



## Oxygen Concentrators

**Effective:** December 1, 2024

**Next Review:** September 2025

**Last Review:** October 2024

### IMPORTANT REMINDER

Medical Policies are developed to provide guidance for members and providers regarding coverage in accordance with contract terms. Benefit determinations are based in all cases on the applicable contract language. To the extent there may be any conflict between the Medical Policy and contract language, the contract language takes precedence.

PLEASE NOTE: Contracts exclude from coverage, among other things, services or procedures that are considered investigational or cosmetic. Providers may bill members for services or procedures that are considered investigational or cosmetic. Providers are encouraged to inform members before rendering such services that the members are likely to be financially responsible for the cost of these services.

### DESCRIPTION

The need for supplemental oxygen is assessed by direct or indirect measurement of the partial pressure of oxygen and the oxygen saturation of hemoglobin in arterial blood. Chronic oxygen therapy is generally administered via nasal cannulae, face mask, or tracheostomy, from a stationary or portable oxygen tank or an oxygen concentrator.

### MEDICAL POLICY CRITERIA

**Notes:** This policy only applies to member contracts that are subject to preauthorization for oxygen, as specified by their group plan. Please check the preauthorization website for the member contract to confirm requirements.

- I. Use of oxygen concentrators may be considered **medically necessary** when all of the following Criteria (A. – F.) are met:
  - A. Alternative treatment measures have been tried or considered; and
  - B. The patient has been tested in the “chronic stable state” and all coexisting diseases or conditions that can cause hypoxia must be treated sufficiently; and
  - C. The patient has a severe lung disease, such as chronic obstructive pulmonary disease, diffuse interstitial lung disease, cystic fibrosis, bronchiectasis,

widespread pulmonary neoplasm, or hypoxia-related symptoms or findings that might be expected to improve with oxygen therapy; and

- D. The patient is not experiencing an exacerbation of their underlying lung disease in Criterion I.C. or other acute conditions impacting the patient's oxygen saturation; and
  - E. The patient does not have obstructive sleep apnea (OSA) or for patients with OSA treated with concurrent positive airway pressure therapy, the qualifying oxygen saturation test is performed following optimal treatment of the OSA; and
  - F. None of the following conditions are present:
    - 1. Angina pectoris in the absence of hypoxemia; and
    - 2. Dyspnea without cor pulmonale or evidence of hypoxemia; and
    - 3. Severe peripheral vascular disease resulting in clinically evident desaturation in one or more extremities but in the absence of systemic hypoxemia; and
    - 4. Terminal illnesses that do not affect the respiratory system.
- II. If a patient has a multi-function home ventilator (E0467), requests for a separate oxygen concentrator are considered **not medically necessary**.
- III. The use of oxygen concentrators when Criterion I. is not met is considered **not medically necessary**.

*NOTE: A summary of the supporting rationale for the policy criteria is at the end of the policy.*

## CROSS REFERENCES

None

## BACKGROUND

According to the Centers for Medicare & Medicaid Services:<sup>[1]</sup>

“Oxygen is a colorless, odorless gas that comprises 21 percent of the atmospheric gases at sea level. Historically, long term supplemental oxygen has been administered in higher than atmospheric concentrations to patients with chronic hypoxemia, generally resulting from cardiac and/or pulmonary disease. The need for supplemental oxygen is assessed by direct or indirect measurement of the partial pressure of oxygen (conventionally expressed in millimeters of mercury, mmHg) and the oxygen saturation of hemoglobin in arterial blood (expressed as a percent). Chronic oxygen therapy is generally administered via nasal cannulae, face mask, or tracheostomy, from a stationary or portable oxygen tank or an oxygen concentrator.” (NCD 240.2.1)

There are various types of concentrators available, with flows most commonly ranging from 1 to 5 L/min, providing up to FiO<sub>2</sub> 0.95. 56 to 65 mmHg or whose oxygen saturation is at or above 89%.

## PRACTICE GUIDELINE SUMMARY

**American Thoracic Society**

In 2019, the American Thoracic Society published a clinical practice guideline based on research regarding home oxygen therapy for children.<sup>[2]</sup> The recommendations included appropriate administration of home oxygen therapy for children of various ages with cystic fibrosis, bronchopulmonary dysplasia, sleep-disordered breathing, sickle cell disease, pulmonary hypertension, and interstitial lung disease when complicated by chronic hypoxemia. Regarding specific equipment, ATS noted that evidence for optimal modalities of home oxygen delivery in children is limited.

## SUMMARY

It appears that oxygen concentrators may improve health outcomes for some people with severe lung disease. Therefore, oxygen concentrators may be considered medically necessary when policy criteria are met.

In all other situations, including but not limited to when policy criteria are not met or a request for a separate oxygen concentrator when the patient has a multi-function home ventilator is made, the use of oxygen concentrators is considered not medically necessary.

## REFERENCES

1. U.S. Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) for Home Use of Oxygen in Approved Clinical Trials (240.2.1). [cited 10/9/2024]. 'Available from:' [www.cms.gov/medicare-coverage-database/view/ncd.aspx?NCDId=312](http://www.cms.gov/medicare-coverage-database/view/ncd.aspx?NCDId=312).
2. Hayes D, Jr., Wilson KC, Krivchenia K, et al. Home Oxygen Therapy for Children. An Official American Thoracic Society Clinical Practice Guideline. *American journal of respiratory and critical care medicine*. 2019;199(3):e5-e23. PMID: 30707039

## CODES

**NOTE:** Oxygen and oxygen equipment codes not listed on the pre-authorization website do not require prior approval and are not routinely reviewed. In addition, there may be additional oxygen codes not included here. However, providers are always expected to follow medical necessity requirements when prescribing and dispensing DME items.

Codes	Number	Description
CPT	None	
HCPCS	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

**Date of Origin:** September 2020