



PULSE OXIMETERS

Number: 20110001-0002
Effective Date: 11/01/2009
Revision Date: N/A

Overview

A pulse oximeter is a medical device that noninvasively measures the oxygen saturation of arterial blood. Oxygen saturation refers to the amount of oxygen bound to hemoglobin in arterial blood.

Over the past 30 years, pulse oximetry has become the standard of care for continuous and/or noninvasive assessment of arterial oxygen saturation in the clinical setting. The device is especially useful for patients who require close monitoring, such as in critical/intensive care units, during the delivery of anesthesia and in sleep labs. In newborns, oxygen toxicity has been identified as a cause of retinopathy of prematurity that can lead to blindness and monitoring of oxygen saturation levels in neonatal intensive care units has helped to reduce this condition. Arterial oxygen saturation determination with pulse oximetry is now in such ubiquitous use in hospitals that it has been called the "fifth vital sign" however the value of its use outside of the clinical setting remains unclear.

Definitions

Pulse oximetry – measurement of oxygen saturation (SpO₂), the percentage of hemoglobin molecules in the blood carrying their full potential of oxygen. The pulse oximeter probe is attached to the patient's finger or ear lobe. Red and infrared light pass through the patient's blood and the amount of light received by the detector on the other side indicates the amount of oxygen that is bound to the hemoglobin. (Oxygen attaches to the heme portion of hemoglobin molecules in the red blood cells. Each hemoglobin molecule can carry up to four oxygen molecules.) Oxygenated hemoglobin (oxyhemoglobin, or HbO₂) absorbs more infrared light than red light, while deoxygenated hemoglobin (Hb) absorbs more red light than infrared light. By comparing the amounts of red and infrared light received, the instrument can calculate the SpO₂.

Policy

Pulse oximeters are covered for MassHealth members only in accordance with contractual obligation and require prior authorization from FCHP.

As a quantitative indicator of hypoxia, hemoglobin saturation is useful to guide the physician in clinical decision making. However, there is insufficient evidence to determine whether the use of a pulse oximeter in the home improves patient outcomes. FCHP considers pulse oximeters not medically necessary.

For MassHealth members only, FCHP will cover the purchase of one (1) pulse oximeter (HCPCS code E0445) per 12 months, when oxygen saturation is transient, variable and unpredictable, even in the presence of supplemental oxygen, and occurs on a regular frequent basis and regular requiring frequent changes in liter flow. A pulse oximeter (HCPCS code E0445) is considered durable medical equipment (DME).

Medicare does not cover oximeters for home use. (Reference NHIC LCD: http://www.medicarenhic.com/dme/medical_review/mr_lcds/mr_lcd_current/L11468_2_010-01-01_PA_2010-07.pdf.)

Exclusions

1. FCHP does not cover oximeters (E0445), except for MassHealth members.¹
2. FCHP does not cover replacement oximeter probes (A4606).

Codes

Codes	Description
A4606	Oxygen probe for use with oximeter device, replacement
E0445	Oximeter device for measuring blood oxygen levels noninvasively

Copyright © 2011 American Medical Association, Chicago, IL

Products to Which This Policy Applies

- ⊕ FCHP Direct & Select Care
- ⊕ Fallon Preferred Care (PPO)
- ⊕ Major Medical
- ⊕ MassHealth
- ⊕ Commonwealth Care
- ⊕ Companion Care
- ⊕ Fallon Senior Plan™
- ⊕ NaviCare
- ⊖ Summit Elder Care® PACE (Note: With the exception of emergency care, all services for Summit ElderCare® PACE participants must be authorized and arranged by the Summit ElderCare (SE) Interdisciplinary Team (IDT) overseeing the care for that participant. The applicable IDT can be determined by the HCO code on the participant ID card. The site codes and corresponding telephone numbers are: SW1-SE East Mtn St. Worcester-508-852-2026, SW2-SE Grafton St. Worcester-508-373-7400, SC1-SE Charlton-508-434-3200, SL1-SE Leominster-978-401-3100.)

References

1. National Heritage Insurance Company LCD for Oxygen and Oxygen Equipment (L11468). Revision Effective Date: January 1, 2010. Available at: http://www.medicarenhic.com/dme/medical_review/mr_lcds/mr_lcd_current/L11468_2_010-01-01_PA_2010-07.pdf.

¹ In accordance with contractual obligation, FCHP will cover the purchase of one (1) oximeter (HCPCS code E0445) per member per 12 months, for MassHealth MCO members only, when SaO2 is transient, variable and unpredictable, even in the presence of supplemental oxygen, and occurs on a regular frequent basis and regular requiring frequent changes in liter flow.

2. AARC Clinical Practice Guideline Pulse Oximetry. *Respir Care*. 1992;37(8):891-7.
3. Hayes Brief. Continuous Pulse Oximetry for Managing Home Oxygen Therapy in Adults. December 30, 2008. © 2008 Winifred S. Hayes, Inc.
4. Hayes Update Search. Continuous Pulse Oximetry for Managing Home Oxygen Therapy in Adults. January 21, 2010. © 2010 Winifred S. Hayes, Inc.

Committee Review Dates:

Technology Assessment Subcommittee: 12/28/10

Technology Assessment Committee: 01/25/11

IMPORTANT NOTE

Not all services are covered for all commercial products or employer groups. Even though this policy may indicate that a particular service or supply is considered covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the Evidence of Coverage to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Medicare and Medicaid members, this policy will apply unless Medicare and Medicaid policies extend coverage beyond this Medical Policy & Criteria Statement