

09-E0000-49

Original Effective Date: 04/15/04

Reviewed: 06/27/19

Revised: 07/15/19

## Subject: Home Pulse Oximetry

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

[Position Statement](#)

[Billing/Coding](#)

[Reimbursement](#)

[Program Exceptions](#)

[Definitions](#)

[Related Guidelines](#)

[Other](#)

[References](#)

[Updates](#)

### **DESCRIPTION:**

Pulse oximetry is a non-invasive method for measuring the amount of oxygen in the blood. A pulse oximeter consists of a computerized monitor and a probe that can be attached to the individual's finger, toe, nose, or earlobe. This photoelectric instrument can provide a direct reading of the arterial oxygen saturation (SaO<sub>2</sub>) in the blood by measuring the amount of light transmitted through a translucent part of the skin.

Pulse oximetry should not be relied upon as the sole method for measurement of pulmonary function or as a method of screening or diagnosing patients with respiratory disorders, or suspected obstructive sleep apnea.

### **POSITION STATEMENT:**

#### **Home Pulse Oximeter Device**

Use of a home pulse oximeter device (E0445) for continuous monitoring **meets the definition of medical necessity** when any of the following situations exist:

- The member has unpredictable, sub therapeutic fluctuations of oxygen saturation levels and would be expected to have an adverse physiological effect if not treated appropriately.
- Oxygen saturation measurements are essential in dictating acute therapeutic intervention
- The absence of readily available oxygen saturation measurements represents an immediate and demonstrated health risk
- The member or member caregiver is trained to provide whatever care is needed to reverse the low oxygen saturation level ordered by the physician
- To validate continued need for home oxygen therapy.

#### **Pulse Oximetry Testing**

Overnight pulse oximetry testing in the home **meets the definition of medical necessity** when the results are reliable in the home setting.

- The member's record must document that the oximeter is preset and self sealed and cannot be adjusted by the member.
- In addition, the device must provide a printout that documents an adequate number of sampling hours, percent of oxygen saturation, and an aggregate of the results. This information must be made available when requested for medical review.

Home pulse oximetry **does not meet the definition of medical necessity** for the following:

- When used as the sole diagnostic test for obstructive sleep apnea (OSA). The sensitivity and negative predictive value of pulse oximetry is not adequate to rule out OSA in members with mild to moderate symptoms. A follow-up sleep study is needed to confirm or exclude the diagnosis of OSA, regardless of the pulse oximetry screening results
- When used for monitoring asthma members. According to the National Institutes for Health, Global Initiative for Asthma, National Heart, Lung and Blood Institute, pulse oximetry is not considered appropriate for asthma management
- When used for routine monitoring of members on long-term home oxygen therapy, except when the member's physical condition has changed, requiring an adjustment in the liter flow or their home oxygen needs.

### **BILLING/CODING INFORMATION:**

#### **HCPCS Coding:**

A4606	Oxygen probe for use with oximeter device, replacement
E0445	Oximeter device for measuring blood oxygen levels non-invasively

### **REIMBURSEMENT INFORMATION:**

Reimbursement for home pulse oximeters is limited to 12 months.

Services in excess of these limitations are subject to medical review of documentation of medical necessity. The following information may be required documentation to support medical necessity: physician history and physical, physician's progress notes, other laboratory studies.

#### **LOINC Codes:**

<b>DOCUMENTATION TABLE</b>	<b>LOINC CODES</b>	<b>LOINC TIME FRAME MODIFIER CODE</b>	<b>LOINC TIME FRAME MODIFIER CODES NARRATIVE</b>
Physician history and physical	28626-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Attending physician progress note	18741-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for

			the claim.
Blood gas tests	18767-4	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Pulmonary study	27896-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.

Refer to sections entitled [POSITION STATEMENT](#).

### **PROGRAM EXCEPTIONS:**

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

#### **Medicare Advantage products:**

The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Home Use of Oxygen (240.2) located at cms.gov.

The following Local Coverage Determination (LCD) was reviewed on the last guideline reviewed date: Noninvasive Ear or Pulse Oximetry for Oxygen Saturation (L33923) located at fcso.com.

The following Durable Medical Equipment Regional Carrier (DMERC) Local Coverage Determination (LCD) was reviewed on the last guideline reviewed date: Oxygen and Oxygen Equipment (L33797) located at cgsmedicare.com.

