# Clinical Policy: Pediatric Continuous Positive Airway Pressure (CPAP)

Reference Number: CP.MP.197 Coding Implications
Last Review Date: 09/20 Revision Log

**See Important Reminder at the end of this policy for important regulatory and legal information.**

## Description

This policy outlines the medical necessity criteria for continuous positive airway pressure (CPAP) for pediatrics. CPAP therapy is a noninvasive technique using an electronic device that provides single levels of air pressure via a nasal mask to prevent the collapse of the oropharyngeal walls and obstruction of airflow during sleep.

## Policy/Criteria

**I.** It is the policy of health plans affiliated with Centene Corporation® that Continuous Positive Airway Pressure (CPAP) for children 18 years of age or under is **medically necessary** when all of the following criteria apply:

**A.** Diagnosis of obstructive sleep apnea (OSA) or polysomnography demonstrates apnea-hypopnea index (AHI) ≥ 1;

**B.** Surgical evaluation meets one of the following:

1. Adenotonsillectomy has been unsuccessful in relieving OSA;
2. Adenotonsillar tissue is minimal;
3. Adenotonsillectomy is inappropriate based on OSA being attributable to another underlying cause (such as craniofacial anomaly);
4. Adenotonsillectomy is contraindicated.

## Background

Obstructive sleep apnea syndrome (OSAS) is a disorder of breathing in which prolonged partial upper airway obstruction and/or intermittent complete obstruction occurs during sleep disrupting normal ventilation and normal sleep patterns. The signs and symptoms of OSAS in children include habitual snoring (often with intermittent pauses, snorts, or gasps) with labored breathing, observed apneas, restless sleep, and daytime neurobehavioral problems. Nocturnal enuresis, diaphoresis, cyanosis, mouth breathing, nasal obstruction during wakefulness, adenoidal facies, and hyponasal speech may also be present. Daytime sleepiness is sometimes reported but hyperactivity can frequently occur. Severe complications of untreated OSAS in children include systemic hypertension, pulmonary hypertension, failure to thrive, cor pulmonale, and heart failure. Adenotonsillectomy remains the treatment of choice for most children with a strong clinical history of OSA or with OSA documented by polysomnography. Anatomically, the tonsils and adenoids represent the most common area of hypertrophy that contributes to airway obstruction. Numerous studies have documented improvement in snoring, OSA, enuresis, behavior, and growth following adenotonsillectomy.[1] The parameters originally used to evaluate childhood polysomnograms were based on adult values. OSA in adults is defined as a respiratory pause lasting more than 10 seconds. Because of children's different physiology and higher baseline respiratory rate, clinically relevant apneas may not last this long. Apneas of three to four seconds' duration can be accompanied by desaturations. These findings have led to the development of separate guidelines for the interpretation of polysomnograms in children. In children, an apnea-hypopnea index greater than 1 (average: 0.1 to 0.5 events per hour) or a


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minimum oxygen saturation of less than 92 percent (average: 96 percent ± 2 percent) is considered abnormal. The apnea-hypopnea index is calculated as the average number of apneas and hypopneas per hour of sleep.[2]

**Coding Implications**

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2020, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

| CPT®* Codes | Description |
|---|---|
| 94660 | CPAP -Continuous positive airway pressure ventilation, initiation and management |

| HCPCS ®* Codes | Description |
|---|---|
| A7027 | Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap |
| A7028 | Oral cushion for combination oral/nasal mask, replacement only, each |
| A7029 | Nasal pillows for combination oral/nasal mask, replacement only, pair |
| A7030 | Full face mask used with positive airway pressure device, each |
| A7031 | Face mask interface, replacement for full face mask, each |
| A7032 | Cushion for use on nasal mask interface, replacement only, each |
| A7033 | Pillow for use on nasal cannula type interface, replacement only, pair |
| A7034 | Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap |
| A7035 | Headgear used with positive airway pressure device |
| A7036 | Chinstrap used with positive airway pressure device |
| A7037 | Tubing used with positive airway pressure device |
| A7038 | Filter, disposable, used with positive airway pressure device |
| A7039 | Filter, non-disposable, used with positive airway pressure device |
| A7044 | Oral interface used with positive airway pressure device, each |
| A7045 | Exhalation port with or without swivel used with accessories for positive airway devices, replacement only |
| A7046 | Water chamber for humidifier, used with positive airway pressure device, replacement, each |
| E0470 | Respiratory assist device, bi-level pressure capability, without back-up rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device) |
| E0471 | Respiratory assist device, bi-level pressure capability, with back-up rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device) |

