Description

Home oxygen therapy is the home administration of oxygen at concentrations greater than the ambient air with the intention of treating or preventing the symptoms and manifestations of hypoxemic or non-hypoxemic medical conditions that are known to clinically improve with oxygen.

Clinical Indications

Medically Necessary:

Short term supplemental home oxygen therapy is **medically necessary** for treatment of hypoxemia-related symptoms with qualifying laboratory values (see *Note* below) associated with acute conditions such as, but not limited to:

- Bronchiolitis
- Chronic obstructive pulmonary disease exacerbation
- Pneumonia

Long term supplemental home oxygen therapy is **medically necessary** for treatment of hypoxemia-related symptoms with qualifying laboratory values (see *Note* below) from chronic lung conditions such as, but not limited to:

- Bronchiectasis
- Chronic lung disease (CLD) [formerly named Bronchopulmonary Dysplasia (BPD)]
- Chronic obstructive pulmonary disease
- Cystic fibrosis
- Diffuse interstitial lung disease
- Pulmonary hypertension
- Pulmonary neoplasm (primary or metastatic)
- Recurring congestive heart failure due to chronic cor pulmonale

Intermittent home oxygen therapy is considered **medically necessary** for the treatment of cluster headaches.

Supplemental home oxygen therapy is considered **medically necessary** during exercise when there is documentation of:

- Desaturation to an SaO_2 of ≤88% during exercise; **and**
- Improvement in hypoxemia and dyspnea or exercise capacity during exercise while using supplemental oxygen.

Supplemental home oxygen therapy is considered **medically necessary** during sleep in individuals:

- With unexplained pulmonary hypertension, cor pulmonale, edema secondary to right heart failure, or erythrocytosis with a hematocrit of >56%; **or**
- When obstructive sleep apnea (OSA), other nocturnal apnea, or hypoventilation syndromes have been ruled out and desaturation during sleep to an SaO_2 of ≤88% for >30% of the night is documented;

or

- When individuals diagnosed with OSA, other nocturnal apnea, or hypoventilation syndromes have desaturation during sleep to an SaO_2 of ≤88% for >30% of the night which persists despite use of continuous positive airway pressure (CPAP) or non-invasive positive pressure ventilation (NIPPV) devices.

Note: Hypoxemia is evidenced by **any** of the qualifying laboratory values obtained while breathing room (ambient) air unless contraindicated:

Adults:

1. Arterial partial pressure of oxygen (PaO_2) ≤55 mm Hg or arterial oxygen saturation (SaO_2) ≤88%;

or

2. Arterial PaO_2 of 56-59 mm Hg or SaO_2 of ≤89% with *any* of the following conditions:

- Cor pulmonale

- Dependent edema secondary to right heart failure
- Erythrocytosis with hematocrit >56%
- Pulmonary hypertension

Infants and Children:

1. PaO_2 of ≤60 mm Hg; **or**
2. SaO_2 of ≤92%.

Not Medically Necessary:

Home oxygen therapy is considered **not medically necessary** for **any** of the following indications, including but not limited to:

- Severe peripheral vascular disease with clinically evident desaturation in one or more extremities in the absence of hypoxemia
- Terminal illness not affecting the respiratory system
- Treatment of angina pectoris or dyspnea in the absence of documented associated cor pulmonale or hypoxemia
- The use of preset regulators used with portable oxygen systems

Discussion/General Information

Home oxygen therapy is the home administration of oxygen at concentrations greater than the ambient air with the intention of treating or preventing the symptoms and manifestations of hypoxemic or non-hypoxemic medical conditions that are known to clinically improve with oxygen.

Arterial oxygen saturation of hemoglobin (SaO2) can be measured by arterial blood gas (ABG) sampling or pulse oximetry. The healthcare practitioner orders the testing type and frequency. Normal values of oxygen saturation (SaO2) are 94% to 100%.

