



Oxygen Therapy Coverage Guidelines for Non-Medicare Advantage Members

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Purpose:

To provide oxygen therapy guidelines for non-Medicare Advantage Members for Population Health and Provider Alliances associates to reference when making determinations.

Coverage Guidelines

Home oxygen therapy is covered if **all** of the following conditions are met:

- (1) The treating physician has determined that the Member has a severe lung disease or hypoxia-related symptoms that might be expected to improve with oxygen therapy, and
- (2) The Member's blood gas study meets the criteria stated below, and the qualifying blood gas study was obtained under the following conditions:
 - 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 (2) days prior to the hospital discharge date, or
- (3) If the qualifying blood gas study is not performed during an inpatient hospital stay, the reported test must be performed while the Member is in a chronic stable state (i.e., not during a period of acute illness or an exacerbation of their underlying disease), and
- (4) The qualifying blood gas study was performed by a physician or by a qualified provider or supplier of laboratory services, and
- (5) Alternative treatment measures have been tried or considered and deemed clinically ineffective.

Group I Criteria

- An arterial PO₂ at or below 55 mm Hg or an arterial oxygen saturation at or below 88 percent taken at rest (awake), or
- An arterial PO₂ at or below 55 mm Hg or an arterial oxygen saturation at or below 88 percent, for at least 5 minutes taken during sleep for a Member who demonstrates an arterial PO₂ at or above 56 mm Hg or an arterial oxygen saturation at or above 89 percent while awake, or



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- A decrease in arterial PO₂ more than 10 mm Hg or a decrease in arterial oxygen saturation more than 5 percent for at least 5 minutes taken during sleep associated with symptoms or signs reasonably attributed to hypoxemia (e.g., cor pulmonale, “P” pulmonale on EKG, documented pulmonary hypertension, and erythrocytosis), or
- An arterial PO₂ at or below 55 mm Hg or an arterial oxygen saturation at or below 88 percent taken during exercise for a Member who demonstrates an arterial PO₂ at or above 56 mm Hg or an arterial oxygen saturation at or above 89 percent during the day while at rest. In this case, oxygen is provided for during exercise if it is documented that the use of oxygen improves the hypoxemia that was demonstrated during exercise when the Member was breathing room air.

Group II Criteria

- An arterial PO₂ of 56-59 mm Hg or an arterial blood oxygen saturation at or above 89 percent taken at rest (awake), during sleep for at least five (5) minutes, or during exercise **and at least one (1)** of the following:
 - (1) Dependent edema suggesting congestive heart failure, or
 - (2) Pulmonary hypertension or cor pulmonale, determined by measurement of pulmonary artery pressure, gated blood pool scan, echocardiogram, or “P” pulmonale on EKG (P wave greater than 3mm in standard leads II, III, or AVF), or
 - (3) Erythrocythemia with a hematocrit greater than 56 percent.

Oxygen Delivery System Coverage Determination

- **Stationary:**

Oxygen concentrators, liquid reservoir, or large cylinders (usually K or H size) that are designed for stationary use:

 - a. Considered medically appropriate for non-Medicare Advantage Members who do not regularly go beyond the limits of a stationary oxygen delivery system with a 50-foot tubing or those who use oxygen only during sleep
- **Portable:**

Systems that weigh 10 pounds or more and are designed to be transported but not easily carried by the non-Medicare Advantage Member (e.g., steel cylinder attached to wheels “stroller style”):



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- a. Considered medically appropriate for non-Medicare Advantage Members who occasionally go beyond the limits of a stationary oxygen delivery system with a 50-foot tubing for less than two (2) hours per day for most days of the week (minimum 2 hours/week).
- **Ambulatory:**

Systems that weigh less than 10 pounds when filled with oxygen, are designed to be carried by the non-Medicare Advantage Member, and will last for four (4) hours at a flow equivalent to 2 L/min continuous flow (e.g., liquid refillable units and aluminum or fiber wrapped light-weight cylinders, with or without oxygen conserving devices):

 - a. Considered medically appropriate for non-Medicare Advantage Members who regularly go beyond the limits of a stationary oxygen delivery system with a 50-foot tubing for two (2) hours or more per day and for most days of the week (minimum 6 hours/week).
- **Oxygen Accessories:**

Accessories such as cannulas, humidifiers, masks, conserving device, and a regulator are included with the oxygen delivery system.
- **Oxygen for Travel:**

Oxygen services furnished by an airline to a beneficiary are not covered.
- **Emergency or Stand-by Oxygen systems:**

AvMed will evaluate and facilitate the need for ongoing approval of medical services for Members during an emergency and/or natural disaster.

References:

1. Petty TL, O'Donohue WJ Jr. Further recommendations for prescribing, reimbursement, technology development, and research in long-term oxygen therapy. Summary of the Fourth Oxygen Consensus Conference, Washington, D.C., October 15-16, 1993. *Am Respir Critl Care Med.* 1994;150(3):875-877.
2. U.S. Department of Health and Human Services, Center for Medicare and Medicaid Services. Evidence of medical necessity for home oxygen therapy. Medicare Carriers Manual §3312. Baltimore, MD: CMS, 2002.
3. Sanchez Agudo L, Cornudella R, Estopa Miro R, et al. Guidelines for indications and use of domiciliary continuous oxygen (DCO) therapy. SEPAR guidelines. *Arch Bronconeumol.* 1998;34(2):87-94.
4. O'Donohue WJ Jr. Home oxygen therapy. *Clin Chest Med.* 1997;18(3):535-545.



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5. O'Donohue WJ Jr. Home oxygen therapy. *Med Clin North Am.* 1996;80(3):611-622.
6. Wilkinson J, Rees J. Domiciliary oxygen. *Br J Clin Pract.* 1996;50(3):151-153.
7. Weitzenblum E. Observance of long-term oxygen therapy at home. *Chest.* 1996;109(5):1135-1136.
8. Tarpy SP, Celli BR. Long-term oxygen therapy. *N Engl J Med.* 1995;333(11):710-714.
9. Tiep BL. Long-term home oxygen therapy. *Clin Chest Med.* 1990;11(3):505-521.
10. Herrick TW, Yeager H Jr. Home oxygen therapy. *Am Fam Physician.* 1989;39(2):157-162.
11. Petty TL. Home oxygen therapy. *Mayo Clin Proc.* 1987;62(9):841-847.
12. U.S. Department of Health and Human Services, Center for Medicare and Medicaid Services. Home use of oxygen. *Medicare Coverage Issues Manual §60-64.* Baltimore, MD: CMS, 2002.

Disclaimer Information:

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed to determine coverage for AvMed's benefits, and are published to provide a better understanding of the basis upon which coverage decisions are made. AvMed makes coverage decisions using these guidelines, along with the Member's benefit document. The use of this guideline is neither a guarantee of payment nor a final prediction of how specific claim(s) will be adjudicated.

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed for selected therapeutic or diagnostic services found to be safe, but proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the AvMed service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations.

Treating providers are solely responsible for the medical advice and treatment of Members. This guideline may be updated and therefore is subject to change.