| HCPCS ®* Codes | Description |
|---|---|
| E0472 | Respiratory assist device, bi-level pressure capability, with back-up rate feature, used with invasive interface, e.g., tracheostomy tube (intermittent assist device with continuous positive airway pressure device) |
| E0561 | Humidifier, non-heated, used with positive airway pressure device |
| E0562 | Humidifier, heated, used with positive airway pressure device |
| E0601 | Continuous airway pressure (CPAP) device |

**ICD-10-CM Diagnosis Codes that Support Coverage Criteria**

+ Indicates a code(s) requiring an additional character

| ICD-10-CM Code | Description (Inpatient Only) |
|---|---|
| 5A09357 | Extracorporeal Assistance & Performance; Physiological Systems; Assistance; Respiratory; less than 24 consecutive hours; ventilation; Continuous Positive Airway Pressure |
| 5A09457 | Extracorporeal Assistance & Performance; Physiological Systems; Assistance; Respiratory; 24-96 consecutive hours; ventilation; Continuous Positive Airway Pressure |
| 5A09557 | Extracorporeal Assistance & Performance; Physiological Systems; Assistance; Respiratory; Greater than 96 consecutive hours; ventilation; Continuous Positive Airway Pressure |

| ICD-10-CM Code | Description |
|---|---|
| G47.33 | Obstructive sleep apnea (adult)(pediatric) |
| P28.3 | Primary sleep apnea of newborn |

| Reviews, Revisions, and Approvals | Date | Approval Date |
|---|---|---|
| Approved by MPC. Non-substantive change; added highlighted areas to more clearly define age of pediatric patient (see pp. 1-2). Previously defined on p. 2 as 0-12; now reads “less than 18”. | 8/4/2011 | 8/4/2011 |
| New template design approved by MPC. | 12/1/2011 | 12/1/2011 |
| Approved by MPC. No changes. | 6/7/2012 | 6/7/2012 |
| Approved by MPC. No changes. | 5/2/2013 | 5/2/2013 |
| Approved by MPC. No changes. | 4/3/2014 | 4/3/2014 |
| Approved by MPC. No changes. | 4/2/2015 | 4/2/2015 |
| Approved by MPC. Clarified; CCG not limited only to a diagnosis of OSA. | 12/3/2015 | 12/3/2015 |
| Approved by MPC. No changes. | 1/12/2017 | 1/12/2017 |
| Approved by MPC. No changes. | 12/7/2017 | 12/7/2017 |
| Approved by MPC. No changes. | 11/1/2018 | 11/1/2018 |
| Approved by MPC. No changes. | 11/7/2019 | 11/7/2019 |

| Reviews, Revisions, and Approvals | Date | Approval Date |
|---|---|---|
| Transferred to CNC template from HS-99. Removed statement that other diagnoses would be considered in MD review, as this applies to all requests not meeting criteria. References reviewed and updated. | 09/20 | 09/20 |

**References**

1. American Academy of Pediatrics. Clinical practice guideline: diagnosis and management of childhood obstructive sleep apnea syndrome. Pediatrics. 2002;109(4):704 -712.
2. Marcus CL, Brooks LJ, Draper KA, Gozal D., Halbower AC, Jones J, et al. Diagnosis and management of childhood obstructive sleep apnea syndrome. Pediatrics. 2012;130(3):576-84. doi: 10.1542/peds.2012-1671. http://pediatrics.aappublications.org/content/pediatrics/130/3/576.full.pdf. Accessed August 31, 2020.

**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

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professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

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**Note: For Medicaid members/enrollees**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

**Note: For Medicare members/enrollees,** to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at http://www.cms.gov for additional information.