

Clinical Policy: Pediatric Continuous Positive Airway Pressure (CPAP)

Reference Number: CP.MP.197

Date of Last Revision: 09/21

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Continuous positive airway pressure (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. This policy outlines the medical necessity criteria for CPAP for pediatrics.

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

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)

HCPCS ^{®*} Codes	Description
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)
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	Revision 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”.	8/11	8/11
New template design approved by MPC.	12/11	12/11
Approved by MPC. No changes.	6/12	6/12
Approved by MPC. No changes.	5/13	5/13
Approved by MPC. No changes.	4/14	4/14
Approved by MPC. No changes.	4/15	4/15
Approved by MPC. Clarified; CCG not limited only to a diagnosis of OSA.	12/15	12/15
Approved by MPC. No changes.	1/17	1/17
Approved by MPC. No changes.	12/17	12/17
Approved by MPC. No changes.	11/18	11/18

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Approved by MPC. No changes.	11/19	1119
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
Annual review. Changed “review date” in the header to “date of last revision” and “date” in the revision log header to “revision date.” References reviewed and updated. Reviewed by specialist.	09/21	09/21

References

1. 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.
2. Paruthi S. Management of obstructive sleep apnea in children. UpToDate. www.uptodate.com. Updated January 14, 2021. Accessed August 11, 2021.
3. Kothare SV, Rosen CL, Lloyd RM, et al. Quality measures for the care of pediatric patients with obstructive sleep apnea. *J Clin Sleep Med*. 2015;11(3):385-404. Published 2015 Mar 15. doi:10.5664/jcsm.4558
4. Halbower AC. Continuous positive airway pressure (CPAP) for pediatric obstructive sleep apnea. UpToDate. www.uptodate.com. Updated November 4, 2020. Accessed August 11, 2021.
5. Garetz SL. Adenotonsillectomy for obstructive sleep apnea in children. UpToDate. www.uptodate.com. Updated June 2, 2020. Accessed August 11, 2021.
6. Children’s sleep apnea. American Sleep Apnea Association. <https://www.sleepapnea.org/treat/childrens-sleep-apnea/>. Accessed August 12, 2021.
7. Obstructive sleep apnea in children. American Thoracic Society. <https://www.thoracic.org/patients/patient-resources/resources/osa-in-children.pdf>. Accessed August 12, 2021.
8. Chan J, Edman JC, Koltai PJ. Obstructive sleep apnea in children. *Am Fam Physician*. 2004;69(5):1147-1155.

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.

CLINICAL POLICY

Pediatric CPAP

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise 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.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members/enrollees and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members/enrollees and their representatives agree to be bound by such terms and conditions by providing services to members/enrollees and/or submitting claims for payment for such services.

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.

CLINICAL POLICY
Pediatric CPAP



©2018 Centene Corporation. All rights reserved. All materials are exclusively owned by Centene Corporation and are protected by United States copyright law and international copyright law. No part of this publication may be reproduced, copied, modified, distributed, displayed, stored in a retrieval system, transmitted in any form or by any means, or otherwise published without the prior written permission of Centene Corporation. You may not alter or remove any trademark, copyright or other notice contained herein. Centene® and Centene Corporation® are registered trademarks exclusively owned by Centene Corporation.