### **DEFINITIONS:**

No guideline specific definitions apply.

### **RELATED GUIDELINES:**

[Oxygen, 09-E0400-00](#)

### **OTHER:**

None Applicable

### **REFERENCES:**

1. American Association for Respiratory Care (AARC). AARC Clinical Practice Guideline. Oxygen Therapy in the Home or Extended Alternate Site Health Care Facility. Respir Care. 2007 Aug;52(8):1063-8; accessed at aarc.org.
2. American Association for Respiratory Care (AARC). AARC Clinical Practice Guideline. Pulse Oximetry. Respir Care. 1992; 37(8): 991-897; accessed at aarc.org

3. Centers for Medicare and Medicaid Services (CMS), National Coverage Determination (NCD) for Home Use of Oxygen (240.2); accessed at [cms.gov](http://cms.gov).
4. CGS Administrators, LLC. Local Coverage Determination (LCD): Oxygen and Oxygen Equipment (L33797); accessed at [cgsmedicare.com](http://cgsmedicare.com).
5. Collop NA, Anderson WM, et al. Clinical Guidelines for the Use of Unattended Portable Monitors in the diagnosis of Obstructive Sleep Apnea in Adult Patients. Portable Monitoring Task Force of the American Academy of Sleep Medicine. *J Clin Sleep Med*. 2007 Dec 15;3(7):737-47.
6. Del Campo F, Crespo A, et al. Oximetry use in obstructive sleep apnea. *Expert Rev Respir Med*. 2018 Aug;12(8):665-681. doi: 10.1080/17476348.2018.1495563. Epub 2018 Jul 26. PMID: 29972344.
7. First Coast Service Options, Inc.(FCSO), Local Coverage Determination (LCD) for Noninvasive Ear or Pulse Oximetry for Oxygen Saturation (L33923); accessed at [fcso.com](http://fcso.com).
8. Kapur VK, Auckley DH, et al. Clinical Practice Guideline for Diagnostic Testing for Adult Obstructive Sleep Apnea: An American Academy of Sleep Medicine Clinical Practice Guideline. *J Clin Sleep Med*. 2017 Mar 15;13(3):479-504.
9. Marcus CL, Brooks LJ, et al. Diagnosis and management of childhood obstructive sleep apnea syndrome. *Pediatrics*. 2012 Sep;130(3):576-84.
10. National Institute of Health Global Initiative for Asthma, National Heart, Lung and Blood Institute (01/95).
11. National Institutes of Health. Sleep apnea: is your patient at risk? National Heart, Lung, and Blood Institute Working Group on Sleep Apnea. NIH Publication No. 95-3803 September 1995; accessed at [nhlbi.nih.gov](http://nhlbi.nih.gov).
12. Qaseem A, Dallas P, et al. Diagnosis of obstructive sleep apnea in adults: a clinical practice guideline from the American College of Physicians. Accessed at [acponline.org](http://acponline.org).
13. U.S. Department of Health and Human Services, National Institutes of Health. National Heart, Lung and Blood Institute. World Health Organization, Global Strategy for Asthma Management and Prevention NHLBI/WHO Workshop Report. Publication Number 95-3759 (01/95).
14. Welsh EJ, Carr R. Pulse oximeters to self monitor oxygen saturation levels as part of a personalised asthma action plan for people with asthma. *Cochrane Database Syst Rev*. 2015 Sep 27;(9):CD011584. doi: 10.1002/14651858.CD011584.pub2. PMID: 26410043.

### **COMMITTEE APPROVAL:**

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy & Coverage Committee on 06/27/19.

### **GUIDELINE UPDATE INFORMATION:**

04/15/04	New Medical Coverage Guideline.
04/15/06	Scheduled review; no changes in coverage statement; references updated.
08/15/07	Review, coverage statements maintained, guideline reformatted, references updated.
08/15/09	Scheduled review; no change in position statement; references updated.
08/15/09	Scheduled review; no change in position statement; references updated.
07/15/11	Revision; formatting changes.

03/15/13	Revision; Program Exception added for Medicare Advantage; references updated.
05/11/14	Revision: Program Exceptions section updated.
06/15/15	Revision; position statements and references updated.
07/15/19	Review; Position statements maintained and references updated.