For the diagnosis of cluster headache, oxygen inhalation (100%) delivered at a rate of 7 to

10L/min. for 15 minutes through a loose-fitting facemask is considered to be a safe and effective, first-line treatment for acute attacks. High-flow oxygen has been shown to abort the headache within several minutes.

Oxygen equipment alternatives include three types of systems to provide home oxygen:

- Compressed oxygen (tanks)
- Liquid oxygen
- Oxygen concentrators

With all of these systems, oxygen is inhaled through a mask or more commonly, a nasal cannula. Oxygen conserving devices can be used with compressed or liquid oxygen. The most popular oxygen conserving devices are demand inspiratory flow systems. These devices use a sensor to detect when inspiration begins and deliver oxygen only during inspiration, thus conserving oxygen during exhalation.

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

HCPCS	
Equipment	
E0424-E0425	Stationary compressed gaseous oxygen system
E0430-E0431	Portable gaseous oxygen system
E0433	Portable liquid oxygen system, rental; home liquefier used to fill portable liquid oxy
E0434-E0435	Portable liquid oxygen system
E0439-E0440	Stationary liquid oxygen system
E0550	Humidifier, durable for extensive supplemental humidification during IPPB treatmen
E0555	Humidifier, durable, glass or autoclavable plastic bottle type, for use with regulator
E0560	Humidifier, durable for supplemental humidification during IPPB treatment or oxyge
E0580	Nebulizer, with compressor, durable, glass or autoclavable plastic, bottle type, for u
E1353	Regulator
E1354	Oxygen accessory, wheeled cart for portable cylinder or portable concentrator, any
E1355	Stand/Rack
E1356	Oxygen accessory, battery pack/cartridge for portable concentrator, any type, repla

E1357	Oxygen accessory, battery charger for portable concentrator, any type, replacemen
E1358	Oxygen accessory, DC power adaptor for portable concentrator, any type, replacem
E1390-E1391	Oxygen concentrator single/dual delivery port
E1392	Portable oxygen concentrator, rental
E1405-E1406	Oxygen and water vapor enriching system
K0738	Portable gaseous oxygen system, rental; home compressor used to fill portable ox

Contents

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
S8120	Oxygen contents, gaseous, 1 unit equals 1 cubic foot
S8121	Oxygen contents, liquid, 1 unit equals 1 pound

Supplies

A4615	Cannula, nasal
A4616	Tubing (oxygen), per foot
A4619	Face tent
A4620	Variable concentration mask

Code Modifiers

QE	Prescribed amount of oxygen is less than one liter per minute (LPM)
QF	Prescribed amount of oxygen exceeds 4 liters per minute (LPM) and portable oxyge
QG	Prescribed amount of oxygen is greater than four liters per minute (LPM)
QH	Oxygen conserving device is being used with an oxygen delivery system

ICD-9 Diagnosis

Including, but not limited to, the following:

162.3-162.9	Malignant neoplasm bronchus or lung
165.0-165.9	Malignant neoplasm of other and ill-defined sites within the respiratory system
197.0	Secondary malignant neoplasm of lung, bronchus
209.21	Malignant carcinoid tumor of the bronchus and lung
277.02	Cystic fibrosis with pulmonary manifestations
339.00-339.02	Cluster headaches
416.0-416.9	Chronic pulmonary heart disease (Pulmonary hypertension, cor pulmonale)
428.0-428.9	Heart failure
466.0-466.19	Acute bronchitis and bronchiolitis
480.0-486	Pneumonia
490-496	Chronic obstructive pulmonary disease (COPD)
515	Post inflammatory pulmonary fibrosis
770.7	Chronic respiratory disease arising in the perinatal period (bronchopulmonary dysp
786.00-786.09	Dyspnea and respiratory abnormalities
799.01-799.1	Asphyxia and hypoxemia, respiratory arrest
V46.2	Other dependence on machines; supplemental oxygen

ARTICLE REFERENCE:
http://www.empireblue.com/medicalpolicies/guidelines/gl_pw_a053649.htm