



# Geisinger Health Plan Policies and Procedure Manual

**Policy: MP198**

**Section: Medical Benefit Policy**

**Subject: Pulse Oximetry for Pediatric Home Use**

## Applicable Lines of Business

<b>Commercial</b>	<b>X</b>	<b>CHIP</b>	<b>X</b>
<b>Medicare</b>	<b>X</b>	<b>ACA</b>	<b>X</b>
<b>Medicaid</b>	<b>X</b>		

### I. Policy: Pulse Oximetry for Pediatric Home Use

#### II. Purpose/Objective:

To provide a policy of coverage regarding Pulse Oximetry for Pediatric Home Use

#### III. Responsibility:

- A. Medical Directors
- B. Medical Management

#### IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

#### V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

#### Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.

- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age

Pediatric – For the purposes of this policy, the term pediatric will refer to Insured individuals under 21 years of age.

**DESCRIPTION:** Pulse Oximetry is a non-invasive method of monitoring arterial blood oxygenation. Changing absorbance of each of the two wavelengths is measured, allowing determination of the absorbances due to the pulsing arterial blood alone, factoring out venous blood, skin, bone, muscle, and fat. Based upon the ratio of changing absorbances of the red and infrared light caused by the difference in color between oxygen-bound and unbound hemoglobin in the blood, a measure of oxygenation can be made.

**INDICATIONS:**

Coverage for home pulse oximeters is subject to the terms, conditions and limitations outlined in the applicable benefit document.

A request for coverage requires a pre-certification through Medical Management or Designee. Equipment must be obtained through contracted Durable Medical Equipment vendors.

The use of *home pulse oximetry* may be considered medically necessary for the following indications when **any** of the qualifying criteria are met:

1. Pediatric patients who require mechanical ventilation; **or**
2. Infants with chronic lung disease (i.e. bronchopulmonary dysplasia); **or**
3. Infants on active therapy for Apnea (i.e. caffeine, tracheostomy); **or**
4. Pediatric patient diagnosed with chronic respiratory or cardiovascular disease requiring supplemental oxygen;

**AND**

The insured individual meets all of the following criteria:

- a. Oxygen needs vary from day to day or per activity (i.e. feeding, sleeping, movement); **and**
- b. Medical need exists to maintain oxygen saturation within a very narrow range; **and**
- c. A trained caregiver is available to respond to changes in the oxygen saturation.

**EXCLUSIONS:**

Current published peer-reviewed medical literature does not support the use of home pulse oximeters for pediatric patients outside of the current industry recognized guidelines. Therefore, the use of home pulse oximeters for indications other than those listed above is considered *not medically necessary* and is **NOT COVERED**.

**Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.**

**Medicaid Business Segment:**

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

**CODING ASSOCIATED WITH:** Pulse Oximetry for Pediatric Home Use

*The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at [www.cms.gov](http://www.cms.gov) or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.*

- 94760 Noninvasive ear or pulse oximetry for oxygen saturation; single determination
- 94761 Noninvasive ear or pulse oximetry for oxygen saturation; multiple determinations (eg, during exercise)
- 94762 Noninvasive ear or pulse oximetry for oxygen saturation; by continuous overnight monitoring (separate procedures)
- A4606 Oxygen probe for the use with oximeters device, replacement

E0445 Oximeter device for measuring blood oxygen levels non-invasively

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

**LINE OF BUSINESS:**

**Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.**

**REFERENCES:**

AARC (American Association for Respiratory Care) clinical practice guideline. Pulse oximetry. Respir Care. 1991 Dec;36(12):1406-9.

Balfour-Lynn IM, Primhak RA, Shaw BN. Home oxygen for children: who, how and when? Thorax. 2005 Jan;60(1):76-81.

Beresford MW, Parry H, Shaw NJ. Twelve-month prospective study of oxygen saturation measurements among term and preterm infants. J Perinatol. 2005 Jan;25(1):30-2.

Brouillette RT, Morielli A, Leimanis A, Waters KA, Luciano R, Ducharme FM. Nocturnal pulse oximetry as an abbreviated testing modality for pediatric obstructive sleep apnea. Pediatrics. 2000 Feb;105(2):405-12.

Kirk VG, Bohn SG, Flemons WW, Remmers JE. Comparison of home oximetry monitoring with laboratory polysomnography in children. Chest. 2003 Nov;124(5):1702-8.

Whitelaw WA, Brant RF, Flemons WW. Clinical usefulness of home oximetry compared with polysomnography for assessment of sleep apnea. Am J Respir Crit Care Med. 2005 Jan 15;171(2):188-93.

Schechter MS; Section on Pediatric Pulmonology, Subcommittee on Obstructive Sleep Apnea Syndrome. Technical report: diagnosis and management of childhood obstructive sleep apnea syndrome. Pediatrics. 2002 Apr;109(4):e69.

Allen J, Zwerdling R, Ehrenkranz R, Gaultier C, Geggel R, Greenough A, et al.; American Thoracic Society. Statement on the care of the child with chronic lung disease of infancy and childhood. Am J Respir Crit Care Med. 2003 Aug 1;168(3):356-96.

Committee on Fetus and Newborn. American Academy of Pediatrics. Apnea, sudden infant death syndrome, and home monitoring. Pediatrics. 2003 Apr;111(4 Pt 1):914-7.

AARC (American Association for Respiratory Care) clinical practice guideline. Long-term Invasive Mechanical Ventilation in the Home. Respir Care 1995;40(12):1313-1320.

Ross PA, Newth CJ, Khemani RG. Accuracy of pulse oximetry in children. Pediatrics. 2014 Jan;133(1):22-9.

Walsh, B and Smallwood, Pediatric oxygen therapy: a review and update. Respiratory Care, 2017;62 (6), 645-661

Seddon P, Sobowiec-Kouman S, Wertheim D. Infant home respiratory monitoring using pulse oximetry. Arch Dis Child. 2018;103(6):603-605.

Williams KB, Horst M, Hollinger EA, et al. Newborn pulse oximetry for infants born out-of-hospital. Pediatrics. 2021;148(4):e2020048785.

This policy will be revised as necessary and reviewed no less than annually.

**Devised:** 01/07

**Revised:** 2/08 (wording)

**Reviewed:** 2/09, 2/10, 4/11, 4/12, 4/13, 4/14; 4/15, 4/16, 3/17, 3/18, 3/19, 3/20, 3/21, 3/22, 3/23

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at <https://www.geisinger.org/health-plan/providers/ghp-clinical-policies>

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.