting in clinically evident desaturation in one or more extremities;
 - D. Terminal illness that does not affect the lungs; and

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- E. When prescribed for intermittent or as needed (PRN) oxygen use.
- IV. The use of home oxygen therapy as the sole treatment for OSA is considered **not medically necessary**. Positive airway pressure devices (e.g., CPAP and BiPAP) are considered the first line of therapy for OSA. Inability to tolerate CPAP with nocturnal desaturations is not an indication for long-term use of oxygen as treatment for OSA. Short term use of oxygen may be considered for coverage in patients with nocturnal desaturations until a formal evaluation by a pulmonary or sleep specialist can be performed. Patients with OSA who have oxygen desaturations that are not related to their OSA would be candidates for home oxygen therapy.
- V. The High Altitude Stimulation Test (HAST) is **ineligible for coverage** for non-medically necessary air travel, as member contracts do not cover services that are primarily for the convenience of the member or a family member.

Refer to Corporate Medical Policy # 1.01.06 Positive Airway Pressure Devices: CPAP, BiPAP, APAP and Non-invasive Positive Pressure Ventilators.

Refer to Corporate Medical Policy # 11.01.15 Medically Necessary Services.

POLICY GUIDELINES

- I. Coverage for Durable Medical Equipment is contract dependent unless mandated by federal or state mandates. Please refer to your Customer (Member/Provider) Service Department to determine contract coverage.
- II. A measurement of arterial oxygen saturation obtained by ear or pulse oximetry is acceptable when ordered and evaluated by the attending physician and performed under the physician's supervision or when performed by a qualified provider or supplier of laboratory services. When arterial blood gas and oximetry studies are both used to document the need for home oxygen therapy and the results are conflicting; the arterial blood gas study is the preferred source of documentation of medical need. A DME supplier is not considered a qualified provider or supplier of laboratory services for purposes of these guidelines.
- III. If the qualifying blood gas study is 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.
- IV. If the initial oxygen prescription did not originate during a hospital stay, blood gas studies should be performed while the patient is in a chronic stable state (e.g., not during a period of an acute illness or an exacerbation of their underlying disease).
- V. Requests for long-term oxygen treatment for OSA without other comorbid conditions (e.g. significant hypoxemia), must be made by pulmonary or sleep specialists.
- VI. The prescription must specify:
 - A. A diagnosis of the disease requiring home use of oxygen;
 - B. Oxygen concentration and flow rate;
 - C. An estimate of the frequency of use (an intermittent or leave in oxygen therapy order must include time limits and specific indications for initiating and terminating therapy);
 - D. Method of delivery;
 - E. Duration of use (e.g., two liters per minute, 10 minutes per hour, 12 hours per day);
 - F. Duration of need (e.g., six months to lifetime). If the oxygen is prescribed on an indefinite basis, the care must be periodically reviewed to determine whether a medical need continues to exist.
- VII. Portable oxygen systems are considered **medically appropriate** only if the patient ambulates on a regular basis.
 - A. Portable oxygen is not covered when it is provided only as a backup to a stationary oxygen system.
 - B. Portable oxygen systems are not covered for patients who qualify for oxygen solely based on blood gas studies obtained during sleep.
- VIII. Oxygen conservation devices are considered **medically appropriate** only for patients on very high oxygen flows, e.g. 4-5 liters per minute.

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- IX. The following components of oxygen therapy are considered **not medically necessary**:
- A. Oxygen and oxygen supplies in facilities that are expected to supply such items;
 - B. Setup and/or installation of respiratory support systems;
 - C. Preset regulators used in portable oxygen systems;
 - D. Regulators which permit a flow rate greater than eight liters per minute as these units are not appropriate for home use; and
 - E. Conserving devices for low oxygen flows (e.g., below four liters per minute).
- IX. Charges for oxygen carts, racks, or stands are included in the supplier's fee for use of the oxygen tank and are ineligible for coverage as a separate service.
- X. A patient who travels out of area, will be financially responsible for oxygen during travel. The Health Plan will only allow one supplier for oxygen during any one rental month.
- A. Oxygen services furnished by an airline to a patient are ineligible for coverage.
 - B. Facility-to-facility transfers may require prior authorization based on contract.
- XI. Routine oxygen supplies include the following:
- A. Portable oxygen systems;
 - B. Mask or nasal cannula;
 - C. Maxi-mist;
 - D. Nebulizer;
 - E. Oxygen gauge;
 - F. Oxygen humidifier; and
 - G. Oxygen tubing.
- XII. Because of safety concerns, the Health Plan highly recommends smoking be prohibited in an area where oxygen is used.
- XIII. Other diagnoses for which short-term use of oxygen has been shown to be beneficial and unrelated to hypoxia (e.g., cluster headache) may require prior authorization based on contract.

