MEDICAL POLICY

SUBJECT: OXIMETERS AND OXIMETRY FOR HOME USE

POLICY NUMBER: 1.01.45
CATEGORY: Equipment/Supplies

EFFECTIVE DATE: 10/28/04
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• If the member's subscriber contract excludes coverage for a specific service it is not covered under that contract. In such cases, medical policy criteria are not applied.
• Medical policies apply to commercial and Medicaid products only when a contract benefit for the specific service exists.
• Medical policies only apply to Medicare products when a contract benefit exists and where there are no National or Local Medicare coverage decisions for the specific service.

POLICY STATEMENT:

I. Based upon our criteria and assessment of the peer-reviewed literature, continuous or long-term use of home-based oximeters have been medically proven to be effective and therefore, are considered medically appropriate for management of the following conditions:
   A. Patients who require mechanical ventilation;
   B. Infants with chronic lung disease who require continuous oxygen therapy (e.g., bronchopulmonary dysplasia);
   C. As an adjunct to apnea monitoring for infants who have experienced an apparent life-threatening cardiopulmonary event, infants with a tracheostomy or an anatomic abnormality who are vulnerable to airway compromise, infants with neurologic or metabolic disorders affecting respiratory control and infants with apnea of prematurity.

II. Based upon our criteria and assessment of the peer-reviewed literature, continuous or long-term use of home-based oximeters have not been medically proven to be effective and therefore, are considered not medically appropriate for prevention of death in the siblings of infants who died due to sudden infant death syndrome.

III. Based upon our criteria and assessment of the peer-reviewed literature, intermittent, short-term home-based studies using oximeters have been medically proven to be effective and therefore, are considered medically appropriate for the following indications:
   A. Patients who have developed evidence of pulmonary toxicity due to prescribed medication;
   B. Patients with severe neuromuscular disease affecting muscles of respiration;
   C. Persons with severe cardiac or pulmonary disease (except sleep apnea) where there is a high likelihood of nocturnal hypoxia; or
   D. Patients with chronic, progressive conditions who require continuous oxygen therapy and who have a change in clinical status necessitating assessment of oxygen dosing.

IV. Based upon our criteria and assessment of the peer-reviewed literature, short-term home-based studies using oximeters have not been medically proven to be effective and therefore, are considered not medically necessary for management of the following conditions:
   A. Obstructive sleep apnea without significant cardiopulmonary co-morbidities including COPD, obesity hypoventilation, and heart failure;
   B. As the means to diagnose congestive heart failure; or
   C. Asthma.

V. Continuous oximeter use for routine monitoring of an individual on oxygen therapy is considered not medically necessary.

Refer to Corporate Medical Policy #1.01.00 regarding Durable Medical Equipment – Standard and Non-Standard.
Refer to Corporate Medical Policy #1.01.05 regarding Home Oxygen Therapy.
Refer to Corporate Medical Policy #2.01.28 regarding Sleep Studies.
POLICY GUIDELINES:

I. Medical documentation of all of the following is required for consideration of an oximeter for home use:
   A. A prescription or written order for the device from a physician; and
   B. Documentation of the diagnosis, history, and expected duration of treatment of the condition for which the oximeter is prescribed should be reflected in the medical record.

DESCRIPTION:

An oximeter is a device used to measure arterial oxygen saturation levels (SpO\textsubscript{2}) noninvasively. The device utilizes wavelengths of light to determine the saturation of oxyhemoglobin (SpO\textsubscript{2}). An oximeter can be used to monitor and manage patients who require ventilator support, and patients with chronic lung disease (e.g., bronchopulmonary dysplasia, chronic obstructive pulmonary disease). Oximeters are also used by various health care personnel as an assessment tool.

Pulse oximetry is considered a safe procedure, but limitations of oximeter devices, false-negative results for hypoxemia and/or false-positive results for normoxemia or hyperoxemia may lead to treatment that is inappropriate for the patient’s true condition. Oximeters are not able to accurately measure levels of oxygen saturation below 80 percent. The oximeter may give inaccurate and erroneous results because of low perfusion rate or low signal strength, excessive motion, intravascular dyes, skin pigmentation, nail polish or nail coverings, elevated dyshemoglobin levels, electromagnetic interference, and exposure to ambient light.

RATIONALE:

Continuous or long-term home pulse oximetry is considered standard of care for the management of patients who require mechanical ventilation.

Pulse oximetry is often used for infants with respiratory disorders on long-term home oxygen therapy. The American Thoracic Society (ATS), in the Statement on Care of the Child with Chronic Lung Disease of Infancy and Childhood, state that oximetry has the advantage of providing an early warning but movement artifact remains a problem. However, an oximeter in the home has the additional advantage of providing the caretaker with useful information, thus saving on the expense and time for office or hospital visits. This is particularly true during times of illness, when home oximetry reports from the parents can help determine whether the supplemental oxygen flow rate or concentration should be increased, or whether the child needs to be further evaluated in the office or emergency room.

The medical literature supports the use of intermittent (short-term) pulse oximetry in the home to assess patients who are at risk for episodes of hypoxia due to medication, neuromuscular disease involving muscles of respiration or change of clinical status in chronic cardiac or pulmonary conditions.

The available studies in the peer-reviewed literature have demonstrated that portable monitoring based on oximetry alone is inadequate for the identification of sleep apnea in adults and children.

A National Heart, Lung and Blood Institute/World Health Organization Global Asthma Initiative Report concluded that pulse oximetry was not an appropriate method of monitoring patients with asthma. The report explained that, during asthma exacerbations, the degree of hypoxemia may not accurately reflect the underlying degree of ventilation-perfusion (V-Q) mismatch.

CODES: Number Description
Eligibility for reimbursement is based upon the benefits set forth in the member’s subscriber contract.

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than POLICY updates.

CPT: 94760 Noninvasive ear or pulse oximetry for oxygen saturation; single determination
94761 multiple determinations (e.g., during exercise)
94762 by continuous overnight monitoring (separate procedure)

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

ICD9: Multiple
ICD10: Multiple

REFERENCES:


*key article
KEY WORDS:
Oxygen saturation, Pulse oximetry.

**CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS**

There is currently no National Coverage Determination (NCD) or Local Coverage Determination (LCD) for Pulse Oximetry.