DESCRIPTION

Oxygen therapy is the administration of oxygen in concentrations higher than those occurring in the atmosphere for the purpose of relieving hypoxemia, preventing damage to the tissue cells as a result of lack of oxygen, and ensuring adequate oxygenation of all vital organs.

Conservation devices may consist of reservoir cannulas (moustache and pendant), transtracheal catheters (invasive, requiring a neck incision), and demand oxygen pulsating devices (deliver a pulse of oxygen only during inhalation; a sensor, circuitry, and a solenoid valve are situated between the pressurized oxygen source and the nasal cannula).

The threshold for oxygen saturation in children is different from that of adults because of greater concern regarding the risks of irreversible pulmonary hypertension secondary to chronic hypoxemia.

Home oxygen therapy is also known as long-term oxygen therapy (LTOT) and domiciliary oxygen therapy.

CODES

- *Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.*
- ***CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.***
- *Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.*

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Code	Description
94452	High altitude stimulation test (HAST), with interpretation and report by a physician or other qualified health care professional;
94453	with supplemental oxygen titration

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Code	Description
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 contents gauge
E0434	Portable liquid oxygen system, rental; includes portable container, supply reservoir, humidifier, flowmeter, refill adapter, 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 adapter
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	Stationary oxygen contents, gaseous, 1 month's supply = 1 unit
E0442	Stationary oxygen contents, liquid, 1 month's supply = 1 unit
E0443	Portable oxygen contents, gaseous, 1 month's supply – 1 unit
E0444	Portable oxygen contents, liquid, 1 month's supply = 1 unit
E0447	Portable oxygen contents, liquid, 1 month's supply = 1 unit, prescribed amount at rest or nighttime exceeds 4 liters per minute (lpm)
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
E1392	Portable oxygen concentrator, rental

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Code	Description
C34.00-C34.92	Malignant neoplasm of bronchus and lung (code range)
D56.4	Hereditary persistence of fetal hemoglobin (HPFH)
D57.00-D57.219	Sickle-cell disorders (code range)
D57.80-D57.819	Other sickle-cell disorders (code range)
D58.2	Other hemoglobinopathies
D86.0-D86.3	Sarcoidosis (code range)
D86.81-D86.89	Sarcoidosis of other sites (code range)
E84.0-E84.9	Cystic fibrosis (code range)
G43.809- G43.819	Other migraine, intractable or not intractable (code range)
G43.A0-G43.A1	Cyclical vomiting, not intractable; intractable (code range)
G43.B0-G43.B1	Ophthalmoplegic migraine, not intractable; intractable (code range)
G43.C0-G43.C1	Periodic headache syndromes in child or adult, not intractable; intractable (code range)
G44.001- G44.099	Cluster headaches and other trigeminal autonomic cephalgias (TAC) (code range)
I27.0-I27.89	Other pulmonary heart diseases (code range)
I50.20-I50.9	Heart failure (code range)
J43.0-J43.9	Emphysema (code range)
J44.9	Chronic obstructive pulmonary disease, unspecified
J47.0-J47.9	Bronchiectasis (code range)
J84.10	Pulmonary fibrosis, unspecified
J84.17	Other interstitial pulmonary diseases with fibrosis in diseases classified elsewhere
J84.89	Other specified interstitial pulmonary diseases
P27.0-P27.9	Chronic respiratory disease originating in the perinatal period

REFERENCES

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*Key Article

KEY WORDS

Domiciliary oxygen, High altitude stimulation test (HAST), Long-term oxygen therapy (LTOT), O₂, Oxygen concentrator, Portable oxygen

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a Local Coverage Determination (LCD) for Oxygen and Oxygen Equipment (LCD) or Home Use of Oxygen (NCD). Please refer to the following LCD and NCD websites for Medicare Members:

NCD Site:

<http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=169&ncdver=1&bc=AgAAgAAAAAAA&>

LCD Site:

<https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=33797&ver=23&SearchType=Advanced&CoverageSelection=Local&ArticleType=BC%7cSAD%7cRTC%7cReg&PolicyType=Both&s=41&Keyword=oxygen&KeywordLookUp=Title&KeywordSearchType=Exact&kq=true&bc=IAAAACAAAA&>